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Contributions to Indian Social Science

Special Issue on Inclusive Development: Perspectives and Policies

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India's Development in Post-reform Period: Pathways for Inclusiveness

R. Radhakrishna*

The present pattern of development comprising high growth, slow expansion of productive employment and worsening inequalities is not inclusive and may lead to social discord in the long term. This may ultimately act as a barrier to high growth. The institutional development discussed in the paper suggests a pathway to inclusive growth. Conscious efforts should be made to eliminate barriers to inclusive growth, and macro-economic policies should be aligned with inclusive growth. It is essential to recognise that inclusive growth reduces poverty in its multiple dimensions and many policies that are effective in reducing poverty also increase growth.

Keywords: Macroeconomic policies, Inclusive growth, Growth and well-being, Pro-poor institutions

It is my great privilege to address the learned gathering at the 18th Annual Conference of the Indian Association of Social Science Institutes (IASSI). The association is unique in terms of its spread cutting across all disciplines in social sciences. It has been making a significant contribution to interdisciplinary research and its dissemination. In my address, I will deal with some aspects of the performance of the Indian economy in the post reform period covering growth, employment and pathways towards inclusive growth.

I. GROWTH IN THE POST REFORM PERIOD

In the wake of unsustainable levels of fiscal and current account deficits, high inflation, low foreign exchange reserves and the crisis in balance of payments in 1991, India initiated a wide range of economic reforms to facilitate a shift from state-led to market driven growth. These reforms provided enough space for the development of the private sector by removing controls on industry, privatizing public enterprises,
relaxing import and export restrictions and loosening current and capital account restrictions. The reforms were also extended to the foreign trade and banking sectors. These reforms were meant to encourage competition in the economy.

As a result, the GDP growth rate increased to 6.1 per cent per annum between 1993/94 and 2004/05 and to a spectacular growth rate of 9.5 per cent per annum during the next three consecutive years i.e. 2005/06 to 2007/08. A surge in savings and high investment supported by easy liquidity and the favourable situation in the world economy put the Indian economy on a high growth trajectory. India witnessed a spurt in exports and a substantial inflow of Foreign Direct Investment (FDI). This high growth had also resulted in increased tax revenue. This enabled both the Centre and State Governments to step up public investments in infrastructure and other expenditure on social sectors. However, the high growth witnessed during these years could not be sustained in subsequent years. India’s annual growth rate slipped to 3.9 per cent in 2008/09 due to the global financial crisis but recovered soon by 2009/10, witnessing an average annual growth rate of 9 per cent during 2009/10-2010/11. The recovery was attributable to the implementation of counter cyclical macroeconomic policies. The annual growth rate dropped to 6.7 per cent in 2011/12 and averaged 4.7 per cent in 2012/13 and 2013/14. During this period, the Indian economy experienced fiscal and current account deficits and inflation. Due to the fall in World oil prices, the current account deficit was cut, the fiscal deficit was moderate, inflation was under control and the growth rate was revived to an average level of 7.5 per cent during 2014/15-2016/17. What is disquieting is the deceleration in the growth rate over the past six quarters, which had dropped to 5.7 per cent in the first quarter of 2017. It is argued by the supporters of the government that the recent slowdown of growth could be attributed to supply side bottlenecks as well as sluggish investment growth. The recent slowdown of GDP growth is considered transitory and that growth will pick up soon.

India’s potential growth as estimated by Rangarajan and Srivastava (2017) would be about 8 per cent per annum during 2014/15 to 2029/30. However, the actual growth will be less than the potential growth and vulnerable to periodic economic, financial and external shocks. Moreover, the present pattern of growth is associated with a widening of inter-state, rural-urban and intra-urban inequalities, a slow rate of reduction of malnutrition and slow expansion of employment (Radhakrishna et al., 2013; Radhakrishna, 2016).

In a perceptive paper, Deepak Nayyar (2017) has argued that structural constraints on growth have been operating over the past six years, “crisis in agriculture runs deep, India’s share in industrial output and manufactured exports in the World economy has steadily declined. The beginning of de-industrialisation is discernible”. The share of agriculture in GDP fell much faster than its share in workforce and the inter-sectoral differential in labour productivity widened.
Agriculture has become less profitable due to increasing costs of production, which is not compensated adequately by the prices received by the farmers. The farming community has become vulnerable to production shocks, low and fluctuating farm prices, and increasing expenditure on health and education. The rainfall pattern has become more erratic and has increased production risks. These factors have pushed the small and marginal farmers into a debt trap. The stagnation of livelihoods, growing debt burden, low market margins and frequent occurrence of natural calamities have resulted in prolonged distress among the small and marginal farmers. Due to various structural barriers, the small and tenant farmers have not been able to participate in and gain from the modern supply chains, including value addition opportunities. These factors underlie the widespread agrarian crisis causing rural distress. It should be recognised that if these structural problems persist, the overall high growth cannot be sustained over a longer period since it may widen inequality as well and result in a demand constraint due to the shrinkage of the home market.

1. Inter-state Variations in Growth

All states had a higher level of per capita GSDP in 2014/15 over 2004/05 and in 2004/05 over 1993/94 (Table 1, Figure 1); and, improvement was more between 2004/05 and 2014/15. There are large inter-state variations in per capita GSDP. Throughout the reform period, the per capita GSDP of Bihar was less than a quarter of that of Maharashtra. Bihar, Uttar Pradesh, Assam, Madhya Pradesh, Odisha, Jharkhand and Jammu & Kashmir were respectively at the bottom of the ranking on per capita GSDP in 2014-15. On the other hand, Maharashtra, Haryana, Tamil Nadu, Uttarakhand, Gujarat and Kerala were at the top of the ranking in 2014-15. It should be noted that Uttarakhand significantly improved its ranking on per capita GSDP from 11 in 1993/94 to 4 in 2014/15 while Punjab slipped from one to eight and Jammu & Kashmir from eight to 14. The ranking of the other states remained more or less unchanged.

![Figure 1](image_url)

GSDP Per capita Across Major States (Rs.000)
Inter-state disparities became accentuated in the post-reform period (Figure 2). The weighted Coefficient of Variation (CV) of per capita GSDP increased from 40 percent in 1993/94 to 51 per cent in 2014/15. Notably, in the three high growth years (i.e. 2005/06 to 2007/08), the inter-state income disparities worsened as revealed by the CV. Since 2007/08, the CV increased at a slower rate. This could be due to acceleration in the growth rate of some of the economically weaker states such as Bihar, Jharkhand, Chhattisgarh and Madhya Pradesh whose annual per capita GSDP growth rate during 2004/05 to 2013/14 accelerated to 6.4-8.4 per cent from 1.8-3.3 per cent during 1993/94 to 2004/05 (Table 1). It is noteworthy that all these states experienced a lower growth rate of per capita GSDP than that of all-India during 1993/94 to 2004/05, but could overtake it during 2004/05 to 2014/15, except Jharkhand whose growth rate moved close to that of All India. Nevertheless, the relative position of the economically weaker states on per capita GSDP remained the same because of their low base at the beginning of the reform period. Inclusive growth necessitates sustaining high growth among these economically weaker states as well as accelerating the growth in Uttar Pradesh.

Inter-state inequality varied across the three sources of income–agriculture, industry and services (Figure 2). Income originating from industry contributed the most to inter-state income inequality while the contribution of agriculture was the lowest. Income originating from services contributed the most to the rising inequality of per capita GSDP.

Considering the entire 1993/94 to 2014/15 period, it is evident that the more developed states of Tamil Nadu, Gujarat Haryana, Kerala and Maharashtra benefited the most from the economic reforms (Table 1). These states were endowed with better infrastructure both in physical and social terms. There was also a significant flow of
private and foreign investment to these states. The Special Category States of Himachal Pradesh and Uttarakhand also progressed well. The economically weaker states Bihar, Uttar Pradesh, Madhya Pradesh, Odisha, Assam and Jharkhand remained at the bottom on the ranking of states on per capita GSDP throughout this period although some of them witnessed higher growth during later part of the economic reform period. These states lacked proper infrastructure, skilled manpower, efficient public delivery systems and proper institutions which might have acted as barriers in attracting private and foreign investment. Though the central transfers to these states through devolution as recommended by the Finance Commissions were significant, their per capita Plan expenditure was low because of their weak own resource position.

2. Growth and Well-being

The accelerated growth in the economic reform period had a significant positive impact on well-being (Radhakrishna et al., 2013). The growth rate of monthly per person expenditure (MPCE) both in rural and urban areas almost doubled during 1983-1997 and 1993/94-2011/12 (Figure 3). All expenditure groups in rural and urban areas gained in the post-reform period. However, the gain was modest for the bottom expenditure group and, in comparison, was very striking for the top expenditure group. While the improvement in the growth rate was 0.10 percentage point per annum for the rural bottom expenditure group and 0.35 percentage points for the urban bottom expenditure group, it was as high as 0.96 percentage point for the rural top expenditure group and 1.32 percentage points for the urban top expenditure group. It is evident that the growth in the post-reform period was pro-rich, and rural top and urban middle and top groups gained the most.

![Figure 3](image)

**Note:** The growth rates are derived from weighted regression estimated with square root of the number of households canvassed in NSS rounds as weights. While estimating the trend equation, an intercept dummy has been included to distinguish between annual and quinquennial NSS rounds. URP: Uniform Reference Period; MRP: Mixed Reference Period. Growth rates are significant at 1% level.

**Source:** Radhakrishna et al. 2013
3. **Growth and Poverty**

The incidence of poverty declined slowly by 0.74 percentage points per annum and the absolute number of poor declined merely by one million during 1983-1993/94. It declined significantly in the post-reform period of 1993/94 to 2011/12 by 2.18 percentage points per annum and by 38 million poor during the entire period, leaving an unacceptably high number of 270 million poor (217 million in rural and 53 million in urban areas). High growth is only a necessary condition for the elimination of the large mass of poor in a short to intermediate period but it should be pro-poor. It is also important to recognise that the poor are concentrated in rural areas. Throughout the period, 80 per cent of the poor continued to be in rural India. Clearly, the performance of India in the reduction of poverty essentially depends on the performance of rural areas in poverty alleviation, which in turn depends on total factor productivity in agriculture, expansion of the rural non-farm sector and improvement of rural wages.

