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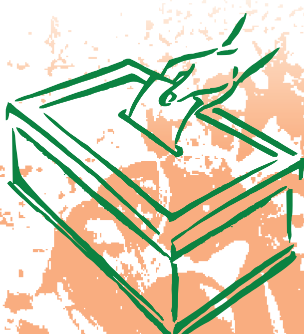

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Debt Accumulation of Indian States with Special Reference to Uttar Pradesh

Ratna Vadra*

Serious deterioration in government fiscal finances in the late 1990s and early 2000s asked for prudent fiscal management. The fiscal deterioration of 1990s and 2000s led to elevated levels of debt liabilities at both the national and sub-national level. Uttar Pradesh (UP) fiscal position during 1990s and 2000s was one of the most vulnerable. Fiscal and revenue deficit and debt levels were appallingly high creating unmanageable pressure on fiscal finances. The UP government has enacted its FRBMA in 2004 with the aim to arrest rising deficits and debt which mandated reduction in deficit and debt levels within a limit in a given time frame. This study is an attempt to examine the level of indebtedness of the Government of India with special reference to the Uttar Pradesh. .This paper examines the debt structure of Uttar Pradesh (U.P.) since it occupies a central place in Indian federal fiscal system due to its large population size years The sustainability analysis has been made in the current study to capture the effect of reforms on debt position of Uttar Pradesh.

Keywords

India, Public Finance, State Finances, Debt Accumulation

Introduction

Fiscal stress and debt repayment pressures were experienced by many states in the late 1990s with continued deterioration evidenced in the early 2000s. The deterioration in the current account was the driving force for declining fiscal health as reflected by worsening in the fiscal and primary balances. In late nineties almost all the states went through difficult phase in respect of state finances. In comparative perspective U.P fiscal imbalance has been worst. The World Bank came out with in-depth study on the fiscal situation of UP: From fiscal crisis to renewed growth (World Bank, 1999). This led UP government to prepare a blueprint of wide range of reforms covering fiscal reforms, fiscal administration, PSUs reforms and power sector reforms. UP became a first recipient at the sub national level of fiscal restructuring loan from World Bank. The reorganisation of state UP with carving out Uttaranchal on Nov, 2000 has fiscal implications for state.

The current paper studies the debt position of states in India with special reference to Uttar Pradesh. The rest of the paper is organized as follows. The first section presents the states ‘borrowing framework as prescribed by the constitution, and changes in the borrowing channels and lending policy for states. It’s following section deals with literature review. Its subsequent section summarizes the trends in states, debts in the last two decades. It’s following section deals with debt position of Uttar Pradesh. The next section presents the major policy and institutional reforms undertaken to restructure debt of Uttar Pradesh. The final section offers conclusions.

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In this paper we study the debt position and contingent liabilities of states and suggest some policy measures that are likely to help evolve a good debt management strategy. The paper delineates the fiscal situation in UP and factors responsible for the growing fiscal stress by using an inter-state analysis of fiscal indicators as well as the State's own indicators over time. The paper addresses, in particular, the growing fiscal costs as well as issues associated with industrial incentive schemes in the State during the reform phase.

Borrowings by States in India

State governments in the Indian federation have been assigned important functions and responsibilities by the Indian constitution. State finances have become a subject of serious concern in the recent years due to mounting fiscal distress caused by deceleration in the growth resources and expenditure growth. The fiscal health of various state governments directly impacts their ability to borrow for investment. Since the mid-nineties many state governments have slipped into a fiscal crisis and are financing their budgets by borrowing. Borrowing thus is increasingly being used to finance current expenditures and not for creation of long lived assets. Some of Indian states witnessed heavy accumulation of debt in recent years. Under Article 292 the executive power of the centre extends to borrowing, either within or outside India, upon the security of the Consolidated Fund of India, within such limits, if any, as may from time to time be fixed by Parliament/ However, the borrowing power of a State (Article 293) is subject to a number of restrictions: (i) it cannot borrow outside India; (ii) it can borrow within the territory of India subject to the conditions (a) limitations as may be imposed by the State Legislature, (b) consent of the Union Government to raise fresh loan if the Union has guaranteed an outstanding loan of the State, (c) consent of the Union to raise fresh loan if a Union loan to the State remains outstanding. Since all the States are in debt to the Centre, they have to obtain Center‘s permission for raising loans .The Government of India borrows heavily both internally and externally. Internal borrowings of the Government are chiefly meant to meet budgetary deficit. External borrowings are meant to meet deficit in the balance of payments. The main sources of internal borrowings are: individuals, commercial banks, financial institutions and the Reserve Bank of India. Borrowings from the RBI arte through ways and means advances (WMA).

Fiscal stress in Uttar Pradesh has been on the increase from the late nineties. This is the outcome of a fall in the revenue resources of the State government coupled with unbridled revenue expenditure. As a result, the State, which had achieved revenue surplus in the mid-nineties, has relapsed into revenue deficit. Another important instrument of Government borrowing is the Statutory Liquidity Ratio (SLR). Under this system, commercial banks and other financial institutions are required to invest prescribed proportions of their assets/liabilities in Government securities. The Committee on Financial Reforms (Chairman: M Narasimhan) 1991 had suggested the gradual lowering of this ratio to 25 percent. Government also raises loans from the general public through regular flotation of securities and bonds like Kisan Vikas Patras and various other small saving schemes. The major sources of external borrowings are the international agencies like the IMF and the World Bank, foreign governments, and foreign private sources. Short-term borrowings from abroad are mainly used to meet balance of payments requirements. Long-term foreign borrowings are needed to finance development projects under the Five Year Plans.

Accumulation of debt reflects the outcome of state governments' fiscal operations on the revenue and expenditure sides of their budgets. If expenditure, whether committed or discretionary, exceeds revenues – tax and non-tax – the excess can only be financed through fresh borrowings. If the mismatch in the growth of revenues and expenditure is of a temporary nature, borrowing provides a mechanism by which the gap between the two is bridged. However, if the mismatch persists over a long period and grows in volume, with the increase in revenue receipts turning out to be inadequate to cover the interest liabilities that are required to service the debt, it leads to growing revenue and fiscal deficits. This, in turn, results in unsustainable debt. The sustainable level of fiscal deficits can be derived with reference to three key parameters: growth rate, ratio of revenue receipts to GDP/GSDP and the interest rate on borrowings. The existing level of debt-GDP ratio is also quite material in the context of fiscal sustainability. Fiscal sustainability requires that a rise in fiscal deficit is matched by a rise in the capacity to service the increased debt.

The mounting debt and debt-servicing liabilities of the States have attracted considerable attention in recent years. The non-Plan revenue gap of the States is looked after by the Finance Commission while the Planning Commission takes care of the Plan gap, both on revenue and capital accounts. Another reason for the high and growing indebtedness of the States is the composition of Central assistance for Plans given under the Gadgil Formula. The existing pattern of assistance has a loan-grant ratio of 70:30 The problem of States indebtedness is not new though it has aggravated in recent years. Debt-related relief to the States may be provided in various forms, viz. Write-offs, rescheduling of the loans with a view to shifting the timing of repayments, consolidation of past loans on common terms, and reduction of interest rate. Various Finance Commissions (FCs) have expressed concern over the growing debt of the states and highlighted the need to consider the cost of debt while ensuring efficient and productive use of borrowed funds. It has been noted that there is need to restrict the future growth of debt of states through elimination of their revenue deficits. Up till now 13th FC has been constituted for transfer of funds from centre to state Some of the recommendation of 13 FC are:

Resetting of interest rate at 9 per cent on loans to states from the NSSF contracted until 2006-07 and outstanding as at the end of 2009-10. Central loans given to state governments for centrally sponsored schemes/ central plan schemes through ministries other than the Ministry of Finance, outstanding as at the end of 2009-10 to be written off, subject to states legislating/ amending their FRBM Acts. Benefit of the DCRF (debt consolidation and interest rate reduction) to be extended to states that could not avail of the same earlier, provided they enact the FRBM Act.

Literature Review

There is ample fiscal literature on the states‘ fiscal reform – fiscal rules, the quality of fiscal adjustment, expenditure and taxation reforms, power sector reform, and budget and financial management reforms but less work has been done on states‘ borrowing in India and debt position of UP. There is vast fiscal literature on the factors leading to the deterioration of state finances in the late 1990s. Factors considered critical to the fiscal deterioration include the impact of the wage revisions; inability to contain wasteful expenditure, including subsidies; reluctance to raise additional resources; and competitive reduction in taxes. Mohan (2000) pointed to the increasing debt service payments and inadequate returns on government spending as important factors behind the deterioration in states ‘fiscal conditions. Acharya (2001) and Rao (2002) attributed the worsening of revenue (current) balance during this period to the implementation of the Fifth Pay Commission recommendations' In pioneering work done on debt sustainability, based on post-Second World War US data, Domar (1944) pointed out that the primary deficit path can be sustained as long as real growth of the economy remains higher than the real interest rates. Shankarkripa, (1995) pointed out that Failure to generate revenues and cut non-productive, especially administrative, expenditure has led UP into a debt trap. Shankar Kripa (2002) says "The fiscal scenario in Uttar Pradesh is showing definite signs of deterioration. Part of the reason for the slow growth of per capita income is the state's inability to raise resources; but the government's inability to allocate funds for productive development has compounded the situation". Rangarajan, D.K Srivastava (2003) in their paper talks about accumulation of debt can be seen as the resultant of the balance between cumulated primary deficits and the cumulated weighted excess of growth over interest rate. Decomposing the change in government's liabilities relative to GDP since

1951-52, it is seen that but for three recent years, the accretion to debt relative to GDP was due to the cumulated primary deficits. A significant part of the effect of the cumulated primary deficits could be absorbed in the sixties, seventies, and the nineties due to the excess of growth over interest rate. However, there were large unabsorbed parts in the fifties and the eighties. The cushion provided by the excess of growth over interest rate may not continue to be available for long. For three years, viz, 2000-01 to 2002-03, the interest rate exceeded the growth rate. This, together with the continuing primary deficits though at reduced level, led to acceleration in the increase in the debt GDP ratio in recent years. For stabilisation of the debt-GDP ratio at current or reduced levels, focus on primary balance becomes necessary. Ter-Minassian and Craig (1997) have argued and we quote: “The growth of sub national debt is frequently a symptom of an inappropriate design of intergovernmental fiscal relations in the country in question, involving, for example large vertical or horizontal imbalances or a system of inter-governmental transfers lacking transparent criteria and conductive to ad hoc bargaining or ex post gap filling. C. Rangarajan, Abha Prasad (2012) in their working paper presents the policy makers’ perspective on the reforms undertaken to manage states’ debt and ensure Solvency While the sustained high growth rates of the Indian economy played a part in alleviating the interest burden on debt and ensuring that the debt does not grow in an explosive trajectory, major reforms were implemented to reverse the fiscal decline, develop fiscal responsibility rules to ensure sustained adjustment, and move toward a market-based financing of state deficits. The serious efforts at fiscal consolidation and institutional reforms have enabled states to set on the path toward fiscal correction.

Outstanding Liabilities of State Governments of India

Outstanding liabilities of state governments is presented in Table 1. From table 1 we can see outstanding liabilities of state governments (at the consolidated level) as a proportion of GDP has been on a declining trend from 2004-05. In 2004 it was 31.8 percent which decreased to 26.6 percent in 2008 and about 21.4 percent in 2014, reflecting the combined impact of favourable macroeconomic conditions and fiscal consolidation at the state level The consolidated debt-GDP ratio of state governments was 31.8 percent in 2004 which declined to 23.5 percent in 2011 and 21.4 percent in 2014.

Table 1: Outstanding Liabilities of State Governments of India (Rs Billion)

YEAR	Amount (rupees billion)	Annual Growth	Debt/GDP
		(percent)	
1991	1281.5	-	21.9
1997	2859.0	14.6	20.1
1998	3308.2	15.7	21.0
1999	3995.8	20.8	22.2
2000	5095.3	27.5	25.3
2004	9031.7	14.8	31.8
2008	13283.0	7.0	26.6
2009	14702.0	10.7	26.1
2010	16486.5	12.1	25.5
2011	18289.8	10.9	23.5
2012	19,939.2	9.0	22.2
2013(RE)	21,752.5	9.1	21.7
2014(BE)	24,332.8	11.9	21.4

Source: RBI, various reports

Composition of Outstanding Liabilities of State Governments

The detailed composition of the outstanding liabilities of state governments from 1990-91 to 2013-14 (BE) are mentioned in Table 1. The composition of states' outstanding liabilities reveals increased reliance on market borrowings, which accounted for 40.2 per cent of their outstanding liabilities at end-March 2013. This is expected to rise further to 44.8 per cent by end-March 2014. On the other hand, the share of liabilities to NSSF has been steadily declining since end-March 2007. A steady decline in net collections under NSSF combined with increasing repayment obligations of the states has resulted in a decline in fresh investments by NSSF in state government securities. Similarly, the states' dependence on loans from the centre continued to decline in 2012-13 (RE) and 2013- 14 (BE) The share of public account items, which had risen at end-March 2011, has been declining since, although moderately.

Debt Position of Uttar Pradesh

Uttar Pradesh, the most populous state of India is well known for its multihued culture religion and variety of geographical land. It is endowed with natural wealth in abundance such as minerals, forests, flora and fauna. The state has to its credit the magnificent architectures and known for its rich arts and crafts Uttar Pradesh is located the Northern part of India and is surrounded by Bihar in the East, Madhya Pradesh in the South, Rajasthan, Delhi, Himachal Pradesh and Haryana in the West and Uttarakhand in the North and Nepal touches its Northern borders. The scenario of industrial investments in the state is quite encouraging. With availability of large skilled and semiskilled workforce coupled with good infrastructure, friendly policy framework and a conducive environment for private investments, Uttar Pradesh is one of the most attractive destinations for investors and entrepreneurs. The state has set up several industrial estates. The key industries are IT, textile, cement, vegetable oils, sugar, cotton yarn, jute, carpet, brassware, glassware and bangles. Uttar Pradesh has a great potential in handicraft sector and it accounts for 60% of the total exports from the state. The state has emerged as a hub for IT and ITES industries including software, BPOs and electronics. The major export items from the state are marble products, textiles, handicrafts, art pieces, gems and jewellery, textiles, electronics, software, computer, hardware & software, apparel, brass work, silk, leather and leather goods, glass items, art metal, chemicals and many others. The economic agenda of the Uttar Pradesh focuses mainly on food industry, biotech, IT and tourism. The state has been able to attract both domestic and foreign investments in different sectors of the economy and have promoted Public Private Partnerships in big way in various sectors such as power, roads, expressways, education etc.

Uttar Pradesh, the most populous state of India, with 16 percent of India's population offers the country largest market. Almost every sixth Indian lives in Uttar Pradesh. It was endowed with natural wealth in abundance, mainly in mountain ranges of the Himalayas in the North and Vindhyan ranges in the South. After the formation of the new state named as Uttranchal on November 9, 2000, the land area of Uttar Pradesh reduced to 240928 sq. kms. Lucknow-the capital of Uttar Pradesh is situated in the central part of the state. At present the state comprises 19 administrative divisions and 70 districts, which has been further reduced but could not be made effective, as the issues became sub judice. Uttar Pradesh was at 13th place among 15 states with Human Development Index value of 0.388, whereas the highest value was 0.638 in Kerala and all India value was 0.472. A few of the Indian states have been more reform oriented, such as Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Tamil Nadu. But states like Haryana, Kerala, Orissa Madhya Pradesh Punjab, Rajasthan and West Bengal have lot to catch up with. Uttar Pradesh is even far more behind. Prior to the 1990-91 reform programmes, the State's budgetary position was under severe stress as in many States in India. The economic growth was below potential, development of human resources lagged behind the national average, and mobilization of resources did not keep pace with the expenditure requirements. Several steps were initiated in 1996-97 such as tax reforms, subsidy cuts, power tariff restructuring and user fee hikes. These measures, although constituted a good beginning, appear to be inadequate. Apparently, the State government has been rather cautious in the implementation of fiscal reforms, as it is not easy to enlist public support for some of the reform programs in a federal democratic setting as in India. Consequently, during the last few years the State has been witnessing not only a slowing down of the pace of fiscal reforms but also a proliferation of counter-reform measures, thus bringing back the fiscal stress. Private and institutional investments in Uttar Pradesh are not at desired level as reflected through low credit deposit ratio of the commercial banks. (Agarwal Manoj, 2005).All this suggests that it is time to make an informed assessment of the progress of the fiscal reform in the State with a view to identify appropriate measures and formulate strategies for further fiscal correction. This study is an attempt in this direction. The study debt of Uttar Pradesh during the period 1990-91 to 2012-13 are discussed in the following sections.

Table 2: Debt / GSDP Ratio of Uttar Pradesh (Average) Percentage

	1995-96 to 1999-2000	2000-01 to 2004-05	2005-06 to 2009-10	2010-11 to 2013-14*	End-March 2013
Uttar Pradesh	35.7	48.9	46.4	35.3	33.7

The debt position of state governments in India, which deteriorated sharply during the first half of 2000s, has witnessed significant improvement since 2005-06 (Table I)This has been attributed,among others, to the implementation of fiscal rules through the enactment of fiscal responsibility legislations in Uttar Pradesh. The fiscal consolidation initiatives of state governments were complemented by debt and interest relief measures by the centre, and were supported by a favourable macroeconomic environment following the high growth phase and a reversal of the interest rate cycle in the mid-2000s. At the end of March 2013, while all the non-special category states were able to adhere to the debt target recommended by FC-XIII, the debt-GSDP ratio for Kerala, Punjab, Uttar Pradesh and West Bengal exceeded 30 per cent.

Table 3: Debt Sustainability Indicators of Uttar Pradesh (1995-2014)

	Rate of growth of public debt (k) should be lower than growth rate of nominal GSDP (g) : k-g<0				Rate of growth of GSDP (g) should be higher than effective interest rate (i) : g-i>0			
	1995-96 to 1999-00	2000-01 to 2004-05	2005-06 to 2009-10	2010-11 to 2013-14*	1995-96 to 1999-00	2000-01 to 2004-05	2005-06 to 2009-10	2010-11 to 2013-14
Uttar Pradesh	5.9	4.6	-6.3	-4.5	1.8	-1.9	8.5	7.3

Source: RBI, A study of state finances, 2013-14

An analysis of debt sustainability of Uttar Pradesh, based on various indicators, has been undertaken taking averages of various indicators during the four different phases for the period 1995-96 to 2013-14 (Table 3). While the rate of growth of debt of state governments at the aggregate and disaggregated levels during 1995-96 to 2004-05 exceeded the nominal GSDP growth rate, there was a significant improvement thereafter, with the difference between the rate of growth of debt and the growth rate of nominal GSDP turning negative during 2005-06 to 2013-14. It was -6.3 percent during 2005-06 to 2009-10 and was -4.5 in 2010 to 2013.

Table 4: Debt Servicing Indicators of Uttar Pradesh (1995-2014)

	Interest Payments to Revenue Receipts				Interest Payments to GSDP				Interest Payments to Revenue Expenditure			
	1995-96 to 1999-00	2000-01 to 2004-05	2005-06 to 2009-10	2010-11 to 2013-14	1995-96 to 1990-00	2000-01 to 2004-05	2005-06 to 2009-10	2010-11 to 2013-14	2005-06 to 2009-10	1995-96 to 1999-00	2000-01 to 2004-05	2010-11 to 2013-14
Uttar Pradesh	27.2	30.2	16.0	11.2	3.1	4.0	2.8	2.2	21.0	23.6	16.7	11.7

Source : RBI, A study of state finances, 2013-14

Overall, the debt position of state governments has shown an improvement as is evident from various debt sustainability indicators. Interest Burden defined by Interest Payments

(IP) to GDP ratio should decline over time and Interest Payments as a proportion of Revenue Expenditure should decline overtime. From table 4 we can see that as a consequence of good performance on revenue and capital receipts and moderate increase in revenue and capital expenditure, the debt burden of the state is on the decrease as evident from the debt-GSDP ratio and, consequently, the interest payments as percent of GSDP have also been declining. The IP/RR it was 27.2 percent during period 19995-96 to 1999-2000 which declined to 11.2 percent during the period 2010-11 to 2013-14. The ratio IP to revenue expenditure also declined during the study period. It was 21.0 percent during period 1995-96 to 1999-00 which declined to 11.7 percent in 2010-11 to 2013-14. However, the recent growth slowdown and volatility in the financial markets may affect the financial health of the state governments, particularly those which have relatively high debt-GSDP ratios.

Table 5: Debt and Accumulated Profit/Loss Position of State PSUs

	2009-10		2010-11		2011-12	
	Debt	Accumulated Profits/Losses(-)	Debt	Accumulated Profits/Losses(-)	Debt	Accumulated Profits/ Losses(-)
Uttar Pradesh	143.8	-190.2	250.8	-226.0	359.5	-293.8

Source: State Audit Reports on Public Sector Undertakings, CAG

The guarantee commitments of state governments with respect to SPSEs are, in fact, a major source of potential risk to fiscal and debt sustainability at the state level in general and in those states in particular where SPSEs have accumulated huge losses and debt liabilities (Table 5). In view of the foregoing and considering the strong presence of contingent liabilities in some states, there is a need for a holistic assessment of state government debt. The debt position of state governments should be seen together with their off-budget liabilities and borrowings through SPVs while also taking into account the potential risks to state finances arising from the dismal health of SPSEs, particularly state power utilities.

Recent Reform Measures of Uttar Pradesh

Fiscal Reforms have to be a continuous process. Uttar Pradesh is passing through a phase of financial crisis as there is lack of financial prudence in the state It can be seen that the receipts have been low and expenditure has been rising since the mid-nineties. Realizing the gravity of the situation some of the measures in field of fiscal, institutional and sectoral areas were taken by the state in late nineties to improve the budgetary situation. A series of reform measures taken by state to enhance revenues and reduce the expenditure are follows:

- State Government appointed a resource mobilization and Taxation Reform Committee for rationalisation of taxes, subsidies and user charges. In 2003-04. Uttar Pradesh proposed to introduce the Fiscal Responsibility and Budget Management Bill in the Legislature. Subsequently, the Bill has been enacted.
- It has proposed to set up a Sub Committee which would suggest measures to enhance the revenues of State, strengthen the tax compliance, computerization and simplification of rules and procedures.
- Government of Uttar Pradesh is planning to establish software technology parks in six districts so, that the state may be recognized in the world for information technology. These parks shall be opened Lucknow, Allahabad, Varanasi, Noida, Agra and Kanpur.
- To reduce the interest burden of states, a Debt Swap Scheme has been formed by states
- State has signed Memorandum of Understanding (MOUs) with the Ministry of Power, Government of India to undertake reforms in time bound manner
- Constitution of State Development Council in U.P. with leading industrialist such as Reliance Industries as its members. The leading industrialists announced ambitions projects in areas of power, health and housing which will lead to increase in infrastructure facilities. .
- New Life Insurance policy related to farmers dying due to sudden accident or becoming physically handicap on such account to be constituted .Gas Power Plants under private sector to be setup at the cost of Rs. 10,000 crore.
- Set up Infrastructure Development Fund with a Corpus of Rs. 10 crore.
- Power Development Fund has been constituted on the advice of State Electricity Regulatory Commission, Separate Power Transmission Corporation under Electricity Regulation Act, 2003, has been setup.
- USAID supported long term fiscal Management and Reforms Programme is to be implemented with technological assistance in the areas of treasury computerization, fiscal planning and analysis, evaluation and review of plans debt management data collection and analysis.
- Emphasis to lessen dependence on market loans / borrowings and making efforts towards enhancing own resources. This proposal is under consideration before Cabinet Committee for Resources and Expenditure Commission.
- New Insurance Scheme is being introduced for 5 lakh rickshaw pullers to benefit them in case of accidental death or getting physically handicapped.
- Concept of 'Gender Budgeting' is being introduced towards an effective tool for women empowerment.
- 2005-06 has been declared as a 'Year of completion of old/incomplete work'.
- Rural Development and Agri-business Centres are to be set-up under a new scheme.
- Decision has been made to encourage private investments in the area of housing construction to meet the target of 'Houses for All' on a priority basis.
- Chief Minister Rural-based Industries Employment Scheme is to take-off to create self-employment avenues for unemployed people of the rural areas.
- Waive off interest accumulated on agricultural bank loans of farmers in all the seven districts of Bundelkhand.
- Provide interest-free loans under the "Manyawar Shri Kanshi Ram Ji Urban Development Scheme" for developmental works of urban bodies.

Apart from these measures some of major Institutional Reforms by State Government of Uttar Pradesh in recent years are summarized in Table 6. Some of the major reforms undertaken by Uttar Pradesh in recent years are implementation of Value Added Tax (VAT) in January, 2008, Fiscal Responsibility legislation on October, 2005, New Pension Scheme (NPS) April, 2005 The state has not taken initiatives in forming of Consolidated Sinking Fund and Guarantee Redemption Fund. Guarantee on ceilings is also not so far imposed. A joint Central and state government reform programme is needed for the development and reform programme of states to succeed. (World Bank, 2005). In keeping with the diverse fiscal situation in states, the Thirteenth Finance Commission (FC-XIII) recommended a state-specific c approach for fiscal adjustment based on past fiscal performance (with 2007-08 as the base year), and prescribed differentiated adjustment paths for different groups of states. States, while managing their finances prudently, are also saddled with the additional. Responsibility of reinvigorating the slowing economy by utilising the fiscal space available with some of them to invest in productive sectors of the economy. An early resolution of differences between the centre and the states and among the states themselves will facilitate removing the legislative hurdles for the introduction of GST, with attendant benefits to tax revenue and growth in medium term.

Table 6: Institutional Reforms by State Government of Uttar Pradesh

Uttar Pradesh	Value Added Tax (VAT) Implemented Guarantee	Fiscal Responsibility Legislation (FRL) enacted	New Pension Scheme (NPS) introduced	Ceilings on Guarantee	Imposed Consolidated Sinking Fund (CSF) set up	Redemption Fund (GRF) set up
	Jan 2008	Feb 2004	April 2005	no	No	no

Conclusion

Thus overall analysis shows that the state finances of Uttar Pradesh are still in not good shape. The revenue receipts and revenue expenditure is increasing faster than capital receipts and capital expenditure. Non developmental expenditure grew faster than developmental expenditure. The growth in non-developmental revenue expenditure is dominated by growth in interest payments and pensions the major fiscal indicators of Uttar Pradesh such as gross fiscal deficit revenue deficit and primary deficit are still high. Regarding the debt position of Uttar Pradesh we find that though some improvement has been made but no mark progress had been made since now. Rate of growth of debt with GSDP has been negative in 2013. Economic reforms at the state level have a substantial unfinished agenda. While a handful of states have demonstrated their commitment by implementing reforms in certain sectors of the state economy, a majority of them have still to initiate any significant policy changes. Thus looking at the finances of Uttar Pradesh clearly states that no such drastic measures were taken by state to improve their finances. The state has to speed up the reforms to catch up with other states. Uttar Pradesh should impart an impetus for growth through a reforms based agenda. The government is faced with the task of enhancing the states' economic growth levels, which would necessitate dramatic improvements in its policy framework, more accountability and effective public institutions and the financial muscle to invest in essential infrastructure and human resource development. Uttar Pradesh would be well on its way of becoming the model state. Despite the fact that there are some promising signs of pick-up but state's growth remains significantly below and near-term prospects are still fragile as growth has moderated in 2011-12 and it is projected to slow down further in 2012-13. The volatility in growth and high inflation risks may spoil revenue projections of the state. , India's federal democracy is increasingly characterized by regionalisation of politics, with politics at the state level being driven by state rather than national issues, and this makes the economic performance of individual states an issue of potential electoral importance. Simultaneously, more important, state's commitment to stick on the path of fiscal consolidation is very critical as general election is due in 2014 (the government has to restrain it from adopting a populist budget if it has potential.

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Evaluation of Intensive Participatory Planning Exercise (IPPE) in MGNREGS

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The present study was conducted to with the focus of studying awareness, implementation process of IPPE, and people participation to help the other blocks for better implementation. The study was conducted in six states representing one from each geographical zone covering 24 Gram panchayats with the coverage of 1412 respondents. The study finds that the IPPE process was not effectively implemented because of lengthy process so there is a need of change in the process for effective implementation to achieve the goal.

Keywords

Participatory Planning, Wage Employment Scheme, People Participation

Introduction

Mahatma Gandhi National Rural Employment Guarantee Act, the flagship programme of the Union Government was passed by the Parliament in August 2005 and came into effect on 5th September 2005. It provides a legal Guarantee for 100 days of wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work at the minimum wage rate notified for agricultural labour prescribed by the State or else an unemployment allowance. The objective of the Act is to supplement wage employment opportunities in rural areas and in the process to also build up durable assets. Creation of durable assets and strengthening the livelihood resource base of the rural poor is an important object of the scheme.

Planning is critical to the successful implementation of the Rural Employment Guarantee Act (NREGA). A key indicator of success is timely generation of employment (within 15 days) while ensuring the process of selection of works. The need to act within a time limit necessitates advance planning and budgetary allocations. The basic aim of the planning process is to ensure that the District is prepared well in advance to offer productive employment on demand. The Act under section 16, mandates the formulation of a development plan by the Gram Panchayat on the recommendations of the Gram Sabha. The development Plan will be an Annual Plan that consists of a ‘shelf of projects’ to offer employment on demand.

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In order to implement the provisions of the act, a self of projects or annual plan has to be prepared and the Gram panchayat has to implement the plan. Very recently Government of India insisted the districts to entrust the preparation of plan on participatory mode with the help of local people and institutions on integrating the various sectors and sections by conducting Intensive Participatory Planning Exercise (IPPE) at the village/ward level and consolidation at the Gram Panchayat level.

Intensive Participatory Planning Exercise (IPPE) in MGNREGS

The unique feature of MGNREGA is its demand-driven character. But before begin to record demand, it is need to make a prior assessment of the quantum of work likely to be demanded as also ascertain the timing of this demand. This matching of demand and supply of work is the process of planning under MGNREGA and this is to be achieved through the preparation of a Labour Budget, which has two sides—one, assessment of quantum and timing of demand for work and two, preparing a shelf of projects to meet this demand in a timely manner. This process is crucial for the timely generation of employment within 15 days while ensuring the selection of works. This process is called Intensive Participatory Planning Exercise (IPPE), it is reinforcing the preparation of labour budget formulations through the use of strategies such as: intensive door to door survey of all vulnerable households, participatory identification of works, outcome orientation of works, close monitoring of this process by functionaries at the State and Central level.

The IPPE is a national initiative by the Ministry of Rural Development in 2500 identified backward blocks in the country with financial allocation of Rs. 1 lakh per block for training. It aims to ensure that people from socially excluded communities are included in their village's annual MGNREGA plan. The IPPE aims to ensure everyone in a community participates in the MGNREGA planning process and that their voices are heard.

The legal mandate of adhering of IPPE is mentioned in the sub-section 6 of section 14 of the MGNREG Act 2005 and it mandates that the District Programme Coordinator (DPC) under MGNREGA shall prepare, in the month of December every year, a Labour Budget (LB) for the next financial year containing the details of anticipated demand for unskilled manual work in the district and the plan for identification of need based works and engagement of workers in the works covered under the programme.

The para 7 of schedule (I) of the act mandates that there shall be a systematic, participatory planning exercise at each tier of panchayat, conducted within the specified period of time. All the works to be implemented by the Panchayats, have to be identified and placed before the Gram Sabha and such works to be implemented in the intermediate Panchayats or other implementing agencies are to be approved by the intermediate or district Panchayats. The chapter 6 of the MGNREGA operational guidelines, 2013 contains details about the procedure to be followed in planning for works and preparation of labour budget. Under the Act every Gram Panchayat (village council) should have an annual plan that includes enough money to pay every MGNREGA-registered family, a list of all the projects that need to be carried out in the community along with project plans.

Thus through IPPE, a development plan consisting of i) Assessment of labour demand, ii) Identification of works to meet the estimated labor demand and iii) Estimated Cost of works and wages is to be prepared. This process of planning and identification of projects must be in a participatory manner at the habitation level, reflecting the needs and aspirations of the local people, while ensuring maximum participation of women, SCs/STs and the poor. These habitation level proposals are collated at the Gram Panchayat level, incorporating inter-habitation works that are identified, again in a participatory manner. Individual works are logically sequenced and packaged together on the principles of Individual Natural Resource Management, to form projects. The GP is the custodian of the Standard operating

Procedures (SoP) and all Programme Implementing Agencies (PIAs) working within the GP are reporting their plans to the GP, which are incorporated into the Annual Plan for MGNREGA after the approval of the GS. The order of priority of projects is determined by each GP in meetings of the GS and the Ward Sabha and is reflected in the Annual Plan.

However, field studies identify some constraints in the process, (Performance audit report; 2008) like GSs are held infrequently, low participation at GSs for selection and prioritisation of works and sometimes work selection is not done according to the priorities or demand of the GS, At the planning stage, the CAG audit found that around 80 GSs had not been convened for planning purpose across 12 states including, Andhra Pradesh, Assam, Chhattisgarh, Jharkhand, Karnataka, Madhya Pradesh, Odisha.

Other field studies had similar findings. (Quick appraisal report; 2009) A study in five districts of Uttar Pradesh found that for selecting the works to be undertaken, only 45 per cent of the 784 respondents (beneficiaries and non-beneficiaries) said that meetings of the GS were held and only 42 per cent respondents reported that the selection of works was done according to priorities of the GS. This percentage was found to be high (as noted in awareness levels above as well) in the case of states like Maharashtra. Out of 200 respondents interviewed in two districts of Maharashtra, 83 per cent in Thane and 60 per cent in Akola reported that GSs were held to discuss MGNREGA.