4. **Growth and States Performance in Poverty Reduction**

There are substantial inter-state variations in the performance on poverty reduction (Tables 2 & 3). Among major States, Kerala, Himachal Pradesh, Andhra Pradesh, Tamil Nadu, Punjab, Haryana, and Uttarakhand performed better. They also had a lower incidence of poverty in 2011/12. States with the highest incidence of poverty in 1993/94 viz., Bihar, Chhattisgarh, Madhya Pradesh, Jharkhand, Uttar Pradesh and Assam had witnessed the slowest reduction of poverty during the post-reform period. It is evident that poverty was increasingly concentrated in Jharkhand, Bihar, Odisha, Chhattisgarh, Madhya Pradesh and Uttar Pradesh. While 41 percent of India’s poor (rural and urban) lived in these economically weaker states in 1993/94, this proportion increased to 57 per cent in 2011/12. Their share among the poor was more than their share in the population (39 percent in 2011/12). The economically weaker states viz. Assam and Uttar Pradesh have to confront low growth and low reduction of poverty in the future. Though the other economically weaker states Jharkhand, Bihar, Chhattisgarh and Madhya Pradesh witnessed higher growth during 2004/05 to 2014/15, the growth does not seem to be pro-poor. For making a decisive impact on poverty, these states have to sustain high inclusive growth, which necessitates putting in place proper pro-poor institutions and improving the efficiency of public delivery systems. Provision of quality infrastructure, democratic decentralisation and creation of appropriate institutions and organisations are essential for inclusive growth. These are lacking in the economically weaker states. Much of the responsibility lies with the State Government. Infrastructure development calls for substantial financial resources and governance to ensure that the resources are well spent. These states have a higher revenue deficit as a percentage of GSDP and depend on central transfers and market borrowings. Their weaker economic position constrains their borrowing from the market. For sustaining
higher growth even at the national level, the Centre has to play a major role for the development of poorer states by allocating more financial resources from the Central pool. As well as by expanding infrastructure in the areas which fall in the domain of the Central Government such as national highways, railways, telecommunications, airports and major ports (Ahluwalia, 2000). In Gujarat, though the growth was very high during 1993/94 to 2011/12, its performance in poverty reduction was bad and the level of poverty was not commensurate with its level of per capita GSDP. Clearly, in this state, growth did not trickle down to the poor.

A simulation exercise carried out by Radhakrishna et al. (2013) by assuming that the MPCE of States grows at a uniform all-India rate across and between rural and urban areas with inequalities and population distribution at the 1993/94 level showing a decline of incidence of poverty by 19 percentage points between 1993/94 and 2009/10, instead of the observed decline by 14 percentage points. The exercise showed that poorer states gained the most in poverty reduction while higher income states lost. The reduction in the incidence of poverty due to an additional rupee would be higher in a poorer state than in developed states. This could be attributed to lower expenditure inequalities in poorer states. It clearly demonstrates that regional balance with accelerated growth would hasten the process of poverty reduction.

II. LABOUR MARKET TRENDS AND CONCERNS

According to an estimate of the World Bank, India’s population in the age group 15-59 years is expected to increase from 757 million in 2010 to 972 million in 2030. It will be a challenge to provide skills to persons in this age group and create decent employment opportunities for those seeking employment. This is the most desirable route to enhancing the well-being of society. World happiness surveys show that unemployment is a major cause of unhappiness. It is claimed that India has the advantage of the ‘demographic dividend’, meaning that a relatively large percentage of the population are in the working age group. If adequate employment opportunities are created, and if the working age group becomes healthy and well equipped with knowledge and skills, India can then reap the benefits of the demographic dividend. In East Asia, the demographic dividend accounted for about one third of their per capita growth rates in the past 30 years (Bloom and Williamson, 1998). It should be recognised that in India, low levels of education and high levels of chronic energy deficiency are the basic factors underlying their low productivity. These are the obstacles for deriving benefits from the demographic dividend.

Analysing the pattern of employment prior to the end of the 1990s, the Second National Labour Commission recognised that: i) overall employment growth had decelerated. ii) Open unemployment had emerged as a problem. iii) Employment expansion in the organised sector had slowed down, accounting for 8.3 per cent at
The quality of the work force has continued to be a problem with only 44 per cent of the labour force in 1990/2000 being literate and only 5 percent equipped with the required skill sets to contribute productively to the economy (MACROSCAN,2002). These challenges persist even now.

Coming to the more recent period, the growth rate of GSDP accelerated to 7.1 per cent per annum between 1993/94 and 2013/14, but the overall employment increased at a low rate of 1.4 per cent per annum between 1993/94 and 2011/12. What is more disquieting is the slower expansion of employment after 2000; overall employment increased by a mere 14.7 million between 2004/05 and 2011/12 as compared to an increase of 59 million between 1999/2000 and 2004/05 (Thomas, 2015). The slowdown in employment in the later period is mainly due to a fall in agricultural employment by 33.3 million between 2004/05 and 2011/12. Employment in the organised sector, which is considered qualitatively better, increased very slowly from 2.65 million in 2005 to 2.83 million in 2010, accounting for about 6 per cent of the total workforce (UPSS). The contribution of the public sector to the growth of organised employment has been very low. Overall unemployment worsened from 3.8 per cent to 5 per cent in the same period.

The slowdown in employment expansion was attributed to the withdrawal of female persons in the working age group 15-64 years from the labour force which decreased to 129 million in 2011/12 from 148 million in 2004/05, though their population increased from 340 million in 2004/05 to 403 million in 2011/12 (Sorsa et al., 2015). Had the labour participation rate remained at the level of 2004/05, the addition to the female labour force would have been 48 million instead of a decline of 19 million. It is claimed that the withdrawal of women from the labour force was because they had gone in for education. However, this cannot account for the fall in labour force participation rate since female persons pursuing education increased by only 19 million (from 23 to 42 million) whereas female persons neither in the labour force nor in education increased by 64 million (from 229 million in 2011/12 to 165 million in 2004/05). The female participation rate in India is the lowest among the BRICS countries, less than half of that in China. Factors such as household income, cultural norms, and gender gap in wages play an important role in women’s participation in the labour market (ibid). There is overwhelming literature showing that female employment and earnings would have a positive impact on their well-being as well as that of children. This calls for raising education levels, training for skills, and safety of women workers and creation of jobs suitable for women allowing greater compatibility of female employment with domestic duties.

The decline in overall employment during 2004/05 and 2011/12 was associated with a decline of 33 million workers in the agriculture sector as well as a moderate
increase in the share of casual workers in the total agricultural work force. Female workforce in agriculture has also decreased. The rate of decrease of female workers has been higher in Bihar, Haryana, Assam, Karnataka, Gujarat and Kerala. It is argued that women had withdrawn from agriculture and were attending to domestic duties in their own households due to an improvement in the availability of income-earning opportunities for male members of the family (Thomas, 2015) and perhaps to avoid heavy manual work in agriculture. There is a degree of segmentation of agricultural labour with female workers mostly engaged in agricultural operations, which are repetitive and strenuous. Even with the progressive withdrawal of female workers, there has been feminisation of agriculture due to the shift of male labour from farm to non-farm work. Rao (2016) suggests “strong policy initiatives, right from the national level, for dealing with public issues such as strengthening land inheritance rights for women, endowment of property rights on houses built with public assistance… and sensitising the agricultural support systems, including credit institutions, to the needs of women farmers and, in particular, inducting women in large numbers in the agricultural extension system to assist women farmers.”

There has been a marked imbalance in the sectoral shares of employment and GDP. In 2011/12, though the share of agriculture in employment was 47.5 per cent it accounted for a low share of 14 per cent of GDP. On the other hand, though the service sector accounted for 59 per cent of GDP, its share in employment was low at 28 per cent. In the case of industry, there was some balance between its share in employment (24.5 per cent) and in GDP (27.0 per cent). The declining share of agriculture in GDP is on the expected line, but the slow decline of its share in employment is a cause for concern. It is a fact that India has failed to shift labour away from an overcrowded agricultural sector to non-agricultural sectors. The growth of the manufacturing sector, which is more labour intensive, has been lagging behind the service sector, which is also a cause for concern.

The non-farm sector is becoming an important source of livelihood in rural areas. Between 1999/2000 and 2011/12, there was a considerable increase in rural non-farm employment. In 1983, only 19 per cent of rural workers were engaged in non-agricultural activities. This had increased to about 36 per cent in 2011/12. Since agriculture is overcrowded, such a shift of workers from agriculture to the non-farm sector is a welcome trend. This shift has taken place among the economically weaker sections (Saha and Verick, 2016). There has been an increase in the demand for specific skills in non-farm activities as well as in commercial agriculture and allied agriculture. These are positive trends.

These changes have brought about perceptible changes in the employment patterns in rural areas. While the percentage of self-employed in agriculture has risen,
in contrast, increasing casualisation of the workforce has taken place in the non-farm sector. Overall, self-employed workers still account for 60 per cent of the rural workforce. The proportion of households among the agricultural households having non-agriculture as a principal source of income, particularly from wage employment has increased considerably between 2002/03 to 2012/13 (NSS0’s Situation Assessment Agricultural Households Surveys). This has been more prominent among poorer agricultural households (Saha and Verick, 2016). It is claimed that the farm household’s dependency on rural non-farm self-employment has risen to secure better livelihood security (Binswanger-Mkhize, 2012).

The average wage rates of rural casual workers accelerated to 3.9 per cent per annum between 1993/94 and 2011/12 as compared to 2.5 percent between 1983 and 1993/04 (Papola, 2014). Rural wages rose faster than urban wages and agricultural wages grew at a higher rate than non-agricultural wages in the post-reform period (ibid). In rural areas, wages in non-agricultural activities were consistently higher than in agricultural activities throughout the period; however, the gap has narrowed down. Despite the higher growth rate of rural wages, urban wages were higher in 2011/12. The improvements in agricultural wages contributed to the reduction in poverty among agricultural labour households (Radhakrishna and Raju, 2015).

Informal workers still constitute more than 90 per cent of the total workforce and the share of the informal sector accounted for about half of GVA. It is a fact that in India, high growth in the post-liberalisation period has been accompanied by increased informalisation and weakened unionisation. A sizeable portion of the workforce is engaged in subsistence production. This segment is at the bottom of the production ladder, providing cheap labour without any social security. Economically and socially deprived sections of society are mostly employed as casual labour. These are some of the worrisome features of the labour market.