The following section outlines the materials and methods used in this study, and it is followed by awareness on Mahatma Gandhi NREGS and IPPE, implementation of planning process, and people participation in different components of planning process. The last section says the policy suggestions.

Materialas and Methods

Thus the present study has been planned to make initiatives to study the implementation process of the IPPE, which will help to improve the planning process of other PRIs of low performing and difficulty facing regions for attainment of better results. Therefore, this study is proposed to study the process of implementation of IPPE from the selected states with the following objectives.

Objectives of the Study

- To study the awareness of beneficiaries on Mahathma Gandhi NREGA and Intensive Participatory Planning Exercise
- To bring out the process of implementation of Intensive Participatory Planning Exercise.
- To explore the extent of participation of beneficiaries in IPPE process
- To frame the policy recommendations for conducting effective IPPE at gross root level

Study Area

The study was conducted in six states representing one from each geographical zone and also based on the variations in Labour Budget projections of 2014-15 and 2015-16. Therefore the study selected three lowest variance states and three highest variance states namely Chhattisgarh (Highest in Central Zone), Odisha (Highest in East Zone) Uttarkhand (Highest in North Zone),Tripura (Lowest in North East Zone), Andhra Pradesh (Lowest in south zone), Gujarat (Lowest in west zone).

With same criterion the districts and blocks were selected from each state. From each Block two GPs were selected. Depending upon the number of IPPE blocks, in few districts it was one block and few other districts it was two blocks.

Table 1: Study Area

State	District	Block	Panchayat
Chattisgarh	Bilaspur	Belha	Podi (H)
			Bijour
		Gaurella– 2	Newarinawapara
			Kotamikhurd
Odisha	Koraput	Narayan Patana	Kumbhari
			Borigi
		Jeypore	Balia
			Pujariput
Uttarkhand	RudraPrayag	Ukhimath	Kotma
			Nyalsu
Tripura	Sepahijala	Jampuijala	Thelakung
			Jugalkishorenagar
Andhra Pradesh	Kurnool	Kosigi	Peddabompalli
			Kamandodd
		Krishnagiri	Kambalapadu
			Sho. Yerragudi
Gujarat	Valsad	Kaprada	Kumbhset
			Vadi

Sampling Procedure

The respondents were selected on the basis of available list of active job card holders and required number of sample was arrived by taking confidence level as 95 per cent and the error level 10 per cent[1]. Sample was selected based on simple random sampling by selecting every 5th name of job card holder from the GP's muster roll. Replacement was adopted for non existence or non availability of selected samples to arrive required number of samples for the study. The total sample size was 1412 covering six states.

Tools for Data Collection

The study used structured schedules for NREGA beneficiaries or 'active job card holders'. The interview schedule was prepared covering all the aspects like socio- economic profiles, awareness levels, participation, quality of participation, and process of Intensive participatory Planning Exercise.

Informal discussions were also conducted to collect information in the critical areas for the process of IPPE. Opinions and suggestions for further strengthening of IPPE were collected and consolidated from the people.

Social Profile of the Respondents

Sex

In all the six states, the study covered 1412 samples consisting of 49.2 per cent males and 50.8 percent females. In all the states females are outnumbered males and is highest in Uttarkhand with 82 percent of the respondents being women. In all the study area women work participation in the MGNREGS is high.

Age

Study reflects that, maximum respondents i.e. 35 per cent fall in the age group of 31 – 40 followed by 28.2 per cent in the age group of 41-50 another 21.4 percent in the age group of 21-30. For 15.7 per cent respondents, who are above 50 years, MGNREGS become a social security measure.

Caste

Out of the 1412 respondents from six study districts, 46.4 percent represent Scheduled Tribes and another 32.6 per cent are from Other Backward Class and 10 percent belong to Scheduled caste and another 10 percent from forward / other caste. Minorities represent only 1.1 per cent.

The study finds that Scheduled Tribe's representation is very high in the state of Gujarat (98.9 percent), Tripura (91.8 per cent), Odisha (66 per cent) and Chattisgarh (54.3 per cent). OBC representation is high in Andhra Pradesh (78.7 per cent). Scheduled Caste participation is very low in all the study areas of the states. The state of Uttarkhand reported 92.5 per cent respondents are in the 'Others' communal category.

Occupations

In the study area, out of 1412 sample respondents, 49.2 per cent work as agriculture labourers and 19.9 per cent are engaged as non-agriculture labourers and another 24 per cent are engaged in agriculture as full time farmers. The remaining respondents are engaged in different activities like handicrafts (four per cent), livestock rearing (2.6 per cent), engagement in some kind of services (one per cent) and business (one per cent). There are some variations across the states like the percentage of agriculture labour is very high (89.8 per cent) in Valsad district of Gujarat. Good number of respondents depending on agriculture is seen in Kurnool district of Andhra Pradesh. Similarly, more number of respondents (44 per cent) depending on non- agriculture labour are found in Sepahijala district of Tripura.

Awareness of Beneficiaries

The study has sought to analyse the awareness levels of the workers on different parameters of MGNREGS like the entitlements, works taken up in their gram panchayat, mandatory facilities to be provided at the worksite, social audit, grievance reddressal mechanisms etc.

Awareness on MGNREGS

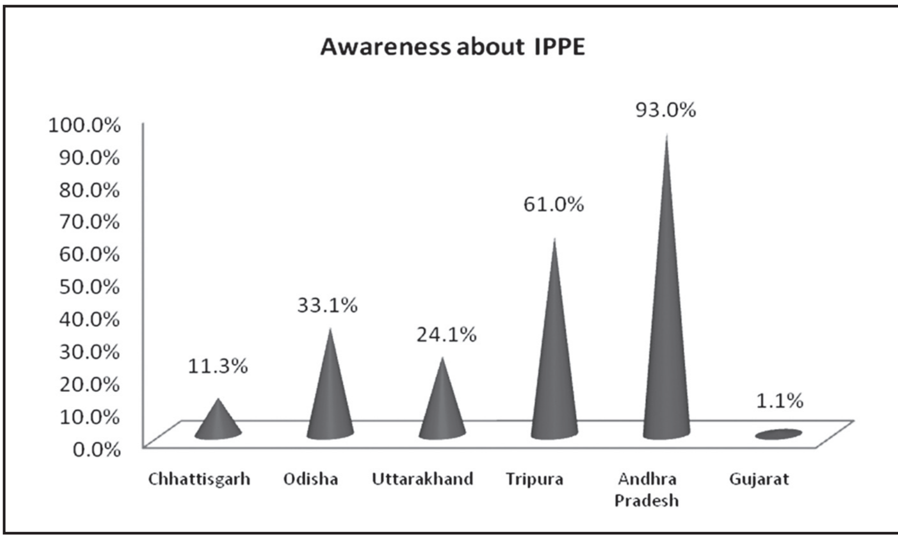
However, the awareness level on the scheme provisions show that, 69.5 per cent know about their right to work under MGNREGA, 66.6 per cent are aware of minimum 100 days guaranteed employment in a year, 54.2 per cent know that they have to submit application for getting work. Around 51 per cent reported of having awareness on the entitlement of unemployment allowance. 48.9 per cent of respondents know the type of works to be undertaken in MGNREGS. Around 48 per cent know gram sabha's role in work identification. Around 40 percent of beneficiaries know social audit, time limit for provision of employment after submission of application, right to raise question during the process of social audit, work site facilities and time limit for payment of wages. There are significant variations across the states.

The study reports that, around 41 per cent knew that the panchayat secretary/ Rozgarsagayak/ Sarpanch or Block Development Officer are authorities to meet to redress the grievances related to the non-issue of job cards, if the work is not provided within the prescribed timeline and delay in payment of wages.

Awareness on IPPE

The main focus of the study was to understand about the process of IPPE and its impact on the process of participatory planning in preparation self of projects under MGNREGA. In the investigation, it was found, among the sample population 44.3 per cent of respondents are aware of the IPPE process. But significant difference was observed across the states. In the highest variation states, especially in Kurnool district of Andhra Pradesh and Sepahijala district of Tripura, the awareness levels about the IPPE were high.

Figure 1: Awareness about IPPE



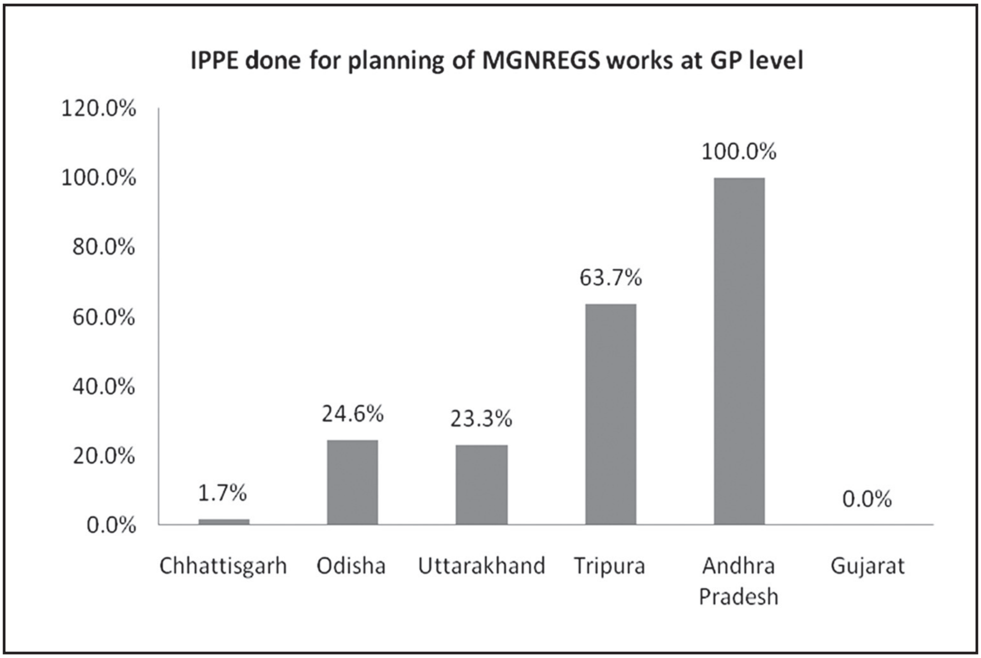
When it was enquired about the awareness levels of the respondents on facilitation of IPPE, it was found that, 57.8 per cent of the respondents felt it is Block Plannig Team and another 25.2 percent felt it is Gram Rojgar Sahayak[2]. It was surprising to see that there was no mention about the role of BPT in either Bilaspur district of Chattisgarh and Valsad District of Gujarat. In Valsad district of Gujarat, the respondents felt the GP secretary will manage the entire show of IPPE. In Bilaspur district of Chattisgarh, respondents felt that it is the Gram Rojgar Sahayak, who will carry out IPPE.

Block Planning team's role was acknowledged by 76.7 per cent of respondents from Kurnool district of Andhra Pradesh, 47 per cent from Koraput district of Odisha, 40.6 per cent from Rudraprayag district of Uttarkhand and in Sepahijala district of Tripura by 36 per cent.

Implementation of IPPE

It was enquired that whether IPPE was done in the GP, though the overall figure show that 42.1 per cent of the respondents but it varied state wise. In Valsad district of Gujarat no one said IPPE took place and in Bilaspur district of Chattisgarh only 1.7 per cent respondents said IPPE actually took place on ground. This says virtually IPPE didn't take place in all the four selected Gram Panchayats of Bilaspur district of Chattisgarh. All the sample respondents from Kurnool district of Andhra Pradesh and 63.7 per cent in Sepahijala district of Tripura, 23.3 per cent in Rudraprayag district of Uttarkhand, and 24.6 per cent from Koraput district of Odisha reported IPPE was conducted in their GPs during the year 2015-16. Over all data shows, the IPPE was not conducted properly as expressed by around 58 per cent.

Figure 2: Implementation of IPPE



BPTs were supposed to created awareness on MGNREGA and motivate the people to attend the meetings. They should conducted meeting and initiated discussion conduct door to door survey and identify the families without job cards. The BPTs should further carry out the work identification process through various mapping exercises. Ultimately, BPTs should contribute in preparation of village development plan. They were imparted training on modus operandi of IPPE and appropriate use Participatory Rural Appraisal method and techniques.

When it was enquired of the process of IPPE, it was known that Out of 595 sample reported conduct of IPPE, 521 (87. 6 per cent) respondents reported that, BPT members have conducted meetings with villagers before starting of IPPE and explained the importance of planning. The discussion was held in the places like Panchayat Office, Integrated Child Development Service Center, Temple, NREGA work place, School premises, etc. About 95 per cent of the respondents reported the conduct of door to door survey and identification of households without job cards and 88.7 per cent respondents revealed that, households without job cards were also identified through the survey.

In the process of IPPE, it is specified to take up planning exercise using PRA techniques like social mapping, resource mapping, transect walk and identify the permissible works under MGNREGS and also other works in convergence which help to rejuvenate the natural resource, agriculture and livelihood base of the GP. So an attempt was made to look into how the process of IPPE went on. Except the state of Gujarat, in all other sample states as revealed by 84.6 per cent respondents, the BPT teams conducted PRA techniques like social mapping, resource mapping and transect walk under IPPE and 94.6 per cent accepted that, social mapping exercise was conducted in their villages. Around 92 per cent said that resource mapping exercise was done except in the state Chattisgarh. Almost 67 per cent respondents said that Transect Walk exercise was conducted in the villages and 88.4 per cent of the respondents reported BPT members had done seasonality analysis in their villages.

As reported by 79.7 per cent respondents, Identification and planning of works also carried in the sample villages as one of the important components under IPPE. But it varied state wise and surprisingly only 3.4 per cent respondents reported such activity took place in Koraput district of Odisha.

Table 2: Process of IPPE Conducted and Role of BPTs in the IPPE

Process and role	Highest Variation States			Lowest Variation States			Total
	Chhattisgarh	Odisha	Uttara-khand	Tripura	Andhra Pradesh	Gujarat	
Preliminary meeting	3	60	24	96	338	-	521
	60.0%	69.0%	77.4%	82.8%	94.9%	-	87.6%
Door to door survey	3 60.0%	76 87.4%	28 90.3%	116 100.0%	342 96.1%	- -	565 95.0%
Identifying HHs without job cards	2 40.0%	76 87.4%	25 80.6%	106 91.4%	319 89.6%	- -	528 88.7%
Social Mapping	2	76	28	113	344	-	563
	40.0%	87.4%	90.3%	97.4%	96.6%	-	94.6%
Resource Mapping	0	75	21	113	339	-	548
	.0%	86.2%	67.7%	97.4%	95.2%	-	92.1%
Transect Work	1	5	28	27	339	-	400
	20.0%	5.7%	90.3%	23.3%	95.2%	-	67.2%
Seasonality analysis	3	71	26	88	338	-	526
	60.0%	81.6%	83.9%	75.9%	94.9%	-	88.4%
Meeting for selection of works	3	3	28	102	338	-	474
	60.0%	3.4%	90.3%	87.9%	94.9%	-	79.7%

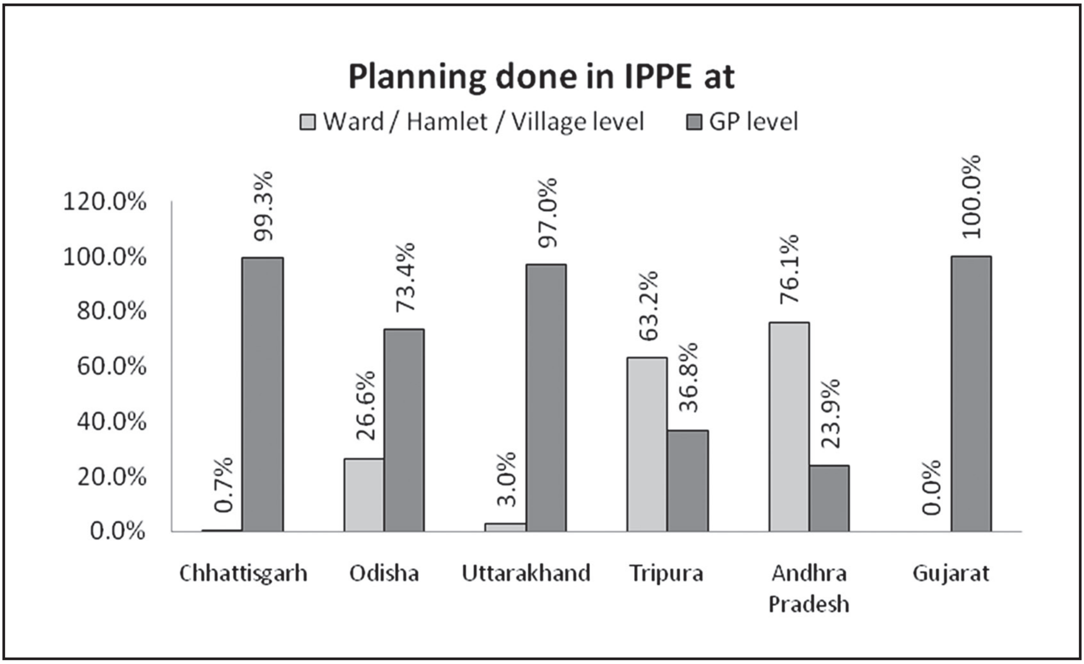
The overall score of IPPE process is calculated for the above components and the highest score with 95.2 percent was seen in kurnool district of Andhra Pradesh and lowest score with 53.1 per cent was reported in Bilaspur district of Chattisgarh.

Various groups' like officials, PRI members, SC/ST, youth from the village, SHGs, NGOs, women, small and marginal farmers participated in the process of IPPE. But their participation varied across the study area.

Level of Planning

As per the guideline of the scheme, the planning process has to be initiated either at the ward or at GP level. 65.6 percent reported the planning process was done at the GP level. But state wise variations were found. In the states of Uttarkhand (97 per cent), Chattisgarh (99.3 per cent) and Gujarat (100 per cent) Odisha (73.4 per cent), planning is done at GP level. But respondents in Andhra Pradesh and Tripura viewed that planning process was initiated at the ward/hamlet/ village level.

Figure 3: Planning done in IPPE



One of the important processes in IPPE is planning in convergence of various schemes implemented by the line department for coordinated development and reduction of duplication and to overcome the constraint of material ratio[3]. When it was enquired about the participation of line departments in IPPE, only 10 per cent respondents reported that they have participated. This scenario was seen in only in the state of Tripura (50 per cent) and in Andhra Pradesh (13 per cent).

It was reported by the respondents that Gramsabha was conducted for the ratification and approval of the plan identified through the process of IPPE. But there were state wise variations. In Kurnool disatrict of Andhra Pradesh, 92.4 per cent respondents reported gramsabha was conducted. In Sepahijala district of Tripura too majority (58.2 per cent) of the respondents said gramsabha was conducted. Contrary to this, in Valasad district of Gujarat the respondents reported no gramsabha took place and the same scenario in Bilaspur district of Chattisgarh, where only negligible number of respondents reported that gramsabha took place.

People Participation in IPPE Process

When a detailed enquiry was made about the participation of the respondents in IPPE, it was found that, except in the state of Gujarat - Valsad District, in all other study area, respondents participated in IPPE. Over all 40 per cent of the respondents participated in the planning of works under IPPE. Participation was high in Kurnool district of Andhra Pradesh and low in Bilaspur district of Chattisgarh.

An attempt was made to quantify the quality the participation of the respondents for all the phases of IPPE, by using the indicators like attended but not participated, participated in the discussions and raised questions and demanded works.

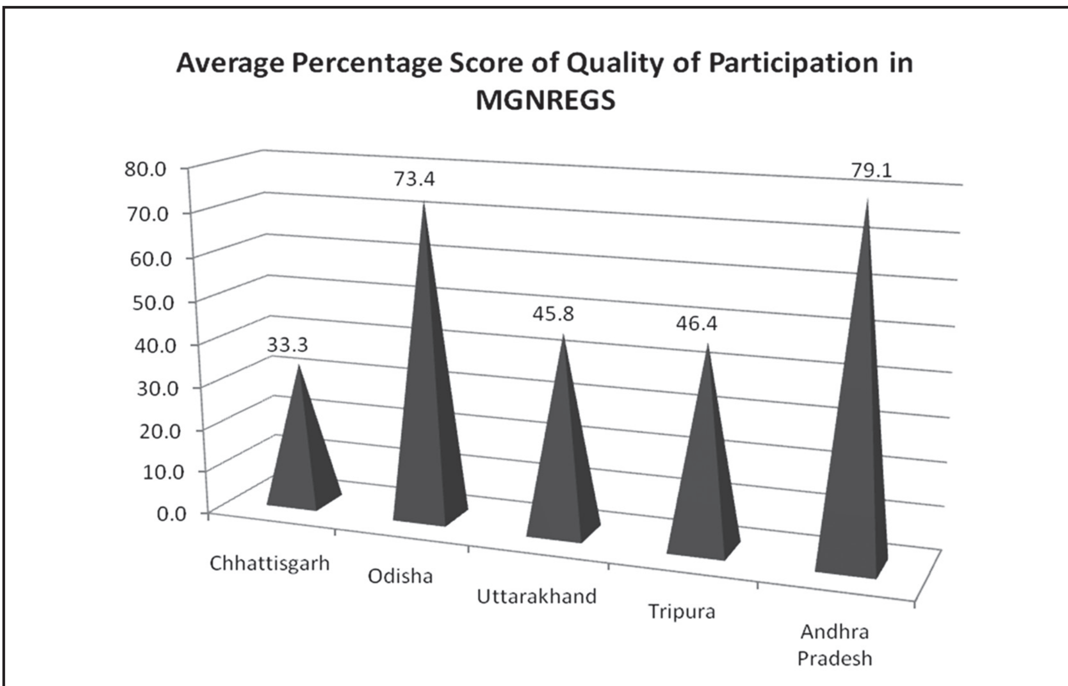
Table 3: Details about the Participation of Respondents in IPPE

Variables	Highest Variation States			Lowest Variation States			Total Percent
	Chhattisgarh Percent	Odisha Percent	Uttarakhand Percent	Tripua Percent	Andhra Pradesh Percent	Gujarat Percent	
In Resource Mapping							
Attended not participated in discussions	75.0	19.8	53.6	71.6	22.4	0	34.0
Participated in discussions	25.0	8.1	46.4	28.4	9.7	0	15.2
Raised questions		72.1			68.0	0	50.8
In Social Mapping							
Attended but not participated in discussions	75.0	25.6	53.6	71.6	22.1	0	34.7
Participated in discussions	25.0	5.8	46.4	26.7	9.7	0	14.5
Raised questions and demanded works		68.6		1.7	68.3	0	50.8
In Transect walk							
Attended but not participated in discussions	75.0	81.4	53.6	87.9	22.7	0	46.9
Participated in discussions	25.0	10.5	46.4	10.3	10.0	0	12.0
Raised questions and demanded works		8.1		1.7	67.4	0	41.1
In Seasonality analysis							
Attended but not participated in discussions	75.0	69.8	60.7	56.0	22.4	0	38.8
Participated in discussions	25.0	7.0	39.3	42.2	9.4	0	17.3
Raised questions and demanded works		23.3		1.7	68.3	0	43.9
In identification of works							
Attended but not participated in discussions	75.0	50.0	50.0	62.9	22.7	0	36.8
Participated in discussions	25.0	9.3	50.0	36.2	10.0	0	17.3
Raised questions and demanded works		40.7		.9	67.4	0	45.8
In prioritization of works at Gram Sabha							
Attended but not participated in discussions	75.0	29.1	46.4	68.1	22.7	0	34.5
Participated in discussions	25.0	9.3	53.6	30.2	9.4	0	15.9
Raised questions and demanded works		61.6		1.7	68.0	0	49.6

State wise variations were noted. In Bilaspur district of Chattisgarh, majority of the respondents just attended but not participated. In the Koraput district of Odisha, in resource mapping, social mapping, identification of works and prioritization of works, majority of the respondents raised questions and demanded works. In Rudraprayag district of Uttarakhand almost half of the respondents just attended but another half have participated in the discussions. In Sepahijala district of Tripura also, majority of the respondents participation was just passive and didn't participate in the discussions. In Kurnool district of Andhra Pradesh, the participation of the respondents was active and majority raised questions and demanded works.

The overall score of quality of participation in IPPE process is calculated for the above components and the highest score with 79.1 percent was seen in kurnool district of Andhra Pradesh and lowest score with 33.3 per cent was reported in Bilaspur district of Chattisgarh.

Figure 4: Quality of Participation



Inclusion of Vulnerable Section

Inclusion of vulnerable sections of population like SC, ST, houseless, land less, women headed households, physically challenged, mentally challenged is one of the most important objectives of IPPE. Thus the IPPE provided an opportunity for the marginalized to join with the gram panchayats in the decision making process and getting better access to the benefits of MGNREGS. It was reported that the inclusion was good in Bilaspur district of Chattisgarh, Kurnool district of Andhra Pradesh and Sepahijala district of Tripura. In Koraput district of Odisha, the inclusion of vulnerable sections was not given priority.

Satisfaction of Beneficiaries on IPPE

Table 4: Responses on the Level of Satisfaction about the Process of IPPE

Level of Satisfaction	Highest Variation States			Lowest Variation States			Total
	Chhattisgarh	Odisha	Uttarakhand	Tripura	Andhra Pradesh	Gujarat	
Highly Satisfied	0	27	24	15	93	0	159
	.0%	7.6%	18.0%	8.2%	26.1%	.0%	11.3%
Satisfied	121	132	2	101	251	0	607
	40.3%	37.4%	1.5%	55.5%	70.5%	.0%	43.0%
Not Satisfied	15	0	0	1	6	0	22
	5.0%	.0%	.0%	.5%	1.7%	.0%	1.6%
No Response	164	194	107	65	6	88	624
	54.7%	55.0%	80.5%	35.7%	1.7%	100.0%	44.2%
Total	300	353	133	182	356	88	1412
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Overall findings of the study reflects, the IPPE conducted in sample panchayats have created impact on the mobilization of people for participation, encouragement of people to intellectually participate in the discussion and demanding for works to fulfill their needs. The study data reveal, the process of conduct of IPPE was done as per the guidelines prescribed by the government. Among the sample population 43 per cent respondents were satisfied and 11.3 per cent were highly satisfied with the process of IPPE.

Recommendations

This process of planning and identification of projects must be in a participatory manner at the habitation level, reflecting the needs and aspirations of the local people, while ensuring maximum participation of women, SCs/STs and the poor. The following recommendations should be implemented by the Ministry of Rural Development while implementing IPPE in next year to ensure quality of IPPE to achieve the goal.

The pre- planning or the preparatory phase of IPPE i.e. awareness creation, sensitization and training of the facilitators of IPPE has to be strengthened.

People maximum reach programmes have to be framed to attract maximum participation in the planning process. The ultimate aim is to make people understand the importance of the IPPE, benefits expected, and necessities of people participation.

Periodical trainings with innovative participatory methods on social mobilization have to be imparted, in addition attitudinal and behavioural training also to be conducted for the planning team, elected representatives and also to the job card holders in encouraging positive participation.

Honorarium to the BPT members for the conduct of IPPE process should be ensured.

Block Planning Team members requested for more number of trainings upto 3, increase of duration at least up to 5 days, restriction of only 25 trainees in a batch, coverage of PRA contents with field Exposure, sufficient time for field and document verification and coverage of attitudinal and motivational sessions. Familiarization of the trainees on the MGNREGA works like identification and prioritation of works, preparation of labour budget, documentation of IPPE process, etc. More practical classes on the exercises related to PRA strategies, household survey, filling of demand estimation formats, etc to be given more concentration in the training.

IPPE was carried at the GP level and suggested to conduct at the ward level or hamlet level and consolidation have to be done at the GP level.

Circumstances and opportunities to be ensured to conduct fare and free IPPE process without political conflicts. Proper documentation, specifically on the participation of weaker sections and their contributions to be captured with video evidences and tracking to be ensured. Verification on whether poor people voices or grievances are included in the self of the projects and has it mentioned in the action taken report also to be ensured.

The fund release has to be linked with the convergence plan made in the IPPE process with the indications of percentages of finance can be drawn from the different schemes with MGNREGS.

The Intensive Participatory Planning Exercise is new initiative implemented by the Ministry of Rural Development. The process is in neonatal stage so there is a need of handholding support at gross root level and need there is a need of rigorous monitoring process by the district and state government official to ensure the rigorous implementation of planning.

End Notes

1 To participate in MGNREGS the beneficiary should get job card. After receiving job card it is not compulsory to participate in scheme. The people who are participating in scheme are called active job card holders.

2 Block planning Team is promoted at block level to facilitate IPPE and it includes members from the civil society organizations/ NGOs, members from federation of SHGs, member of SHGs, member of watershed committees, and youth from the household worked more than 50 days in MGNREGS for the last three years and also one official.

3 Mahatma Gandhi NREGS should have 60 per cent labour component and 40 per cent material component for any kind of work is having material is called wage material ratio.

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Status and Factors of Public Health: A Case Study of Construction Workers of Gandhinagar, Gujarat

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Public health is a vital part and component of development in any society. There are a host of factors which affect health of individuals and communities along with public health services. The public health is determined by various social and economic factors like income of the family, family size, working conditions, availability of physical and social infrastructure, access to health facilities and health coverage. Low income is the cause for lack of nutritious food, safe drinking water and accessibility to medical facilities. These low income groups are unable to spend sufficient money on health care facilities. Gandhinagar city is a newly developing capital city of one of the western provinces of India, i.e. Gujarat. In construction sector of this city nearly 20,000 manual laborers are participating in public and private constructions. Majority of these laborers are migrant labourers, migrated from other states of India. Out of major problems faced by the construction workers one is related to accessibility to the health care. Providing health care facilities to this section is a major challenge for the government also. The construction labor force of Gandhinagar is estimated to have an additional burden of 18,000 to 20,000 children who don't have any significant education, nutrition and health care facilities. Due to the problem of language barriers, children's access to education from local schools is very limited. Overall, the construction workers access to benefit from welfare schemes and other government programmes are also very limited. The present paper is an attempt to assess the current health status and identify the major factors affecting the public health related to the construction workers like income of the family, education, working conditions, water and sanitation facilities, and accessibility to health care facilities. Further, the present study tries to identify possible intervention policies to improve the public health scenario for the construction workers in Gandhinagar.

Keywords

Public Health, Migrant Labour, Construction Sector, Health Care, Public Health Awareness

Introduction

Construction is an important sector of industrial activity in any country. India's constriction sector as such is an important segment of industrial activity and thus contributes a significant proportion

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of the industrial GDP and also to the overall national income of the economy. After the agriculture and allied sectors a sizeable portion of India's organized and unorganized labour force is employed in the construction sector. Thus, the importance of the construction sector can be viewed from the fact that it employes about 33 million people and affects a number of related industries like cement, steel, technological manufacturers and so on. Construction industry affects being a major contributor to India's GDP both directly and indirectly. Moreover, with easing of norms for FDI in real estate and construction along with the enfolding of central governments Smart Cities project and 'Housing for All by 2022' will provide major impetus to the construction sector. Additionally, the AMRUT Mission i.e. Atal Mission for Rejuvenation for Urban Transformation of the Indian government has the potential to provide enhanced boom in infrastructure and construction sector. In short, construction is one of the major growth drivers of the economy.

Viewing the importance of employment of a major part of workforce in the construction industry the dependence of manual, semi-skilled and skilled labour in this sector is needless to be emphasized. Moreover, as infrastructure construction had a share of 23 percent of total construction industry in 2015 and which is forecasted to be grown with a CAGR of 9.94 percent in nominal terms thus, leading to a size of INR 9.5 trillion (USD 140.1 billion in 2020). With expanding population and rapid urbanization the overall construction industry will be growing exponentially and it will be contributing a whopping 30.6 percent share in the overall construction industry by 2020. From this it can be gauged that the construction industry will be employing increased amount of workforce in the next five years and thus will be requiring enhanced level of new skilling of the construction workers. In other words a productive and healthy construction workforce is the need of the hour to support a formidable boom in the construction sector. Hence, the issue of sound health services and public health facilities to the construction workers is of vital importance at present which cannot be ignored. In this context the present study makes an attempt to assess the current health status and identify major factors affecting public health related to construction workers and tries to make a case for possible intervention policies to improve the public health services for the construction workers in Gandhinagar.

Construction Sector in India

The Construction sector contributes to 10 percent of India's GDP and provides direct employment to around 20 million construction workers. As per Planning Commission's projection, India's construction sector is poised to invest USD 1 trillion in infrastructure during 12th Plan (2012-2017) period. Moreover, the market size (overall output) of India's construction industry for the same period is estimated to the tune of INR 52.31 trillion. The government has undertaken grand plans to develop infrastructure like creating 100 smart cities, 20 new industrial clusters, industrial corridors, increasing highway networks and roads in India. Moreover, the construction equipment industry which forms more than 60% share of investment in infrastructure and contributes 7-8% of GDP, provides more than 30 million employment in the country with a projected market size of USD 22.7 billion by 2020.

To promote creation of Smart Cities and growth in urbanization with infrastructural and transport connectivity INR 70.6 billion is allocated in 2016-17. Urban infrastructure construction also includes an allocation of INR 1 billion for metro rail projects in Ahmedabad and Lucknow. For rural construction sector development INR 80 billion is earmarked for rural housing and INR 40 billion is proposed for low cost housing under the National Housing Bank.