III. TOWARDS INCLUSIVE GROWTH

India would be able to continue on a high growth trajectory in the medium term but faces periodic shocks and has to rely on countercyclical policies for macroeconomic stability. However, the challenge is to provide decent employment to absorb the persons entering the labour market as well as to reduce the existing stock of under-employed persons. The challenge is also to moderate the increasing economic inequality including inter-state inequality.

What should be done to accelerate the process of poverty reduction in its multiple dimensions? While growth is necessary for poverty reduction, it may not trickle down to the bottom groups unless some pre-conditions are met. There is a need to go beyond the establishment of social safety nets to protect the vulnerable groups
from risks and focus on providing decent employment and raising the incomes of the poor through explicit policy interventions. The experience, largely, is that countries that are most successful in reducing poverty are the ones that have combined rapid growth with equity. In such a strategy, public policies influence both the process of income generation as well as the distribution of income. It needs to be emphasised, however, that the importance of growth cannot be ignored. A strategy that focuses primarily on reducing inequality through redistribution of income but ignores growth is unlikely to lead to a sustained process of poverty reduction. It may undermine the incentive system, and impose serious constraints in finding the resources necessary to finance the targeted anti-poverty programmes in the absence of growth. Therefore, growth needs to be rapid enough to significantly improve the absolute conditions of the poor. In addition, to have the maximum impact of the growth, there should also be an improvement in the relative position of the poor in incremental income and it should be more than their share in the average income. The improvements in the income share of the poor are bound to induce better and sustainable growth by generating adequate demand and incentives for more investment. Thus, multiple strategies have to be evolved to address the constraints on growth, better targeting of safety net programmes as well as augmenting the human resources of the poor. The latter is critical in enabling the poor to contribute to rapid growth and for withdrawing the safety nets gradually.

Some of the developing countries in Asia could achieve speedy reduction in income poverty and multiple deprivations in a short span of time. Rao (1996) argues that, the initial conditions for growth and poverty reduction in East Asian countries such as China and South Korea were more favourable for rapid growth and speedy poverty reduction than in India. Implementation of radical land reforms, mobilisation of adequate resources by the state for investment in physical infrastructure as well as human development were common elements in their efforts to achieve poverty reduction, though their ideologies and socio political systems differed (Rao, 1996 and 1998). In China, in addition to radical land and other structural reforms, people’s capabilities were significantly improved through expanded health and education facilities, coupled with the development orientation of the ruling elite and the strength of the public institutions (Malik, 2012). Its focus on small and medium enterprises in its development policy played an important role in growth as well as employment (Pasha et al., 2003).

Though many components of reforms such as radical land reforms, de-bureaucratisation, and decentralisation of development figured in Indian development Plans, they could not make much headway because of resistance from pressure groups (Rao, 1998). Had radical land reforms been implemented soon after independence and
required investments made in human development and infrastructure, India could have achieved sharp and sustained reduction in poverty. Though many radical reforms are not politically feasible in India, there are some positive developments due to the electoral process such as implementation of nation-wide rights based programmes such as MGNREGA, Food Security, Right to Education etc., and income improvement programmes such as NRLM. If these are properly implemented, marginalised groups may emerge as pressure groups and this may lead to a socially just economy. What seems to be feasible in India is an incremental approach to improve the living conditions of the vulnerable groups. This should be complemented by a labour intensive process of development and needed institution building.

Since a large number of the poor depend on agriculture for their livelihood, achieving the goal of poverty reduction as well as inclusive growth depends on the improvement of agricultural productivity and processes that facilitate the migration of agricultural workers to expand and diversify the rural non-farm sector. These will contribute to the diversification of employment opportunities as well as household income. This has been the process of transition towards an industrial economy in many East and South Asian countries, which experienced a sharp reduction in poverty (Barker and Dawe, 2001).

Institution building and technological innovations are necessary to promote broad-based agricultural growth. Starting at the ground level, there is a need to develop collective institutions such as SHG federations to bring together small and marginal farmers particularly tenant farmers to act collectively. The experience of the Vegetable and Fruit Promotion Council Keralam (VFPCK), Kerala in this regard is noteworthy. Under this initiative, about two lakh marginal and tenant farmers have been organised into ten thousand self-help groups, and their collective strength has been built through the formation of federations and business networks consisting of about three hundred farmers’ markets, so that they could deal with the markets, banks, and technology providers successfully. This has improved the small farmers’ access to development agencies and strengthened their bargaining power in local transactions. Through this collective platform, these farmers could earn significantly higher prices. Its “Master Farmers” approach has resulted in capacity building of farmers, which is crucial for an endogenous development process. This has remarkably boosted the social and entrepreneurial capital of small farmers. The successful case of SHG farmers of Sri Dharmasthala Rural Development Trust is worth replication. Another option could be to organise the small and marginal farmers into producer cooperatives to tap the advantages of scale. In the Indian context, though there have been institutions like farmers’ producer companies and joint liability groups of small farmers and tenants, the progress in their expansion has been very tardy. Special efforts need to be made
to accelerate the growth of these institutions. Institutional arrangements have to be evolved to involve professionals in the preparation of project proposals for the establishment of Farmer Producer Companies besides providing handholding support during the gestation period. Another category of institutions relating to governance is PRIs, which can be entrusted with the task of local level planning and implementation of programmes for infrastructure as is being done in Kerala. Collective institutions and PRIs could motivate the poor farmers to shed their passivity and to play an active role in the local level institutions of governance and, in particular, participate in policy decisions. State level apex bodies need to be created to promote and nurture Farmers SHG Federations, Farmers Markets and Producer Companies; and institutions for managing the risks. Further, it is necessary to extend technical knowledge and influence public policy for the well-being of the farming community. The most important issues related to the farming communities are reducing regional inequalities, maintaining livelihood security, and improving the well-being of women and children. In addition to these, issues such as the educational and health status of farmers should also be addressed.

Small enterprise clusters have emerged as vibrant hubs of economic activities in East and Southeast Asian Countries. It is necessary to learn about the role of the state, local institutions and industrial organisations in the formation of some successful industrial clusters as in Tamil Nadu, India such as the Tiruppur Knitwear Cluster. With necessary policy and infrastructure support, they can emerge as engines of industrial growth in peripheral areas. The education levels of farm workers are far behind their urban counterparts. This restricts decent employment opportunities to the rural workers. Migrant labourers from rural areas are normally employed as casual workers in the lower rungs of the informal sector. Education and skill development are essential to facilitate the migration to more productive and regular off-farm employment for the rural workforce. Since education gives the highest returns to both rural economic growth and poverty alleviation, it should be considered as a public good and should be accorded priority in public investment. It should be noted that private investment cannot be a substitute for public investment, especially in strengthening access to public goods.

Poverty alleviation programmes are top down in nature and the poor are normally passive in the implementation of these programmes. They are not very effective since they do not take into consideration the local felt needs of the people. For effective poverty alleviation, social mobilisation and empowerment of the poor is the first basic step. This has been successfully done through the formation of SHGs, particularly those of poor women. The earlier assumption about poverty alleviation that the poor could be assisted to enable them to raise their income, which in turn would address all
the multiple deprivations at one go has been proved wrong. Raising income levels and sustaining them is a slow process. Hence, the basic deprivations of the poor need to be addressed directly through public support systems. Some of the other important steps are: improving the capabilities by providing skill training to the poor; use of new science and technology in the process of poverty reduction as is being done in MGNREGA in Andhra Pradesh; make poverty alleviation programmes development oriented as is being done by Bharatiya Agro Industries Foundation (BAIF); intensify social auditing and monitoring the use of poverty funds; give more powers to local PRIs as in Kerala and make development administration accountable to the public. Above all, political commitment to the cause of inclusive growth assumes overwhelming importance.

Economically weaker states such as Bihar, Jharkhand, Assam, Odisha, Chhattisgarh, Madhya Pradesh and Uttar Pradesh with a high incidence of poverty experienced slow reduction in poverty. Although, Bihar, Jharkhand, and Chhattisgarh had faster growth of per capita GSDP in the later part of the economic reform period, this had not made much impact on poverty. For faster reduction of poverty even at the national level, it is essential that these states should experience pro-poor growth for a longer period. Provision of quality infrastructure, democratic decentralisation and creation of appropriate institutions and organisations more so of the poor are essential for inclusive growth in these states.

To conclude, the present pattern of development comprising high growth, slow expansion of productive employment and worsening inequalities is not inclusive and may lead to social discord in the long term. This may ultimately act as a barrier to high growth. The institutional development discussed above suggests a pathway to inclusive growth. Conscious efforts should be made to eliminate barriers to inclusive growth, and macro-economic policies should be aligned with inclusive growth. It is essential to recognise that inclusive growth reduces poverty in its multiple dimensions and many policies that are effective in reducing poverty also increase growth. It is also essential to recognise that the Indian economy should sustain productivity led high growth in the long term to compete in the globalizing world.

Notes
1. The growth rates presented in this section were based on GDP at factor cost with base year 2004/05(old series) for the period up to 2013/14 and for the subsequent period based on GDP at market prices with base 2011/12 (new series).
2. The Annual growth of Gross Fixed Capital Formation (GFCF) dropped from 4.9 per cent in 2014-15 to 3.9 per cent in 2015-16 and further to 0.4 per cent in 2016-17 (OECD, 2017).
3. Their estimated potential growth does not consider any improvement in the sectoral productivity of capital and is mainly driven by the assumed growth rate of savings. The output capital ratios mostly represent the year 2014/15 when the economy’s growth did not fully recover to the high
growth path. Moreover, annual estimates of output capital ratios are susceptible to year-to-year changes in capacity utilisation.

4. The decomposition of Coefficient of Variation of GSDP into sectors by taking into consideration of the covariance terms has shown that industry contributed the most to inter-state inequality.

5. Ghose (2016) observes that government policies systematically discriminated in favor of skill intensive services against manufacturing by taxing services very lightly compared to manufacturing. Also, the rules for the entry of FDI have been less restrictive for services.

6. This section draws from Radhakrishna (2015).

7. Fan et al. (2000) reports “In 1978, 260 million residents in rural China or 33 percent of the total rural population, lived under the poverty line and had inadequate food and income to maintain a healthy and productive life. However, this changed dramatically after the rural reforms began. Immediately after the reform, farmers’ income soared. The income gains were shared widely enough to cut the number of rural poor, hence, the rate of rural poverty, by more than half. By 1984, only 11 percent of population lived below the poverty line.” Clearly, in a span of 6 years China could achieve what India could not achieve in two decades in the post reform period. However, though income inequality increased moderately in this period, it increased rapidly in the subsequent period and has become a cause of concern for Chinese political economy. Economic growth also could not reach people living in very remote areas. Recognizing it, China started nation-wide poverty alleviation in 1986 to improve the basic production conditions and basic infrastructure in poor areas as well as human quality in poor areas by comprehensive skill training.