The urban infrastructure is estimated to attract investments of USD 650 billion in the coming two decades. To facilitate investment in townships and city infrastructure government of India has permitted 100 per cent FDI through the automatic route and de-licensing of material handling equipment industry with 100 per cent FDI under direct route. The FDI norms for the construction development sector are further being eased.

Construction Sector of Gujarat and Gandhinagar

As per, Census 2011 estimates there are about half-a- million construction workers in Gujarat out of which 50 thousands (i.e. about 10 percent) are based in Ahmedabad. As per a CAG Report tabled to Gujarat Assembly in 2014 the total number of Construction workers in Gujarat was estimated at 1.2 million out of which only 6 percent is registered by the Gujarat government. As separate estimates of number of construction workers for Gandhinagar are not available, and since builders based in Ahmedabad usually are engaged in construction work at Gandhinagar and hence keep on shifting the construction workers between Ahmedabad and Gandhinagar, it can be reasoned that the construction workers of Ahmedabad also includes that of Gandhinagar. If a conservative estimate of 10 percent is taken for Ahmedabad–Gandhinagar construction sector, then it turns out to be not less than l20 thousands construction workers. The construction labor force of Gandhinagar is estimated to have an additional burden of 18,000 to 20,000 children who don't have any significant education, nutrition and health care facilities.

As population is expanding in overall India and Ahmedabad, including expansion of urban population and increased rural urban migration, population pressure on existing infrastructure and housing have increased tremendously over the years that has taken shape into newer construction in the periphery of Ahmedabad and Gandhinagar leading to a contiguous agglomeration of construction activities between the twin cities of Ahmedabad- Gandhinagar. This has led to enhanced construction activities in Gandhinagar and increased flow of construction workers from different parts of the state including those from outside the state.

Construction works in India is heavily depended on internal rural urban migration. The Government of India figures on internal migration are updated till the 2001 census. However, the National Sample Survey Organization (NSSO) in 2007-08 pegged the number of internal migrants at 326 million or 28.5 percent of the population. In 2013 a UNESCO study titled, *"Social Inclusion of Internal Migrants in India"* projected the number of internal migrants to cross about 400 million as per Census 2011. The UNESCO study talks about the conspicuous migration corridors in India which includes Bihar to National Capital Region, Bihar to Haryana and Punjab, Uttar Pradesh to Maharashtra, Orissa to Gujarat, Orissa to Andhra Pradesh and Rajasthan to Gujarat. Hence, the domestic migration in Gujarat depends on its own intra-state migration and conspicuous migration from other states prominently from Orissa and Rajasthan to Gujarat and in reasonable numbers from West Bengal.

Labour Issues & Labour Laws in Construction Sector of Gujarat

In general, the labour law in India is related with many aspects of employment relationship between the labourers, the trade unions, employees and the employers. Labour law defines the rights of the workers and trade unions and overall obligations of the employers in the construction work place. Hence, India's labour laws cover broadly industrial relations, workplace safety and health issues, and standards and rights of employment. As there are multiplicity of labour laws in India enacted by the Government of India and different states, a set of different labour laws can be found to be applicable to a particular state, which is alternatively known as Industrial law in India. The earliest Indian Law related to labour employment was the Trade Dispute Act 1929, which was repealed by the Industrial Disputes Act on 1st April 1947. It dealt with fair ways and fair working commissions for the labour and their fullest obligation for uninterrupted production.

The majority of labour laws applicable to building and construction industry in India are Fatal Accidents Act, 1855, Industrial Disputes Act 1947, Trade Union Act, 1926, Workmen Compensation Act, 1923 (amended), Payment of Wages Act, 1936 (as amended), Employers Liability Act, 1938 (as amended), Employees State Insurance Act, 1958, Minimum Wages Act, 1948, Factories Act, 1948, Contract Labour and Regulation Act, 1970, Equal Remuneration Act, 1976, Building and other construction worker's (Regulation of Employment and Conditions of Service) Act 1996, Building and other Construction Worker's Welfare Cess Act, 1996 and other related to gratuity, provident fund, insurance, maternity benefit etc.

In addition to the central laws Gujarat also enacted certain laws and rules applicable to various labour workers and specifically to the construction workers. For example, the Contract Labour (P&R) Gujarat rules 1972, the Payment of Gratuity under Gujarat Rules 1973, the Industrial Disputes Act 1947 and Gujarat Rules 1966, the Bombay Industrial Relations Act 1946 and Gujarat Rules 196, the Child Labour (P&R) Act 1986 and Gujarat Rules 1994 etc.

Though Gujarat government defines 3 categories of construction workers- unskilled, semi-skilled, and skilled and provides applicable daily and monthly minimum wages under the Minimum Wages Act. The last notification of Labour & Employment Department, Government of Gujarat, applicable during the study period (June-July 2016), declared minimum wage w.e.f. April 1, 2016 till September 30, 2016 under which the minimum wages per day of Zone-I (Municipal Corporation) workers for unskilled as (INR 295.80), semi-skilled (INR 303.80) and skilled (INR 312.80) respectively. That turns out to be a monthly minimum wages of INR 7690.80 for unskilled, INR 7898.80 for semi-skilled and INR 8132.80 for skilled workers for 26 days of work leaving aside four days off. These rates are applicable for the study region i.e. capital city of Gandhinagar which is a Municipal Corporation area. The latest notification regarding minimum wage in Gujarat for Zone-I Municipal Corporation Area has been revised w.e.f. October 1, 2016 till March 31, 2017 as INR 296.80 per day for unskilled workers, INR 304.80 for semi-skilled and INR 313.80 for skilled workers. Moreover, minimum wage in Zone-II Municipalilty Areas which include smaller cities and towns are lower- INR 288.80 per day (unskilled), INR296.80 (semi-skilled) and INR 304.80 (skilled).

Gujarat was one of the first states in India to set up a Rural Labour Commissionerate in 1981 to undertake various measures, to improve the conditions of unorganized rural labour so as to protect them against discrimination and exploitation from the employers. For this the rural workers welfare board was set up under the Commissionerate. Ten years after the Supreme Court directed all states to constitute construction workers welfare board for ensuring security and safety of construction workers, the Gujarat government had constituted the 'Gujarat Building and Other Construction Workers' Welfare Board' in the year 2004. However, Gujarat government's record for the enhancement of welfare for the construction workers is not encouraging. The 2014 CAG Report tabled in Gujarat Assembly had criticized the Gujarat government regarding implementation of benefits and registration of construction workers. Out of a total cess of INR 5408.8 million collected during 2006-2013, the Board had spent INR 99.2 million, including INR 41.2 million on labour welfare schemes, i.e. a minuscule 0.76 percent of the total cess disbursed as actual benefits to 12,193 (17.43 percent) out of 69,971 eligible construction workers. Even failure to provide financial assistance to the family members of workers dying at workplace was criticized by the CAG. (ET, 27 July 2014).

Public Health Concerns among Construction Workers & Factors: Literature Review

Public health is of utmost concern in any democratic society. U.N. Universal Declaration of Human Rights declares, all people have a right to the highest level of health attainable. Hence basic public health needs of construction workers, who are subject to critical nature and level occupational hazards and susceptibility to health risks and diseases, must be of utmost concern. The construction workers in LDCs and developing countries are subject to poor living and unhealthy working conditions, impoverished nutrition, and unsatisfactory housing along with exploitative terms and low incomes. Francoise Barten. (1996).

Vilma S Santana, et al. (1997) evaluated the notion that informal jobs (in absence of formal labour contracts), instability and the absence of fringe benefits, are positively associated with psychiatric symptoms in a poor urban area of Brazil. Likewise, Donna Mergle (1999) examined impact of work conditions on health and well-being and found that reducing errors in exposure understanding of the rapidly changing work environment and labor situation and it can be a means for developing appropriate strategies for preventive intervention.

Women reported unique problems and concerns related to working in this industry and were found to face a different pattern of fatal injuries and certain differences in patterns of nonfatal injuries compared and health outcomes in a complementary fashion can lead to a better to men. Laura. S, (2000)

The deaths and costs represented substantial cost shifting from workers' compensation systems to individual workers, their families, private medical insurance, and taxpayers (through Medicare and Medicaid). Paul Leigh.J. (2004)

Ram Lakhani (2005) in an empirical study of 1,052 workers selected by stratified random sampling, found that women reported earnings of Rs. 38 to 40 per day. Only 5% of women and 2% of men had permanent employment. 77% of women and 96% of the men reported working for 10 to 12 hours daily. Further, discriminatory barriers to financial and career advancement were observed to be linked to recurrent physical and psychological symptoms and more frequent visits by women workers to the doctor.

Jos Verbeek (2004) found that occupational health could benefit considerably from greater awareness of the evidence for and against various types of intervention. Taimela.S, (2008) examined the effectiveness of two occupational health intervention programmes in reducing sickness absence among construction workers at risk. The occupational health intervention was found to be effective in controlling work loss to a degree that is likely to be economically advantageous within the high risk group.

Qu.B., et al, (2009) in a study of Chinese construction workers found that knowledge about HIV/AIDS could improve the attitude and behavior of migrant urban construction workers, that can enable them to avoid high-risk behavior which enhances spread of HIV/AIDS.

Niraj Pandit, (2011) in a study at Piparia, district Vadodara (Gujarat) among 52 migratory construction worker families found them to be more vulnerable to various aspects of Maternal and child health (MCH) issues. Balkrishna B. Adsul, (2011) in a study to examine health problems among migrant construction workers found the average number of health problems in the workers was 1.41. 50.48% of them were regular consumers of tobacco and 14.65% were that of alcohol. Likewise, Chawada .BL, et al, (2012) found that lack of social security and family support system make them a vulnerable to addiction and violence. It also emphasized the need for alternate way for providing healthcare to these workers.

Poongodi. R, et al, (2012) found that women construction workers have to assume multiple burdens of household work, looking after children and work in the sites to earn a living. S. Tikoo, et al. (2013) in a study about women construction workers found that there was a significant negative correlation between frequency of occurrence of occupational health problems and extent of suitability of work place environmental parameters. Anandi Bagchi, et al, (2014) in a study of female brick field workers of West Bengal, India found musculo-skeletal disorders to be prominent health disorder probably due to their work posture, working environment and related lifestyles.

Vaidya.V.G, et al, (2015) in a study to examine occupational health hazards of women workers of brick kiln & construction industry found that at brick kiln sites, average CO exposure was 62.8 ppm in summer and 55.5 ppm in winter season. Also average dust exposure was 146.1 mg/m in summer and 91.4 mg/m in winter season. At construction sites, average dust exposure was 41.5 ppm and 90.8 ppm in summer and winter respectively.

Factors Affecting Public Health

Public health is defined as science of protecting the health related safety of people and improving the health of communities through education, policy making and intervention through research for disease, injury and epidemics prevention. Public health involves application of knowledge gained in different fields like biology, medicine, sociology, psychology, anthropology etc. and formulating public policy education and training programmes to monitor the health status of the communities to diagnose and investigate health related issues and problems and so on. The vital task of public health services provided by the state also involves components like informing, educating and empowering people about health issues and intervening at the bottom of the population pyramid specifically to the underserved, marginalized, disenfranchised, migrant marginalize, nomadic and minority community or any other groups looking at the fringe outside the mainstream society. Public health policies and its services that's why intends to mobilize community partnerships so as to understand recognize and solve health related problems. This in essence needs institutional support and regulations for ensuring safety and protecting public health. Moreover, public health conditions of a community depends on the support of the institutional mechanism, sound public policies and trained public health personnel and related personal healthcare work force.

There are host of factors which health of individual and communities along with public health services. Public health is determined by various social and economics factors like income of the family, family size and working condition, the availability of physical and social infrastructure, access to health facilities and health protection coverage. Low income remains as the major reason for lack of nutritious food, accessibility to medical facilities and a better health and living standard leading to low overall life expectancy of the community.

Many factors act together to affect public health-i.e. the health of people and communities. For example, the living conditions, different social and life circumstances and state of environment determine the health conditions of people and communities. Additionally to a large extent, factors like genetic make up, people's income and education level, and relationship with friends and family have significant impacts on health, while the more common factors such as access and use of health care services might have lesser impact. (HIA, WHO).

As per the WHO's Health Impact Assessment the determinants of health include the social and economic environment, the physical environment, and individual characteristics and behaviours of people. Income and social status, income inequality among the people leads to differences in health attainment levels. Likewise low education levels often leads to poor health conditions, higher stress and lower self-confidence. (HIA, WHO) Moreover, the physical environment like availability of safe drinking water and clean air, healthy workplaces, employment and working conditions and control over it, safety of dwellings, and living infrastructures including transport connectivities all have greater impact on public health.

Other factors impacting public health relate to the social support networks like family support, support from friends, and communities support systems contribute public health significantly along with the cultural practices of communities and their customs and traditions. Along with the community support system, the institutional support mechanism by the public sector- i.e. by the public administration, health administration at the state and local level, subsidized health services and health insurance coverage, availability of cheaper medical facilities and drugs and medicines all can contribute significantly on public health. Last but not the least, gender issues and societal differences on treatment towards different genders can determine the health attainment levels of men and women.

Methodology of the Study

The study was conducted by undertaking a field survey whereby an appropriate questionnaire with thirty-five open ended questions. The survey was conducted during June-July 2016. Individual construction workers including both male and female workers were surveyed taking a sample of 50 workers from 41 families across five construction sites in Gandhinagar. Convenient sampling technique was followed for collecting the data. Appropriate statistical research tools were employed for analyzing the data.

Sampled Data Analysis and Findings: Socio-Economic Status

Out of the 50 workers surveyed 82 percent were males and 18 percent were females. The age of the workers range from 19 to 38 years with highest concentration in the 25 to 30 years (38%) and average age of the workers was 28.26 years. In terms of literacy all were endowed with basic literacy. There were basically three categories of construction workers in the sample- manual labourer, manual labourer cum plaster worker, and plaster worker. In this way, these three categories were of unskilled labourer (80%), semi-skilled labourer (16%) and skilled labourer (4%). (Figure 1).

Analysing the migration pattern of construction workers in Gandhinagar, majority of the labourers were localite (80%) from Gujarat and the others were migrant labourers (20%) from outside the state. It was observed that the workers from the sample were coming to Gandhinagar for work from two districts of Dahod (66%) and Panchmahal (14%). (Table 1) Dahod is tribal majority district with 74.32% tribal population in 2011 as per Census 2011 with low literacy rate of 58.82%. Panch Mahal district was the parent region from which tribal dominated Dahod was carved out to form a new district. But Panch Mahal still has significant number of tribal population (more than 20% in 2011). The outside migrants were from the nearby Udiapur districts of Rajasthan, which is also third in the state in terms concentration of tribal population (49.7%) with comparatively low literacy rate of 61.82% in 2011. The comparatively low literacy rate and tribal population concentration has a direct correlation with the migration as construction labour to nearby areas.

The average family size was found to be 5.18 and those having children had an average of close to 2 (1.93) children per family with maximum 3 children in a family. Out of all the workers 68% had spent 6 months or more time on construction work, 30% had spent 8 months or more and only 2% for 12 months.

Figure 1: Skill Type of Construction Workers in Gandhinagar

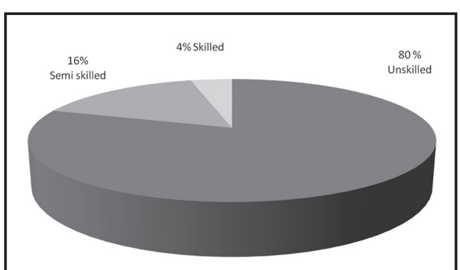


Table 1: Migration Status of Construction Workers in Gandhinagar

Within State Migrants	80%	Panchmahal	14%
		Dahod	66%
Out-side State Migrants	20%	Udaipur, Rajasthan	20%
		Total	100%

In terms of wages as per skill, clearly three distinct wage rates were visible, 80% of the sample workers were earning INR 300 per day for unskilled labour, 4% were earning INR 700 per day for semi-skilled labour and 16% earned INR 1000 for skilled labour. So, whereas the workers were getting wages as per the minimum wages norm fixed by the State Government, there was significant wage differential across the 3 categories of workers. When the unskilled labour was getting paid with a higher wage differential of 1.4% over the minimum wage, the semi-skilled and skilled labour were getting 130.4% and 219.7% higher wage differential respectively than their respective minimum wages. This showed the evidence that market determined wage rates in the construction industry were substantially higher than the Government fixed minimum wages and they tend to rise significantly with higher skills. This also signifies higher supply-demand gap of skilled labour in construction sector of Gujarat. It must be noted here that the State government fixed wage differentials (per day) across the skills was a meager 2.7% between unskilled and semi-skilled, and 2.9% between semi-skilled and skilled. The latest minimum wage notification mechanically revises the per day wages across all skills of Zone-I by only raising 1 Rupee each without much recognition to skilled labour.

However, in terms of monthly wages, 19.5% reported earnings of below INR 9000, 41.5% INR 9000, 17.1% INR 18,000, 4.9% INR 21,000 and 14.6% with INR 30,000 and 2.4% INR 60,000. Based on one month recall period, the workers reported their monthly family health expenditure to be INR 500-1500 (26.8%), INR 500-2000 (56.1%) and INR 10,000 or above (17.1%). (Table 2) One striking finding from the monthly expenditure data was, those having monthly family expenditure of between INR 4000 to 8000, were able to spend INR 500 to 2000 on monthly family health expenditure. That's 82.9% of worker families in this health expenditure category in all, providing direct evidence of income and expenditure correlation including health expenditure.

Another significant finding was observed in the sample, where all the female labourers (constitute 18% of the sample) were unskilled, earning INR 300 per day, i.e. only 1.4% more than the Government minimum rate, with a monthly income of INR 9000 and their monthly consumption expenditure was ranged between INR4000 to 7000. This shows paucity of skills and training available to the women construction workers informally or formally by government efforts, if any.

Table 2: Monthly Income, Expenditure & Health Expenditure Pattern of Construction Workers

Individual Monthly Income (INR)	No. of Workers	Monthly Family Income (INR)	No of Worker Families	Monthly Family Expenditure (INR)	No of Workers	Monthly Family Health Expenditure (INR)	No of Worker Families
Below 9,000	16%	Below 9,000	19.5%	About 5000	12.2%	500-1500	26.8%
9,000	64%	9,000	41.5%	4000-7000	29.3%	500-2000	56.1%
21,000	4%	18,000	17.1%	5000-7000	12.2%	10,000 or less	17.1%
30,000	16%	21,000	4.9%	5000-8000	9.8%		
>30,000	0%	30,000	14.6%	10,000-14,000	22%		
		60,000	2.4%	15,000-20,000	14.5%		
Total	100%	Total	100%	Total	100%	Total	100%

Findings on Basic Health Facilities Available to Construction Workers of Gandhinagar

In terms of access to basic facilities related to health, sanitation and social welfare, all workers from the sample had access to safe drinking water, sanitation facilities and health facilities. All of the sampled workers had PDS coverage and none faced linguistic problems at workplace or hospital. In case of diseases, the mode of treatment available to the construction workers was only Public Health Centre (90%) and rest accessed public health facilities with family care at their native place in case of major health problems.

The workers were found with occurrences of multiple common health problems, which were found to be Cough, Cold & Flu (54%); Monsoon diseases & flu (36%); Flu & BP (6%); Cough, Cold, Flu & Heat Stroke (4%). None from the sample reported to be suffering from any communicable diseases. However, a small 8% of the workers were found with kidney problems like suffering from kidney stones which possibly was related with the type of drinking water available in the area. Though all of the workers visit health centres, major health care difficulties faced by them were as follows: 36% of workers complained of no hospital in the vicinity, that's why they had to leave work and go to their native place for treatment. Whereas, 44% said that there was no access to public health centre and 18% prefer to go to their native place in case of health problems. Only 2% said that treatment or services given in public health centre was not proper and was of low quality but they find the private hospitals very costly and unaffordable.

The type of treatment/medication administered by the workers in case of health problems was found to be as follows: 52% reported resorting to low-cost treatment (including traditional medicines), 20% received free medication, 10% received free treatment and rest 18% of workers reported resorting to low priced medicines. (Figure 4) Regarding health care benefits 76% of workers reported receiving them and 24% didn't receive any health care benefits provided by the government or any volunteer agencies. Moreover, none had reported availing health services from health camps, NGOs or social activists.

Figure 2: Common Health Problems of Construction Workers of Gandhinagar (% of Workers)

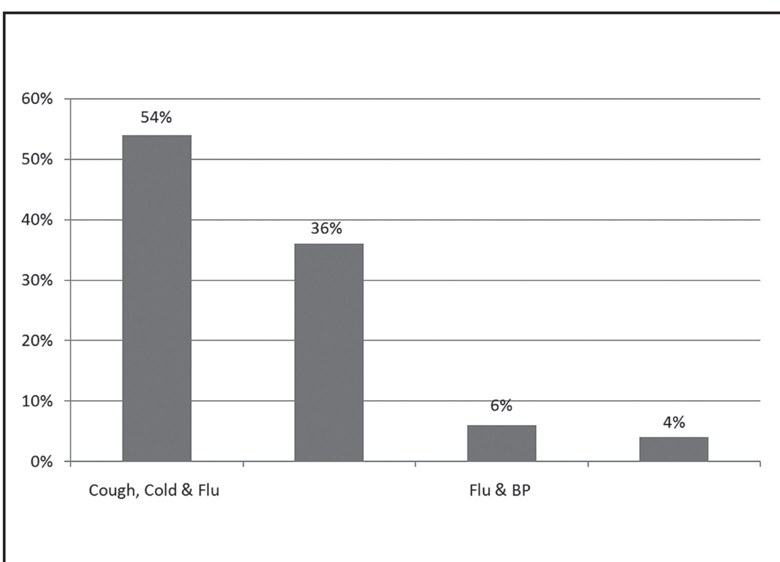
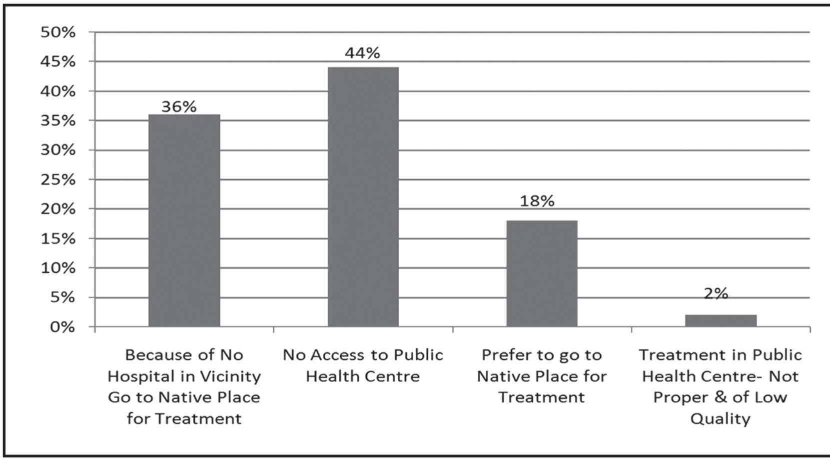


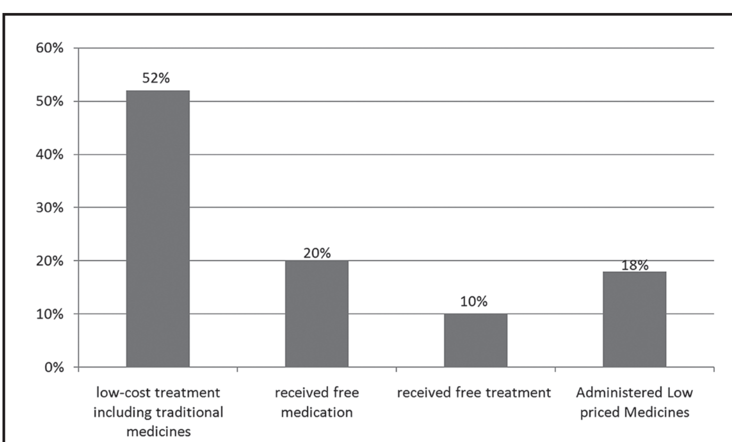
Figure 3: Major Health Care Difficulties of Construction Workers of Gandhinagar (% of Workers)



Regarding awareness about the health care benefits none of the workers had any awareness about the health care schemes or other related benefits available to them. None of the critical patients like those with kidney problems, were aware about the Gujarat Chief Minister's special health care scheme named Mukhyamantri Amrutum (MA) Yojana or found to be receiving health benefits under it.

All married women reported to visiting health centre in case of child delivery. 64% of the sample reported about regular visit of health workers to their site, 12% reported about 'weekly once' visit, whereas, 24% reported no regular visit by them. The mobile health van provided by Gujarat government especially for construction workers were reported not to be reaching to the construction sites as the sites were away from the highway in the inner areas. This poses a special challenge for access to health care benefits by the workers. This was reflected in regularity of child vaccination, where only 37% parents reported to have received vaccination regularly for their children, whereas, 63% reported not to be getting regular vaccination. Also few cases were observed where newborns were yet to receive polio vaccination.

Figure 4: Treatment Administered by Construction Workers of Gandhinagar (% of Workers)



None of the workers in the sample received the health and accident insurance from their employees, as expected. But, it is noteworthy to observe that all workers from the sample reported about receiving financial assistance from their employers in case of health or any other emergency, though there was no clarity about the size and nature of the assistance. This probably reflects the symbiotic employee-employer dependableness in Gujarat for smooth functioning of the construction activity.

Health Benefits for Construction Workers in India and Gujarat

The Union Government has formed a corpus fund, out of which various welfare schemes viz. Group Insurance, Medical and Health Care, Scholarships, Pension, etc. are implemented for the construction workers. For this, a cess @ 1 % on every construction activity with a cost of more than Rs.10 lakh is collected under the Building and Other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the Building and other Construction Workers Welfare Cess Act, 1996. Some welfare schemes for intra-state and inter-state migrant rural workers by the Gujarat Government may be extended to the construction workers as well, like seasonal *Balvadi* -cum- crèche near work site, nutritious food and first aid facilities to the children of 0- 6 years.

A number of other schemes have been formed to ensure good working and health conditions of the workers:

ESI Scheme: The Employee State Insurance Scheme (ESI) of Government of India, provides the on-site construction workers and their families complete medical care with no ceiling on the treatment against injury, death, disablement, maternity and unemployment. Moreover, it provides for sickness benefits in cash @ 70% of wages for up to 91 days a year, 90% of wage as disablement benefits, 90% as dependent benefit, and INR 10,000 as funeral benefit along with a 24x7 helpline for casualty guidance from ESIC hospitals.

Janani Suraksha Yojana: JSY is safe motherhood scheme of Government of India under National Rural Health Mission (NRHM) for reducing maternal neo-natal mortality by promoting institutional delivery among the poor pregnant women. It has contributed immensely to the BPL, ST and SC expecting women.

Rashtriya Swasthya Bima Yojana: With just INR 30/- p.a. per family and Re 1 renewal fee this scheme provides cashless health insurance cover of RS. 30,000/- per family p.a. for all pre-existing diseases, hospitalization expenses, maternity benefit and transportation payment of Rs.100/- per visit.

Swasthya Bima Yojana: This parallel health insurance scheme of Gujarat government, for the unorganized BPL workers and their family provides cashless health cover up to INR 30,000.

Shramik Suraksha Accident Group Insurance Scheme: This scheme implemented since 1996, covers accidental death of unorganized rural and urban workers aged 14 to 70 years in Gujarat, with insurance benefit of INR 1,00,000 for death/ permanent disablement and INR 50,000 for partial disablement. This benefit is available to those workers who are not covered under the ESI Scheme or Workman's Compensation Act.

Chiranjeevi Yojana: Free maternity services (including necessary delivery facilities, investigation, medication and INR 200 as transportation grant) are provided by Gujarat government to the BPL or tribal women under this scheme.

Bal Sakha Yojana: This scheme provides free neonatal care including intensive care to all newborns of BPL mothers in Gujarat in partnership with pediatricians.

Mukhya Mantri Amrutam Yojana: This scheme provides quality medical and surgical care to BPL families (five members) for the treatment of critical diseases-cardiovascular, neurosurgeries, burns, poly trauma, cancer, kidney and neo natal diseases. The total sum assured for the BPL family is of INR 2,00,000/- per family per annum on family floater basis.

As awareness level was critically low among the construction workers, suitable measures like involvement of voluntary agencies and community participation, must be taken to increase awareness about these health and related benefit schemes among the construction workers.

Conclusion

Construction being a vital activity in the economy depends critically on the productivity of its workers, which again is vital for the overall growth of this sector and the economy. Realizing this sector has received legal and executive protection via suitable legislation on wages and covering the sector with government policies and schemes related to health care and related insurance coverage. But implementation of both legal and institutional protection needs appropriate monitoring and intervention mechanism. As found in the study, areas of interventions can be ensuring availability of on-site health facilities, availability and access to health centres near to construction areas, regular visit of health workers and health care van to the site, regular health check-ups and monitoring of public health facilities delivered to the workers etc. Regular vaccination to the young ones, organization of seasonal health camps and public health facilities to the women should be of utmost priority for the government and both local and central government must work in tandem to ensure that the intended benefits are truly accrued to the workers. If this occurs, then the construction workers will not be dependent on informal sources for treatment. Funds allocated for this purpose must be released on time with proper identification of the beneficiaries. Moreover, the success of public health strategy depends critically not only on the suitable intervention mechanism and related infrastructure to be put in place, but also on the rights based approach designed from bottom to top. With suitable measures taken to enhance public health awareness through voluntary agency and community participation, the workers themselves can demand for improvement in the health services delivery as part of their vital rights. This will only ensure effectiveness of public health system at the grassroots level.

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A Comparative Study of State Finances of Haryana and Punjab

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The fiscal reforms have been considered as an integral part of the agenda of overall economic reforms. Deterioration in fiscal performance of the government at centre and state levels over the period has attracted attention of the researchers and policy makers in India. It was realised that fiscal restructuring / reforms are imperative for increasing the efficiency of resource mobilisation and allocation in the economy and for the overall macroeconomic stability. The salient feature of the fiscal reforms in India was the introduction of rule based framework supported by institutional reforms. The 11th Finance Commission has made a milestone in state finances through implementing Fiscal Responsibility and Budget Management (FRBM) Act in 2003 to improve fiscal health of centre as well as state governments. It becomes pertinent to analyse the management of state finances in rule based framework. Fiscal restructuring has been initiated by both the states Haryana and Punjab on the recommendations of the 11th, 12th and 13th Finance Commissions but expected results are still awaited. The appropriate expenditure policy is missing in both the states. Consequently, the resources available with the states are insufficient to meet their respective socio-economic obligations. It has been observed that various fiscal indicators remained relatively in comfortable zone in Haryana. Hence, the state Haryana has been appeared relatively in a better fiscal position as compared to Punjab during the period under consideration.

Keywords

Fiscal Reforms, Economic Reforms, Fiscal Performance, Macroeconomic Stability, Framework, Socio-economic Obligations, Fiscal Indicators

Introduction

Deterioration in fiscal performance of the government at centre and state levels over the period has attracted attention of the researchers and policy makers in India. To improve the fiscal performance rule based fiscal restructuring was recommended by the 11th Finance Commission. The enactment of Fiscal Restructuring Legislations (FRLs) has provided impetus to the process of attaining fiscal sustainability particularly in terms of improvement in fiscal indicators. This process got momentum after the Twelfth Finance Commission (TwFC) as it recommended systematic reforms in various areas like revenues, expenditure and fiscal discipline. Initially, the central government introduced the debt swap scheme under which high cost central loans of the states were converted with low cost market borrowings. Secondly, TwFC recommended Debt Consolidation and Relief Facility (DCRF) by linking it to the enactment of Fiscal Responsibility and Budget Management (FRBM) Act. Thirdly, state governments implemented Value Added Tax (VAT) to replace state sales tax which improved their revenue performance. Fourthly, many states implemented New Pension Scheme (NPS) for their employees which enabled them to control their pension liabilities.

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The central government has been operating under Fiscal Responsibility and Budgetary Management (FRBM) Act, 2003 and FRBM Rules, 2004 since 2004-05. This Act prescribed for elimination of the revenue deficit by 2008-09 and reduction in fiscal deficit by at least 0.3 per cent of the GDP annually, so that fiscal deficit can remain less than 3 per cent of GDP by the year 2008-09. Subsequently, state governments have initiated to Fiscal Responsibility Legislations (FRLs). The TwFC further incentivised the fiscal restructuring process and extended the deadlines for meeting fiscal targets.

The financial resources and functions of centre and the states have been specified in Schedule Seventh of the Indian Constitution under three lists: Union List, State List and Concurrent List. The responsibility of national importance and the resources to meet these obligations have been assigned to the central government. The responsibility of regional importance has been given to the state governments. In the Concurrent list, the subjects of common importance for both the centre and states have been covered, but centre supersedes the states occasionally.

Keeping in view the local issues, the state governments have been assigned major expenditure responsibilities. Therefore, states' contribution in developmental expenditure, particularly on social and economic services, has increased over the period. With decentralisation of the fiscal activities, the role of states in providing better social and economic services to enhance social welfare of the people has widened over the period. Generally, the state governments face financial crunch to meet expenditure responsibilities with the resources available with them, hence their dependence on the centre for resources in terms of central transfers has increased. Broadly, the expenditure pattern of the states has been dominated by committed expenditure such as salary, interest payments, pension, subsidies and other administrative services. Consequently, fiscal management of the states to a large extent has been shaped by devolution of resources from the centre and expenditure commitments that arise from time to time.