References


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## APPENDIX

### Table 1
GSDP Per Capita at 2004/05 Prices and its Annual Growth Rates across Major Indian States

<table>
<thead>
<tr>
<th>State</th>
<th>GSDP per capita (Rs)</th>
<th>Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>17631</td>
<td>29117</td>
</tr>
<tr>
<td>Assam</td>
<td>15629</td>
<td>19154</td>
</tr>
<tr>
<td>Bihar</td>
<td>6248</td>
<td>8864</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>17121</td>
<td>21851</td>
</tr>
<tr>
<td>Gujarat</td>
<td>20694</td>
<td>38163</td>
</tr>
<tr>
<td>Haryana</td>
<td>24849</td>
<td>42670</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>21126</td>
<td>38162</td>
</tr>
<tr>
<td>Jammu &amp; Kashmir</td>
<td>19014</td>
<td>25706</td>
</tr>
<tr>
<td>Jharkhand</td>
<td>15493</td>
<td>21050</td>
</tr>
<tr>
<td>Karnataka</td>
<td>17799</td>
<td>30359</td>
</tr>
<tr>
<td>Kerala</td>
<td>20941</td>
<td>36464</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>13797</td>
<td>17643</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>26110</td>
<td>40884</td>
</tr>
<tr>
<td>Odisha</td>
<td>12968</td>
<td>20409</td>
</tr>
<tr>
<td>Punjab</td>
<td>27213</td>
<td>38149</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>13202</td>
<td>21297</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>19852</td>
<td>34168</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>11575</td>
<td>14789</td>
</tr>
<tr>
<td>Uttarakhand</td>
<td>17218</td>
<td>27765</td>
</tr>
<tr>
<td>West Bengal</td>
<td>14204</td>
<td>25044</td>
</tr>
<tr>
<td>All India</td>
<td>16688</td>
<td>27536</td>
</tr>
</tbody>
</table>

**Note:** Annual growth rates are computed from estimated semi-log trend equation. * Data for 2013/14, ^ Growth rates are up to the year 2013/14. Andhra Pradesh refers to the composite state.

**Source:** R.Radhakrishna, 2016
### Table 2
Classification of States on Performance in Poverty Reduction between 1993/94 and 2011/12 and Levels of Poverty in 1993/94 and 2011/12

<table>
<thead>
<tr>
<th>Best Performing States</th>
<th>Moderate Performing States</th>
<th>Worst Performing States</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State</strong></td>
<td>1993/94</td>
<td>2011/12</td>
</tr>
<tr>
<td>Goa</td>
<td>20.7</td>
<td>5.1</td>
</tr>
<tr>
<td>Kerala</td>
<td>31.3</td>
<td>7.1</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>34.7</td>
<td>8.1</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>44.6</td>
<td>9.2</td>
</tr>
<tr>
<td>Sikkim</td>
<td>31.8</td>
<td>8.2</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>44.5</td>
<td>11.3</td>
</tr>
<tr>
<td>Punjab</td>
<td>22.4</td>
<td>8.3</td>
</tr>
<tr>
<td>Haryana</td>
<td>35.9</td>
<td>11.2</td>
</tr>
<tr>
<td>Meghalaya</td>
<td>35.2</td>
<td>11.9</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>32.1</td>
<td>11.3</td>
</tr>
<tr>
<td>All India</td>
<td>45.1</td>
<td>21.9</td>
</tr>
</tbody>
</table>

**Note:** Performance of the States in poverty reduction is arranged from the best to the lowest. Figures are the percentage of poor in respective states/UTs; Performance as suggested by Kakwani (1993) is measured by computing Performance Index: \( \frac{\text{Ln} (P_{1993-94} - P_{2011-12}) - \text{Ln} (P_{2011-12} - P_{\text{min}})}{\text{Ln} (P_{\text{max}} - P_{\text{min}})} \). The maximum and minimum values of poverty considered are: 66 and 5 percent respectively.

**Source:** Radhakrishna (2015)

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### Table 3
Classification of States by Growth and Performance in poverty reduction (1993/94 to 2011/12)

<table>
<thead>
<tr>
<th>GSDP Per Capita Growth rate (1993/94 to 2011/12)</th>
<th>Performance in poverty reduction (1993/94 to 2011/12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher</td>
<td>Better: Haryana, Himachal Pradesh, Kerala, Uttarakhand</td>
</tr>
<tr>
<td>Moderate</td>
<td>Better: Andhra Pradesh, Tamil Nadu</td>
</tr>
<tr>
<td>Low</td>
<td>Better: Punjab</td>
</tr>
</tbody>
</table>

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22 IASSI Quarterly: Contributions to Indian Social Science
The paper analyses the worrying state of higher education in general and social sciences in particular. The contribution of social sciences is sought to be measured in commercial terms. Over the years social sciences have bent to be in tune with the dominant interests. The tendency has been more towards system rationalization than pursuit of knowledge with the public or social purpose. An attempt is made here with reference to Economics to show how these tendencies have evolved historically by sacrificing ethics and values in the name of objective rational science. These tendencies have become more exposed. There has been declining public support more so under the neoliberal regime. And much more troubling is the declining esteem towards social sciences. Financial support for research has become more motivated by specific, short-term and often commercial concerns. The role of social scientists as public intellectuals becomes essential to learn from the public as much as sharing knowledge with the public. The enhancement of public value of social sciences lies in the ability in interacting with the public that would have reason to value social science research. The power of social science to speak the truth to power to restore a due place for social science research in society is contingent upon the reach of social science to the public.

**Keywords:** Social science research, Ethics and values, Neo-liberalism, Social good, Normative public value

I. THE INSPIRATION

I am extremely thankful to the Chairman of IASSI and the President of the 18th Annual Conference for inviting me to deliver the Tarlok Singh Memorial Lecture. I accepted it in humility, fully aware of my limitations in measuring to the task. I had no personal contact with Tarlok Singh but came to know much about him from his

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Based on Tarlok Singh Memorial Lecture delivered at the Eighteenth Annual Conference of the Indian Association of Social Science Institutions held at Acharya Nagarjuna University, Guntur, December 2017.
writings and that of his contemporaries. Tarlok Singh had a long association with
the Planning Commission right from its inception, first as its Secretary and later as a
Member. During those early years of myriad challenges, the functioning of Planning
Commission was looked upon with as much expectation as that of Lok Sabha. In those
days, Tarlok Singh’s commitment and dedication to the task was so deep and familiar,
Planning Commission, it appears, was called by the nickname ‘Tarlok Sabha’.

He belonged to a generation of civil servants and scholars with deep involvement
innation building based on unwavering faith in moral and ethical values. He was
a part of a generation who had a vision of India evolving as an ‘integrated society’
economically and socially based on egalitarian principles enshrined in the Constitution
as Directive Principles of State Policy, the translation of which into reality was seen as the
task of the Planning Commission. Tarlok Singh visualized this internal transformation
to happen very much in harmony with external relations as well. He observed: “For
India, development along humane lines and with the moral consent of all people, calls,
externally, for the consistent pursuit of two aims: peaceful reconciliation of conflicts
between countries, including her own, and a genuine partnership in development
between the more and the less developed countries.

“In a world in which nations respond all too easily to their own narrow interests,
India can hope to give her best to her own people and to the human race only by
steadily enlarging cultural and economic cooperation with all other nations and
especially with her neighbors in and around the subcontinent” (Singh 1974).

Tarlok Singh was closely associated with Gunnar Myrdal, a brilliant intellectual
who broke the disciplinary closures in the approach to and analysis of social issues,
emphasized and infused ethical values as the basis for social science theorizing, and
promoted, as much as he practiced, egalitarian principles in governance. Tarlok Singh
was deeply inspired by him. He dedicated one of his books (Singh 1969) to him, and
to another book (Singh 1974) a lengthy foreword was written by Myrdal. When India
launched its planning process, Myrdal had great expectations about it as an initiation
of the country on an egalitarian path. In his autobiographical essay (Myrdal 1984,
p. 156), of what he called as “growing pangs of conscience”, he observed that when
he saw India soon after independence, he was impressed by Nehru’s initiatives in
many fields, “all in the direction of democracy and equalization”. As a part of further
“advances in the egalitarian direction, a set of ‘directive principles’ was added to the
Constitution … The Planning Commission has been instituted in 1950 and was linked
to the directive principles. Nehru as Chairman of the Planning Commission, himself
wrote a brief note stressing the egalitarian purposes of Indian policies” (Ibid).

In his later visits, Myrdal observed that “things had changed and continued
to change in a less encouraging direction”. And so did Tarlok Singh feel, deeply
distressed about the later developments in India. His observations have a much more contemporary ring as to what is witnessed now and hence worth recalling. Referring to the growing alienation of people from the administration with uncertain political and moral authority, so much of what is said lacks true ring. The chasm between the values and premises of the Directive Principles and Fundamental Rights in the Constitution and the working of our political, economic and social institutions in terms of the daily life satisfaction of a large number of people is becoming too wide to be sustained for long…”

“In truth, every idea and every institution which, in the past, has given hope and led to action, is now on test. The challenge is pervasive, making demands, at the same time, on the intellect, on the social purpose, on the leadership in every walk of life and at every level. In its barest form, this is the nature of the crisis upon us. No one can stand aside from it” (Singh 1969, 4-5).

Although it may sound a bit unconventional, I digressed a little more from the theme of the lecture because my theme itself is inspired by ethical values and commitment to the cause of equity and social justice as spelt by the Directive Principles, and the lifelong efforts of Gunnar Myrdal in infusing ethical values in social theory that broke all disciplinary boundaries, in infusing egalitarian principles in governance, and in living a life of public intellectual conveying that social knowledge is for public purpose. Now, first I shall briefly refer to the disturbing state of higher education and social science research in India as discussed by several scholars. There is hardly anything to disagree with several significant suggestions to improve the state of affairs of social science research establishment and the status of social science research. I, however, draw attention to one of the self-critical questions raised: Can social scientists “speak the truth to power?” Are the social sciences constructed with such an objective or speaking for what the powers want? It is here I turn briefly, as an example, to what the mainstream economics has done to itself in the pursuit of its ‘scientific’ knowledge. It is only through coming out with truth, infuse basic values of public purpose in the pursuit of knowledge and speak to public as a little more of public intellectuals, social scientists can ‘speak the truth to power’ and restore the value of social science research as legitimate public good that deserves that 0.1% of the public investment to which claims are laid as means to the recognition of its legitimate to status.