In this study, we propose to examine the fiscal performance of the state governments of Haryana and Punjab on the basis of certain fiscal indicators. We would confine ourselves to the comparative analysis for the period 2000-01 to 2014-15 (11th FC onwards) in this exercise.

The fiscal performance may be evaluated in terms of the efficiency of management of receipts (primarily taxes and user charges), expenditure, management of deficit & surplus and debt. It may further be analysed in relation to the guidelines / norms laid down by the Finance Commissions. The study has been divided in five Sections. In section I, we have overviewed the performance of the economy of Haryana and Punjab to provide an overall perspective to the study. Section II examines sources of revenue receipts of the state governments. Section III includes expenditure pattern to meet the socio economic priorities of the governments. Section IV examines the fiscal performance and debt management keeping in view the fiscal restructuring and consolidation reforms in Haryana and Punjab. The Section V includes concluding observations.

Economy of Haryana and Punjab: An Overview

The state of Haryana came into existence by bifurcating the state Punjab on 1st November 1966. The states of Haryana and Punjab are the main beneficiaries of green revolution in India. Both the states are amongst agriculturally developed states in the country. The Table 1 presents the demographic features of Haryana and Punjab.

Table 1: Demographic Features of Haryana and Punjab

Particulars	Haryana	Punjab
Area (sq. Km)	44212	50362
Population (Lakh)	253.5	277.4
Rural Population (per cent)	65.20	62.52
Urban Population (per cent)	34.80	37.48
Sex Ratio (females per 1000 males)	879	895
Population Density (persons/sq. Km)	573	551
Literacy Rate (per cent)	75.60	75.80
Males Literacy Rate (per cent)	84.10	80.40
Females Literacy Rate (per cent)	65.90	70.70
Per Capita Income at 2004-05 prices for 2014-15 (Rs.)	71493	51403

Sources: 1. Census 2011.
2. Economic Survey of Haryana 2014-15,
3. Economic Survey of Punjab 2014-15
4. Central Statistical Organisation

The data shows that area and population in Punjab is relatively high than that of its counterpart Haryana. Majority of population resides in rural areas in both the states. Interestingly, the share of urban population in total population in Punjab (37.48 per cent) is relatively high than the corresponding share (34.80 per cent) in Haryana. Sex ratio is slightly in better position in the state of Punjab as against Haryana. Literacy rate is more or less the same in both the states. Per capita income (at constant prices 2004-05) for the year 2014-15 is significantly high in Haryana as compared to Punjab.

Table 2: Growth Rate of Gross State Domestic Product in Haryana and Punjab

(at Constant Prices 2004-05) *(per cent)*

Particulars	Haryana	Punjab	India
2000-01	-	-	-
2005-06	9.20	5.90	9.48
2010-11	7.41	6.52	8.91
2012-13	5.50	4.64	4.47
2013-14	6.97	5.73	4.74
2014-15	7.76	5.32	NA

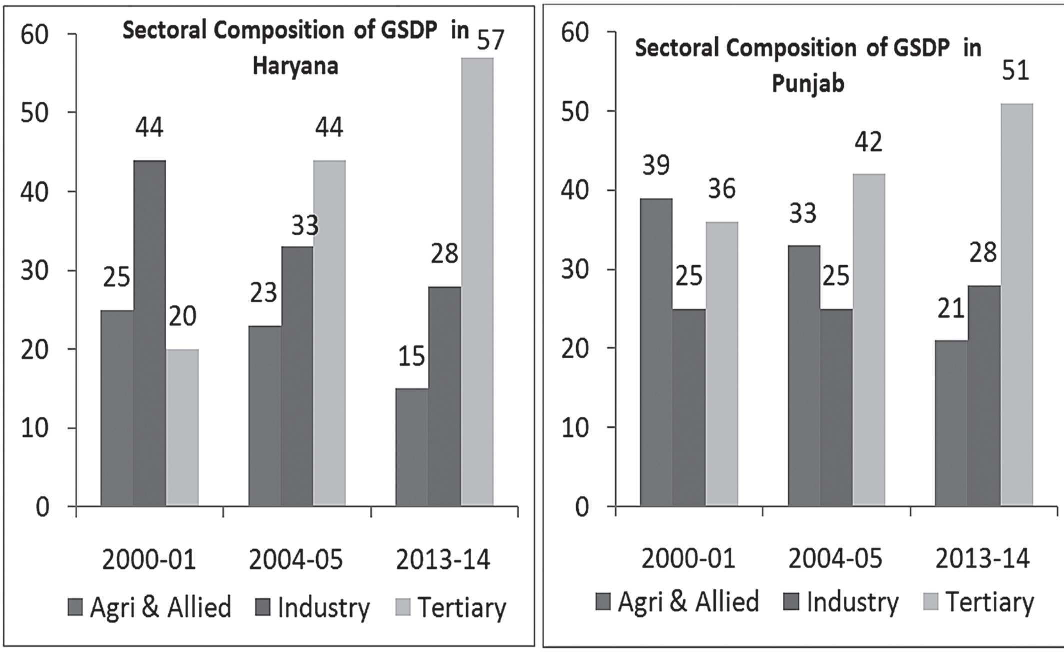
Sources: Central Statistical Organisation, NITI Aayog, Government of India

The Table 2 presents the annual growth rate of GSDP. The data reveals that the growth rate of GSDP in Haryana has been relatively high than that of its counterpart Punjab as well as all India level during most of the period 2001-02 to 2014-15. The average annual growth rate was 7.82 per cent for Haryana, 5.45 per cent for Punjab and 6.72 per cent for all India during the period 2000-01 to 2014-15.

It has been observed that both the states have experienced significant structural transformations. The relative contribution of various sectors i.e., Agriculture & Allied, Industries and Services in Gross State Domestic Product (GSDP) has changed significantly.

Graph 1: Sectoral Composition in GSDP in Haryana and Punjab

(per cent)



It has been observed that agriculture is the mainstay of rural population, which comprises more than 62 per cent of the respective population in both the states, Haryana and Punjab. But the relative share of Agriculture & Allied sectors in Gross State Domestic Product (GSDP) has drastically decreased from 25 per cent to 14 per cent for Haryana and from 39 per cent to 24 per cent for Punjab during the period 2000-01 to 2014-15. The share of industrial sector in GSDP has decreased from 44 per cent to 27 per cent in Haryana, whereas the corresponding share has slightly increased from 25 per cent to 27 per cent in Punjab during the period under consideration. The share of tertiary sector in GSDP has increased from 20 per cent to 59 per cent and from 36 per cent to 49 per cent in Haryana and Punjab corresponding during the same period. The predominance of agriculture sector was visualised as a main reason for instability in the growth rate of the state economy of Haryana and Punjab due to fluctuations in agriculture production. It implies that industry and tertiary sectors registered much higher growth rates than the agriculture & allied sectors which reflected in the increased share of industry and tertiary sectors and decreased share of agriculture & allied sectors in the GSDP in both the states over the period.

Revenue Receipts and Its Components in Haryana and Punjab

Revenue plays a significant role in the development of any economy. The major sources of revenue at sub-national government may be classified broadly in two groups; own revenue receipts (own tax and non tax Revenue) and central transfers (share in central taxes and central grants).

The data presented Table 3 clearly highlights that the share of total revenue receipts in gross state domestic product (GSDP) was relatively high in Punjab than that of in Haryana during most of the years under consideration. It has been observed that the share of own revenue received (own tax & non tax revenue) in Punjab has decreased on account of own non tax revenue receipts, particularly receipts from general services during the years 2006-07 and 2007-08 and consequently the share of total revenue receipts in GSDP was relatively less than that of Haryana.

Table 3: Share of Total Revenue Receipts as %age of GSDP in Haryana and Punjab

(per cent)

Particulars	Total Revenue Receipts		Own Tax Revenue		Own Non Tax Revenue		Share in Central Taxes		Central Grants	
	Hry	Pb	Hry	Pb	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	11.04	12.53	7.24	6.54	2.42	3.92	0.58	0.96	0.80	1.10
2005-06	12.73	15.63	8.35	8.28	2.26	4.18	1.10	1.13	1.02	2.04
2010-11	09.83	12.22	6.45	7.45	1.32	2.36	0.89	1.35	1.17	1.06
2012-13	09.86	11.25	6.90	7.93	1.37	0.92	0.90	1.43	0.69	0.97
2013-14	09.79	11.05	6.58	7.58	1.28	1.00	0.86	1.39	1.06	1.07
2014-15 (RE)	10.42	12.20	6.79	8.15	1.30	0.85	0.87	1.54	1.45	1.66

Source: Authors' calculations

Note: GSDP-Gross State Domestic Product, Hry- Haryana, Pb- Punjab, RE- Revised Estimates

During the year 2014-15, the share of total revenue receipts in GSDP (12.20 per cent) was much higher in Punjab than that of 10.42 per cent in Haryana. Similar trend have been observed in case of own revenue receipts. However, it needs to be noted that tax GSDP ratio in Haryana was relatively high than its counterpart Punjab during the initial years of the decade. Since the year 2008-09 onwards, the trend reversed mainly because of relatively higher growth was observed in GSDP than that of own tax revenue in Haryana. Consequently tax GSDP ratio has relatively declined in Haryana. It may be highlighted that the tax-GSDP ratio has deteriorated from 7.24 per cent to 6.79 per cent in Haryana whereas the corresponding ratio indicated improvement from 6.54 per cent to 8.15 per cent in Punjab during the period 2000-01 to 2014-15. The share of central transfers in GSDP was relatively high in Punjab than that of in Haryana during most of the period under consideration.

Per Capita Revenue Receipts

Per capita revenue receipts may also be used as one of the indicators to make a comparative analysis. Per capita revenue receipts in Haryana and Punjab have been presented in Table 4.

Table 4: Per Capita Revenue Receipts and Its Components in Haryana and Punjab

(in Rs.)

Particulars	Total Revenue Receipts / person		Own Tax Revenue / person		Own Non Tax Revenue/ person		Share in Central Taxes/ person		Central Grants/ person	
	Hry	Pb	Hry	Pb	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	3109	3850	2039	2010	681	1205	163	142	226	196
2005-06	5942	6511	3894	3449	1055	1741	515	461	478	428
2010-11	10049	9975	6600	6080	1345	1926	905	832	1199	1102
2012-13	12805	11334	8969	7988	1779	930	1166	1083	891	821
2013-14	14250	12288	9585	8429	1865	1117	1253	1170	1547	1495
2014-15 (RE)	16773	14817	10932	9901	2096	1031	1403	1872	2341	2013
ACGR	**11.89**	**9.40**	**11.85**	**11.22**	**7.78**	**-1.13**	**15.43**	**18.76**	**16.87**	**16.80**

Source: Authors' calculations

Note: GSDP-Gross State Domestic Product, Hry- Haryana, Pb- Punjab, RE- Revised Estimates

The data highlights that per capita revenue receipts has increased at a growth rate of 11.89 per cent (from Rs. 3109 to Rs. 16773) in Haryana and 9.40 per cent (from Rs. 3850 to 14817) in Punjab during the period 2000-01 to 2014-15. Up to 2005-06, per capita revenue receipts were relatively high in Punjab than that of in Haryana. It happened mainly because of the contribution of own non tax revenue receipts which were perceptible greater in Punjab than that of in Haryana. Thereafter, per capita revenue receipts remained on higher side in Haryana as compared to Punjab because of a perceptible increase in its own non-tax revenue, particularly on account of receipts from urban development on the one side and increase in own tax revenue on the other.

It is interesting to be noted that per capita own revenue (tax & non tax) has increased relatively at a higher growth rate of 11.01 per cent (from Rs. 2720 to Rs. 13028) in Haryana than that of 8.50 per cent (from Rs. 3215 to Rs. 10932) in Punjab during the period under consideration. Per capita central transfers (share in central taxes & central grants) have a tendency to increase in both the states, but relatively higher growth rate was recorded in Punjab as against its counterpart Haryana during the corresponding period. It implies that Haryana has been focussing to increase own resources and reducing dependency on central transfers as compared to the state Punjab.

Composition of Own Tax Revenue

To analyse the structure of own tax revenue receipts in the states, we have calculated the percentage share of major tax components in total own tax receipts. The data in Table 5 reveals that sales tax (VAT), excise duty and stamp duties & registration fees are the major components of own tax revenue, which have been contributing more than 85 per cent in own tax revenue receipts in both the states.

Table 5: Composition of Own Tax Collection in Haryana and Punjab

(per cent)

Year	Own Tax Revenue (Rs. in crore)		Taxes on Sales		State Excise		Stamp Duties & Registration Fees		Other Taxes & Duties	
	Hry	Pb	Hry	Pb	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	4312 (100)	4895 (100)	59.69	54.03	19.48	27.07	9.72	8.66	11.11	10.24
2005-06	9079 (100)	8989 (100)	61.72	51.48	12.19	17.45	14.76	18.59	11.33	12.48
2010-11	16790 (100)	16828 (100)	66.00	59.52	14.09	14.10	13.81	13.78	6.10	12.60
2012-13	23559 (100)	22588 (100)	65.27	58.52	13.74	14.75	14.12	12.93	6.87	13.80
2013-14	25567 (100)	24079 (100)	65.61	61.66	14.46	15.64	12.52	10.38	7.41	12.32
2014-15 (RE)	29603 (100)	28561 (100)	67.32	62.18	14.69	16.39	11.15	9.66	6.83	11.76

Source: RBI: Handbook of Statistics on State Government Finances, 2010, RBI: State Finances- A Study of Budgets for various years

Note RE- Revised Estimates, Figure in brackets indicates per cent, Hry- Haryana, Pb- Punjab

It has been observed that after implementation of VAT in 2003 by the states Haryana and Punjab, the contribution of sales tax in own tax revenue receipts has increased and the share was more than 60 per cent in Haryana but it remained less than 60 per cent in Punjab during most of the period under consideration, except a few years. Moreover, the relative share of sale tax (VAT) in own tax revenue receipts in Haryana was relatively more than its counterpart Punjab during the period 2000-01 to 2014-15. The share of excise duty in own tax revenue receipts has decreased in both the states, (from 19.48 per cent to 14.69 per cent in Haryana and from 27.07 per cent to 16.39 per cent in Punjab), during the corresponding period. However, the share remained relatively more in Punjab than Haryana during the same period. It may happen mainly because of relatively higher production and sale of liquor in Punjab.

The share of stamp duty and registration fees in own revenue receipts has increased mainly because of faster urbanisation policy of the state governments under which a large number of investors were allowed change in land use (CLU) and granted licences for the colonisation in urban areas in both the states and reached at the highest levels from 9.72 per cent to 16.15 per cent in Haryana and from 8.66 per cent to 20 per cent in Punjab during 2000-01 to 2006-07. Thereafter, it decreased to 11.15 per cent in Haryana and 9.66 per cent in Punjab in the year 2014-15 mainly due to decrease in property transactions which happened on account of slowdown in reality sector on the one hand and decrease in stamp duties and registration fees on the other.

Comparison of Actual Revenue Realisation with Targets & Projections

We have also tried to examine the revenue performance of state governments in relation to the projections of various Finance Commissions in the last about one and half decade.

The Table 6 highlights the details of projections made by the various Finance Commissions and the actual revenue realisation by the states during the period 2000-01 to 2014-15. It needs to be noted that the own tax revenue collection remained significantly less than the projections, whereas non tax revenue was significantly high as against the projections made in both the states during the period of 11th Finance Commission.

Table 6: Evaluation of Actual Performance vis-à-vis Targets & Projections in Haryana and Punjab

(Rs. in crore)

11th Finance Commission Projections and Actuals								
Year	**Haryana**				**Punjab**			
	Own Tax Revenue		**Own Non Tax Revenue**		**Own Tax Revenue**		**Own Non Tax Revenue**	
	Proj.	**Actual**	**Proj.**	**Actual**	**Proj.**	**Actual**	**Proj.**	**Actual**
2000-01	4322	4312	674	1439	4449	4895	1041	2935
2001-02	5163	4972	787	1666	5290	4820	1074	2961
2002-03	6139	5550	920	1808	6290	5711	1152	4036
2003-04	7299	6348	1075	2223	7479	6146	1244	4666
2004-05	8678	7440	1275	2544	8892	6945	1391	5358
12th Finance Commission Projections and Actuals								

Years	Haryana				Punjab			
	Own Tax Revenue		Own Non Tax Revenue		Own Tax Revenue		Own Non Tax Revenue	
	Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual
2005-06	8458	9079	1372	2459	8167	8989	1731	4536
2006-07	9727	10928	1573	4591	9380	9017	1902	3973
2007-08	11186	11618	1802	5097	10773	9899	2096	5254
2008-09	12864	11655	2066	3238	12372	11150	2318	5784
2009-10	14794	13220	2372	2740	14210	12040	2575	5653
13th Finance Commission Projections and Actuals								
Years	Haryana				Punjab			
	Own Tax Revenue		Own Non Tax Revenue		Own Tax Revenue		Own Non Tax Revenue	
	Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual
2010-11	17614	16790	11990	3421	18518	16828	3204	5330
2011-12	20171	20399	13397	4722	20552	18841	3528	1400
2012-13	23154	23559	14981	4673	22916	22588	3910	2629
2013-14	26577	25567	16796	4975	25551	24079	4348	3191
2014-15	30507	29603*	18830	5677*	28490	28561*	4847	2973*

Source: RBI: Handbook of Statistics on State Government Finances, 2010, RBI: State Finances- A Study of Budgets for various years, 11th, 12th and 13th Finance Commissions reports.

Note: *- Revised Estimates, Proj- Projections

In case of Haryana, actual tax and non tax revenue has remained on higher side as against the projections in the period of 12th Finance Commission. During the corresponding period, actual tax revenue realisation was less but non tax revenue receipts have been recorded more than the projections made in Punjab. The tax & non tax revenue remained relatively on lower side as against the projections set by 13th Finance Commission during majority of the period in both the states.

In other words, it may be pointed out that actual own tax revenue realisation was more than the projections in Haryana, but Punjab followed the reverse trend during most of the period under consideration. In case of own non tax revenue, the actual collection was higher than the projections in both the states during the period of 11th and 12th Finance Commissions. But the reverse trend was observed in the states during the period of 13th Finance Commission.

In order to achieve fiscal consolidation, the 13th Finance Commission (ThFC) has projected the share of states' own revenue receipts (tax & non tax) in GSDP at the level of 13.88 per cent and 12.93 per cent for Haryana and Punjab respectively during the year 2014-15. The state Haryana and Punjab have appeared in a position to realise only 8.09 per cent and 9 per cent of GSDP respectively through their own resource mobilisation efforts.

To generate adequate resources required to enhance basic infrastructure for the state economy, the increase in own revenue resources generation must be realised to potential/ capacity by ensuring higher levels of efficiency, autonomy, accountability and transparency of the resource mobilisation administration.

The major failure of the state governments in collection of non-tax revenue has been due to provisions of subsidisation of services without any sound socio economic justifications. Lack of political willpower has also contributed to perpetuate the financial crisis in the states. It may be argued that a significant amount of revenue potential has remained unrealised over the period, the state governments must take some stringent steps to exploit the existing potential and also focus on additional resource mobilisation to fulfil its obligations towards socio-economic objectives through higher outlays.

Expenditure Pattern in Haryana and Punjab

To meet the aspirations of the society, it becomes pertinent to utilise the available resources in an efficient and equitable manner. Management of state finances has become more pertinent when horizontal and vertical imbalances exist. The governments at centre as well as sub-national levels have making efforts to meet fiscal targets set under rule based framework. The state governments have been targeting the quality expenditure to achieve fiscal targets which is a matter of serious concern. Total expenditure has been composed into two categories, capital outlay and revenue expenditure. Capital outlay assumes importance as it has a long term impact on growth & development. It ensures a more productive economy and enhances the government's revenue raising potential due to higher expected gross domestic product in the future, if spent efficiently. In other words, capital expenditure/ outlay have been considered productive expenditure which contributes to enhance the productive capacity of the economy. Revenue expenditure is current expenditure which is used to meet current liabilities. The revenue expenditure has, further, been classified into development and non development expenditure. It is, generally, believed that non development revenue expenditure has been to meet committed expenditure and development expenditure contributes in improving productive capacity. However, most of the development revenue expenditure has been as non plan expenditure which is used to maintain the existing infrastructure and services that is also committed in nature. The terms used in budgets create jargon that needs to be clearly defined. The share of total expenditure in GSDP indicates the resources required to meet social obligations.

The Table 7 clearly reveals that the share of total expenditure in GSDP was relatively high in Punjab than that of its counterpart Haryana during most of the period 2000-01 to 2014-15. It becomes pertinent to highlight that the share of capital outlay in GSDP has been less than 2.5 per cent, whereas that of revenue expenditure was more than 10 per cent in both the states during the corresponding period.

Table 7: Components of Total Expenditure as %age of GSDP in Haryana and Punjab

(per cent)

Particulars	Total Expenditure/ GSDP		Capital Outlay/GSDP		Revenue Expenditure/ GSDP	
	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	14.48	17.51	2.43	1.86	12.06	15.65
2005-06	13.10	18.17	1.48	1.40	11.62	16.77
2010-11	12.43	15.62	1.55	1.06	10.88	14.56
2012-13	12.81	14.34	1.68	0.67	10.13	13.66
2013-14	11.80	13.80	1.01	0.69	10.79	13.11
2014-15 (RE)	13.88	15.11	1.28	1.13	12.60	13.99

Source: Authors' calculations

Note: GSDP-Gross State Domestic Product, Hry- Haryana, Pb- Punjab, RE- Revised Estimates

Interestingly, the share of revenue expenditure in GSDP has remained significantly on higher side in Punjab than that of in Haryana during the same period. The share of capital outlay in GSDP was comparatively low in Punjab as against its counterpart Haryana during most of the period under consideration, except one year 2006-07, when it was slightly on higher side in Punjab due to a considerable expenditure in power sector.

In other words, the share of revenue expenditure in GSDP has been significantly high than that of capital outlay/expenditure in both the states. There is an urgent need to regulate/ control the share of revenue expenditure on the one hand and to enhance the share to capital outlay in GSDP on the other for equitable growth & development in both the states.

Per Capita Expenditure

It is clear from the data presented in the Table 8 that per capita expenditure has consistently increased in both the states at a growth rate of 12 per cent (from Rs. 4079 to Rs. 22,338) in Haryana and 8.52 per cent (from Rs. 3541 to Rs. 18,350) in Punjab during the period 2000-01 to 2014-15. It is pertinent to highlight that growth of per capita capital outlay and revenue expenditure has been relatively high in Haryana as against its counterpart Punjab. However, the pace of growth of revenue expenditure has been relatively high than that of capital outlay in both the states during the corresponding period.

Table 8: Per Capita Expenditure and Its Components in Haryana and Punjab

(Rs.)

Particulars	Total Expenditure per person		Capital Outlay per person		Revenue Expenditure per person	
	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	4079	5380	683	572	3396	4808
2005-06	6113	7569	691	582	5422	6987
2010-11	12713	12747	1585	861	11129	11886
2012-13	16650	14438	2194	678	14456	13761
2013-14	17178	15347	1475	670	15703	14576
2014-15 (RE)	22338	18350	2057	1369	20281	16981
ACGR	**12.00**	**8.52**	**7.63**	**5.99**	**12.65**	8.78

Source: Authors' calculations

Note: ACGR-Annual Compound Growth Rate, RE- Revised Estimates, Hry- Haryana, Pb- Punjab

It may be highlighted that per capita tax revenue increased by Rs. 8893 in Haryana and Rs. 7891 in Punjab while per capita capital outlay went up just by Rs. 1374 and Rs. 797 respectively during the period under consideration. It implies that state governments are using peoples' hard earned money, collected in the form of taxes & other charges, for meeting current expenditure, that is matter a of serious concern.

Share of Total Expenditure in Total Revenue Receipts

The ratio of total expenditure to total revenue receipts indicates the capacity of the state to finance its expenditure obligations. The Table 9 presents the composition of total expenditure as percentage to total revenue receipts in Haryana and Punjab.

The data in Table 9 shows that the resources available with Haryana and Punjab were found in-sufficient to meet their expenditure obligations/ priorities during the period 2000-01 to 2014-15. The states were not in a position even to meet their respective revenue expenditure with the resources available with them during most of the period under consideration.

Table 9: Composition of Total Expenditure as %age of TRR in Haryana and Punjab

(per cent)

Particulars	Total Expenditure / TRR		Capital Outlay / TRR		Revenue Expenditure/ TRR	
	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	131.21	139.77	21.98	14.86	109.23	124.91
2005-06	102.88	116.26	11.64	8.94	91.24	107.32
2010-11	126.51	127.79	15.77	8.64	110.74	119.16
2012-13	130.02	127.39	17.13	5.98	112.89	121.41
2013-14	120.55	124.89	10.35	6.27	110.19	118.62
2014-15 (RE)	133.18	123.84	12.26	9.24	120.92	114.60

Source: Authors' calculations

Note: TRR- Total Revenue Receipts, Hry- Haryana, Pb- Punjab, RE- Revised Estimates

It implies that a significant amount of borrowings, which are supposed to be used as capital expenditure for capacity enhancement have been diverted to meet current expenditure. In case of Haryana, surplus on revenue account was recorded during three years (2005-06 to 2007-08) because of a significant increase in revenue receipts on account of stamps duties and registration fees, sale tax (VAT) and excise duty on the one hand and increase in non tax revenue receipts from urban development and interest receipts on the other. Therefore, the share of revenue expenditure in total revenue receipts was less than 100 per cent. The growth rate of revenue receipts was recorded relatively high than that of revenue expenditure, consequently surplus on revenue account appeared in Haryana during these three years. Generally, the states' inability to meet revenue expenditure with the available resources forced to raise borrowings which in turns have to increase their liabilities in terms of interest payment and repayment of principal amount over the period. It is interesting to note that the ratio of revenue expenditure to total revenue receipts was focussed relatively on higher side in Punjab than that of in Haryana during most of the period under consideration. But reverse trend was observed in the ratio of capital outlay/expenditure to total revenue receipts during the corresponding period, except a few years.

Per Capita Revenue Expenditure

The data on per capita development and non development revenue expenditure has been presented in Table 10.

Table 10: Per Capita Revenue Expenditure and Its Components in Haryana and Punjab

(Rs.)

Particulars	TRE/ person		DRE/ person		NDRE/ person	
	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	3396	4808	1915	2091	1481	2718
2005-06	5422	6987	3350	2808	2072	4179
2010-11	11129	11886	7430	4935	3699	6950
2012-13	14456	13761	9927	7193	4529	6567
2013-14	15703	14576	10554	7323	5148	7254
2014-15 (RE)	20281	16981	13495	8921	6786	8060
ACGR	**12.65**	**8.78**	**13.90**	**10.15**	**10.68**	**7.52**

Source: Authors' calculations

Note: TRE- Total Revenue Expenditure, DRE- Development Revenue Expenditure, NDRE- Non-Development Revenue Expenditure, ACGR- Annual Compound Growth Rate, RE- Revised Estimates, Hry- Haryana, Pb- Punjab

Per capita development revenue expenditure has increased by Rs.11580 (from Rs. 1915 to Rs. 13495) in Haryana and by Rs. 6830 (from Rs. 2091 to Rs. 8921) in Punjab during the period 2000-01 to 2014-15. The growth of per capita development revenue expenditure (13.90 per cent) was relatively high in Haryana than that of in Punjab (10.15 per cent) during the period under consideration. Similar trend was also observed in case of non development revenue expenditure. It may be pointed out that per capita non development revenue expenditure was significantly high in Punjab than that of its counterpart Haryana. However, per capita non development revenue expenditure has increased relatively at a higher rate of growth (10.68 per cent) in Haryana than that of 7.52 per cent in Punjab. But in absolute terms the growth of non development revenue expenditure was relatively high in Punjab as against its counterpart Haryana during the period under consideration.

Per Capita Capital Outlay

The trends of per capita outlay have been observed in the same line with its share in GSDP. The data on per capita capital outlay in Haryana and Punjab has been presented in Table 11.

The data reveals that per capita development capital outlay has increased at a growth rate of 7.35 per cent (from Rs. 669 to Rs. 1938) in Haryana which is relatively high than that of 5.53 per cent (from Rs. 554 to Rs. 1242) in Punjab for the period 2000-01 to 2014-15.

Table 11: Per Capita Capital Outlay and Its Components in Haryana and Punjab

(Rs.)

Particulars	CO/ person		DCO/person		NDCO/ person	
	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	683	572	669	554	14	18
2005-06	691	582	656	548	35	35
2010-11	1585	861	1506	794	78	67
2012-13	2194	678	2098	620	96	58
2013-14	1475	770	1369	694	106	76
2014-15 (RE)	2057	1369	1938	1242	119	127
ACGR	**7.63**	**5.99**	**7.35**	**5.53**	**15.34**	**13.91**

Source: Authors' calculations

Note: CO- Capital Outlay, DCO- Development Capital Outlay, NDCO- Non-Development Capital Outlay, RE-Revised Estimates, ACGR- Annual Compound Growth Rate, Hry- Haryana, Pb- Punjab

It needs to be noted that a significant growth in per capita development capital outlay was observed in Haryana during the years of surplus on revenue accounts (from 2005-06 to 2007-08). Similar growth pattern was observed in Punjab during the years 2005-06 and 2006-07, when the revenue deficit was at its lowest levels. It implies that higher revenue deficit has been financed at the cost of development capital outlay, which is matter of serious concern. It is appreciable that per capita non development capital outlay was restricted less than Rs. 100 in both the states during most of the period under consideration.

Per Capita Development Capital Outlay

The trends of per capita development capital outlay have been observed in the same line with its share in GSDP.

The Table 12 exhibits per capita development capital outlay in Haryana and Punjab. Per capita development capital outlay was observed at the lowest levels in both the states during three years

(2002-03 to 2004-05) due to perceptible collection of receipts and recoveries from food storage and warehousing. On capital account, the highest growth rate (18.63 per cent in Haryana and 20.90 per cent in Punjab) was observed in expenditure on social services. It happened mainly due to low base values in both the states.

Table 12: Per Capita Development Capital Outlay and Its Components in Haryana and Punjab

(Rs.)

Particulars	DCO/ person		ESS/ person		EES/ person	
	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	669	554	68	22	602	532
2005-06	656	548	188	132	468	416
2010-11	1506	794	484	240	1023	555
2012-13	2098	620	551	253	1548	367
2013-14	1369	694	684	326	686	368
2014-15 (RE)	1938	1242	882	379	1056	864
ACGR	**7.35**	**5.53**	**18.63**	**20.90**	**3.82**	**3.29**

Source: Authors' calculations

Note: DCO- Development Capital Outlay, ACGR- Annual Compound Growth Rate, RE- Revised Estimates, ESS- Expenditure on Social Services, EES- Expenditure on Economic Services, Hry- Haryana, Pb- Punjab

The growth rate of per capita capital outlay in social services has been recorded relatively high in Punjab as compared to the corresponding growth rate in Haryana during the period 2000-01 to 2014-15. However, reversed trend was observed in case of expenditure on economic services during the corresponding period.

Per Capita Development Revenue Expenditure

The Table 13 presents the data on per capita development revenue expenditure. Per capita development revenue expenditure has increased at a growth rate of 10.90 per cent (from Rs. 1915 to Rs. 13495) and 10.15 per cent (from Rs. 2091 to Rs. 8921) in Haryana and Punjab respectively during the period 2000-01 to 2014-15.

Table 13: Per Capita Development Revenue Expenditure and Its Components in Haryana and Punjab

(Rs.)

Particulars	DRE/ person		ESS/ person		EES/ person	
	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	1915	2091	1185	1229	730	863
2005-06	3350	2808	1714	1383	1636	1425
2010-11	7430	4935	4286	2623	3144	2312
2012-13	9927	7193	5527	3957	4400	3236
2013-14	10554	7323	5778	3962	4776	3360
2014-15 (RE)	13495	8921	8026	5429	5440	3492
ACGR	**13.90**	**10.15**	**13.63**	**10.41**	**14.33**	**9.77**

Source: Authors' calculations

Note: DRE- Development Revenue Expenditure, ACGR- Annual Compound Growth Rate, ESS- Expenditure on Social Services, EES- Expenditure on Economic Services, RE- Revised Estimates, Hry- Haryana, Pb- Punjab.

The data further highlights that per capita expenditure on social and economic services has also gone up in both the states, but the growth of expenditure on these services was relatively high in Haryana as compared to Punjab during the corresponding period. Per capita expenditure on social services has registered a growth rate of 13.63 per cent (from Rs. 1185 to Rs. 8026) in Haryana and 10.41 per cent (from Rs. 1229 to Rs. 5429) in Punjab during the same period. In case of per capita expenditure on economic services, the growth rate was 14.33 per cent (from Rs. 730 to Rs. 5440) and 9.77 per cent (from Rs. 863 to Rs. 3492) in Haryana and Punjab respectively during the corresponding period. It is pertinent to note that the growth of per capita expenditure on social and economic services in terms of percentage as well as absolute amount was significantly high in Haryana as against its counterpart Punjab during the period under consideration.

Share of Expenditure on Major Social Services in GSDP

The expenditure on social services plays a significant role in promoting social welfare through social infrastructure. It comprises expenditure on education, sports, art and culture, public health, water supply and sanitation, family welfare, social welfare and nutrition etc. It may be used as an instrument to achieve social equity.

The ratio of expenditure on social services to GSDP determines the size of the government through public expenditure. Higher the ratio, the greater would be the size of the state government.

Table 14: Expenditure on Major Components of Social Services as % age of GSDP in Haryana and Punjab

(Per cent)

Particulars	ESS/GSDP		Edu/ GSDP		Med/GSDP		WSS/ GSDP		SSW/ GSDP	
	Hry	Pb	Hry	Pb	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	4.21	4.00	2.23	2.48	0.49	0.85	0.37	0.20	0.79	0.31
2005-06	3.67	3.32	1.81	2.11	0.41	0.64	0.33	0.18	0.80	0.29
2010-11	4.19	3.21	2.27	1.81	0.41	0.53	0.33	0.13	0.88	0.59
2012-13	4.25	3.93	2.06	2.33	0.43	0.57	0.32	0.14	0.70	0.45
2013-14	3.97	3.56	1.90	2.02	0.40	0.54	0.32	0.10	0.66	0.42
2014-15 (RE)	5.01	4.47	2.47	2.34	0.55	0.69	0.33	0.12	0.94	0.48

Source: Authors' calculations

Note: GSDP- Gross State Domestic Product, ESS- Expenditure on Social Services, Edu- Education, Med- Medical Health & Welfare, WSS- Water Supply & Sanitation, SSW- Social Security & Welfare, RE- Revised Estimates, Hry- Haryana, Pb- Punjab

The share of expenditure on major social services in GSDP has been presented in Table 14. The data shows that the share of expenditure on social services in GSDP has initially decreased and thereafter it tended to increase in both the states during the period 2000-01 to 2014-15. The share of expenditure on social services in GSDP has decreased from 4.21 per cent in 2000-01 to 3.36 per cent in 2004-05, thereafter it increased to 5.01 per cent in 2014-15 in Haryana. In case of Punjab, the corresponding ratio has decreased from 4 per cent in 2000-01 to the lowest level of 2.85 per cent in 2007-08 and thereafter it increased to 4.47 in 2014-15.

It needs to be highlighted that the highest share of expenditure on social services has been devoted to education in both the states. It is also interesting to reveal that upto the year 2005-06, the share of expenditure on education sector in GSDP was relatively high in Punjab than that of in Haryana, thereafter, the reversed trend was observed. Further, it may be noted that the share of expenditure on medical services in GSDP was on higher side in Punjab than that of in Haryana during the period under consideration. However, it remained less than 1 per cent and 0.50 per cent of GSDP in Punjab and Haryana respectively during the corresponding period. Water supply & sanitation is also one of the crucial social services for increasing welfare of the society. In the present scenario, where drinking water crisis particularly in rural areas deepened due to overutilization of ground water for irrigation and excessive use of chemical fertiliser and pesticides, its importance has widened in both the states. The share of expenditure on water supply & sanitation in GSDP has decreased in both the states i.e., from 0.37 per cent to 0.33 per cent in Haryana and from 0.20 per cent to 0.12 per cent in Punjab, during the period 2000-01 to 2014-15, which is not a healthy sign. The state governments should concentrate on this problem on priority basis. It is also pertinent to reveal that the share of expenditure on social security & welfare schemes in GSDP was relatively high than that of in water supply & sanitation in both the states during the corresponding period. However, relatively higher emphasis was given to social welfare schemes by the state Haryana as against its counterpart Punjab during the period under consideration.

Per Capita Expenditure on Major Social Services

Per capita expenditure on social services may give us more intensive comparative picture about the status of social services in the states. Per capita expenditure on major components of social services has been presented in Table 15.

The data highlights that per capita expenditure on social services has increased at a growth rate of 13.63 per cent (from Rs. 1185 to Rs. 8056) in Haryana and 10.41 per cent (from Rs. 1220 to Rs. 5429) in Punjab during the period 2000-01 to 2014-15.

Table 15: Per Capita Expenditure on Major Components of Social Services in Haryana and Punjab

(Rs.)

Particulars	ESS/person		Edu/ person		Med/ person		WSS/ person		SSW/ person	
	Hry	Pb	Hry	Pb	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	1185	1229	629	763	138	262	104	63	221	96
2005-06	1714	1383	845	878	193	267	153	73	372	121
2010-11	4286	2623	2318	1476	420	430	340	108	895	479
2012-13	5527	3957	2674	2344	561	574	418	141	913	454
2013-14	5778	3962	2764	2248	589	599	461	106	968	472
2014-15 (RE)	8056	5429	3980	2838	884	841	538	150	1505	584
ACGR	**13.63**	**10.41**	**13.09**	**9.15**	**13.18**	**8.09**	**11.58**	**5.95**	**13.64**	**12.79**

Source: Authors' calculations

Note: ESS- Expenditure on Social Services, Edu- Education, Med- Medical Health & Welfare, WSS- Water Supply & Sanitation, SSW- Social Security & Welfare, ACGR- Annual Compound Growth Rate, RE- Revised Estimates, Hry- Haryana, Pb- Punjab

It needs to be noted that relatively higher growth of per capita expenditure in absolute as well as percentage terms on all the major social services was observed in Haryana as compared to Punjab during the period under consideration.

It may be pointed out that education sector was given top priority in expenditure on social services by both the states during the period 2000-01 to 2014-15. Second top priority was given to medical health and social security & welfare by the states Punjab and Haryana respectively during the period under consideration. However, the share of expenditure on social services in GSDP is beyond expectations in both the states. The state governments must enhance the share of expenditure on social sector in GSDP and reprioritise their expenditure pattern on an urgent basis.

Share of Committed Expenditure in GSDP

It has been observed that committed expenditure plays a crucial role to determine fiscal capacity of the state to undertake developmental activities for the welfare of the people. Higher share of committed expenditure in state's resources indicates more dependency on borrowings to meet productive revenue expenditure or capital expenditure. In the era of rule based fiscal consolidation, the states are making efforts to meet the specified fiscal targets at the cost of productive expenditure, which may adversely affect the growth prospect of the economy in future. Generally, this situation is not considered as a healthy preposition. The committed expenditure consists of expenditure on salaries & wages, pension, interest payment, and subsidy. Both the state governments have introduced New Pension Scheme and Debt Swap Schemes on the directions of the central government to consolidate their finances.

The Table 16 presents the share of total committed expenditure in GSDP in Haryana and Punjab.

Table 16: Committed Expenditure as % age of GSDP in Haryana and Punjab

(Per cent)

Particulars	TCE/ GSDP		IP/GSDP		Subsidy/GSDP	
	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	8.38	10.65	2.51	3.13	0.38	0.00
2005-06	7.81	11.30	1.93	3.42	1.35	1.45
2010-11	7.50	10.67	1.28	2.22	1.26	1.54
2012-13	7.41	11.25	1.39	2.40	1.60	1.80
2013-14	7.09	10.66	1.51	2.46	1.46	1.54
2014-15 (RE)	7.25	10.65	1.59	2.56	1.31	1.36

Source: Authors' calculations

Note: TCE- Total Committed Expenditure, GSDP- Gross State Domestic Product, IP- Interest Payment, RE- Revised Estimates, Hry- Haryana, Pb- Punjab

The data reveals that a significant share of GSDP has been cornered by the committed expenditure in both the states, however relatively higher share was observed in Punjab than that of in Haryana during the period 2000-01 to 2014-15.

The data further highlights that the share of interest payment in GSDP has significantly decreased after the year 2003-04, when debt swap scheme was adopted by both the states. The ratio of interest payment to GSDP indicates the amount of resources devoted to servicing debt, which was accumulated in the past. The share of interest payment in GSDP was significantly high in Punjab as compared to its counterpart Haryana during the period under consideration mainly due to high debt GSDP ratio. High debt burden generally leads to higher burden of interest payment. Over the period, the share of interest payment to GSDP has decreased from 2.51 per cent to 1.59 per cent in Haryana and from 3.13 per cent to 2.56 per cent in Punjab during the period 2000-01 to 2014-15. The ratio of subsidy to GSDP was observed less than 2 per cent in both the states, except a few years during the respective period. The state governments should take initiatives to manage their committed expenditure.

Per Capita Committed Expenditure

The Table 17 reveals the data on per capita committed expenditure and its components in Haryana and Punjab. The data highlights that per capita committed expenditure has increased at a growth rate of

11.24 per cent (from Rs. 2359 to Rs. 11663) in Haryana and 9.59 per cent (from Rs. 3273 to Rs. 12926) in Punjab during the period 2000-01 to 2014-15.

Table 17: Per Capita Committed Expenditure in Haryana and Punjab

(Rs.)

Particulars	TCE/ person		IP/person		Subsidy/person	
	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	2359	3273	706	962	107	0
2005-06	3642	4707	901	1426	629	604
2010-11	7668	8707	1305	1810	1291	1257
2012-13	9631	11332	1806	2416	2076	1815
2013-14	10315	11850	2193	2737	2130	1717
2014-15 (RE)	11663	12926	2558	3106	2102	1654
ACGR	**11.24**	**9.59**	**8.96**	**8.13**	**21.96**	**-**

Source: Authors' calculations

Note: TCE- Total Committed Expenditure, RE- Revised Estimates, IP- Interest Payment, ACGR- Annual Compound Growth Rate, Hry- Haryana, Pb- Punjab

Per capita committed expenditure was significantly high in Punjab as against in Haryana during the corresponding period. Similar trend has been observed in case of per capita interest payment due to relatively high accumulation of debt in Punjab which was reflected in terms of higher burden of interest payment. But interestingly, per capita subsidy was relatively high in Haryana as compared to Punjab which have free power supply to agriculture sector in the state during the period under consideration. Interestingly, the growth of per capita committed expenditure and interest payment in absolute terms has been relatively high in Punjab than that of its counterpart Haryana during the corresponding period.

Share of Committed Expenditure in Total Revenue Receipts

The ratio of committed expenditure to total revenue receipts indicates the share of total revenue that is used to meet committed expenditure. Higher the share, lower would be resources available with the government on its discretion to meet development expenditure.

Table 18: Components of Committed Expenditure as %age of TRR in Haryana and Punjab

(Per cent)

Particulars	TCE/ TRR		IP/TRR		Subsidy/TRR	
	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	75.89	85.03	22.70	24.99	3.44	0
2005-06	61.30	72.29	15.16	9.76	10.58	9.28
2010-11	76.31	87.29	12.98	19.23	12.85	12.61
2012-13	75.22	99.99	14.10	21.31	16.22	16.01
2013-14	72.39	96.44	15.39	22.88	14.95	13.97
2014-15 (RE)	69.53	87.23	15.25	20.96	12.53	11.67

Source: Authors' calculations.

Note: TCE- Total Committed Expenditure, TRR- Total Revenue Receipts, IP- Interest Payment, RE- Revised Estimates, Hry- Haryana, Pb- Punjab.

The Table 18 shows the share of committed expenditure in total revenue receipts in Haryana and Punjab. The data highlights that the committed expenditure has cornered relatively higher share of total revenue receipts in Punjab than that of in Haryana. On an average, about 90 per cent of total resources has been used to meet committed expenditure, leaving only 10 per cent resources on its discretion in Punjab. Whereas committed expenditure consumed about 72 per cent of total revenue receipts in Haryana, it implies that the state Haryana is relatively in a better position which has about 28 per cent of total resources on its discretion.

The share of interest payment in total revenue receipts may also be taken as one of the important measures to assess fiscal sustainability but there is no definite norm of sustainability. The Ministry of Finance, Government of India used to classify states as debt stressed or not, based on a cut off interest payment/ revenue receipts (IP/RR) ratio of 20 per cent. The Eleventh Finance Commission (EFC) observed that the ratio of interest payment to total revenue receipt should be about 18 per cent and thus recommended that the states should consider this as their medium term objective. However, the Twelfth Finance Commission in its suggested path of fiscal restructuring/ consolidation has recommended that the ratio of interest payment to total revenue receipts must be gradually brought down to 15 per cent by the end of 2009-10. It needs to be noted that the share of interest payment in total revenue receipts has perceptibly decreased in both the states mainly on account of debt swap scheme. After 2004-05, the share has remained more or less stable in Haryana whereas that of tended to increase in Punjab. A consistent increase in the share of interest payment in total revenue receipts is a matter of concern. A rise in IP/RR ratio may happen either due to increase in the amount of interest payment or decrease in total revenue receipts on account of fall in own revenue receipts and central transfers. Both the prepositions are not desirable for fiscal sustainability.

Fiscal Performance and Debt Management in Haryana and Punjab

To improve fiscal health, the central as well as state governments have initiated rule based fiscal reforms. The Finance Commissions (11th, 12th and 13th) have recommended that state governments should achieve a zero level of revenue deficit and fiscal deficit should not exceed 2.5 / 3.0 per cent of GSDP and the accumulated borrowings (debt burden) may not exceed 22.5 per cent of GSDP. Moreover, in pursuance of recommendations of the Eleventh Finance Commission, the central government set up an Incentive Fund to expedite fiscal reforms at the sub national levels. The fund provides incentive to encourage the state government to implement fiscal reforms in a time bound manner. The grants were linked to the progress in implementation of the programme. The state governments were required to prepare Medium Term Fiscal Reforms Plan (MTFRP). The MTFRP incorporates the provisions for evaluation of the performance of the prescribed fiscal indicators in the previous year vis-à-vis the targets set out earlier and the likely performance in the current year as per revised estimates.

The Section 3 of the Fiscal Responsibility Legislation (FRL) of the state governments requires the MTFRP Statement to include the following: (i) a statement of recent economic trends and prospects for growth and development, (ii) an evaluation of the performance of the prescribed fiscal indicators in the previous years, (iii) the medium term fiscal objectives of the government, (iv) three-four year rolling targets of fiscal indicators with specification of underlying assumptions, (v) an assessment of sustainability relating to the revenue deficit and the use of capital receipts for generating productive assets, (vi) policies of government for the ensuing financial year relating to taxation, expenditure, borrowings and other liabilities, etc., and (vii) the strategic priorities and key policies of the government.

As per the recommendations of the Twelfth Finance Commission, state governments would access the market directly and each state's capability in raising resources will be market determined and based on their respective financial health. Hence, it becomes imperative for states' to have viable fiscal figures (Reserve Bank of India, 2006).

Fiscal sustainability may be examined by using fiscal indicators which are generally expressed as ratios of gross state domestic product at current prices. The fiscal indicators may be classified into four major groups: (i) deficit indicators (ii) revenue performance (iii) expenditure pattern and (iv) debt management. Different deficit indicators reveal the fiscal capacity of the states to servicing the debt raised to finance the deficits, particularly on revenue account.

The deficit indicators approach analyses fiscal health of states by looking at a quantum & direction of the four major deficit indicators as each of which provides insight into a different aspect of fiscal health i.e., the revenue deficit, the primary deficit, the gross fiscal deficit and the primary revenue balance.

Expenditure management through appropriate prioritization and control is important for the government at centre and state levels. The conflict between containing the fiscal deficit and providing adequate outlays for strengthening the socio economic infrastructure makes expenditure prioritization relatively more crucial aspect in state finances in India.

The 14th Finance Commission drafted a roadmap for fiscal management with efficiency keeping in view the problems relating to growth, equity and overall stability, particularly price stability and external sector stability. To discharge their obligations both the union and the states should be fiscally empowered, separately and jointly. Such empowerment may warrant fiscal consolidation and improvement in the quality of fiscal management. The Commission argued that the impact of growth on equity and stability will depend significantly on the quality of fiscal transparency and fiscal management.

In order to reduce fiscal stress a number of states had undertaken various policy initiatives focussed mainly at augmenting revenues and increasing the efficiency of tax mobilisation on the one hand and rationalisation measures on expenditure side i.e., increases in retirement age to contain the outgo on pensions, introduction of voluntary retirement schemes, imposition of restrictions on new recruitments and changes in the discount rates for commutation of pension on the other. In addition, some states had also taken steps towards imposition of ceilings on guarantees, as well as the creation of sinking funds and guarantee redemption funds.

There may be two strategies for sustainable and equitable growth at the centre as well as sub national levels. One is tax enhancement and other is expenditure compression. The increase in tax rate is not comfortable zone for the governments to enhance revenue. Therefore, the states have broadly focussed on contraction of development/ quality expenditure which is very convenient way for attaining time bound fiscal consolidation.

The state governments must focus on revenue augmentation through broadening and rationalizing their tax systems, improving the efficiency of their tax administration, simplification of their tax laws and focusing on better compliance along with reduction in administrative expenditure, non-plan revenue expenditure, non-development expenditure and growing pension liabilities.

Normally, healthy fiscal management practices are that the state government should generate enough revenue to meet its revenue expenditure i.e., its revenue deficit should be close to zero. The revenue deficit requires the resources which normally should go into capital investment or for development expenditure. It is better if state generates some revenue surplus for investment in some priority economic and social sectors to enhance pace of economic development and/or raise the existing levels of socio-economic welfare of the people. Government may borrow (or incur fiscal deficit) for capital expenditure or investment which may enhance the production capacity of the economy. Borrowings lead to increase in interest burden and principal amount repayment liabilities. The level of borrowings should be such that the economy does not fall into the debt trap.

Specific fiscal targets for the states were provided in their Fiscal Responsibility and Budget Management

Acts (FRBM Act), Mid Term Fiscal Restructuring Policy (MTFRP) and Fiscal Correction Path (FCP). To meet the targets of fiscal consolidation, Haryana and Punjab governments have also made certain institutional changes since 2000-01 onwards.

Table 19: Institutional Reforms made by State Governments in Haryana & Punjab

S. No.	VAT Implemented	FRBM	NPS	Consolidated Sinking Fund	Guarantee Redemption Fund	Ceiling on Guarantee Imposed
Haryana	April 1, 2003	July 2005	January, 2006	Yes, 2002-03	July 2003	Yes
Punjab	October, 2003	January, 2005	April 1, 2005	No	No	Yes

Note: VAT- Value Added Tax, FRBM- Fiscal Responsibility and Management Act, NPS- New Pension Scheme

The Haryana Fiscal Responsibility and Budget Management Act (HFRBM Act) was enacted in July 2005. The government of Punjab has enacted the FRBM in 2003, which was subsequently amended vide the Punjab Fiscal Responsibility and Budget Management (Amendment) Act, 2005 to ensure prudence in fiscal management and to maintain fiscal stability in the state.

The latest provisions of the FRBM acts for Haryana and Punjab are as follow:

Table 20: Targets of Major Fiscal Indicators for Haryana and Punjab

(per cent)

Year	Revenue Deficit as per cent of GSDP		Fiscal Deficit as per cent of GSDP		Outstanding Debt as per cent of GSDP	
	Punjab	Haryana	Punjab	Haryana	Punjab	Haryana
2011-12	1.8	0.0	3.5	3.0	41.8	22.6
2012-13	1.2	0.0	3.5	3.0	41.0	22.7
2013-14	0.6	0.0	3.0	3.0	39.8	22.8
2014-15	0.0	0.0	3.0	3.0	38.7	22.9

Source: 13th Finance Commission, Government of India.

The Table 20 clearly shows that the fiscal targets set for Punjab were relatively on higher side mainly due to uncomfortable fiscal situation in the state by the 13th Finance Commission. The ratio of revenue deficit to GSDP was set at zero in 2011-12 and has to be maintained up to 2015 for Haryana, whereas the target of zero revenue deficit was set for the year 2014-15 in Punjab. The target of fiscal deficit as a ratio of GSDP was also high for the years 2011-12 & 2012-13 in Punjab than that of in Haryana. During the year 2013-14, the target of fiscal deficit was set at 3 per cent of GSDP in Punjab which is equivalent to the target of fiscal deficit in Haryana. Moreover, the ratio of outstanding debt to GSDP, which indicates debt stress of the states, was set at relatively higher levels for Punjab as against the targets for Haryana during the years 2011-12 to 2014-15.

Share of Major Fiscal Targets in GSDP

The actual fiscal situation in terms of fiscal indicators of the states Haryana and Punjab has been presented in Table 21. The data reveals that the fiscal situation of Haryana was appeared relatively better than Punjab as all the fiscal indicators i.e., GFD, RD, PD & PRB as a ratio to respective GSDP, were significantly at lower levels, which reflects relatively comfortable position of Haryana, during most of the period 2000-01 to 2014-15.

Table 21: Major Fiscal Indicators as %age of GSDP in Haryana and Punjab

(per cent)

Particulars	Gross Fiscal Deficit		Revenue Deficit		Primary Deficit		Primary Revenue Balance	
	Hry	Pb	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	3.80	5.22	1.02	3.12	1.30	2.09	-1.48	-0.01
2005-06	0.26	2.45	-1.11	1.14	-1.67	-0.98	-3.05	-2.28
2010-11	2.79	3.16	1.06	2.34	1.52	0.72	-0.22	0.12
2012-13	3.04	3.28	1.30	2.60	1.65	0.88	-0.09	0.20
2013-14	2.14	2.77	1.00	2.06	0.63	0.31	-0.51	-0.81
2014-15 (RE)	3.59	2.97	2.18	1.78	1.94	0.43	0.53	-0.75

Source: Authors' calculations

Note: GSDP-Gross State Domestic Product, Hry- Haryana, Pb- Punjab

In Punjab, the ratio of revenue deficit to GSDP was perceptibly on higher side as against the corresponding ratio in Haryana. However, the ratio of revenue deficit to GSDP in Haryana was less than 2 per cent during most the period under consideration, except the year 2005-06 to 2007-08, when there was surplus on revenue account. The surplus on revenue account in Haryana occurred mainly due to perceptible increase in tax revenue receipts on the one hand and decline in expenditure on warehousing and crop procurement on the other. Due to persistence of high revenue deficit, the ratio of gross fiscal deficit to GSDP was also significantly on higher side in Punjab during the corresponding period. The ratio of primary deficit, which indicates the level fiscal deficit net of interest payment, was relatively in a comfortable zone for Haryana during the same period. Higher levels of primary deficit indicate more space for productive expenditure. The primary revenue balance, the difference between revenue deficit to interest payment (RD-IP), was remained in surplus during most of the period under consideration in Haryana. Surplus in primary revenue balance highlights that the state government has sufficient resources to finance its current obligations and deficit on revenue accounts appeared mainly due to accumulation of past liabilities in terms of servicing of outstanding liabilities.

The governments need resources, which are scarce in nature, for making investment in social and economic infrastructure to meet the aspirations of the public in a democratic system. Apart from own resources, the state governments depend on central transfers and/ or borrowings to make required expenditure. The extent to which debt servicing consume resources, particularly out of borrowings, productive investment has been adversely affected accordingly. As a state have deficit on its revenue account, it uses costly borrowings to finance current or consumption expenditure and to that extent, the state has been unable to use its borrowings for productive investment. The higher is the ratio of deficit to GSDP, the greater are the chances of the state getting into the debt trap.

Over the period, changes in the composition of total liabilities have been observed due to some policy stances. Consequently, the share of market borrowings in the outstanding liabilities of state governments have increased while the share of loans and advances from the centre tended to decline sharply since 2003-04 onwards. Now market loans occupy the largest share in total outstanding liabilities of the states.

Share of Outstanding Liabilities in GSDP

The ratio of total outstanding liability to GSDP indicates the debt repaying capacity of the state government. A high debt to GSDP ratio indicates that the government is highly dependent on new borrowings to repay its past stock of debt. Higher ratio leads towards debt trap. The state governments should make efforts to enhance own resources so that the dependency on borrowings may be reduced.

The Table 22 presents the composition of total outstanding liabilities as percentage of GSDP.

Table 22: Total Outstanding Loans and Its Major Components as % age of GSDP in Haryana and Punjab

(per cent)

Particulars	TOL/ GSDP		TID/ GSDP		LAC/ GSDP		OL/ GSDP	
	Hry	Pb	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	24.60	41.10	6.79	12.85	9.90	19.67	7.91	8.59
2005-06	24.80	47.10	15.90	31.17	2.04	6.65	6.86	9.28
2010-11	18.04	32.76	11.93	24.18	0.87	1.43	5.25	7.16
2012-13	19.80	32.40	14.26	23.87	0.62	1.13	4.92	7.40
2013-14	20.50	32.20	15.00	23.72	0.59	1.05	4.91	7.43
2014-15 (RE)	21.50	32.40	15.76	23.93	0.53	1.07	5.21	7.40

Source: Authors' calculations.

Note: GSDP- Gross State Domestic Product, TOL- Total Outstanding Liabilities, TID- Total Internal Debt, LAC- Loans & Advances from Centre, OL- Other Loans, RE- Revised Estimates, Hry- Haryana, Pb- Punjab.

The data highlights that outstanding GSDP ratio has been significantly high in Punjab than that of in Haryana during all the period 2000-01 to 2014-15. However, after the introduction of debt swap scheme in the year 2003-04, the ratio of total outstanding liabilities to GSDP in Haryana has tended to decrease and reached at the lowest level of 17.61 per cent in 2008-09, thereafter, it increased to 21.50 per cent in 2014-154. In case of Punjab, the corresponding ratio has decreased from 50.14 per cent in 2003-04 to 32.40 per cent in 2014-15. However, it was significantly high as against in Haryana. The composition of total outstanding liabilities in GSDP has also changed significantly in both the states over the period. Presently, market loans have occupied the largest share in total outstanding liabilities of both the states mainly due to policy stances. Consequently, the share of internal debt in GSDP has significant gone up while that of loans & advances from centre tended to decrease in both the states. It is pertinent to highlight that the share of loan & advances from centre in GSDP has reduced from 9.90 per cent to 0.53 per cent in Haryana and from 19.67 per cent to 1.07 per cent in Punjab during the period 2000-01 to 2014-15. The share of internal debt in GSDP has increased from 6.79 per cent to 15.76 per cent in Haryana and from 12.85 per cent to 23.95 per cent in Punjab during the corresponding period. The share of other loans in GSDP has decreased in both the states during the period under consideration. It may be pointed out that the share of total outstanding liabilities in GSDP was significantly high in Punjab than that of in Haryana during the period under consideration. However, both the states have achieved the targets of debt GSDP ratio set by 13th Finance Commission for the year 2014-15.

Per Capita Outstanding Liabilities

Per capita outstanding liability may also be used as one of the indicators to determine the fiscal health of the state.

The Table 23 highlights per capita outstanding liabilities and its composition in Haryana and Punjab. The data shows that per capita outstanding liabilities has increased at a relatively high growth rate of 11.32 per cent (from Rs. 6928 to Rs. 34602) in Haryana than that of 7.87 per cent (from Rs. 12629 to Rs. 39340) in Punjab during the period 2000-01 to 2014-15. It is pertinent to note that per capita outstanding liability was significantly high in Punjab as compared to Haryana during the corresponding period. The growth of per capita internal debt (18.81 per cent) in Haryana has also been significantly high than that of 14.23 per cent in Punjab during the period under consideration. However, per capita internal debt in absolute amount has increased with Rs. 25106 (from Rs. 3948 to Rs. 290542) in Punjab which is significantly high as comparison to the growth of Rs. 23457 (from Rs. 1913 to Rs. 25370) in Haryana during the same period.

Table 23: Per Capita Total Outstanding Loans and Its Major Components in Haryana and Punjab

(Rs.)

Particulars	TOL/ person		TID/ person		LAC/ person		OL/ person	
	Hry	Pb	Hry	Pb	Hry	Pb	Hry	Pb
2000-01	6928	12629	1913	3948	2787	6043	2229	2638
2005-06	11572	19625	7418	12986	953	2771	3201	3868
2010-11	18448	26743	12194	19734	884	1167	5370	5842
2012-13	25725	32632	18533	24039	800	1135	6392	7458
2013-14	29844	35809	21833	26383	866	1166	7145	8261
2014-15 (RE)	34602	39340	25370	29054	846	1300	8387	8986
ACGR	**11.32**	**7.87**	**18.81**	**14.23**	**-7.64**	**-9.74**	**9.24**	**8.51**

Source: Authors' calculations

Note: TOL- Total Outstanding Liabilities, TID- Total Internal Debt, LAC- Loans & Advances from Centre, OL- Other Loans, ACGR- Annual Compound Growth Rate, RE- Revised Estimates, Hry- Haryana, Pb- Punjab

Per capita loan & advances from centre has decreased in both the states i.e., from Rs. 2787 to Rs. 846 in Haryana and from Rs. 6043 to 1300 in Punjab during the period 2000-01 to 2014-15. Per capita other loans have increased from Rs. 2229 to Rs. 8387 in Haryana and from Rs. 2638 to Rs. 8986 in Punjab during the corresponding period. However, the growth of per capita other loans in absolute as well as percentage terms has been relatively high in Punjab as compared to Haryana.

It may be argued that states' own resources have become consistently insufficient to meet expenditure obligations in both the states over the period. Consequently resource gap in the states has been met through borrowings. Public borrowings have become the convenient source to cover the resource gap for the state governments. The growth of states' public debt and servicing of these debts has unprecedentedly posed serious strain on the state's fiscal health.

Concluding Observations

Haryana and Punjab are amongst the agriculturally developed states of India. Over the period, the state economy of Haryana and Punjab has experienced significant structural transformations. The relative contribution of various sectors i.e. Agriculture & Allied, Industries, and Tertiary, in Gross State Domestic Product (GSDP) have changed significantly. The share of agriculture & allied sectors in GSDP has decreased perceptibly whereas that of industrial and tertiary sectors increased over the period of time.

Per capita revenue receipts have increased at a growth rate of 11.89 per cent (from Rs. 3109 to Rs. 16,773) in Haryana and 9.40 per cent (from Rs. 3850 to 14,817) in Punjab during the period 2000-01 to 2014-15.

Up to 2005-06, per capita revenue receipts were relatively high in Punjab than that of in Haryana. It happened mainly because of the contribution of own non tax revenue receipts, particularly revenue from lotteries. Thereafter, per capita revenue receipts remained on higher side in Haryana as compared to Punjab because of a perceptible increase in own non-tax revenue, particularly on account of receipts from urban development on the one side and increase in own tax revenue on the other.

It has been observed that sales tax, excise duty and stamp duties & registration fees are the major own tax components, which contribute more than 85 per cent in own tax revenue receipts in both the states. After implementation of value added tax (VAT) in 2003 by the states, the contribution of sales tax in own tax revenue receipts has increased in both the states and its share was observed more than 60 per cent in Haryana but remained less than 60 per cent in Punjab during most of the period under consideration, except a few years. Moreover, the relative share of sale tax (VAT) in own tax revenue receipts in Haryana was relatively more than its counterpart Punjab.

The share of excise duty in own tax revenue receipts has decreased in both the states, however, the share remained relatively more in Punjab as compared to Haryana during the period under consideration.

The share of stamp duty and registration fees receipts in own revenue receipts has increased in both the states mainly because of faster urbanisation policy of the state governments under which a large number of investors were allowed change in land use (CLU) and granted licences for the colonisation in urban areas.

In order to achieve fiscal consolidation the Thirteenth Finance Commission (ThFC) has projected states' own revenue receipts (tax & non Tax) as percentage of GSDP at the level of 13.88 per cent and 12.93 per cent for Haryana and Punjab respectively for the year 2014-15.The states has been in a position to realise only 8.09 per cent and 9 per cent of GSDP respectively through their own resource mobilisation efforts. Major failure of the state governments in collection of non-tax revenue has been due to subsidisation of services without any sound justifications and lack of political will-power has also contributed to perpetuate the financial crisis in the states. It may be argued that a significant amount of revenue potentials has remained un-realised, the state governments must take some stringent steps to exploit the existing potentials to generate adequate resources required to enhance basic infrastructure and also focus on additional resource mobilisation to fulfil its obligations towards socio-economic objectives through higher outlays.

The ratio of total expenditure to total revenue receipts indicates the capacity of the state to finance its expenditure obligations. The data revealed that the resources available with Haryana and Punjab were insufficient to meet their respective expenditure obligations/ priorities. Moreover, the states were not in a position even to meet their respective revenue expenditure with the resources available with them during the period under consideration. It implies that a significant amount of borrowings, which are supposed to be used as capital expenditure for capacity enhancement, has been diverted to meet current expenditure.

The committed expenditure plays a significant role to determine fiscal capacity of the state to undertake developmental activities for the welfare of the people in the state. A significant share of GSDP has been cornered by the committed expenditure in both the states, however relatively higher share was consumed in Punjab than that of in Haryana during the period 2000-01 to 2014-15.

The committed expenditure has consumed a major chunk of own resources (tax & non tax) in Haryana during most of the period under consideration, except 2009-10 when own resources have fallen short to meet committed expenditure on account of implementation of 6th Central Pay Commission rewards. But the situation of Punjab is relatively more grim/horrible as own resources were not sufficient even to meet committed expenditure during the period 2000-01 to 2014-15, except the year 2005-06 when own resources have increased at a perceptible rate particularly on account of revenue receipts from stamp duties & registration fees.

The fiscal situation of Haryana was relatively better than Punjab as all the fiscal indicators were significantly at lower levels, which reflects relatively comfortable position, during most of the period under consideration. In Punjab, the ratio of revenue deficit to GSDP was perceptibly on higher side as against the corresponding ratio in Haryana. However, the ratio of revenue deficit to GSDP in Haryana was less than 2 per cent during most of the period under consideration, except the year 2005-06 to 2007-08 when there was surplus in revenue account. Due to persistence of high revenue deficit, the ratio of gross fiscal deficit to GSDP was significantly on higher side in Punjab during the corresponding period.

The ratio of total outstanding liability to GSDP indicates the debt repaying capacity of the government. Higher the ratio, lower would be the debt repaying capacity of the state. A high debt to GSDP ratio indicates that the government is highly dependent on new borrowings to repay past debt. Whereas a low debt to GSDP ratio shows that the government have sufficient resources to repay past stock of debt without incurring further borrowings. In other words, higher ratio leads towards debt trap.