II. NEO-LIBERALISM, HIGHER EDUCATION AND SOCIAL SCIENCE RESEARCH IN INDIA

1. Higher Education under Neo-liberalism

Though the issues that influence social science research have certain specificities, they are not likely to be completely independent of what has been happening to overall
higher education. First, the resource support available to social science research depends substantially on the allocations made to higher education, and other funding sources like different government departments, corporate sources, international agencies, and trusts still constitute much less share. Second, the human resources that are the building blocks of social sciences research depend upon the nature and quality of academic programmes and training in social sciences in the universities and other institutions offering post-graduate and research degrees. In terms of enrolments and number of institutions there has been phenomenal growth. Between 1956 and 2008, the number of universities (of all types) increased from 25 to 431, number of colleges from 700 to 20,677 and number of enrolments from 1 lakh to 116.12 lakhs (Thorat 2008). The access to higher education measured in terms of gross enrolment ratio (GER) in the age group of 18 to 23 increased from 0.7% in 1950-51 to 1.4% in 1960-61 to about 11% in 2006-07, though estimates from NSS and Census data were marginally on the higher side, and overall it was much below the world average but on par with developing countries (Thorat 2008). This was achieved in spite of the reduction in the share allocated to higher education in the education budget in the Eighth (1992-97) and the Ninth (1997-2002) to about 7% to 8%, compared to one-fourth in the Fourth Plan (Tilak 2012).

Very interestingly, apparently, cogent logic was built into the strategy to promote policies to privatise higher education. With launching of neoliberal reforms since early 1990s, an argument was made suggesting that higher education was ‘non-merit good’ that need not be funded by the state, and that expansion of higher education to reach about 30% GER by 2020 would require enormous financial resources which cannot be met by the state and hence the need for private investment, including FDI, in higher education. The Commerce Ministry argued that the higher education sector in India should be ‘freed’ and the country should open its doors to foreign investment, prompting the government of India to approve 100 percent automatic Foreign Direct Investment (FDI) in higher education in April 2000 (Sarker 2015). But the entire argument of resource constraint hardly refers to strategies of high growth, the growing inequalities, the persistent low tax-GDP ratio and the huge potential to raise it, and the promised doubling of overall allocation to education up to and beyond 6% of the GDP. The additional revenue mobilization option in the light of growing potential tax base has been kept as a closed chapter. Instead, corporate heads like Mukesh Ambani, Kumaramangalam and Narayanamurthy head the committees to decide the future of higher in the country! Business and industrial organisations like ASSOCHAM and FICCI have been busy conducting ‘summits’ to explore the potentially profitable opportunities in the business of higher education (Sarker 2015).

But there was some hope when a sudden and significant surge in the allocations under Eleventh Plan (2007-12) was seen but the means adopted were through increasing
opening up of higher education to privatization, and public-private partnerships (PPP) by being part of the General Agreement on Trade in Services (GATS) under WTO (Tilak 2012). The push to privatisation of higher education did work in numbers. Between 2008 and 2015-16, the GER increased from 11% to 24.5%, the number of universities increased from 431 to 799, of which the private universities increased from 28 to 277- a ten-fold increase (and it is still an unfinished agenda)(GoI,2016).

It has been at the cost of institutions of higher education becoming “yet another sector offering investment opportunities for producing and selling a good or service for the global market. Market orientation and profitability are replacing the national consensus and social functions of institutions of higher education” (Verghese 2009 in Sarker2015. There is hardly any concern that opening up of higher education to the market forces would cause severe damage to the very social fabric of the country by sacrificing the objectives of better access, quality, and equity.

There are several saner voices cautioning on the dangers of privatization of higher education. Perhaps the message could not be better than how Nayyar puts it: What are the dangers of privatization of higher education?

He feels, there are clear answers to reflect upon:

- Markets should not decide on academic curricula or research agenda. Teaching and research cannot be simply about use-value and exchange-value,
- The objects of higher education cannot be efficiency and profits.
- Individual conduct gets driven by self-interest, rather than common-interest.

“The ultimate danger lies in the erosion of values and ethics in the university community that could damage the credibility, if not reputation, of universities which play a critical role as guardians in an open society. Indeed, the integrity and the independence of intellectuals in universities, respected by citizens and society, constitute our institutional mechanism of checks and balances in a political democracy” (Nayyar 2007, 33).

The final agenda for privatising higher education is set out in the Draft Twelfth Five-year Plan (2012-17). The Plan might have vanished, but obviously, the agenda stays. A systematic analysis of the agenda by Tilakshows the push for privatization: that “the ‘not-for-profit’ prescription in education sector should be re-examined in a pragmatic manner”, “barriers to private entry are high, which need to be re-examined”, “deserving” private institutions to be favoured with “access to public funds in the form of loans, financial aid for students and competitive funding for research”. And the analysis suggests that though there was a gradual process towards privatization ever-since the shift to a neoliberal regime in the 1990s, the agenda spelt out above is a final shift “to a system based on neo-liberal market philosophy. Sadly, the transition seems to be complete and dangerously irreversible” (Tilak 2012).
2. **Social Science Research in India**

In the pre-independence era, whatever social sciences existed, were confined to a few universities, not all of which had all the social science departments, nor did the existing departments have any funds for research. Yet if some scholarly work, ‘impressive in range and depth’, could come out of the universities, these were the result of individual effort. In any case with less than 0.7% as the gross enrolment ratio (GER), and with most of them probably in the undergraduate courses, higher education was an elite affair. In the post-independence period with the rise in the number of universities and especially with establishment of the Planning Commission with a mandate to design programmes of investment for the socio-economic development of the country, there was an increase in the demand for information on various aspects of the economy and society, and for its interpretation and analysis as inputs for policy-making. Though there is no comprehensive account of progress in social science research in all its dimensions in all its locales of public institutions like universities, research institutes, and government agencies, there are periodic reviews of the working of the ICSSR institutions and their contribution to research – there have been five such reviews so far - which together give an account of the progress with focus on research institutions. In addition, the ICSSR also has been carrying out thematic subject-wise reviews of research which together afford us a larger picture of the state of focus in terms of methodologies, data sources and analytical contributions to social science knowledge. A brief but succinct account as to the progress and the state of social science research in India, as a quick reference is available in EPW 2007.

For over a decade now, there has been widespread disaffection with the nature and progress of social science research in India. “At the present juncture, it is widely perceived that social science research in India is in crisis” (GoI, 2011, S. Guha 2008). The contemporary scenario could best be paraphrased from the reports of two review committees on the working of the ICSSR – the Fourth Review Committee under the Chairmanship of A. Vaidyanathan (ICSSR 2007) and the other committee set up by the MHRD under the Chairmanship of Deepak Nayyar (GoI, 2011) – and the responses and observations by other agencies and individual scholars. In terms of the range of subjects covered there was a surge. During the past two decades, social science research has “grown beyond the traditional disciplinary boundaries into areas that are pertinent to current socio-economic and political context in the country” (DFID 2011). Issues like globalization and development, education, health, equitable growth, sustainable development, poverty studies, urbanization, feminist and gender studies, affirmative action, inclusive development and cultural studies mark the range. “While scale and range of the social science research in the country have been expanding, the nature, scope and quality of research output, as well as, its contribution to a better understanding of socio-economic processes and shaping public policy is
widely perceived to have fallen short of expectations and also not commensurate with the resources spent on them” (ICSSR 2007), in spite of the resources spent were acknowledged as very meager. It is a different matter that India is in the company of South Asia where social science research is “a sea of mediocrity with islands of excellence and visibility” (WSSR 2010).

With the establishment of the ICSSR in 1969 and promotion of publicly funded social science research institutions in each state, the number of institutions under its fold expanded to 27 by 1980s. But since then there was no expansion of public research institutions. On the contrary, many of the institutions established in the 1970s and 1980s have witnessed steady decline (GoI, 2011). And only about half-a-dozen or so are genuinely viable as research and training institutions (Chatterjee 2008). Though there has been a rapid expansion of universities, only a small proportion, 15 to 20 percent of them were teaching and research-based universities; 80 percent can be treated as teaching universities only. (Krishna and Krishna 2010).

According to the Scopus database, India was the only visible South Asian country in terms of research publications at the international level, and with a share of 1% in world’s publications it ranked thirteenth in terms of the top twenty-six social science producing countries, which were led by the U.S. and the U.K. It is no consolation because, as Krishna and Krishna (2010) observe that “… looking deeper into the trend during this period, it becomes clear that Indian social sciences witnessed either a relative stagnation, or a declining trend compared to China. The latter published 606 papers in 1996 compared with India’s 706, but by 2007 China outpaced India twofold. The available data also reveals that only nineteen institutions of higher learning, including universities, published fifty or more papers” (Krishna and Krishna 2010, 78). Another comparative study of publication of social science research papers in five countries (China, Argentina, Mexico, Brazil and India) shows that each of them had less than 500 in 1995, and of them India ranked top with the highest papers. But by 2007 the picture changed entirely, with China surging past all countries to reach the top with 2300 papers, while India struggled to reach 750 papers. Even Brazil with 1690 papers surpassed India (Singh 2011, 12). What is interesting is that contributions of non-resident Indians (NRIs) and foreigners had substantial contribution to Indian social science research. Data from eight renowned publication houses reveals that out of a total of 998 published books, 326 books (nearly one-third) have been published either by NRIs or by foreigners. Out of 542 articles published in reputed social science journals in 2004-05, 131 articles (nearly one-fourth) were published by NRIs or foreigners (ICSSR 2007, 19). If the contributions of foreigners are excluded from these publications, very little quality work would remain to the credit of Indian social scientists (Singh 2011, 12). There was also a high degree of variation in the quality of
research across the ICSSR institutions. Institute-wise analysis of select publications during 2006-07 to 2009-10 shows very few in the top peer-reviewed journals, with a few individual exceptions (GoI, 2011, 41). There are hardly any attempts to quantify the quality of social science research in India. A pioneering attempt is made recently by Ray and his colleague from the Institute of Development Studies, Thiruvananthapuram (Ray et.al. 2016), which reveals that India’s social science research “contributes more to public debates and policy formulations than to pushing the frontiers of knowledge for further research”. Their indices show a kind of tantalizing picture with 90% of all articles showing a positive quality index score but 99% of these articles still score only less than 0.14.