Per capita outstanding liabilities have increased at a relatively higher growth rate of 11.32 per cent (from Rs. 6928 to Rs. 34,602) in Haryana as against 7.87 per cent (from Rs. 12629 to Rs. 39,340) in Punjab during the period 2000-01 to 2014-15. Interestingly, per capita outstanding liability has been significantly high in Punjab as compared to Haryana during the corresponding period.

In nutshell

Fiscal restructuring has been initiated by both the states Haryana and Punjab on the recommendations of the 11th, 12th and 13th Finance Commissions but expected results are still awaited. The appropriate expenditure policy is missing in both the states. Consequently, the resources available with the states are insufficient to meet their respective socio-economic obligations. It has been observed that various fiscal indicators remained relatively in comfortable zone in Haryana. Consequently, the state Haryana has been appeared relatively in a better fiscal position as compared to Punjab during the period under consideration. In the present scenario, both the states are urgently required to regulate unproductive expenditure on the one hand and to enhance own resources (tax & non tax) through ensuring transparency and accountability on the other to meet development priorities/ expenditure so that the dependency of the states on central transfers and market borrowings may be reduced.

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Municipal Service Delivery and Urban Local Governance: A Performance Appraisal by the Citizen of Surat, India

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The paper examines the supply status and the mechanism of civic services to the citizen of Surat city, especially the poor, for whom public services have been actually designed. The survey was designed to determine the assessments of the citizen regarding the various municipal services. The survey finding suggest that nearly 60% respondents are generally satisfied with the services provided by the civic body includes water, sanitation, SWM, public health and education. The finding also shows that citizens have expressed their highest level of satisfaction among fifteen services been the quality of the water and at the lower level of satisfaction was library and reading rooms. The study also noted that many respondents especially in lower income settlements expressed their dissatisfaction for the shortage of basic services particularly health, public transportation, water, sanitation and public distribution shops. The survey outcomes suggest that several services especially for the poor have a potential for improvement.

Keywords

Municipal Services, Citizens Survey

Introduction

Urbanization is considered as a key indicator for economic growth. Infect the economic activities are largely concentrated in urban areas. As per the World Urbanization Prospects: The 2007 Revision (United Nations, 2007)[1] that world population is expected to increase by 2.5 billion, passing from 6.7 billion to 9.2 billion. At the same time, the population living in urban areas is projected to gain 3.1 billion, increasing from 3.3 billion in 2007 to 6.4 billion in 2050. In other words, the urban areas of the world are expected to absorb all the population growth expected over the next four decades while at the same time drawing in some of the rural population. As a result, the world rural population is projected to start decreasing in about a decade and 0.6 billion fewer rural inhabitants are expected by 2050 than in 2007. The study noted that the pace of urbanization in India (29%) would be much slower than that of China (40%) the worlds' most populous nation. However the fact is that out of nineteen mega-cities[2] at world level, three in India, viz. Bombay, Calcutta, and Delhi cross ten million inhabitants. The statistics reveled that by the middle of 21st Century, 29 urban agglomerations will be qualified as mega-cities instead of 19 in 2007. Accelerated urban growth in developing countries like China and India has strained

1 For the statistics related to World Urbanization, see the website http://esa.un.org/unup/

2 Ruet (2005) referring to Hancock and Hiernaux (2000), mentions that the concept of megalopolis applies when a sufficient geographical extension leads to the loss of a centre, or gives rise to a pluri-centralism. This is not the case with the mega-cities of India, which remains central to their agglomeration.

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the capacity of urban local government to provide most basic services includes health, education, drinking water, sanitation, sewage, municipal waste collection and disposal and construction of new dwelling units for poor people etc. to their citizens. The local civic body faces challenges to tackle the ever increasing needs of civic services and also growing problems like encroachment of public land, expansion of unauthorized housing colonies and rehabilitation of slum dwellers with minimum basic amenities etc. Surat city in western part of India is not an exception in this case.

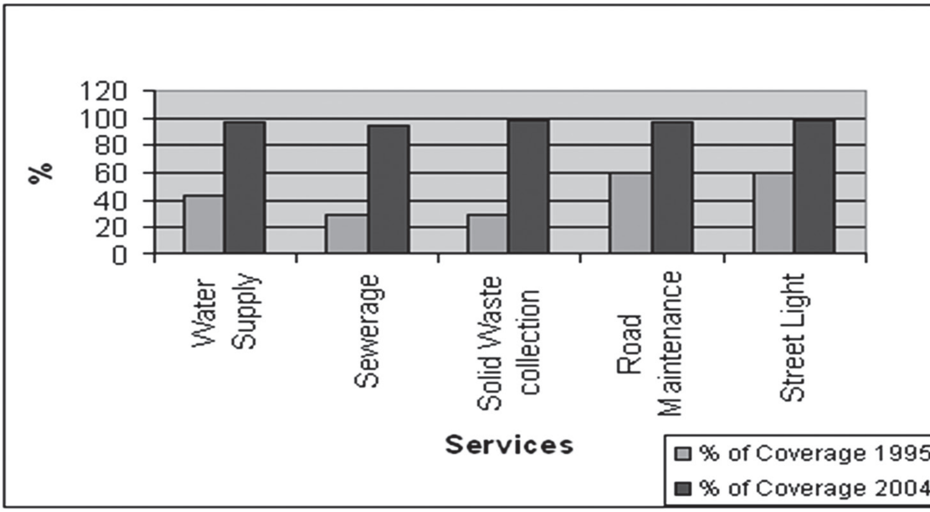
Surat is the second largest city in Gujarat after Ahmedabad and one of the ninth mega cities of India according to the census 2001. Surat is a rapidly growing city of India, and this growth is very likely to continue at a rapid pace due to very large scale of industrialization in the city and its periphery. Das (1997) noted that with a changing industrial landscape and growth in its economic activities, the city of Surat not only attracted a substantial amount of capital, but also a large proportion of migrant population from within Gujarat, the neighboring state of Maharashtra as well as from further regions of Uttar Pradesh, Orissa, Andhra Pradesh and Tamilnadu. These ways the small, medium, and large industrial base has made city one of the fastest growing cities in India, which create tremendous pressure on civic body to provide basic amenities to their citizens. In other term we can say that the growth of the civic infrastructure and service standards fall short of the actual requirements. However to meet the required infrastructures and various civic services there has been a widespread practice of outsourcing in the delivery of various civic services.

In terms of planning of municipal services, Surat Municipal Corporation provides in two ways: either it may deliver them itself or it may have contract with a private player under public private partnership (PPP) model. To understand the mechanisms of the delivery of various municipal services and their coverage in the city, the author have taken views and experiences of citizens, especially the poor, for whom public services have been actually designed. The survey was designed to determine the assessments of the citizen regarding the various municipal services provided by the SMC. The citizen survey has been conducted precisely to obtain a better idea of exactly which services need for the improvement of quality. The study was based on the interviews of the citizens from various areas of the city. The study also covered citizen's satisfaction with various municipal services, provided by the SMC. The specific objectives of study was: (a) to examine the supply status and the mechanism of civic services to the citizen, (b) to get feedback and suggestion from citizens, about the services provided, and (c) to provide the recommendations to the local governance to improve the municipal service delivery. The study was designed to use both quantitative and qualitative information to capture citizen feedback on the performance of the local government. This study reports the finding of 1515 adult residents (18 years and above) from each of the 102 areas were selected randomly, consisting of 58 percent residential units from organized housing colonies and 42 percent from lower income areas includes slum, chawl, Garib Awas, within a ± 5% error parameter. A multi stage sampling method draws the sample households. An interview schedule was used to collect information from the respondents. This paper is outcome of this study.

Status of Basic Municipal Services in Surat

Two decades back about 70 per cent of the city had no sewage disposal system; only 43% of the city got drinking water through pipelines in the houses, garbage collection was from 30 to 35 percent area on daily basis (Trivedi: 2013), almost 40% area was not having street lights, and the maintenance of the public road was not satisfactory (see chart 1). However SMC has increased the coverage almost double in all the basic services, especially in safe drinking water, sanitation and solid waste collection and disposal for the public safety after the epidemic crisis in 1994 (Shah, 1997).

Chart 1: Coverage of Basic Civic Services in Surat City



Source: Annual Report of SMC, 1995, 2004

The SMC, after learning from its past experiences, took all the necessary steps, such as desalting of drains and checking sensitive points for water logging, solid waste collection and disposal, safe water supply through pipeline, civic centers at various places for the redressed of citizens' grievances and for all the administrative works, and extension of basic amenities to the slum dwellers etc. In the slum pockets, not only health programs were carried out by the SMC but also a special cell for the community welfare activities for the weaker sections of the society known as UCD (Urban centre for Development) was started. As per the data filled in the reform checklist by the SMC for the JNNURM program, 27.58% do not have access by way of individual tap connection but have access to water through pipe connection or through community stand posts is almost 97%. As per the SMC, the household consumption of safe water is 91 percent while remaining portion is consumed by the industry. Like safe water supply through pipeline, the sanitation and sewerage is also an important civic service for the public health. To deal with residential and industrial waste water, SMC had a waste water disposal mechanism since 1997. As per the SMC in 2006 92% of the habitable areas have a comprehensive sewerage system, which was 29% in 1997. The closed drainage system was introduced way back in 1956 in the city. In 1991 it was covering 13% of the area and 33% population. This has improved significantly after 1995, and by 2008 it covered 90% population.

Urban health centre (UHC) in the city is very essential and necessary for those citizens, who can not afford the private medical facility. In Surat there are two big hospitals, and 33 UHCs run by the SMC. Out of 33 UHCs, 12 Centres are having maternity home services to promote hospital delivery in the city. Free and compulsory education to all the children between 6 and 14 years is a constitutional commitment in our country. SMC practically accepted the free and compulsory education for children below fourteen years and had started its first primary school way back in 1920. As population has grown in the city during the last three decades, SMC is running 270 schools in 6 mediums (Gujarati, Hindi, Marathi, Urdu, Telugu and Udiya) which are unique in case of Surat. Not only the primary schools but also 65 balvadis (preprimary school) are run by the SMC.

Finding of the Study

Citizens to a large extent were happy and also appreciate the amenities, infrastructures, and overall development of the city. However when asked about the problems they were facing, a significant percentage of residents cited broken roads, encroachment of footpaths and public place, water lodging during monsoon, inadequate water supply, open drainage lines particularly in slums and traffic jams and noise pollution emanated by embroidery machines operated in residential complexes, and unbearable sound in marriage and festival season in the city. The slum dwellers seem to be more dissatisfied of municipal services in the city, they are very unhappy because of shortage of water and toilet facilities, absence of sewage, and garbage removal facilities, open drainage, lack of maintenance of street light, poor public distribution system etc. The slum dwellers are not happy with the slum rehabilitations program. This may be possible because the slum dwellers may not understand the challenges involved in budgeting and administering this program. A general opinion of the sample respondents for developing Surat city included security of citizens, healthy city environment, and maintenance of public parks and voluntary participation of citizens in the overall planning of the city. The survey finding suggest that nearly 60% respondents are generally satisfied with the services provided by the civic body includes water, sanitation, SWM, public health and education. The finding also shows that citizens have expressed their highest level of satisfaction among fifteen services been the quality of the water and at the lower level of satisfaction was library and reading rooms.

The citizen survey shows that more than 70% of the respondents are satisfied or very satisfied with the quality of drinking water. This shows that SMC on the whole are doing a good job in securing quality of drinking water. Close to that number, 72% are satisfied with the maintenance of the street light. Around sixty percent or above respondents are satisfied with drainage, city’s collection of garbage, Health care, and Education services. The outcome show that almost 64% respondents preferred to go to the private doctor. The reasons for the same seem to be non-availability of medicines in the government/ municipal corporation hospitals and public health centres, non suitability of their timings and in some cases the urban health centres being far from their residence. The survey result indicated that 17% of the respondents expressed that the quality of primary education in the city has not improved in the past five years. Besides almost 22 % reported that the quality of primary education improved but not up to the mark. But in case of health care services almost 51% respondent indicated improvement in the last five year. To improve service delivery and coverage, the civic body promoted outsourcing and the use of Public Private Partnerships (PPPs) but the finding of the study indicated that there are still some areas where citizens finds weakness. Public garden and recreation places and also improvement in the traffic and the noise control were considered very important to enhancing the quality of life of the citizens. Almost 27% respondents believed that the city does not have adequate play ground and recreation places, 23% respondents perceived no improvement in the library and reading room services. Although 44% of the respondents dissatisfied with the basic amenities of the slum, and equal percent of people highly critical with the rehabilitation program basically for the slum dwellers. Due to less number of play ground, respondents particularly the younger people in East zone were felt that the civic body has not concerned to provide the adequate play ground in the city for them.

The study also noted that many respondents especially in lower income settlements expressed their dissatisfaction for the shortage of basic services particularly health, public transportation, water, sanitation and public distribution shops. The survey outcomes suggest that several services especially for the poor have a potential for improvement. The findings of the study show a very strong and positive relationship between citizen satisfaction level and the types of the settlements, family income and education level of the respondents. The impact of income on the level of citizen satisfaction regarding with municipal services is also statistically significant ($p=.000$). It seems that low-income groups are systematically deprived of the distribution of municipal services. While accessibility to various services may not be a major problem for higher income groups because they can access them from private providers. The lower income groups the basic services have to be provided by municipality as they cannot afford to buy water or to meet the medical expenditures and or enroll their children in private school. It is therefore not surprising that the lower income groups are not satisfied with the service delivery. A total of 30% of citizens had made a complaint prior to the field survey, but of them only 47% reported that their problems were resolved in the stipulated time frame

The respondents perceive the level of services provided by the SMC, Surat from last five years have improved and satisfaction with safe water (60% rated improved), SWM (58%), maintenance of Street Light (58.2%) and public road (55%). However some exception services to this generalization appears to be noise pollution, where almost 35% respondents either rated worst or not improved in last five years. The public awareness about JNNURM program in Surat city is very low. The survey finds that the citizens hardly knew about how the money allocated is spent in various development projects.

Conclusion

The increasing urbanization and urban poverty led to serious deficiencies in the existing urban infrastructure and provision of basic urban services, especially safe water, sanitation, SWM, public health, and education. The urban administrative bodies in our country do not have any fool proof design which provide for information related to increasing inflow of the population, required services, funds and the human power etc. Surat Municipal Corporation is not an exception to this. Promoting private sector participation in various services without monitoring and accountability is not advisable. Our study found that even when the private players were involved in some of the core services (for instance door to door garbage collection, road maintenance or maintenance of street light), the citizens were not happy. However to tackle this issue in a larger perspective of the city planning, SMC needs to develop the civic society network to improve the service delivery mechanism rather than simply encouraging the private players for service delivery. The city dialogue is almost absent in the city.

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Internet and Its Regulation - Net Neutrality

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This paper addresses the debate over net neutrality. In this paper, I propose to discuss the growing importance of the role of the internet in our lives, its contribution to economic, political and social justice, its pricing with a view to inter-generational equity and maintenance of the digital commons and the role of the Federal Communications Commission (FCC) as a regulator of the internet.

Keywords
Net Neutrality, Role of Internet, Economic, Political and Social Justice, Public Policy

Introduction

The internet is a network of basic computer networks. Things like the World Wide Web, instant messaging, downloads, uploads, file sharing ride on this network. This is akin to the telephone network where what we speak rides on the network. The internet has expanded to link up almost 210 nations, including some of the world's poorest. The connections between the computers mostly use telephone networks and are a mixture of old-fashioned copper cables, fibre-optic cables (which send messages in pulses of light), wireless radio connections(which transmit information by radio waves) and satellite links.

The task of the internet is to move computerised information (known as data) from one computer to another. Most data moves over the net using a system called packet switching, which breaks up the data into small pieces called packets, each one tagged with its ultimate destination and allowed to travel separately and when they reach the final destination, they are re-assembled to make a complete packet of data again. This makes for efficient use of the network.

The usage of the internet is growing rapidly and this has positive network effects. 87.36 % of individuals used the internet in the US is 87.36 in 2014. About 74.7 % of individuals used household internet as of 2012. 74.8 % of households had internet as of 2012.[1] The Internet plays an important role in the economy, providing jobs, productivity growth, and cost savings. Political unrest and upheavals in recent times have largely been sparked and spurred on by the immediacy of communication of the internet. More than anything, it makes the lives of many simpler.[2]

In this paper, I propose to discuss the growing importance of the role of the internet in our lives, its contribution to economic, political and social justice, its pricing with a view to inter-generational equity

1 http://www.itu.int/pub/D-IND-ICTOI-2015 Measuring the Information Society
2 Ericson, Brooke. ""Möbius-Strip Reasoning": The Evolution Of The Fcc's Net Neutrality Nondiscrimination Principle For Broadband Internet Services And Its Necessary Demise". Administrative Law Review 62.4 (2010): 1217–1260. Web...

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and maintenance of the digital commons and the role of the Federal Communications Commission (FCC) as a regulator of the internet.

The FCC is the regulator of the internet in the United States. It adopted the Open Internet Rules on Feb 26th, 2015 which are "designed to protect free expression and innovation on the Internet and promote investment in the nation's broadband networks. "Broadband access was classified as a telecommunications service by applying Title II (common carrier) of the Communications Act of 1934 to Internet service providers, as against their earlier status of information service. These Bright Line Rules, known in common parlance as net neutrality, apply to both fixed and mobile broadband service and pertain to no blocking, no throttling, no paid prioritization, Open Internet conduct standard, transparency, and reasonable network management.[3] This ruling has not delivered any stasis and to the contrary continues to be at the heart of many a debate on the internet.

The Problem

The extant internet access policy is that of net neutrality, i.e. non-discrimination. The internet is a means to access content, i.e. information in a real-time manner and also a means of free speech; both of these are undeniably enablers as posited by Andersen. Prima facie it would appear that net neutrality promotes equal and unrestrained access to the internet and therefore does act as an enabler. This requires to be examined with caution as our understanding of the entire eco-system, its sustainability, its costs to the producer or service providers and benefits to the user, the role of government in regulation is nebulous. And it is so, not only to laypersons but also to the established wizards in industry and academia. [4]

Take for instance the Netflix vs Comcast issue. This is used to confound the debate around net neutrality. The issue here is however that of a content provider pushing down content beyond the bandwidth capacity of the broadband provider and refusing to pay for better Quality of Service. The broadband provider is only the last mile provider and it cannot be blamed for all ills nor can it bear the burden for all technological enhancement of infrastructure.[5]

*The general ignorance of the functioning of the internet and its stakeholders clouds our decision for net neutrality. Senator Jim Mint has the following to say on our lack of understanding of the internet, "*Unfortunately, many who are usually staunch defenders of free markets and limited government have been slow to speak out against these threats to Internet freedom. There is a tendency to dismiss them as parochial, deep-blue "Silicon Valley" issues — of little interest or import to "the rest of America." This is short-sighted. All of these threats work to the detriment of citizens and consumers. And all policymakers who believe in freedom should stop kowtowing to special-interest lobbyists, tax-hungry states, and federal bureaucrats whose knee-jerk reaction is always more regulation or snooping. We may be a long way off from China-style censorship and surveillance, but we need be alert to "reforms" and regulations that restrict the very Internet freedoms that have served our nation and the world so well. The Internet is the New World of freedom. We should protect it."[6] The US Government through its role as regulator has a contribution both in the domestic and international space.[7]

Tomasi's principle of market democracy forms the basis for a policy of discrimination in access to the

3 https://www.fcc.gov/general/open-internet accessed on 6th March 2016

4 Lee, Robin S., and Tim Wu. "Subsidizing Creativity Through Network Design: Zero-pricing and Net Neutrality". The Journal of Economic Perspectives 23.3 (2009): 61–76. Web...

5 http://www.cnet.com/news/comcast-vs-netflix-is-this-really-about-net-neutrality/

6 *Jim DeMint, a former senator from South Carolina, is the president of the Heritage Foundation.* Saving Internet Freedom By Jim DeMinthttp://www.heritage.org/research/commentary/2015/6/saving-internet-freedom

7 http://www.wsj.com/articles/SB10001424052748703780204575120181476495268The Internet and Political FreedomThe U.S. can help ensure free Web access in countries like Iran. By L. GORDON CROVITZ

internet. Free market fairness, with its twin commitment to economic liberty and a fair distribution of goods and opportunities, is a morally superior account of liberal justice as per Tomasi. Let us for the purpose of appreciating and making out a case for deviating from the extant policy examine whether the internet is a public good. The classic definition of a public good is that which is non-rivalrous and non-excludable. The internet does not bear the characteristics of a public good as the consumption is excludable – the user can be prevented from usage; and the usage by one would impact the consumption of others depending on the scale of consumption and quality of service provided. It is therefore not a public good. Let us ask ourselves whether the internet serves public interest? The answer is in the affirmative as it benefits the public. It provides entertainment, education, facilitates medical consultations through telemedicine, trade in the stock exchange, banking, e-commerce etc. and in general a better quality of life. Not having access to the internet deters development of those who are digitally excluded. They do not have the benefit of accessing information which is available electronically and which is the very breath of life in an era of technology. What is it like to not access email? What is it to be unable to shop by comparing prices for essentials online? This must be appreciated not from the view of the busy CEO who would gladly not access her email or someone shopping for designer goods online, but from the view of the "worse off". Not having access to the internet equals not being able to function at a level of normalcy that has become de rigeur post the advent of the internet.

The internet is however provided by private sources and regulated by the Government.[8]The internet is not a utility which was built by the Government. It is an infrastructure network that has been built largely by the private sector. It is akin to a highway which has been built by multiple parties who now partner with each other through contracts and agreements. The content provision is dominated by a few players, the transmission is by Internet Service Providers (ISPs), also the private sector, and the backbone of the internet, spanning continents in tier I and tier II, tier III Internet Backbone Providers (IBPs) is also provided by private players. In fact, content providers, Netflix and Youtube use half of the internet capacity in the country.

Would the presence of competition in the ISP market mitigate any problems associated with discrimination and make net neutrality regulation irrelevant.[9] The net neutrality debate in the United States and around the world is an avatar of an age-old debate about the duties of firms that supply infrastructure services which are essential to the economy, or "affected with the public interest." As Lee and Wu put it "In the nineteenth century, trains and canals were the focus of this debate; in the twentieth century, it was the telephone and the electric systems; and in the twenty-first century, the Internet has seized center stage."[10]

Tomasi argues that a thick concept of economic liberty is significant as a basis for responsible self-authorship and democratic legitimacy. Market democracy affirms a wide-ranging right to economic liberty strictly limiting the scope of legislative authority in economic affairs, meaning thereby regulation in free markets. It highlights the role of markets in the pursuit of social justice, mainly through the forces of spontaneous order. It also holds social justice as the hallmark of institutional or political evaluation. Let us now look at the right to the internet and whether it can be justified.

8 https://blog.lizardwrangler.com/2007/08/06/the-internet-and-the-public-good/ Thought symposium called The Internet and the Public Good. jointly hosted by the Mozilla Foundation, the Harvard Business School, and the Harvard Law School's Berkman Center for Internet and Society.

9 Choi, Jay Pil, and Byung-Cheol Kim. "Net Neutrality and Investment Incentives". The RAND Journal of Economics 41.3 (2010): 446–471. Web...

10 Lee, Robin S., and Tim Wu. "Subsidizing Creativity Through Network Design: Zero-pricing and Net Neutrality". The Journal of Economic Perspectives 23.3 (2009): 61–76. Web...

The concept of rights such as right to life, right to speech, right to freedom, etc.are those that limit the actions of the government. The concept of Positive Rights was developed therefore to circumvent the aforesaid shortcoming by adding new rights. These rights differ from the old rights. Unlike rights which pertain to freedom from interference from others, these new rights demand goods and services. Positive rights are to be satisfied through other people providing them. These positive rights require action from others, instead of inaction. Positive rights are not compatible with real rights, or "negative rights" which require that no man can be forced to do anything he does not want. The two are incompatible. Positive rights are accepted at the expense of negative rights. They cannot coexist, since they are polar opposites.[11]

A case study by the UN Special Rapporteur on the Internet, Frank LaRue contended that it is better to leverage existing human rights (such as freedom of speech and freedom of association) in relation to Internet usage, as opposed to creating a "new human right to the Internet." The context today is that of Internet access is swiftly becoming an indispensable economic and social enabler within a modern hyper-connected world, i.e. lack of Internet access makes it increasingly challenging to take full advantage of existing human rights (such as freedom of speech, civil and political freedom as well as potentially social and economic freedoms). Opinions are divided on whether the availability of Internet access and resources should be driven by free market forces or whether government should be the primary agency successfully expanding access to the Internet.[12]

According to Tomasi, property rights are best defended not in terms of self-ownership or economic efficiency but as requirements of democratic legitimacy. He asserts that economic liberties ought to be considered basic in the same sense that political liberties are in the Rawlsian scheme. The world has been witnessing the influence of the internet and especially that of social media in the political arena, be it peaceful dissemination or overthrowing of governments. The Rand Corporation in a report prepared for the US Government, states that "over the past decade, the Internet has become a battleground between repressive governments that would censor content and those who advocate free access for all." This study was commissioned by the Bureau of Democracy, Human Rights and Labor (DRL) at the Department of State to assess the effect of Internet freedom on the relationship between civil society and elected officials worldwide, conducted during 2011-12 and focused on the role of the Internet and social media during popular protests in 2011 in Egypt, Syria, China, and Russia; the analyses highlights several mechanisms through which open and free Internet can trigger political transformation. "In fully authoritarian regimes that outlaw opposition and elections, Internet freedom promotes the expansion of social space and, in so doing, transforms political space. The Internet can also undermine the stability of a nondemocratic regime by triggering an information cascade that mobilizes civil society; free Internet can also make political coalitions more inclusive by opening deliberations that cut across socioeconomic cleavages, thereby spreading information to people who do not usually interact on a daily basis. The expansion of online freedoms does not automatically translate into visible political outcomes, however, because such factors as fragmentation of the elite, support of international allies, and socio-economic status of netizens affect how authorities respond to online mobilization."[13]Clearly, the internet is the Hyde Park of the 21st century. It is both the voice and the space for citizens to access their dreams and aspirations.

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11 http://www.importanceofphilosophy.com/Bloody_PositiveRights.html

12http://trends.ifla.org/expert-meeting-summary/is-internet-access-a-human-right-is-the-internet-a-public-good

13http://www.rand.org/content/dam/rand/pubs/research_reports/RR200/RR295/RAND_RR295.pdf
Olesya Tkacheva, Lowell H. Schwartz, Martin C. Libicki, Julie E. Taylor, Jeffrey Martini, Caroline Baxter
Report prepared by Rand Corporation Internet Freedom and Political Space

The Policy Proposed

Having contextualised the issues plaguing the internet both in facts and moral justification with the core objective of appreciating the outcomes of social, economic and political objectives, it is proposed to recommend discrimination in pricing policy, moving away from the present net-neutrality or non-discrimination policy of access. This policy of discrimination is proposed in pricing to the users, both content providers and the end-users. This is proposed with a view to establish economic, social and political equality or at the very least to reduce such inequalities. Evidently, an internet policy regulating access is not only about pricing.

There are two users at either side of the " dumb pipes" that are the internet provided by the Internet Service Provider(ISP). These are the content providers, such as Netflix, Youtube, Hulu, Google, Yahoo etc. who create content for consumption by the end-user, who lie at the other side ,and are people like us,accessing the internet for information, internet, e-commerce and a host of other reasons. Content providers typically do not charge their users but earn their revenues from the advertisements that are streamed to the users; they pay the ISP for uploading their content and they do not pay for it to be streamed to the user; on the other hand the user pays for accessing the internet and may sometimes pay for accessing content. (For e.g. New York Times gives you a few free articles per month beyond which you would have to pay.)

Users access the internet for various reasons, chief of which are educational, entertainment, commerce. Users of the lower income would benefit from the internet in that they would not be digitally excluded from the rest of the world. It would give them ease of access to employment and help in improving their skills in a world which is moving from physical labour to technological skills. For e.g. a plumber would be able to make contact and obtain work from a customer by a Facebook page or an email address. A single mother who cannot commit herself to full-time or part-time employment may work from home or even seek work outside as per her convenience by matching up needs with customers/employers online – the ease and probability of this online is manifold compared to the offline. It would also help parents to assist their children in homework, despite their own constraints of poor educational achievements; for instance they could search for information online. Persons who are immobile or disabled may access the internet and contribute per their capacity and probably make a living. The internet would bring the world to their doorstep, much like books did – opening up a vista of the unexplored and unknown to those penniless travellers thirsty for knowledge. The internet address issues of asymmetry of information and helps both producers/purchasers and consumer/suppliers. It creates a win-win as against a zero-sum game in physical markets. For e.g. e-Choupal, an initiative of ITC Limited, a conglomerate in India, links directly with rural farmers via the Internet for procurement of agricultural and aquaculture products like soybeans, wheat, coffee, and prawns. It tackles the challenges posed by Indian agriculture, characterized by fragmented farms, weak infrastructure and the involvement of intermediaries. Farmers have access to real time marketing and agricultural information.

Tomasi's case for a thick economic right is rooted in two moral claims, i.e. free economic activity is both a fundamental expression of human freedom and, more powerfully, a fundamental mechanism for self-realization. [14]Tomasi's concept of market democracy summarizes three concepts: (1) a thick concept of economic liberty grounded mainly in consequentialist considerations, (2) a formal concept of equality that sees the outcome of free-market exchanges as largely definitive of justice, and (3) a limited but important state role in tax-funded education and social-service programs. This "thick

14https://bostonreview.net/books-ideas/free-market-fairnessFree Market Fairness
Is There a Moral Case for Free Markets?Martin O'Neill and Thad WilliamsonNovember 05, 2012

economic right “would help people across social strata achieve their life dreams. It is a positive right as this would require to be provided to them, albeit with a price and at a quality of service standard. Tomasi deviates from Rawls' basic liberties in that the former grants a special status to economic rights, such as a right to free commerce and a right to hold productive property. Whereas basic liberties for Rawls comprise only civic and political freedoms, such as a right to equal political voice, and personal freedoms, such as freedoms of movement and occupational choice and freedom to hold personal property, for Tomasi economic liberties include a right to hold productive property; a right to engage in commercial contracts in one's interest, including a right to sell one's own labor on one's own terms; a right to make one's own decisions about savings and long-term financial planning; and, above all, in general, a right to benefit from one's own economic activity. If these economic liberties are recognized as basic, then as per Rawls, these cannot be overridden for the sake of promoting the secondary principle of equality.

Let us now examine the role of institutions and the role of society in this policy of the internet. Tomasi holds that institutions must establish their commitment to respecting citizens and creating conditions in which they can develop and exercise the moral capacities for self-authorship. Moreover, society must comprise of citizens who have respect inter-se ; they must respect the core liberty-interests of their fellow citizens. These include life-defining economic decisions that help them pursue their own character, values, and dreams. Tomasi also holds that the basic political and economic structures of a free society must be such that they ensure that all groups benefit and are also justifiable to all classes of citizens. Tomasi recognizes the legitimacy of all four common justifications of market regulation, i.e. to protect exploitation of workers, to protect consumers, to protect third parties harmed by market transactions through externalities, and to preserve the stability of the economy or society as a whole.

Thus, institutions such as the government regulator and the private player must be cognisant of their role towards all citizens and having recognised that the internet is an enabler, facilitate self-authorship. Further, citizens have to realise their obligations inter se regarding core-liberty interests. What would this imply? The core objective here is to facilitate access of the internet to all citizens, even if they are unable to pay with a minimum specified quality of service standard and for citizens to fulfil their inter se obligations and subsidise each other, thus facilitating access and usage by all and maintenance of the digital commons.

To this end, content must be categorised and content providers charged accordingly. Evidently, some categories provide more advertisement revenue for content providers than others because these are consumed more and also there might be a higher willingness to pay for such content by users. Also , the fact that most public spaces in most geographies offer free wifi, the cost of access to the internet must be low enough to incentivise the private sector (in some cases public sector) to continue access to internet through wifi . This is a recommendation; and clearly the role of regulation by the FCC is to ensure a level playing field to new entrants and to prevent monopoly and regulatory capture. This is a queer situation where the nature of the service mandates a right owing to the positive network effect of usage, arising however from private property. Therefore, the FCC would do well in setting the guidelines and prices for end-users' access and leave all other pricing mechanisms to the free market. The guidelines are to ensure access to all citizens, to enhance network expansion to unserved areas, and to facilitate public spaces with internet access, thereby satisfying universal access.

The internet is a cheap source of entertainment. This also encourages consumers towards unbridled consumption. This may in times to come affect the traffic and cause congestion for consumers accessing the net for information or education. A fee per categories of content may be charged to the content provider by the ISP. The user may be given access to the internet with specified quality of service (QoS) at a minimal charge to be determined by the regulator, i.e. FCC. Users who desire superior QoS, say speed, etc. must be prepared to pay more. Such a model would increase the revenues of the ISP. This would encourage innovation which is the touchstone of technology. (It is to borne in mind that the peculiar nature of technology is that there is efficiency with every innovation which happens extremely rapidly. As a result, infrastructure providers are wary of investments; it is a fragile environment.) The ISP would pay more taxes as a result. These taxes or a special cess collected from the ISP may be used to: a. maintain the digital commons b. provide access/network expansion to internet to areas hitherto not served so as to achieve universal access (alternately this may also be made a part of ISPs mandate with timelines, with penalties for failure) c. subsidise users for access to certain useful "paid" sites or subsidise content providers to allow free access to certain " useful" content. All of these would be justified by Tomasi's market democracy as economic rights would be made available to all as a positive right and social justice would be achieved. Access to the net would enable self-authorship.

Criticism

A country like the USA, torn between Republican and Democratic views is polarised between the Free Market and Minimal State and Libertarian regimes. This policy draws a balance between the two. The twain shall actually meet! This policy proposes a free market with minimal government intervention and the promotion of access to the internet as a positive right with the consequential outcome of social, economic and political equality. The role of the FCC is to ensure the maintenance of the internet infrastructure. This is required from the first mile to the last mile. Degradation of infrastructure will result in the economy slowing down and stagnation in the job market. Government data and business is transacted on the net and this too will be affected in speed and safety protocols. The FCC would need to play a larger role globally in mobilising international support and funds for maintenance and upgradation of the IBPs. Domestic economy is now more than ever not cocooned from international economies. The role of any regulator is to reign in market failure and to deal with monopolies or oligopolies and help bring in competition and lower prices through efficiency. It has to incentivise data compression by the content provider leading to more efficient use of bandwidth and this cannot be done by net neutrality. Also, QoS has to be offered on a variable level as some consumers may like to pay for better QoS. And there has to be a disincentive for usage, by Qos, by quantity or temporally to avoid congestion. Broadband is now a " Telecom Carrier " and the consumer is burdened by a Universal Service Obligation tax.

The FCC has declared the internet a public utility. However, neither the FCC nor the Government has the capacity to take over the infrastructure. Nor is the internet a public good. Whether access to the internet is a fundamental liberty has not yet been debated. These questions must be deliberated on by the FCC before any intervention. The internet comes with a cost. Bandwidth is limited and constant upgradation of infrastructure. Sunk costs in infrastructure are huge and the revenue model has yet to be understood. In this case, the ISPs were recovering a price differential from certain demand side customers by way of upgradation of their infrastructure (high speed routers, special servers for content providers provided by them). It is quite possible that differential tariffs would have been charged for the supply –side customer too, probably based on content accessed or subsidised by free ads paid by for by the advertiser or some other model. A commercial entity is entitled to runs its business so long as it is not jeopardising the economy at large, denying basic rights to citizens or infringing on the liberties of the individual. Government, on the other hand can regulate when it senses a market failure or a social cost that is not reflected in the price. Such was not the case which prompted the FCC regulation. Placing caps on prices is warranted only if there is monopolistic market capture and after exercise of due diligence. Giving into the demand for right to net neutrality without any investment by the Government is an exercise in the imposition of sovereign power. The regulation as demonstrated above will thwart infrastructure investment and quality of service. Another vital aspect of neutrality which has been lost in the din of the argument for net neutrality is that of search neutrality. The search results which are given to the user are filtered results. This is clearly a violation of right to access information totally without any limitations. This requires examination by the FCC. As this could be insidiously used as a tool to influence opinion and choice.

Others would question the feasibility of categorising content. I think this difficulty can be met as all taxation or differential charges are about categories and splitting hair always takes place at the margins of categories. Yet other queries would be about content providers willing to pay and discrimination amongst users. Free markets are about discrimination and about creating equilibrium between willingness to pay and willingness to supply. This has to be balanced by the FCC's role of placing a regulatory cap on price so that monopolistic tendencies do not prevail.

Conclusion

Tomasi addresses the danger philosophers believing that ideal theory is the whole of political theory. If a regime pursues justice as fairness through institutions unrealistic in light of the general facts of political sociology, such a regime is unjust regardless of the number of official guarantees it includes. Similarly, if a regime pursues justice as fairness by a strategy that is within the boundaries of what is sociologically realistic, that regime is just regardless of how few guarantees it includes. Tomasi's free market fairness affirms its compliance with the general formulation of the difference principle and the "ideal of formal equality," while supplementing it with the more demanding ideal of "fair equality". It also recognises the special value of political liberties, with free-market fairness requiring a political system that protects every citizen from domination in the formulation of the rules and policies that are to govern cooperative life.[15]Though basic liberties are not absolute, they can be legitimately curtailed to protect other basic liberties or to ensure that everyone can exercise them. However, a high moral value is attached to basic liberties and any proposals for limiting these require a strong justification.

The FCC should address itself to areas of intervention including broadband deployment and adoption, public safety, spectrum, and universal service reform etc. (Issues that require resolution in ways others than affirmative regulation should be done with the aid of bodies such as BITAG (Broadband Internet Technical Advisory Group) which is a broad cross – section of network and edge companies to find solutions to network management and engineering disputes.[16]) .The goal of government should be to improve broadband and wireless penetration and facilitating overall lowering of costs by introducing competition which will bring efficiency gains through introduction of innovative technology in both wired and wireless, improved bandwidth, data compression, responsible usage by consumers, precedence for transfer of data on essentials such as education, health care , government communications, stock markets over entertainment etc. Areas which are hard to penetrate can be catered to exclusively by Government as is being done in the Municipal Broadband projects. Unbundling after a cost-benefit

15file:///C:/Users/User/Downloads/816-3139-1-PB.pdf - Review by – Thomas A. Hemphill University of Michigan-Flint of Free Market Fairness

16https://apps.fcc.gov/edocs_public/attachmatch/DOC-303457A1.pdf Accessed on 7th Mar 2016 analysis would aid in introducing competition. [17] Such regulation will aid in buoying up the economy and also the job market. Also, considering the global nature of the internet structure and economy in general, the role of the FCC is also to negotiate at the global level for a competitive market.

(The above paper was written while in the Harvard Kennedy School of Government in May, 2016. Though the problem and the policy proposed are situated in the context of the US, the same apply to the Indian context too. I express my gratitude to Prof Henry Lee, Faculty, Prof Robichaud, Faculty and David Gray Grant, Teaching Assistant at the Harvard Kennedy School of Government. The views expressed are purely for an academic objective and do not represent my views in any official capacity.)

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E-Governance in India: A Case Study of Leveraging Information & Communication Technology (ICT) for Women Empowerment under MGNREGA in the State of Rajasthan

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One of the major schemes launched by the government of India with the objective of providing social security to people below poverty line,especially women in the rural areas, is'Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)', which was started in the year 2005. Rajasthan government initiated Information and Communication Technology (ICT) services for e-governance of MGNREGA in order to improve service delivery. The case study focuses on how ICT tools were leveraged to empower rural women so that they could have better access to information and entitlements through this public-private partnership initiative. In the end, authors also highlight challenges in implementation of the scheme.

Keywords

MGNREGA, ICT, E-Governance, Public Service Delivery, Women Empowerment

Introduction

"Sexism is the root oppression, the one which, until and unless we uproot it, will continue to put forth the branch of racism, class, hatred, competition, ecological disaster, and economic exploitation. No other human differentiations can be similarly powerful in reproducing oppressions, and so, women are the real left."

- Morgan Robin

Status of Indian women in the country has undergone numerous changes in last decade. Sociologists are of the opinion that in the ancient time, Indian women were seen at par with men in all walks of life and they were believed to be equal in status. The Vedic literature is full of references to support this. Women were free to choose their professions and they could move freely with their husbands. Gargi, Maitrayi, Vishwashra, Godha were famous for their literally and intellectual abilities. During the Smritis period (Period of codification of laws), and the Mogul Period, the roleof women saw decline in their status as compared to the status of men in India. Women were confined within boundaries of the house, were denied education, and many social evil practices like child marriage, purdah (veil) system,

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female infanticide, sati-pratha, ban on remarriage of widows etc. got into the social system making women completely dependent on men. There is still stark differentiation and inequality between men and women in rural areas.

Governments in Asia pacific region are in the transition phase and there is growing role of ICT and e-governance that government could use to tie together women empowerment and gender equality *(Social Development Report May, 2016).* UNPO project 2014-15 aimed at enhancing gender responsive policies in Asia pacific region and building e- governance strategies so that governments could develop capabilities for women empowerment in their countries. E-governance aided with women empowerment is solidly based on the foundation of digitization of services, and providing complete support to women to utilize these services in effective manner. E-governance initiatives can be considered gender responsive only when they meet the canons of governance, including building infrastructure, digital support system, and sensitizing gender.

According to World Bank Group report (2012) Information and Communication Technology can play a bigger role in increasing workforce productivity, eliminate/reduce poverty, improve governance, and lead to better and sustainable economic growth. According to the report, use of ICT has improved in developing nations since the year 2000 and it is continuously increasing. The report clearly states that ICT has direct role in eliminating / reducing poverty as it has provided opportunities for people in rural area and has added options like microfinance and mobile money. The report also states that countries are revamping their ICT policies to enjoy the benefits and bring market reforms and also going for public private partnerships and India is playing a bigger role in this.

Women empowerment typically means women's ability to join as equivalent partners with men in economic, social, political, and cultural systems in the society. The main problems, which Indian women face,are lack of education, poverty, safety and health. One of the common obstacles for women empowerment in the country is gender bias. The Indian and State Governments have been taking various actions and have introduced many schemes for empowerment of women. Some efforts are mentioned below:

- Various schemes by Ministry for Women and Child Development
- Swayamsidha Program
- National Commission for Women

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)

There are many schemes running under the women empowerment mission**.** Mahatma Gandhi National Rural Employment Guarantee Scheme is one of such schemes. This act was formulated as National Rural Employment Guarantee Act (MGNREGA) in 2005 by the central government to fight poverty more effectively. The Act was notified on September 7, 2005. This initiative was basically aimed at rural development in the country. It was to provide opportunity for the households to have their livelihood security. It provides guarantee of work for minimum 100 days and crediting of wage to the worker's bank account. The workers could get themselves involved even as unskilled manual labor and earn money. Apart from economic security for rural people, it clearly aimed at building infrastructure, environment protection, ICT development, and empowerment of rural women.

MGNREGA did not have women's empowerment as its original intention. However, it is proving to be a major initiative for empowerment for women in rural India. This act ensures placing of women supervisors as well as guarantees minimum 33 percent jobs to women. Thus by generating employment opportunities for rural women and providing them fair wages, this act is playing a very significant role in empowering rural women and in improving their quality of life and higher self-esteem for them.

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) Project was started in 200 districts of various states in the country in its first phase in the year 2006. Today, MGNREGA covers all those districts of India who have rural population. Districts with 100 per cent urban population are out of its preview. This act was initiated to provide and create sustainable livelihood for villagers and to create social infrastructure and economic well-being for them. The Act proposes active and compulsory participation of local village community and calls for participation from women villagers in this scheme. This act ensures transparency in its operation and application.

Key entitlements of a villager under the act:

- MGNREGA Job Card Holder can apply for available job at any time
- Gram Panchayat / Block Office are the places where job application can be deposited
- Government to ensure employment within 15 days of job applied by the applicant
- If within 15 days government fails to provide a job, applicant is eligible for unemployment allowance;
- Minimum wage fixed by the government is applicable to all types of workers
- Wages to be digitally paid either in bank accounts, or in post office accounts
- All wage details have to be recorded in the system on immediate basis
- On every work site, First-aid facility, drinking water facility, and shades are to be provided for job workers
- For mothers of small children, crèche or child care facilities are to be provided

MGNREGA is gender sensitive and some of its aspects that empower women are listed below:

- For any available job at any work site, at least 33% of the registered workers should be women
- Wages of women workers for the days of work carried out by them have to be credited in their own bank / post office accounts. In case, they do not have bank / post office accounts, accounts have to be opened for them
- Destitute, widow, and deserted women have to be identified near the job sites in the villages, and they have to be provided with minimum 100 days of work
- Pregnant women, and newly mothers are to be provided job sites closer to their homes, and less effortful work has to be allocated to them
- The act also states that minimum 50 per cent of supervisors at all work sites in villages should be women
- The act also encourages participation of women members in planning, facilitating, controlling, and monitoring various activities

Government's Scheme Initiatives

Government of India has initiated various schemes for rural upliftment, and empowerment of rural women from time to time. Government of India has launched total 66 schemes since 1954 in association with Department of Rural Development, and Department of Labour and Development in various sectors viz. agriculture, affordable housing, child care, digital project, education, electrification, financial inclusion, health, employment, insurance, mother care, pension, rural development, self-employment, skill development, urban development and tourism. Table 1 and 2 highlights such 10 important schemes launched by Government of India. MNREGA was one of those schemes launched in 2006 in India.

Table 1: Government Scheme 1-5

S. No.	Scheme	Ministry	Date of Launch	Outlay / Status	Sector	Provisions
1	Integrate Rural Development Program	MoRD	1978		Rural Development	Self-employment program to raise the income generation capacity of target groups among the poor and the scheme has been merged with another scheme name Swarnajayanti Gram Swarozgar Yojana (SGSY) since 01.04.1999.
2	Swarnajayanti Gram Swarozgar Yojana	MoRD	1999		Rural Development	Bring the assisted poor families above the poverty line by organising them into Self Help Groups (SHGs) through the process of social mobilisation, their training and capacity building and provision of income generating assets through a mix of bank credit and government subsidy.
3	Sampoorna Grameen Rozgar Yojana	MoRD	2001		Rural Self Employment	Providing additional wage employment and food security, alongside creation of durable community assets in rural areas.
4	Pradhan Mantri Adarsh Gram Yojana	MoRD	2010		Model Village	Integrated development of Schedule Caste majority villages in four states.
5	National Rural Livelihood Mission (NRLM)	MoRD	2011			This scheme will organize rural poor into Self Help Groups (SHGs) and make them capable for self-employment. The idea is to develop better livelihood options for the poor.

Source: Govt. of India Website

Table 2 : Government Scheme 6 – 10

S. No.	Scheme	Ministry	Date of Launch	Outlay / Status	Sector	Provisions
6	National Urban Livelihood Mission (NULM)	MoHUPA	2013			This scheme will reduce poverty of urban poor households specially street vendors who constitute an important segment of urban poor by enabling them to access gainful self-employment and skilled wage employment opportunities.
7	National Career Service (India) (NCS)	Ministry of Labour and Employment	2015		Employment	The objective of this project is to help job-seekers land up at the job they deserve.
8	Digital India Programme	MoC&IT	2015	1 Lakh Crore	Digitally Empowered Nation	Aims to ensure that government services are available to citizens electronically and people get benefited from the latest information and communication technology.
9	Deen Dayal Upadhyaya Grameen Kaushalya Yojna	MoRD	2015		Rural Development	It is Government of India's project to engage rural youth specially BPL and SC/ST segment of population, in gainful employment through skill training programmes.
10	Mahatma Gandhi National Rural Employment Guarantee Act	MoRD	2016	Rs.40,000 Crore in 2010-11	Rural Wage Employment	Legal guarantee for one hundred days of employment in every financial year to adult members of any rural household willing to do public work related unskilled manual work at the statutory minimum wage of Rs.120 per day in 2009 prices.

Source: Govt. of India Website

ICT Ecosystem Project

For MGNREGA Project,'ICT enabled Eco System' was created which included internet, information kiosk, mobile telephony, and also the community radio for creating and increasing the act's awareness in rural women about various entitlements for them and creating a state of demand for them. Project MGNREGA Pilot was planned in20 villages of Udaipur, and Bhilwara Districts of Rajasthan. This ICT enabled tool was primarily based on four key components:

Soochna Seva Kendra (Information Kiosks): Touch screen computers with image panels, and text to speech panels were installed at information kiosks. There was mobile telephony, and voice based gateways were installed to provide job informationto workers in real time, with complete details including job cards, work status, completion time, wages allotted and pending.

GPS Verified Attendance Tracking Tool: Since workers were scattered across the worksite, this automated attendance tracking tool helped in tracking the correct attendance easily.

Community Radio: This acted as important source of communication and way of reaching women in villages. These radio services provided information about entitlements to women, as well as provided them important information related to health, education etc.

SMS Job Card Retrieval: Once a worker's mobile number was registered at the MGNREGA job office, worker could get information related to his / her job, which included number of hours / days worked, and remaining hours / days of work by just an SMS.

Digital Knowledge Repository: This repository was created under MGNREGA to enhance knowledge dissemination and smooth monitoring of system.

MGNREGA was built up on the foundation of creating inclusive governance and development led by community workers. In this pilot project, women's participation was specially kept in mind to make the village women empowered.

Project Overview

Government of Rajasthan, Ministry of Rural Development, India, and United Nations Development Program (UNDP) in partnership with a private player 'One World Foundation India' initiated the project "Knowledge for Community Empowerment and Enhanced Livelihood Opportunities" and launched in the State of Rajasthan on October 2, 2009 in 20 villages of Udaipur, and Bhilwara Districts.

This project was primarily aimed at creating advanced level user-friendly technology for villagers and providing them empowerment and at the same time also improving delivery of the services under MGNREGA. ICT ecosystem under MGNREGA created an important service delivery model, which was fully technology driven and facilitated large-scale implementation and handling of huge data. ICT enabled services played an important role in easy implementation, and in improving service delivery. Free, and real-time information availability acted as critical success factor in implementation of the scheme.

Small locations of Bhilwara, and Udaipur districts were chosen for ICT implementation project primarily because of three important reasons:

- This intervention could lead to failure, as they were in pilot testing phase, so trying it in small geographical location was the best idea
- Small geographical location is easily accessible and implementation and monitoring does not cause any impediments
- Handful of resources made it beyond the scope of initiative for wider testing.

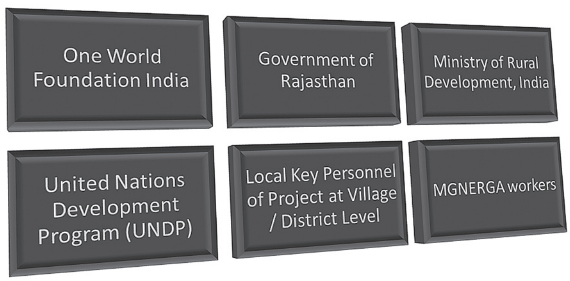
Project Objective

While MGNREGA was created on the foundation of providing support and transparent system to villagers, the ICT enabled system was created to support this agenda of providing transparent facts and figures. This project was initiated with the aim of empowerment of poor villagers including women, and to provide them information about their rights, and entitlements for greater utilization of benefits under the act.

Implementation Strategy

The primary stakeholders in implementing ICT in MGNREGA are depicted in Figure 1.

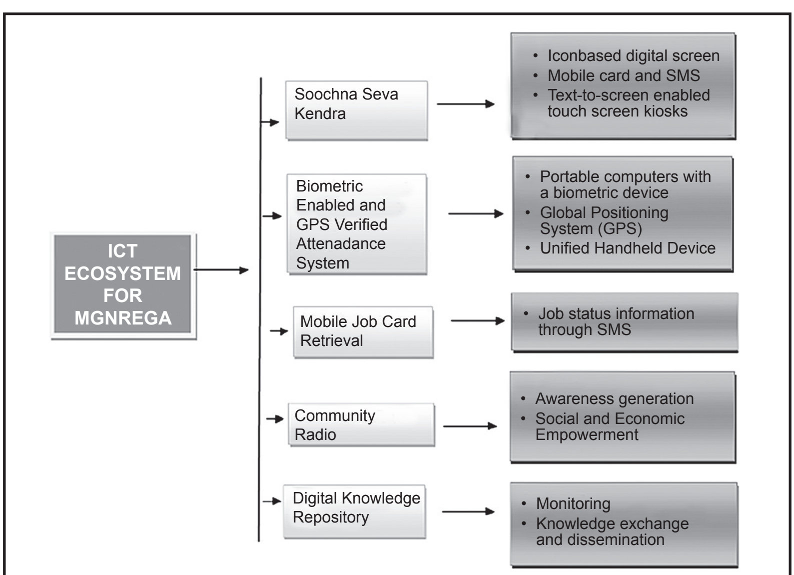
Figure 1: Primary Stakeholders in implementing ICT in MGNREGA



Project Components

Key components of ICT Ecosystem for MGNREGA are shown in Figure **2.**

Figure 2: ICT Ecosystem for MGNREGA - Key Components



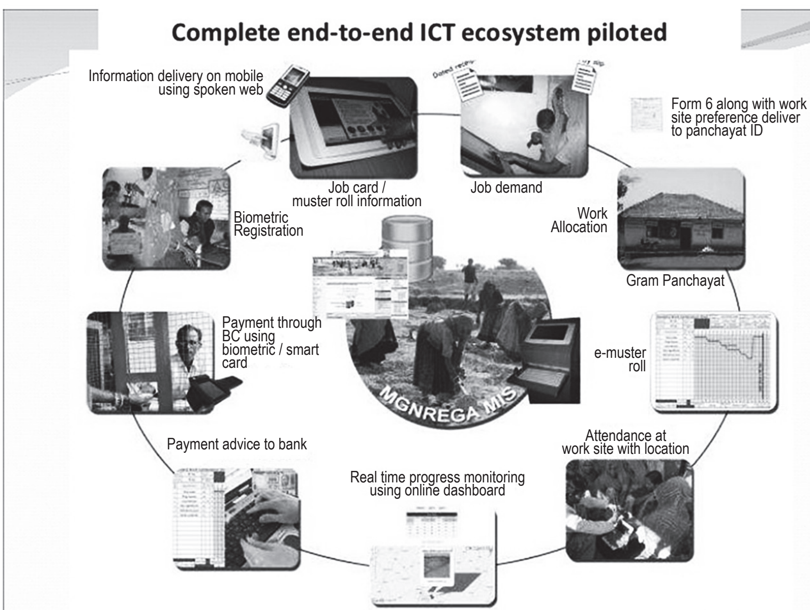
Source: OneWorld Foundation India

Process Flow of ICT Project

Under MGNREGA-ICT implementation, rural poor / villagers, especially women have access to information at various levels. All they need to do is to register themselves at Information Kiosk for MGNREGA. Kiosk operator assists the user in creating his / her biometric identity by taking his/her thumb impression as well as photograph and registers him / her at the kiosk. Once the user is registered he /she has access to an auto enabled touch screen panel, where he/she can check his/her job card, job availability, wage details, and various other things related to the scheme. Complete process flow is depicted in Figure 3.

It is enabled with image based user friendly icons, and local language assistance to guide them. They can print their job cards and pay slips also from these kiosks. Once they identify a preferred job, the secretary will allocate the job to them, and GPS enabled tracking system will timely record their attendance. The complete online dashboard allows access to all the stakeholders to manage, and monitor the work progress and check the data on real time basis. By referring to the same dashboard, Panchayat Office transfers payments to the workers in their bank accounts / post office accounts.

Figure 3: Process Flow of ICT Ecosystem for MGNREGA



Source: One World Foundation India

Project Outcomes

Improving Information Access through Technology Utilization: Information kiosks, as the name suggests,are available anytime for citizens to provide act related as well as job related information. Workers need not any more depend on information provided by gram panchayats, because now information kiosks provide them information at any given time, and authentic information. Mostly, workers access job demand, scheme information, job card information and grievance redressal section through information kiosks.

Creation of Model for Up Scaling: Pilot testing of project in Bhilwara and Udaipur Districts of Rajasthan was found to be satisfactory and Ministry of Rural Development recognized its success and decided to come up with national policy framework on biometrically enabled end to end ICT applications. The whole framework was to be prepared keeping in mind mechanism to improve accountability and transparency in public policy system.

Worker registration, and biometric based authentication system, touch screen, text to speech enabled system, workers attendance through GPS enabled system, digital capture of work at worksite, and automated payment system were some of the key components of this ICT related framework.

Awareness Creation & Gaining Participation: Reaching at Grassroots: Easy, quick, and timely access to information increased villagers' awareness, and they became inclined to participate in the scheme. Workers felt that they got access to information about jobs, their wage entitlement, allowances, and all other related things to act, which was earlier not easily available. This was an easy approach for women as well, since they did not need to go to the Bank Officials to seek information. They can have direct access to information. It avoided all kinds of social barriers for them including speaking to other men and being dependent on them for information. Sometimes, women found it difficult to access information kiosk on their own. At few places, women were placed as incharge at information kiosks.

Service Delivery by MGNREGA Officials: MGNREGA was executed by gram panchayats. All implementation aspects at village level were covered, which included facilitating registration, information sharing, muster roll preparation, worksite monitoring, training of women workers, and ensuring timely payments. Panchayats communicated the scheme benefits to villagers, as well as directed them to information kiosks.

Enhanced Efficiency and Transparent Government Operations: ICT ecosystem led to efficiency in operations, increased last mile access and reduced corruption practices especially in case of job allocation, and disbursement of wage payments. Increased awareness about legal entitlements have increased the system's transparency.

Challenges in Implementation of MGNREGA

MGNREGA is now in 11th year of its functioning. It faced various implementation challenges in its inception years. There were lot of villagers who did not have employment under the scheme initially. Joint families faced problem of getting jobs. Many people were not able to understand the information kiosk, registration process, and were quite hesitant to use the technology initially. They had to go to the panchayat people for taking support, and situation was the same as before. The panchayat workers initially took advantage, and communicated only those things, which they wished to communicate, and took advantage of villagers' belief, and illiteracy and even took commission to disseminate information, jobs, and wages.

Information kiosks were the most important component of this scheme, and attracted women workers to the job, but initially it was not that easy to have access to them, and share the information. When the project started, even adequate kiosks were not available initially. Implementation agency's limited capacity also created roadblocks, and lack of budgetary support led to problems in scaling up the project and reaching out the last mile. According to OneWorld Foundation Report, not beyond 30 per cent people visited information kiosks, and it remained inaccessible to the majority of people. Infrastructural issues created major obstacles in successful outreach of this project.

ICT implementation was difficult task in rural area due to poor bandwidth, electricity issues, and above all public unwillingness to adopt the change. Reaching out to rural communities in big way and making them understand about the project were the significant challenges faced by the project implementation team. Government officials, including women supervisors, needed to be thoroughly trained on service delivery mechanism, since they would be the ones who would play important part in success of this model.

Key Lessons

Some of the key lessons drawn from this case study from the districts of Rajasthan include:

- Transparent Information Dissemination
- Streamlining Service Delivery through use of ICT
- Enhancing all stakeholders' participation to ensure project sustainability
- Technology customization to accommodate local needs
- Employing user friendly technology
- Development of infrastructure facilities
- Training of supervisor and implementation team is required
- Availability of necessary ICT support tools

Conclusion

MGNREGA is a ray of hope for underprivileged and disadvantaged people in the villages of Rajasthan. It actually brought significant change in their lives. Women, who had been only restricted to "Choka – Chulha" (House-hold Shores), got chance to participate and earn, and move forward on their own. It was an opportunity for them to increase their livelihood, and provide health facilities to their families. The transparent system increased opportunities, and timely wages were paid to them, while earlier, they used to shell out money in gram panchayats. They also became tech literate, and learnt the use of technology. It also improved indirectly girls' education, and increased the confidence level of women. They started taking active part in family affairs and decision-making.

There is proposal to integrate 'Aadhaar Card' with the system. This would further enhance the 'authenticity of claims' for job cards. Benefits could be enhanced through certain initiatives like greater participation of women in procedural aspects, greater control over the type and management of assets. There is lot of scope to further leverage the Information and Communication Technology for women empowerment under MGNREGA.

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Social Science Research: Status, Emerging Trends and Interdisciplinary Research[1]

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In the contemporary world where global crises are mutually reinforcing, and increasingly pushing disciplinary boundaries for their prognosis, the demand for more social science, better social science and inter-disciplinary social science is increasing. Social Science Research is also required much more today owing to the fierce debate on issues of national unity and identity. However, to rise to the challenge of wicked problems of the global world, SSR discourses and methods need a fundamental overhaul to become a broad-front social sciences that studies phenomena in its entirety, beyond the confines of any single discipline. This paper attempts to make a case to end the disconnect- or war- between pure and social sciences, and advocates the need for recognition of their respective strengths and for evolution of integrated sciences. It also identifies few challenges of conducting inter-disciplinary research in social sciences, drawing from scant literature on the subject and author's experience in supporting development research and independent public policy research institutions.

Keywords

Social Sciences, National Unity, Pure Sciences, Integrated Sciences, Interdisciplinary Research, Think Tanks

Introduction

We stand at the threshold of future. 'Nature is richer, more unexpected and more complex than had been imagined at the beginning of the twentieth century' (Embong, 2010). The Nobel Prize-winning chemist Paul Crutzen proposed calling this unprecedented time the *Anthropocene*: a new geological era in Earth's history, in which humans are the defining geological force, and the first in which that force is "actively conscious of its geological role". In the Anthropocene, people assume centre stage (WSSR, 2013) …. The social sciences thus have a vital role in enriching society's understanding of what it means to live – and maybe thrive – in the Anthropocene, and in raising awareness of the opportunities, accountabilities and responsibilities this brings with it.

The demand for more social science, better social science and inter-disciplinary social science is increasing. This is the result of the state of the world, and more specifically of what could be called 'a confluence of crises': that is, contemporary crises that mutually reinforce one another." (WSSR 2010). Little wonder that Singapore increased their national budget for Social Science Research (SSR) by 45% in a single year in 2016.

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What should be the role played by social scientists in these challenging and demanding times? “The social science community should all the more act as a speech-community, an independent minded community of scholars that speaks out on issues, articulating views frankly and objectively, guided by the theories and tools of analysis at our disposal to help make sense of the complexities of change and provide possible ways forward. This is in keeping with the social science being an emancipatory project, a project to enlighten, educate and inform, to provoke critical thinking and the powers of imagination, to speak truth to power in their engagement with various questions affecting the society and country”. (Embong 2010).

However, in doing so, social scientists must also introspect with similar, and perhaps more rigorous critique of themselves. That the complex problems of the world today-climate change, hunger, water and sanitation, impact of automation, human cloning-cannot be adequately and comprehensively addressed by any one single discipline is obvious, and bears no repetition. As scholars, we know that the rationale for evolution of different disciplines and their rapid growth was the larger purpose of trying to understand human society, where each discipline provided a perspective through their individual lens but none of them could describe the whole. If anything, the global challenges of today have begun to strongly remind us of that larger purpose of our enquiry. No man is a discipline (B. Fischoff quoted in Bruhn, 1995). It is therefore time to shed our respective disciplinary boundaries, to seek out knowledge generation on inter-disciplinary boundaries, to respectfully engage with distant cousins across disciplines and rise above the regimented notions of knowledge in our quest for solutions to contemporary challenges in these very difficult and uncertain times. It is time we ceased applying research approaches of discipline to undisciplined problems in the world with the expectation that we will have appropriate solutions. Findings from Giri Institute of Development Studies (GIDS) analyses of research output in India, presented in Thorat&Verma (2017),confirms disciplinary insularity amongst us. “Most of the studies in all disciplines are carried out within disciplinary boundaries and are, at best, linked to partial theories of the concerned discipline which have limited explanatory power”. The same study also identifies another crucial weakness in the sphere of theories in social sciences, stating that ‘Indian social scientists are concerned about domination of western theories and concepts, but at the same time, a large number of other work indicates that no much progress has been made in the theorisation of Indian reality”. These must change.

Re-assembling social sciences into a ‘broad-front’ social sciences is not only required to address global challenges of contemporary times, but in this digital age where technological fusion is a defining feature of what is being called as the Fourth Industrial revolution, this is required even for the intellectual development of the disciplines themselves. And such joining up will increasingly need to span not only social sciences but biological, technological and engineering sciences too.

There are examples of pooling of methods across disciplines- mathematisation of parts of many disciplines, spread of experimental methods such as Randomised Control Trials (RCTs), importing of ‘systematic review’ concepts from health sciences and medicines, development of big data research methods, importing of software engineering and programming methods into social sciences, are just a few such examples. The spread of ‘open access’ agenda from STEM (Science, Technology, Engineering and Medicine) disciplines is now taken a major stronghold across social science disciplines with development of open source software and networked science systems. All of these are cross-disciplinary developments, and indeed laying the foundations of as much as benefitting from the digital deepening in the current age.

A typical feature of SSR is that in capturing the truth of human behaviour in many aspects, it often is able to capture the whole truth about a specific social phenomenon, but equally often fails to capture the entirety of it all due to the complex and unpredictable nature of human behaviour. It is this feature of SSR that policymakers often hold against SSR. In fact, therefore, it is imperative on the part of policymakers and those who make investment decisions in SSR that they appreciate the complex nature of human relations encountered by social sciences in the search of truth. Since social sciences deal with complex human behaviour, it takes enormous time and effort to understand human processes, and therefore needs continuous and high levels of investment in research, as Allport argued, to understand the truth in its entirety. (Thorat&Verma 2017)

In this paper, the author proposes to share some perspectives on current global trends in SSR, and particularly emphasise the need for SSR to explore and understand 'truth in its entirety" in order to make the world a better place, and to support the call by global citizens to 'leave no one behind' as part of the UN SDGs vision. This will entail particular emphasis on inter-disciplinary research in social sciences; a not-so-new approach to understanding complex global challenges of contemporary times. In this context, this paper would also make a modest effort to highlight the importance of SS to return to their larger purpose of enabling us to make value-rational judgements and choices in the context of power and diverse interests, rather than continuing to 'slip' towards increased scientism in SS to emulate NS. In this last respect, this paper would draw heavily upon advocacy of phronetic social science research remarkably argued by Bent Flyvbjerg (2001).

Social Science Research Matters

The role of social science in promoting national unity and identity was strongly highlighted by the Report prepared in 1970 at the government of Malaysia through the Harvard Advisory Service project when the country was plagued precisely with the kind of core national challenges that seem to be affecting modern day India, viz., promotion of national unity and identity through preservation of inter-community peace and harmony, addressing economic inequalities and imbalances across groups and regions, and promotion of national culture and a sense of national identity. In highlighting the role of policy-relevant social science research, however, the Advisory committee outlined 3 key features that must characterise research in order for it to classify as professional and scientific, viz., degree of independence and distance from immediate demands of the government, systematic and scientific approach, and a systematic study of large range of situations, similar to what Bent Flyvbjerg (2001) calls as 'dialoging with a polyphony of voices'.