It is observed that while there are many reasons behind the crisis in social science research in India, the single most important reason for the crisis is identified as the shortage of assured government funding for social science research (GoI, 2011, 5). We may examine it in terms of the resources available to the ICSSR from the MHRD, and the funds made available by the ICSSR to the research institutes, and to the research projects (GoI, 2011, 11):

- Over the period 2005-06 to 2009-10, the total grant to ICSSR rose only by 22 percent in nominal terms from Rs. 41.8 crore to Rs. 51 crore. In real terms, over this period, total grant shrunk by 7 percent.

- During the same period, the total grant to ICSSR was only about 2.3 percent of the total grant received by CSIR and 11 percent of the grant received by ICMR.

- In 2009-10 ICSSR research institutes got only 15 percent of their total expenditure from the ICSSR, and rest from the states and other sources. The grants for individual research projects were very small. During the period 2006-07 to 2009-10, 85 percent of projects received less than Rs. 5 lakh and about 14 percent less than Rs. 2 lakh.

There was an overdependence on state governments and other sponsored projects for funding with the danger of dilution of research quality and even shift away from desired research priorities, compromising the ability to pursue independent research (GoI 2011, 38, Chatterjee 2008). Many faculty members are often compelled to take up projects sponsored by various state governments and other agencies, simply to generate funds for the institute to break even. “Consequently, independent theoretical research in social sciences, which often has long-term significance, does not receive the attention it deserves” (GoI, 2011, 38). This is more visible in disciplines like economics, which receives maximum share of funding for research but mostly for its sponsored research with more focus on applied empirical research. “There is hardly any support
for themes of economics that straddles the other social sciences and addresses a wide range of themes from philosophical basis of the discipline to the question of culture, gender or the politics of globalization” (DFID 2011).

The declining share of public support is a clear sign of low priority accorded to social sciences research. In the wake of neo-liberalism, social science research has also seen a sharp rise in commercial orientation and increasing role for private enterprise. Financial support for research has become more motivated by specific, short-term and often commercial concerns (Papola, 2010). The expanding space of the private sector into health, education, public utilities, etc. has also created a new demand for social science research for business management, commerce, marketing, media and other fields, with a negative effect on conventional social science fields. “New actors such as corporations, industrial associations, NGOs, and private trusts entering the research field to conduct specific goal – and mission-oriented research attract the ‘cream’ in social sciences and contribute to an ‘internal brain-drain’ ” (Krishna and Krishna 201, 78). With the talented weaned away by lucre to the private sector and with those left out forced to earn their institute budget by sponsored projects, social science research that concern larger social maladies or those concerned with the larger issues that broaden democratic process of development may not have any space.

The recommendations of the Fourth Review Committee of the ICSSR (ICSSR 2007), as could be seen from the follow-up debates, were widely acclaimed as well thought out and the hope was that changes on the lines suggested would set the path towards a healthy social science research climate in the country. There was, however, one critical issue that was raised during the course of the debate but did not receive adequate attention, and this concerns the question about the social or public value of social science. In the follow up debate on the recommendations of the Fourth Review Committee, in a somewhat Feyerabendian style (Feyrabend1978), it was pointed out by Balakrishnan that one of the weaknesses of social science research in India was that “it is too tame and parochial”, that credibility of empirical research lies in the ability to “say it as it is”, and it should have space to address the problems of humanity at large (Balakrishnan 2008, 38). Balakrishnan emphasizes, invoking Edward said that the goal of independent social science lies in the role of “speaking the truth to power”. I assume that in a democratic open society social scientists’ credibility to speak the truth to power comes from their ability in speaking truth to the public. Social scientists can speak the truth to people if they have the courage of conviction that their knowledge is based on the commitment to the values of larger social good. This needs a certain introspective evaluation. And here, I turn briefly, as an example to what the mainstream economics has done to itself in the pursuit of modeling itself as economic science, and leaving us to reflect on what it means to ‘speak the truth to power’!
III. ECONOMICS, EPISTEMICS, ETHICS AND VALUES

Modern economics “characterize human motivations in such spectacularly narrow way. One reason why this is extraordinary is that economics is supposed to be concerned with real people” (Sen 1987, p. 1)

1. Introduction

One of the main reasons for disaffection with the social science research is rooted in the very nature of its historical construction as a form of knowledge which involved a process of dividing social sciences into a specific set of independent standard disciplines. Though right from the early stages of Enlightenment there existed questions which could be seen as specific to social science disciplines, these never figured in a framework of separate disciplines until early nineteenth century. The space for social science disciplines emerged with the challenge to the so called natural social order brought about by the French Revolution. To organize the new social order, defying natural social order, one had to first study it and the rules which governed it. With this in view “many of those who began to lay the basis of modern social science in the first half of the nineteenth century, most notably Great Britain and France, turned to Newtonian physics as a model to emulate”. The context was that science (Newtonian) had triumphed over philosophy (Aristotelian Metaphysics) and had therefore come to incarnate social prestige in the world of knowledge. There is no wonder that the founders of social science in this tradition, like Comte, were talking of ‘social physics’ and exhorted: “Our research, then, in every branch of knowledge, if they are to be positive, must be confined to the study of real facts without seeking to know their first causes or final purpose”! Comte’s agenda and ambition was much larger and his faith in the ‘scientific method’ in solving the social problems was out of all proportions. “‘Socialphysics’ would permit the reconciliation of order and progress by turning over the solution of social questions to ‘a small number of elite intelligences’ with appropriate education. In this way, the Revolution would be terminated by the installation of a new spiritual order”.

Those possessed of “physics-envy” would take an idealized, indeed fantasized, image of science for their model (Ravetz, 1995). Of all the emerging distinct social science disciplines, Political Economy was the foremost in this obsession with the scientific method, trying to claim status on par with natural sciences. Ricardo was making statements in the British Parliament that the laws of Political Economy were comparable to the laws of gravitation!

2. The Classicals

In examining the growth of knowledge in economics we may begin with a very interesting, perceptive and apparently unusual observation, coming as it does from
J.R. Hicks, about the difference between the history of science for a scientist and history of economics for an economist. “Economics is more like art or philosophy than science – in use that it can make use of its own history. The history of science is a fascinating subject; it is important for philosophy of science – but it is not important to the working scientist in the way that the history of economics is important to the working economist. When natural scientist has come to the frontiers of knowledge ready for new exploration, he is unlikely to have much to gain from a contemplation of the path by which his predecessors have come to the place where he now stands. Old ideas are worked out, old controversies are dead and buried. The position in economics is different. We cannot escape from our past. The facts which we study are not permanent or repeatable, like facts of the natural sciences – they change incessantly and change without repetition” (Hicks 1976, 207).

I have quoted this at length because it would be interesting to see how much of mainstream economics that evolved over time reflect these nuances? Adam Smith who established the foundations of the Classical Political Economy was very much influenced by the French Physiocrats and was interested in explaining long-run production process. Smith was averse to bring in Newtonian mechanics into economics. His emphasis was on explaining the phenomenon, and did not see any room for predictions in economics. Nor did he postulate a model of human beings as only “self-interested” beings, as he was wrongly attributed of having equated self-interest with ‘efficiency’. In fact, Amartya Sen discusses at length (Sen 1987, 22-28) Smith’s notion of ‘man’ which is much more of social nature. According to Smith “man ought-to regard himself, not as something separated and detached, but as a citizen of the world, a member of the vast commonwealth of nature and to the interest of this great community, he ought at all times to be willing that his own little interest should be sacrificed” (Smith quoted in Sen 1987, 23). Sen observes that “… it is precisely the narrowing of the broad Smithian view of human beings, in modern economics, that can be seen as one of the major deficiencies of contemporary economic theory. This impoverishment is closely related to the distancing of economics from ethics” (Sen 1987, 28).

Unlike Smith, Ricardo was very much impressed by the Newtonian revolution and was driven by the ambition of conceiving economic process in terms of law-like propositions. Though Ricardo did not write explicitly on his method of analysis, the analysis of his work shows it was based on hypothetico-deductive model of explanation, denying any need for facts, since they do not speak for themselves. This Schumpeter termed as ‘Ricardian Vice’, i.e. propensity to apply highly abstract models to complex reality (Blaug 1980, 58). Ricardo’s claims and its justifications continued to haunt methodological crisis in economics. His simplified assumption regarding knowledge,
expectation and uncertainty or certainty, the so-called Ricardo’s ‘habit of thought’ amounts to the deductive manipulation pre-eminently of these postulates of perfect knowledge, expectations and certainty play central role in the use of the deductive method and abstract model building in economics (Hutchison 1984, 2). Soon after his death in 1823, there was wide criticism on the validity of Ricardian system as science. But the burden of explaining Ricardo’s method became the task of other classical economists that followed. It was Nausso William Senior, who for the first time, in his ‘Introductory Lecture on Political Economy’ (1827) proposed a distinction between what he termed as a ‘pure and strictly positive science’ and an impure and inherently normative art of political economy’. Scientific political economy, he argued, rested essentially on a very few general propositions which were the result of observations and which were self-evident. He identified four such propositions viz. that every person desires to maximize wealth with as little sacrifice as possible, that population tends to increase faster than the means of subsistence, that labour with machines is capable of producing a positive product and that agriculture is subject to diminishing returns. Clearly his attempt was to put the theories of Ricardo and Malthus on scientific basis. Perhaps, Senior was the first to make formal proposition of ‘economic man’, the maximizing behavior of man as the basis of political economy.