There are several ways in which one could highlight the role of SSR in promoting well-being, whether through improved public policy making, or through creation of new knowledge and pushing the frontiers existing understanding of economic, social, political and technological matters. Only to set the context, one way to categorise their role could be in terms of the following roles.

Contribution to enhancing human enlightenment. The role of thinkers and philosophers such as Aristotle and Plato immediately comes to mind when thinking of developing the conceptual underpinnings of the larger purpose of State and society and their inter-relations. Not all developments however have been salubrious to human enlightenment, and the discipline of economics, for one, has recently been facing stringent criticism over dereliction of its larger goal when conceived. In ancient Greece, Xenophon - father of economics- described the term economics as an art of the practice of household management. Even Aristotle distinguished economics from *Chrematistics* - art of acquiring wealth. It is a different matter that the lure of masquerading economics as science specially in 19^{th} century soon led to conveniently sidestepping the larger purpose of economics that was related to society`s goals, and- specially with John Stuart Mill`s definition- economics began an inexorable journey of being recast as science. This trend eventually led to Nobel (-Memorial) Prize being extended to 'economic sciences' since 1960s, 'leaving a vacuum of goals and values' (Raworth, 2017). However, John Maynard Keynes, worrying about the role of economics, observed that 'the ideas of economists and political philosophers, both when they are right and when they are wrong' are more powerful than is commonly understood. Indeed the world is ruled by little else.' This statement remains perhaps more true today than in 1930 when this was made, and there remains little doubt that the discipline of economics has contributed to a prosperity in human wealth and incomes in past centuries that remains unprecedented in human history. It continues to remain the queen of social sciences.

Better Society: Human values related to collective decision-making (democracy) or rights based approaches, or more recently, inclusive process of growth, sustainable development, gender transformative approaches etc are all key illustrations of how SSR continues to expand the frontiers of knowledge and seek improved understanding and develop new approaches to better understand and capture human well-being. Newer developments such as Human Development Index (HDI) and improved natural stock assessment methods in the context of sustainable development are all specific examples of this development in recent decades. UN best epitomises this post-war development in 20th century, and the recently adopted global SDGs captures the human aspiration of better living for all, emphasising growth processes that 'leaves no one behind'.

Public Policy: The role of SSR to public policy is perhaps most visible, and indeed critical. This plays out through multiple mechanisms since the path from SSR to policy is rarely linear, and most often very complex and equally unpredictable. Plenty of recent evidence[2] strongly suggests the critical and predominant role of social relationships in enabling uptake of SSR in public policy processes and outcomes. Whether it is setting up of new institutions to promote SSR, or it is use of SSR for public policy purposes, SSR continues to play a vital role, and increasingly so in the complex world where limits of mono-disciplinary approaches are becoming more and more obvious and binding. It would be pertinent to highlight the critical role that think tanks play in this process – SSR for public policy engagement. Many excellent examples from all over the world on success in changing public policies and societal discourses are available through the Think Tank Initiative (www.thinktankinitiative.org), which is a multi-donor global program that supports over 40 think tanks in 23 countries- 14 of whom are in South Asia and 7 of them in India.

Societal Terms of Discourse: In democratic societies, much of the demand for change emanates from public outcry and social forces, sometimes engendered through 'chance' events. Many new policies on curbing corruption came about, for instance, owing to the Anna Hazare led public mobilisation under the banner of 'India against corruption'. Or a litany of legal and administrative reforms in respect of women's safety and security were triggered by the 'Nirbhaya' case and happened in a very short time. These reforms could happen because huge body of knowledge had been created for a long time and hence existed on 'black money' generation in India, as well as causes of and remedies to improve women's safety and security in public places. Mass mobilisation enabled their passage into public policy change.

Education / Teaching: The role of SSR in teaching cannot be exaggerated. Universities have traditionally been the harbingers and holders of SSR such that new knowledge could seamlessly find its way into pedagogy. Unfortunately, however, in India, and many South Asian countries, universities have inexorably declined as centres of research, and that role has been significantly adopted by think tanks, or policy research organisations. There is evidence[3] that the relationship between universities and think tanks in the global south is symbiotic, with considerable exchange of scholars between the two agencies, and this is welcome, although not ideal.

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2 See, for instance, http://blogs.lse.ac.uk/impactofsocialsciences/2017/01/16/rubbing-shoulders-an-understanding-of-networks-relationships-and-everyday-practices-is-key-to-parliamentary-engagement/

3 See, for instance, http://www.thinktankinitiative.org/sites/default/files/Understanding%20Think%20Tank-University%20Relationships%20in%20the%20Global%20South.pdf

Social Sciences vs Natural Sciences: The Science War[4]

The Science Wars have been going on for many years not only between Natural Sciences (NS) and Social Sciences (SS), but also increasingly among the SS disciplines (just as among NS disciplines too). Comparisons are thus often made of the state policies for NS vis-à-vis those for SS, and their respective funding. For instance, Thorat & Verma 2017 mention that for the year 2010-11, 'the share of expenditure on SSR as percentage of total union budget was 0.025%, whereas it was 0.86% for pure science research. The share of SSR to GDP at market price was 0.0062%, whereas it was 0.21% for pure science'.

This paper argues that this framework that pitches NS against SS is a wrong framework to use. Adoption of this framework itself is self-defeating for SS as a result of which, despite many decades of using this argument, nothing much has changed in favour of increased state resources or policy attention for SSR. There are several reasons for this.

1. It is futile to try and emulate NS in their rigour. Why?
   - Rigour does not only mean quantitative results – not everything that matters can be counted, nor everything that is counted matters (GDP vs Gross National Happiness GNH)
   - In an attempt to be seen as 'objective', SSR is rapidly trying to advance its methods towards a slippery path – more data, more numbers and more models – RCTs being a case in point.
   - Unlike in NS, 'objectivity' in SS is not 'contemplation without interest', but employment of 'a *variety* of perspectives and affective interpretations in the service of knowledge' (Flyvbjerg 2001)
2. Both NS and SS serve a unique, and extremely important function in knowledge production and advancement of human progress. Aristotle argued that NS and SS are and should be different ventures, and discussed 3 intellectual virtues, or properties of intellectual work: episteme, technie and phronesis. While the first two have had their descendants in 'epistemology' and 'technology', we have allowed SS to be so colonised by NS that we do not even have a word for the 3rd intellectual virtue phronesis. So what are the characteristics of these three intellectual virtues?
   - *Episteme* represents scientific knowledge, universal, invariable, context-independent, based on general analytical rationality. This is what we call as natural sciences today. The *know why*.
   - *Techne* represents craft or art. Pragmatic, variable, context-dependent, oriented towards production, based on practical instrumental rationality. Technique or technology as we know today captures this virtue. The *know how*.
   - *Phronesis* represents ethics, deliberation about values with reference to praxis. Pragmatic, variable, context-dependent. Oriented towards action and based on practical value-rationality. This virtue has no analogous contemporary term.

Phronesis thus concerns with analysis of values- things that are good or bad for humans - as a point of departure for action. It requires consideration, judgement and choice, and more than anything else, it requires experience. It is about value judgements and not about producing things (technie). Thus, "Phronetic research is dialogical in the sense that it includes and if successful, is itself included in, a polyphony of voices, with no one voice, including that of the researcher, claiming final authority".

"The Mona Lisa may top the list of famous portraits but is far from most influential one. That accolade belongs to ….rational economic man, the self-centred depiction of humanity at the heart of economic theory, who is also known as *Homo Economicus* (note how the Latin touch lends him an air of scientific credibility)…-solitary, calculating, competing and insatiable.' Today, Adam Smith is undeservedly

4 Title of May 1996 issue of *Social Text* journal, reference Flyvbjerg, 2001, p 1

credited for creation of this character that is at the heart of all mainstream economic theory. To set the record straight however, although he believed ‘self-interest was of all virtues that which is most useful to individual, Smith also believed that it was far from the most admirable of our traits, knocked off that top spot by our humanity, justice, generosity and public spirit…the qualities most useful to others’....how selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it’. Based on variety of evidence drawn from multiple social sciences including psychology and sociology, Raworth, 2017 goes on to characterise the 21st century portrait of man in sharp contrast to the homo economicus; from self-interested to socially reciprocating, from fixed preferences to fluid values, from isolated to interdependent, from calculating to approximating, from dominant to dependent and calls for ‘meeting ourselves all over again’.

Daniel Kahneman- the psychologist awarded Nobel Prize in economics in 2002- too offers serious challenge to the homo economicus assumption that is the soul of mainstream economic theory, and for longest period of time. “To a psychologist, it is self-evident that people are neither fully rational nor completely selfish, and that their tastes are anything but stable….(Psychology and economics) seemed to be studying different species…later dubbed as Econs and Humans’.(Kahneman, 2011). Further, in discussing the surprising survival of ‘seriously flawed’ Bernoulli’s expected utility theory- ‘the foundation of rational-agent model and is to this day the most important theory in social science’ - Kahneman offers his explanation as ‘theory-induced blindness: once you have accepted a theory and used its tool in your thinking, it is extraordinarily difficult to notice its flaws…Except for the very poor, for whom income coincides with survival, the main motivators of money seeking are not necessarily economic…for many, money is a proxy for points on a scale of self-regard and achievement’. He goes further in challenging the validity of rational-economic agent that man is assumed to be in economics and says that ‘an important choice is controlled by an utterly inconsequential feature of the situation (how choices are framed)…and skeptics of rationality are trained to be sensitive to the power of inconsequential factors as determinants of preferences..’.

From the above, it will be immediately evident that phronesis underlines importance of specific examples and case studies, and importance of experience and judgements of humankind. This is the nature of social sciences that concerns with choices and judgements in the context of power, drawing upon episteme and technie. This is what has advanced human civilisation, and the higher order concept of human values with its fundamental rights and responsibilities, mostly enshrined in the United Nations Charters of Declarations.

3. NS and SS both Serve a Certain Purpose that is Unique
   - Developments in technology is NS, but its application and use is a political question, laden with normative considerations of choice and good and bad values. Technologies are developed in labs - under strictly controlled conditions where all systems variable are known, clearly defined and understood. SS labs are communities, groups, households and societies. They are also administrative units such as states, countries. Application of technology therefore in SS labs is fraught with questions of human values and political choices. And that is how it should be. In this framework, NS and SS both play a unique role- as each must- in order for human progress.
   - Examples to illustrate above:
     i. How will automation affect jobs?
     ii. We have the technology to replicate Dolly in human beings. Should we?
     iii. Will building more toilets (essentially a S&T approach to sanitation) improve sanitation behaviour in communities?

iv. ‘Aadhar’ (unique identify card in India) - While the technology to capture uniqueness of each individual is impressive, the use of this information is increasingly raising concerns around data privacy, intrusion into private space, potential abuse of such data driven by political and electoral compulsions and aspirations etc.

NS and SS both therefore bring unique attributes to addressing a social problem. Contribution of each is valuable, and neither alone can address complex global and social challenges. They never did, nor could they ever do.

Why IDR?

Many different terms: Inter-disciplinary, multi-disciplinary and trans-disciplinary have been used, and sometimes interchangeably, in literature. They represent an increasing intensity and depth of collaboration across disciplines, with inter-disciplinary being least integrated and trans-disciplinary being most. In this paper, we would use ‘Inter-disciplinary research (IDR)’ to indicate the need for disciplines to speak to each other at the stage of project design and collaborate across research methods and methodology in evolving the research design.“If you think of disciplines as organs, true interdisciplinarity is something like blood. It flows. It is a liquid. It is not contained. There is no inside and outside.” (Committee On Facilitating Interdisciplinary Research, 2005).

In order to understand the rationale for IDR better, it may be worthwhile to have a quick glance at the global trends in SSR**.** Multiple ways in which this question could be approached.

1 Thematic: What are the new research themes on the horizon? There are many and could be easily found through basic web search and hence this paper does not dwell on the specific themes. There are well defined sub-disciplines within each discipline in SS that remain under studied in India and they are all identified in the study by Giri Institute of Development Studies in Thorat & Verma 2017.

2 Methods & Methodology: What are the new approaches to understanding complex global problems. This is where the role of IDR gets highlighted strongly.

   a. S S boundary is Blurring: Sociobiology, Neuropsychology, Behavioural Finance, Bioeconomics, Social Medicine, econophysics, psychophysics are IDR themes that are witnessing rapid advances and innovations. The entire domain of Artificial Intelligence is strongly inter-disciplinary in character.

   b. Methods: Big Data: Is Statistics of Sampling Dead? While Big Data offers enormous opportunities, it raises immense challenges as well as deep concerns. ‘I suppose it is tempting, if the only tool you have is a hammer, to treat every problem as if it were a nail’. (Abraham Maslow, 1966).

   c. Methodology: Use of technology in data collection – Quality control, but how ethical?

   d. Data privacy issues in electronic surveys

   e. Need to develop new methods and methodologies to address relatively newer challenges in areas of marginalisation and group exclusion – a hitherto unstudied area of SS

   f. Inequality across groups on economic parameters (income and wealth) requires a new set of tools and ‘Doughnut Economics’ (Raworth, 2017) approach to begin to grapple with complex challenges

   g. How conceptually relevant are social and economic constructs, for example, what is urban and what is rural, or what are castes is not clearly defined concepts.

There are thus two categories of factors that strongly suggest the need for IDR.

A. Current Methods are Unsuitable

1. Single disciplines- specially relying wholly on either technological solutions or data based evidence such as economics in social sciences-could provide at best an incomplete and often a damaging policy prescription.
2. Many scholars globally believe that data alone brings rigour, and numbers (quantitative methods) are seen to be more valuable and unquestionable than qualitative work, or narratives that provide contexts. In other words, in our single minded drive to counting what matters, we forget that not everything that matters can be counted. For those who are still suspicious, just look at the secular fall of GDP as the sole indicator of welfare, and visit the conceptual underpinnings of GNH. If Data, or Big Data is now so central to methodologic rigour, let's look at the manner in which exclusive reliance on the increasingly revered Data (or Datum for the purists) can be problematic.

B. Drivers of IDR in Contemporary World

1. Inherent Complexity of Nature and Society: It is not possible to study the earth's climate, for example, without considering the oceans, rivers, sea ice, atmospheric constituents, solar radiation, transport processes, land-use,land-cover, and other anthropogenic practices and the feedback mechanisms that link this "system of subsystems" across scales of space and time. If science and engineering deal with extremely complex systems, the same is true for studies of human society. How human societies evolve, make decisions, interact, and solve problems are all matters that call for diverse insights. Very fundamental questions are inherently complex. For example, why does hunger persist in a world of plenty? How does one approach the ethical and uncomfortable dilemmas posed by human cloning technologies? Dolly, the sheep, was born in July 1996, opening up a leapfrog technology that raised extremely uncomfortable questions for human civilisation. How does one address the trade-off between growth and sustainability that climate change poses in our extremely unequal world? Answering such questions successfully requires collaboration across the natural sciences, social sciences, and humanities.
2. Discoveries are more likely at the Boundaries between Disciplines: The field of cognitive science has evolved in response to questions that could not be answered by single disciplines. Today the Cognitive Science Society embraces anthropology, artificial intelligence, neuroscience, education, linguistics, psychology, and philosophy. Ecology and economics (and other social sciences) have a common origin, at least in name, and, increasingly, a common field – ecological economics – that aspires to facilitate "understanding between economists and ecologists and the integration of their thinking" with the goal of developing a sustainable world.
3. 'Encounters across disciplines benefit each discipline, extending their horizons'. Centre of Development Studies' study presented in Thorat&Verma, 2017 confirms the value of collaboration in strengthening quality in India. It found that "About 77 per cent of the top quality articles are co-authored and two-thirds of these co-authored articles include at least one foreign collaborator, while the remaining one-third have only Indian collaborators. Results from the top quality percentile of articles confirm that international collaborations result in higher quality. Discipline-wise break-up of collaborations in the top quality bracket shows that foreign collaborations dominate national collaborations in all disciplines in the top percentile. In fact, with the exception of political science, law, and history, all other disciplines have more collaborative (jointly authored) than single-authored papers in the top quality bracket".

4. The Need to Solve Societal Problems: Application of technologies to enhance the quality of life can itself create problems that require technological solutions. Examples include the buildup of greenhouse gases (hence global warming), the use of artificial fertilizers (water pollution and eutrophication), nuclear-power generation (radioactive waste), and automotive transportation (highway deaths, urban sprawl, and air pollution).
5. The Stimulus of Generative Technologies - Cyber Infrastructure: A recent example of a generative technology has been the development of the Internet, whose popular form is only about a decade old. The Internet has both enhanced connectivity between people and revolutionized access to information, transforming the ability to interact and collaborate across space and time. It has special relevance to the world of research, for which it offers ways to work in large, distributed teams, enlarge the educational enterprise, provide access to data on time and spatial scales never possible before, and design powerful new tools to transform the processes of discovery, learning, and communication. IDR research is increasingly also transnational in character, with scholars from universities and think tanks collaborating in real time across geography is now more the norm.

Perhaps one useful way to look at these questions could be the SDGs framework-6 broad social, economic and sustainability ambitions as in ‘doughnut economics’. The one common factor that binds most of these questions is the inter-disciplinary nature of the challenge. The one issue therefore that is increasingly becoming clear in recent times, and is picking up pace, is the need to reassemble all disciplines together in order to holistically understand the myriad and complex challenges of our times-climate change, radicalisation of societies, sustainable development and issues of what is being called as ‘Fourth Industrial Revolution’. In our quest for disciplinary excellence, and effort to out compete other disciplines – and economics has done well amongst SS disciplines on that front – we have ended up creating a detrimental hierarchy of knowledge at multiple levels – between NS and SS, within SS, and even within conventional disciplines – organic and inorganic chemistry, or botany and zoology. They are all but different facets of human society, and deepening of disciplinary knowledge has immensely benefited human progress. However, in their success lies the kernels of the need to bring them all together if we are to address the modern global human and social challenges. Contemporary problems of the Anthropocene era do not lend themselves to insights originating from single disciplines, or even those that are close cousins (sociology and anthropology, or botany and zoology). They require distant disciplines- often unrelated in their origins and methods- to come together if the world is to address them sustainability, and in an inclusive manner.

“We are entering a new historical era of uncertainty and unpredictability, in which our time-tested, modernisation paradigm and other tools of analysis may not be good enough to help grasp fully the complexities we face.” (Embong 2010). Our task is to broaden our reasoning to make it capable of grasping what, in ourselves and others, precedes and exceeds reason. (Flyvbjerg 2001).

So what does it take to conduct IDR? Comparative Research Centre for Water Sensitive Cities at Monash University, Melbourne, Australia comprises over 85 organisations, including 13 research agencies, 230 researchers and PhD students from more than 20 disciplines across social and biophysical sciences. They recommended 5 principles for a successful IDR:

a. Forge a shared mission
b. Develop T-shaped researchers, though be mindful that it took 5 years before publications in high-impact journals began to appear.
c. Nurture constructive dialogue
d. Give institutional support- university policies, promotion criteria and seed-funding

e. Bridge research, policy and practice: bringing multi-stakeholders together, specially policy makers and those from industry who rarely think in silos.

Challenges to IDR

1. Do we know how much IDR takes place? Lack of data and information is the first stumbling block.
2. Management of collaborative and multidisciplinary research projects is a substantive issue. Assessment of IDR (2005) found that IDR project success depended largely on coordinating interactions among researchers. Dispersion of participants,rather than inter disciplinarity, was the most problematic aspect. Projects with principal investigators in multiple universities were substantially less well coordinated and reported fewer favorable outcomes. Project-related conferences,workshops, and other regular meetings appeared to reduce the adverse effects of dispersion. The assessment identified a number of needs for further support, including management tools that would increase the ease with which project participants interact over the lifetime of the project.
3. Cultural hierarchy at 3 levels
    a. Mindset of pure scientists: Natural sciences dismiss social sciences as having largely a ‘service’ role, being allowed to observe what they do, but not disturb.
    b. Theory vs applied science: Social science practice in India has harboured a cultural hierarchy dividing it into a vast, inferior mass of academics who pursue empirical social science and a privileged few who are considered the theoretical pundits with reflective capacity which makes them intellectually superior to the former. To use a familiar analogy, Indian social science represents a pernicious divide between theoretical brahmins and empirical shudras.
    c. Amongst disciplines: Primacy of economics over other SS such as sociology, political sciences, history etc. GIDS analysis (in Thorat&Verma, 2017) of the top 1 per cent quality articles in Indian indicates that not all disciplines are uniformly represented in the top bracket. The disciplines of economics, social geography, and social psychology have more than proportionate presence in the top bracket, while the rest have less than proportionate presence. It may be noted that strategic studies and religion–philosophy do not have any presence at all in the top quality bracket”.
4. Deeply asymmetrical integration: SS is typically brought in only after the project has taken shape, and usually as a single social scientists rather than a team. This asymmetry was visible in power relations, personnel numbers, funding, knowledge production and independence.
5. Academic institutions’ budgets, governance and promotion arrangements are usually organised around single disciplines, as are processes at many granting bodies and journals (RR).
    a. Teaching Time buyout for instance does not exist in Indian universities.
    b. Recruitment and promotion exclusively linked to API scores discourages IDR.
    c. Organisational structure of universities into water-tight departments, with faculties being recruited for specific departments/disciplines is another hindrance. How many political science teachers have even entered the department of history, or how many times does a teacher from economics department enter the premises of that of sociology?
    d. This divide is deeper when NS vs SS. And increasingly, even within disciplines, the regimentations across sub-disciplines is telling. Inorganic vs organic chemistry, or macroeconomist vs political economics are real divides that have grown with specialisations at levels of sub-disciplines.

6. IDR struggles for prestige and are trickier to peer review.
7. Training and Capacity Building: Not too many centres/educational courses that offer meaningful IDR courses. Indian Institute of Science (IISc) in India for instance stands out for IDR among social sciences and, separately, among pure scientists. There are a few centres elsewhere too such as at Jamia Millia Islamia, Narsee Monjee Institute of Management Studies (NMIMS), Tata Institute of Fundamental Research (TIFR) etc. Are there any Centre for IDR that combines both pure and social sciences? At least one of this kind in India- Centre for Study of Technology and Policy (CSTEP) in Bangalore- does exist. Admittedly, it is not easy to conceptualise and then operationalise such a centre.
8. Duration of projects are typically longer and transaction costs too are higher.
9. Biophysical sciences have well-agreed theories. SS spend much time in developing one, which too is rarely agreed unanimously. Nature of experiments too are very differently designed and controlled.

Little wonder then that the US Committee of Interdisciplinary Sciences, in their landmark report on IDR in 2005 said that "Applicants interested in interdisciplinary work felt disadvantaged relative to applicants focusing in single disciplines because of relatively short submission deadlines, pressure to understate costs for IDR proposals,the page limit on proposals, the difficulty of teaming administratively with investigators in different institutions, and lack of a well-defined review path for IDR proposals".

Way Forward

Gujarat Institute of Development Research (GIDR) study in Thorat and Verma 2017 assessed the quality of social sciences systems in India in the global context. How does the Indian social science output compare with other countries, and where does India currently stand? The study analysed 30938 journal articles published during 2008-14, drawn from SCOPUS database, to examine the publication status of India in social sciences in an international context. Using the SC Imago data, the study assessed the citation pattern of the published articles. What did it find on IDR?

1. For the period 2009-14, India consistently ranked among the top 15 countries in the world. It ranked 11th with 1.6 per cent of the global share of total 1659908 publications of journal articles in top 160 countries. In comparison, China had a share of 5 per cent and ranked third.
2. Discipline-wise analysis showed that the share of pure social science articles was significant but is declining. Of all the articles published, share of pure social sciences was 52 per cent, but the share of social science articles written in conjunction with engineering sciences was 27 per cent, and 6 per cent was in collaboration with human health and allied disciplines. A relatively higher share of articles in the disciplines of engineering, human health, and other multidisciplinary themes points towards the increasing importance of incorporating social sciences to these issues so as to be more responsive to the societal needs and behaviour. Clearly, the study indicates the move towards interdisciplinary and multidisciplinary themes.
3. Of the total 30938 articles, 28 per cent were published with 'international collaboration'. The United States (US) and the United Kingdom (UK) contributed 52 per cent of the total international collaborations. About 49 per cent of all articles were published in journals published from India, whereas 16 per cent and 11 per cent were published in journals published from the UK and the US respectively. Share of Indian journals in all publications (30938 articles) declined from 57 per cent in 2009 to 42 per cent in 2014. Thus, articles written by SSR institutions in collaboration with foreign institutions declined during 2009-14.

The question then is, are we as a nation equipped- or equipping- ourselves to prepare our social scientists for the digital age, where IDR across distant disciplines is the norm rather than an exception? Do we have the right structures and systems to encourage and promote a unified social science- a global science, if one could call it- that drives IDR which is not only critical for external impact, but also increasingly for the intellectual development of disciplines themselves? How many universities and colleges have such centres that promote IDR? How encouraging are the governance systems of research in State Funding agencies as well as knowledge producing agents such as universities? How equitably are they distributed across disciplines and geography? How well is such knowledge informing teaching and training of next generation scholars?

Even a moments reflection to the above questions will drive home one important fact. That is that clearly, the state of social sciences infrastructure and ecosystem in India is in dire need of support and reform. For social sciences to play their rightful role in their emancipatory and enlightenment role for human civilizational progress and instrumental role in public policy making, and in this current times, it is imperative that the social science research ecosystem is strengthened, the institutions governing the research ecosystem, as well as those producing good quality research and researchers are made stronger and well governed and collaborations across disciplines and organisations are increased. This will benefit humanity at large, and will also enable improved intellectual developments in research methods and methodology across the entire spectrum of social sciences. Technology is a great leveller, and the digital era must also level the hierarchy across disciplines.

Many actors, principally the state SSR promoting agencies, such as ICSSR and other National Councils, must play a leading and crucial role in creating an enabling environment as well as promoting more, better, and IDR. A lot of what needs to be done to improve support to and promote SSR in India is captured in Thorat and Verma 2017, so the author will refrain from mentioning all that here. However, as a staff of a research funding agency (International Development Research Centre- IDRC- of Canada), the author would like to highlight a few personal reflections in this context.

1. IDRC is a leading SSR funding agency in India (2nd highest in value terms) according to Institute of Public Enterprises (IPE) study presented inThorat&Verma 2017. IDRC is fully seized with this imperative, and continues to remain committed to promoting such collaborative networks and projects.
2. The likelihood of funding from IDRC increases with collaborations across boundaries of nations and disciplines, ceteris paribus.
3. However, the extent of the success remains bounded by at least two important factors:
   a. The nature and number of collaborative proposals that are received, which is not entirely an endogenous factor.
   b. The other important factor that limits the extent of IDR funding is the importance of being equitable in IDRC's approach to funding local research. Not all countries, regions and organisations are equally endowed with research skills, and it is imperative therefore to optimise supporting excellence alongside supporting building capacity of individuals and organisations that are not so well endowed.
4. Notwithstanding the above, funding IDR has its share of challenges:
   a. Peer-Review mechanisms, specially since more and more of IDRC calls are competitive calls. IDRC often insists that the project team sets up an advisory group from multiple stakeholders to guide and mentor projects.
   b. Increasing impatience with tangible results by donor community at large. IDRC stands close to the end of the spectrum where it understands the need for long-term engagements for results

better than many others, but with the rise in partnerships even within the funding world, that is no longer as simple and straightforward.

c. In the program called the Think Tank Initiative- a multi-donor global program managed by IDRC, in addition to providing core financial and technical support to select group of think tanks, there are explicit incentives and supplementary modalities to support collaborations across think tanks and countries. These incentives have taken time to get rooted, but have begun to show promise. There is little doubt that collaborations across agencies, countries and disciplines take time to realise, and hardly is a 'natural' or an automatic process.

These are congruent to the top three recommendations made in the Committee of Interdisciplinary Sciences (2005) report in their landmark study on IDR for funding agencies (Appendix E, p270). In a survey of 266 agencies engaged in research, the top three recommendations made were to

1. provide more support for IDR (39.1 percent of respondents)
2. develop and implement a more effective review process for IDR proposals (17.7 percent), and
3. rethink funding allocation strategies (11.3 percent).

Conclusion

Never before have the social sciences been so influential. `Today, no public policy can be developed, no market interaction can occur, and no statement in the public sphere can be made, that does not refer explicitly or implicitly to the findings and concepts of social and human sciences' (Wittrock, 2010).

Promotion of national unity and identity, addressing economic inequalities and imbalances across groups and regions, and promotion of national culture and a sense of national identity are all key roles played by social sciences, and their relevance to our contemporary societies cannot be exaggerated. However, the modern day challenges in the increasingly integrated world require a response from social sciences- as indeed from natural sciences too- that transcends the disciplinary boundaries that we have limited our intellectual growth too. For social sciences in particular, the dominant streak of emulating NS methods, and 'slipping' towards more scientism, specially in economics, is not only self-defeating, but also- as this paper argues- irresponsible as a body of knowledge that is not only expected to be the guardians of social values, but also simultaneously advance value-rational judgements and choices in context of power at large for human progress. In one sense, the wickedness of modern challenges encapsulated in SDGs, strongly remind the SS of the need to return to the larger purpose and work towards finding the 'truth in its entirely'. In this sense, to quote Flyvbjerg (2001), 'the purpose of SS is not to develop theory, but to contribute to society's practical rationality in elucidating where we are, where we want to go, and what is desirable according to diverse sets of values and interests'.

For long, knowledge has been fragmented and training and teaching has become more and more regimented in respective disciplines. That indeed was the need of the times and has enabled us to be able to deepen our knowledge and sharpen our tools, methods and methodologies in respective disciplines. Their success today now enables us to be able to build and draw upon them as a collective, and reassemble the fragments of knowledge through what is being called as IDR in our quest to understand human society in its entirety, and to propose holistic solutions to contemporary challenges which are increasingly impervious to mono-disciplinary exploration and demand IDR or IDR approaches. We know the tools, and we have the knowledge and understand. An integrated world requires an integrated social sciences. We need to introspect, and then show intent to embrace and drive the change. "Indeed he knows not how to know who knows not how to un-know". (Richard Francis Burton, quoted in Flyvbjerg,2001)

"A mind that is stretched to a new idea never returns to its original dimension". (quoted in Flyvbjerg 2001). It is the author's earnest hope that this paper, and many others in similar vein before and after, serves the purpose of stretching the scholars' mind such that it never returns to its original dimension.

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References should be embedded in the text as follows: (Laski 1960:19). If more than one reference is to be given, they should be first in alphabetical and then in chronological order, as follows: (Babu 2006:51; Rosenau 2006:29; Wagner 1960:34).

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For articles in periodicals

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For chapters in an edited book

Rosenau, James N. 1988. "New Dimensions of Security: Turbulence in International Politics," in George Ross, ed. Security in a Globalising World, New York: Macmillan

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There is a growing realization that long-term business success can only be achieved by companies that recognize corporate social responsibility (CSR) as part of the process of wealth creation and as providing a competitive advantage. The conference aims at discussing CSR in the existing perspective and future outlook with focus on lighting up the challenges and the best practices in CSR.

Conference Objectives

- To discuss the existing practices and future prospects of Corporate Social Responsibility in a globalized economy.
- To highlight the 'Best Practices in CSR' in the context of business sustainability.
- To discuss implementation models and structures that can be used in all sectors of industry.
- To explore ways of aligning CSR to the business agenda for sustainability.
- To create awareness of the latest thinking on CSR and governance issues as a driver of change, innovation and sustainable profit.

Discussion Themes at the conference (Yet not limited to…)

- Perspectives of CSR in the Global Economy
- CSR and Sustainability
- Governing CSR
- Evaluation, Monitoring and Documenting CSR practices
- Accounting for value: Measuring and managing social investment
- Social Auditing Integrating CSR with Business Policy
- Cascading the CSR strategy
- Creating impact and ensuring sustainability of community based programmes
- Partnership – Engaging Stakeholders
- Ethical issues in CSR
- Leading Sustainability Change
- Benchmarking CSR practices
- Turning CSR into Corporate Social Innovation (CSI)
- Case Studies on Best practices in CSR (Private and Public sector)
- Making CSR mandatory
- CSR: Sectoral perspective
- Empowering the next generation: Engaging youth in CSR
- Entrepreneurship opportunities within CSR Participation
- Best practices in CSR

Participation

The conference is a platform for intellectual deliberations related to the area of Corporate Social Responsibility is open to:

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- NGOs
- Consultants
- Academicians, Research Scholars and Management students,
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Please visit website for detailed guidelines for authors. Only those papers that adhere to the author's guidelines will be considered f*or review.* **All papers are to be submitted by electronic mail to: *gcsrcongress@ipeindia.org***

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The conference will be held in the City of Hyderabad, India at Institute of Public Enterprise. The program will be divided into technical sessions. Each session shall be chaired by an expert from academia/ industry. Each author will be given 10 minutes to present which will be followed by discussion for about five minutes.

Important Dates

15th November, 2017	:	Last date for submission of full papers
30th November, 2017	:	Confirmation of paper acceptance
20th December, 2017	:	Last date for registration & submission of power point presentation
15th January, 2018	:	Communication of final schedule
1st - 2nd February, 2018	:	Conference

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