J.S. Mill inherited these propositions of Senior, and as a torchbearer of Ricardo’s political economy was expected to formalize the methodology of political economy. But J.S. Mill was a genial person with his own libertarian philosophical moorings and inductive scientific orientation. The political economy which had its origins in moral philosophy, because of the nature of claims that were made to elevate it as a science, already earned a reputation as a ‘dismal science’, thanks to Malthus Essay on Population. By the time J.S. Mill entered the political economy, it was regarded as a subject that would not attract good-natured persons like Mill. So much so, a contemporary of Mill had this couplet to humour his friends:

*John Stuart Mill*

*By a mighty effort of will*

*Overcame his natural bonhomie*

*And wrote ‘Principles of Political Economy’*

(Quoted in Sen 1987)

J.S. Mill’s treatise on *A System of Logic* was a systematic exposition of inductive method. Therefore, he outright rejected the deductive propositions that economic laws were self-evident truths, which could be known without the need for empirical verification. Mill’s essay on the *Definition of Political Economy* (1836) makes it clear that economic sphere is only one part of the whole arena of human conduct and
therefore ‘economic man’ is only a ‘fictional man’. For him, political economy was a puzzling science. He describes it as “inexact and separate” science which employs the deductive method. Since the science of political economy is a body of deductive propositions resting on assumed psychological propositions and abstractions from all non-economic aspects of human behavior, its laws are exposed to ‘disturbing causes’, circumstances external to the case, which may have their own laws like the laws of the case itself. If the disturbing causes can be a priori predicted, then the effect of special causes should be either added or subtracted from the effect of the general one. It is because of disturbing causes, political economy ends up with tendency laws with ceteris paribus conditions. Mill suggests that it is because of disturbing causes that he’s ‘a mere political economist who has studied no science but political economy, if makes any attempt to apply his science to practice, will fail”. Daniel Hausman, a philosopher-economist who made an extensive study of Mill feels that the earliest and the best empiricist approach was his, which was not palatable to the grand apriorists of those times (Hausman 1988). John Elliot Cairnes (1965), who followed Mill, while appreciating Mill’s analysis, goes on to suggest that any verification in political economy may not disprove a theory because of disturbing causes and concludes that political economy as a hypothetical-deductive science represents not positive but hypothetic truths, i.e. makes conditional predictions subject to ceteris paribus.

3. The Neoclassicals I: A Priorists 1870-1920

The emergence of the marginalist school from the 1870s with an emphasis on the model of ‘maximizing man’ there was also growing criticism on the abstract deductive method. Alfred Marshall and John Neville Keynes attempted a reconciliation of abstract-deductive and historical-inductive reasoning. Keynes in his, *The Scope and Method of Political Economy* (1891) begins with a distinction between “positive science– a body of systematized knowledge concerning what is; a normative or regulative science – a body of systematized knowledge discussing criteria of what ought to be ... an art ...” and urges the importance of recognizing a distinct positive science of political economy and thereby closing the room for any normative value considerations and then attempted to reconcile Senior, Mill and Cairnes tradition with claims of historical inductive school. He went on to claim that even a priori method begins and ends with empirical observation. The emphasis was on ‘economic man’ and he suggested that Mills reference as ‘fictional man’ was only an abstraction of a real man. His contention was that the realism of the concept of economic man could be seen in the self-interested economic behavior dominate benevolence under contemporary conditions.

By 1870s ‘political economy’ disappears in favour of ‘Economics’. “By stripping away the adjective ‘political’, economics could argue that economic behavior was the reflection of a universal individualist psychology, rather than socially-constructed
institutions, an argument which could then be used to assert the naturalness of laissez-faire principles” (Wallerstein 1996). Political science as a separate discipline also legitimized separate ‘Economics’. The process of institutionalization of the social science disciplines was in the shadows of “the very time that Europe was finally confirming its domain over the rest of the world” – a euphemism for the emerging imperialism.

Hicks raises an interesting question as to how to explain the emergence of “Marginalist Revolution” in the 1870s with a renewed emphasis on ‘maximizing man’ and shift of emphasis from the Classical production and distribution to exchange or what marginalists called ‘catallactics’ (Hicks 1976). Hicks was obviously aware of political forces operating in Europe but tries to avoid the explanation of the role of politics in the shaping classical or neoclassical political economy by merely observing that “some say” that it was a reaction against the socialist tendencies in the air, and adds it was not necessarily Marx at that time. But goes on to say that the principal reason for the turn to “marginalist revolution” was “the possibility of construction of powerful economic theory based on exchange” (Hicks 1976, 212). There is no wonder that Hicks pursued it to the tilt when he observed “... there is much of economic theory which is pursued for no better reason than its intellectual attraction; it is a good game” (Hicks quoted in Hutchison 1984, 14). Hutchison goes on to add that there may be strong academic ground for this ‘game playing’. This may stem to some extent from “not unjustifiable scepticism about the contribution of economic theorizing to more successful real-world policy-making” (Hutchison 1984, 15).

Turning again to Hicks question: How to explain the rise of catallactics, the neoclassical shift? There are other explanations. Vrocy has this to say: “... in social sciences, the process of scientific construction necessarily includes a political dimension, which plays a pervasive role in the orientation of scientific activities. In a class society, the ruling class cannot be indifferent to the type of social science developing in the society in which it holds power” (Vrocy 1980, 298). Baumberger was much more categorical in his analysis: “Much of Neoclassical theory was an attack against ‘Marx the revolutionary’. Bohm-Bawerk’s ‘Capital Theory’ was aimed to refute Marx. But for Marx, today’s mainstream economics could have been much closer to classical economics” (Baumberger 1980, 330). The developments in France and England with the emergence of the bourgeoisie to power there were class struggles since the 1830s. For the ruling classes, Ricardian analysis of distribution was a threat. Ricardo was Marx’s master. “The result was in place of disinterested inquiries, there were hired-prize figures in place of genuine scientific researchers, the bad conscience and the evil interest of apologetics. With classical theoretical framework leading to radical conclusions and the power structure within society in which the bourgeoisie had become the dominant class, it was necessary both to discard the disharmonious
elements of the Ricardian approach and to propose a justification for profit” (Ronald Meek in Vrocy 1980, 315).

It is this kind of ideological manipulation that provoked moral indignation in Myrdal from his early academic career. Myrdal’s, The Political Element in the Development of Economic Theory, written in 1930 and published in English in 1953, was one of his earliest books that engage in an exercise of detecting systematic biases and logical flaws in classical and neoclassical economic theory. His contention was that these writings never revealed their basic value premises and depended on abstract method. This type of mental conditioning, he found resulted in biases to the extent of not recognizing the existence of even unemployment which was widely prevalent then. For him, equality or egalitarianism were not mere abstract formulae but an expression of living ideals and such a part of the social reality and social values. His other essays, Value in Social Theory (1958) insists on clear value premises and relate research work in relation to it. The Classical and neoclassical economics, in contrast, denuded the subject of any values in the name of evolving as an objective science. The theme of the paradox of egalitarian principle and the lack of realization of that ideal permeates most of Myrdal’s writings, which were quite in contrast to what the neoclassical economics was trying to do (O’Toole 1972).

4. The Neoclassicals II: 1920-45

By late 1920s there was a wide criticism of the neoclassical school by both the German historical school and the American institutional economics on the unrealistic premises on which theories were based. During the period 1880-1920 the friends and advocates of neoclassical adopted, on the whole, a moderate, conciliatory stance. They agreed that economic theory made false assumptions, and admitted that the value of theory depended greatly on the degree of accord between assumptions and facts. Yet they insisted, first that the assumptions did correspond broadly with events; and second, that sacrifice of some accuracy for simplicity was justified in view of the complexities of facts (Melitz 1965).

But in the 1930s and 1940s, the neoclassical economists aggressively defended ‘pure theory’. Lionel Robbins led the aggressive defense of pure theory. He brought in ‘scarcity’ to centre stage to highlight efficiency. Scarcity in the face of multiple ends forces rational allocation of means by individuals. He defended a priorism, the belief in self-evident nature of economic postulates. He put up a hefty defense in favour of his postulates of subjectivism and methodological individualism and his rationality principle emphasising individuals ordering their preferences. He rejected the claim of historians that all generalizations are historico-relative by attributing the criticism as politically motivated. His objection to behaviouralist insistence that science should deal with directly observable phenomena was by pointing out that individual
behaviour was only understandable but not observable. He rejected all value and ethical aspects of economic theory. Terence Hutchison subjected Robbin’s *a priorism* to severe criticism. He called his pure theory as pseudo-science and insisted that if it were to be ‘positive science’ it should be testable. He questioned the assumption of ‘perfect expectations’ and the rationality postulate, he insisted on the extensive use of empirical techniques in economics and dismissed ‘psychological method’ as illegitimate. In fact, Hutchison insisted on testing the assumptions as much as the theory of realism. It was in this context that Hausman (1992), refers to Richard Lester (1946) who tested the fundamental proposition of the neoclassical theory of the firm and came out with the results that firms did not behave precisely as marginal productivity theory predicted.

But in spite of the criticism, the neoclassical economics during the period, ethics and values were kept beyond the bounds of the main body of economics and welfare economics reduced to ‘positive economics’. Economic efficiency was seen as the ultimate goal and Pareto-optimality was the thesis. It never recognizes the goodness of justice or fairness, since these are ethical values. Sen, who was critical of the ethics-free economics observed that “an economy can be Pareto-optimal even when some people are rolling in luxury and others are in near starvation as long as the starvers cannot be made better off without cutting into the pleasures of the rich. If preventing the burning of Rome would have made Emperor Nero feel worse off, then letting him burn Rome would have been Pareto-optimal. In short, a society or an economy can be Pareto-optimal and still be perfectly disgusting” (Sen, 1970, p. 6). But Pareto-optimality still rules the minds of the mainstream economists.

5. The Neo-classical III: 1945-1970

The heyday of ‘scientism’ of social sciences could be marked as the 1945-1970 period. During this period “… social scientists were like adolescents serving as apprentices to an idolized master artisan, the ‘real’ scientist. But the master artisan was, unbeknownst to the social scientists, losing his credentials. The ‘new scientists’ showed that the philosophy of science justifying these ‘master artisans’ had led scientific practice astray” (Wallerstein, 1992). On the heels of invincible deceptive power of pure theory or *a priorism*, comes its own version of ‘positive economics’ with its own neoclassical characteristics of theory testing. Milton Friedman’s “Methodology of Positive Economics” (1953) comes with a mission to counter criticism of two pillars of neoclassical economics, viz. 1. the maximization behavior and 2. the model of perfect competition. For him the ultimate goal of science is to develop theories or hypotheses that can provide valid and meaningful predictions about phenomena. These hypotheses should be testable and the only test is the correspondence between the prediction and experience. And with one stroke, he attempts to wipe out two major criticisms viz. unrealistic assumptions and invalid theory, by suggesting the realism of assumptions or for that matter that of
theory does not matter – theory is only an instrument for prediction, and if prediction is corroborated, then assumptions could be treated “as if” true. And then goes to the other extreme, by suggesting good predictions need bad assumptions! Here is his, what Samuelson called, the F-twist: “... Truly important and significant hypothesis will be found to have “assumptions” that are widely inaccurate descriptive representations of reality and, in general, the more insignificant the theory, the more unrealistic the assumptions” (Friedman 1953). There was an extensive criticism of Friedman’s essay on every count, the philosophical, logical, and several other grounds (Melitz 1965). But Friedman never replied. One may grumble that Friedman’s methodology is “a mythology resulting in methodology” (Mason 1980). And that grumble includes Samuelson. But the ‘instrumentalism’ worked with its twists and turns. It is about the one methodological rule which has dominated economics since the early 1960s. The rule at issue is the methodological requirement that all economic models or theories, if they are going to be given serious consideration by practicing economists, must be shown to be testable …” (Boland 1989).

And what truth do we speak to power? How to mend ourselves to be able to speak to the public, so that we could be social scientists?! And with what type of epistemic, ethical and value premises we pursue our social science knowledge. Unless we seek some reasonable answers to these simple questions our social scientist conscience may not be clear to look towards restoring a respectable place in the hearts and minds of people.

IV. PUBLIC VALUE OF SOCIAL SCIENCES

According to John Brewer (2013), there could be three different meanings of public value, one in terms of use value, the other in terms of exchange value or what he calls as price value, and the third is in terms of normative value. He spells the scope of it thus: “Normative public value of social science is that it nurtures a moral sentiment in which we produce and reproduce the social nature of society, enabling us to recognize each other, social beings with a shared responsibility for the future of humankind through understanding, analyzing and ameliorating the fundamental social problems stored up for us” (Brewer 2013).

To realize the public value as set out above, it becomes imperative that social sciences in their content, methods, and action restructure and redesign themselves. Normative public value involves realizing collective and communal benefits in terms of active citizenship, public engagement, social empathy and intellectual awareness and civic awareness.

The other dimension of realization of normative public value involves more public participation. The role of social scientists as public intellectuals becomes essential to
learn from the public as much as sharing knowledge with the public. The enhancement of the public value of social sciences lies in the ability in interacting with the public that would have reason to value social science research. The power of social science to speak the truth to power to restore a due place for social science research in society is contingent upon the reach of such social science to the public.

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The choice of vocabulary to describe problems of poverty and inequality can influence the perceptions and scope of both analysis and policy. This article considers the concept of social exclusion, its different meanings and how it has been interpreted and used by researchers and policy-makers. Four broad models of society which give rise to different processes of exclusion are presented, based on earlier work by Hilary Silver – these are synthetically described as solidarity, individual specialization, monopoly and organic differentiation. The dimensions and patterns of exclusion in each are briefly described, in order to highlight their diversity. Three illustrations are then given of the application of a social exclusion approach to policy formulation in France, the UK and India. It is argued that social exclusion cannot be overcome by piecemeal policies, but requires a comprehensive approach.

Keywords: Social exclusion, relative deprivation, caste, gender, social policy, Europe, India

A quarter of a century ago, I participated in a meeting organized by the European Commission in Brussels. A man named Jacques Delors, one of the leading French politicians of his generation, was the president of the Commission. In the meeting, he presented the European strategy to defeat poverty. There were many elements to this strategy, but a central one was to attack what he described as social exclusion, the process by which many individuals and groups were excluded from the normal standard of life - from jobs, from government programmes, from social rights and activities.

The work of the European Commission inspired me to develop a research programme on social exclusion at the International Institute for Labour Studies, where

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Lecture given at the 18th Annual Conference of the Indian Association of Social Science Institutions, Guntur, Andhra Pradesh, December 4-5, 2017.
I was working at the time. There was already a great deal of research and policy interest in social exclusion in industrialized countries, but much less in low-income countries, where the main concern was poverty, not exclusion. Yet it seemed to me that there was more to poverty than just falling below an income standard of $1 a day.

I will say a little more about the ideas we developed in that research programme in a moment (some of the results are reported in Rodgers et al., 1995). However, I would like to start with a more specific point. In our work, we were privileged to have the support and advice of Professor Peter Townsend. Townsend is not very well known in India, although he did publish a couple of pieces about poverty here, but for several decades, he was one of the leading academics in the field of poverty studies in Britain. His major study of poverty in the United Kingdom (Townsend, 1979) had a considerable influence on both research and policy. In his work, he developed and applied the notion of relative deprivation. His definition was as follows:

“Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the type of diet, participate in the activities and have the living conditions and the amenities which are customary, or at least widely encouraged or approved in the societies to which they belong. Their resources are so seriously below those commanded by the average family that they are, in effect, excluded from the ordinary living patterns, customs, and activities.”

By calling this relative deprivation, he highlighted two things: that poverty had to be considered in relation to society, rather than in absolute terms; and that it was about multiple short falls compared with social norms. However, he also explained that his understanding of poverty and deprivation started from an analysis of class relations; poverty was rooted in the class structure of society, especially in the growth or persistence of an underclass. But in the 1970s class analysis was out of fashion, so he decided to change the terminology. He chose to describe the problem as relative deprivation, a phrase that was easy to understand, but which also called for an analysis of social inequality. In other words, he saw the terminology in instrumental terms, using a vocabulary that was appealing and attracted attention, but which opened the door to a deeper social analysis.

Later on, he also wrote about social exclusion, a term that he used in the same way, to examine the root causes of inequality and poverty. He argued that the precise words did not matter provided you addressed the key issues.

So can we agree with Juliet, in Shakespeare’s play Romeo and Juliet, when she says, “What’s in a name? That which we call a rose, by any other name would smell as sweet.”

Well, not entirely. Of course, Juliet was talking about Romeo, and a rose is not a good metaphor for exclusion and deprivation. Apart from that point, the words you
use do matter, because they may reformulate the problem. That is certainly true of the phrase “inclusive development”, which is the theme of this conference. Under that heading, specific reference is made to “equity and social inclusion”, “inclusive social and political institutions”... In other words, the issue is expressed as inclusion rather than exclusion... This is a positive message rather than a negative one and politicians are much happier with a positive message. Social exclusion reminds them that there is a problem.

From an analytical, as opposed to a political point of view, is inclusion just the mirror image of exclusion? Alternatively, does the change of vocabulary somehow change the agenda? I think it does. If you ask the question - included in what? – and compare it with the question - excluded from what? - then you realise that not all issues are the same. Inclusive development may include you in the labour market, but leave you excluded from political voice. Above all, the social relations that lead to exclusion cannot be simply reversed. Exclusion is the result of many interlocking factors and to the exclusion of some corresponds the inclusion of others. In reality, it is necessary to think about inclusion and exclusion together.

Concern with social exclusion, using that terminology, emerged in Europe in the 1970s and 1980s, especially based on work by French sociologists investigating the persistence of social disadvantage in a modernizing society. In India, on the other hand, the use of the expression “social exclusion” is relatively recent, and much more attention is paid to conventional measures of poverty. It is true that there has been some growth in the use of the term social exclusion in recent years. However, this is modest compared with the increasing reference to “inclusive development”.

In the remainder of my lecture, I will first briefly summarize some conceptual issues; then give some examples from Europe of how the notion of social exclusion has been interpreted and used; and conclude with a few comments about the current agenda in India.

I. SOME CONCEPTUAL ISSUES

It is important to start, conceptually, at the macro-societal level. There is a tendency to think about social exclusion in terms of the groups and individuals who are affected, and the social and economic benefits from which they are excluded. But in fact, the notion of social exclusion (or inclusion) is embedded in a concept of society. In the research programme at the International Institute for Labour Studies that I mentioned, Hilary Silver, a sociologist from Brown University in the United States, developed a typology of forms of social organization in which different forms of exclusion arise (Silver, 1995).

Her first model was a unitary society built around solidarity. In this case there is a core of shared values and norms, bolstered by institutions that serve to integrate
individuals in society and protect their rights. A social tie connects each individual to this core. This is inspired by the French Republican concept of society, but it could equally describe other centralized societies built around loyalty to the nation state. This is the model from which the notion of social exclusion originated - which is not surprising because there is a clear notion of what it is that individuals and groups are included in (or excluded from).

The second model is built around individual specialization. Societies are composed of individuals with diverse interests and capabilities, with a division of labour and exchange in both economic and social spheres. Here inclusion is more diffuse, and exclusion may reflect individual choices, market failures, discrimination or other factors. Individuals may be included in some ways and not in others. Exclusion is a much weaker concept here than in the solidarity model, because the different dimensions of exclusion do not necessarily coincide.

The third model is one of monopoly. This refers to hierarchical societies, with groups at different levels controlling resources, defending their territory and excluding others – from occupations, cultural resources, goods and services. Such societies are unequal, with a hierarchy of inclusions and exclusions, though there may be solidarity within particular social groups. Social institutions (family, schooling, caste, ethnic origin) determine who has access to each level. Such societies are built on exclusion, just as the solidarity model is built on inclusion.

A fourth model covers organic notions of society, composed of distinct groups, which may be functional, regional or ethnic in character. A corporatist or fascist state may integrate these groups into an organic whole; but one can also conceive of intermediate situations where pluralist societies are composed of autonomous groups, mediated by social institutions to resolve conflict and ensure coordination. In this model, exclusion may arise from the concentration of economic or political power, or if individuals are not integrated into one of the mainstream groups.

These models are ideal types, and each real-world society may combine elements from several or all. It could be argued that India is more monopoly than solidarity, but elements from individual specialization and from the organic model can easily be seen. Exclusion in India therefore reflects a variety of different, overlapping and sometimes conflicting mechanisms.

Once these models are defined, it is easier to identify the dimensions of exclusion, which will vary from one model to another, and the social groups that are most vulnerable.

Many dimensions of social exclusion are self-evident: the conventional definition of poverty is built around exclusion from basic goods and services, along with inadequate housing and sanitation. Behind this there are exclusions from land and
from labour markets – exclusion from occupation, or from employment, in turn tied to exclusion from education and training. Lack of access to knowledge is a crucial factor too. It is widely argued that a lack of voice is fundamental – inability to participate in social decisions and organizations. Exclusion from human rights might also extend to the functioning of the justice system, the right to citizenship, and the right to health and security. Many of these issues are on the agenda of this conference. What is a little less self-evident is that these dimensions are not independent – they tend to reinforce each other in a process of cumulative causation, which renders the process of exclusion deeper and more difficult to escape from. It follows that analysis of exclusion must be multidimensional or it misses important aspects of the process.

Which groups are vulnerable to exclusion again depends on the model of society. In India, because of the fragmentation of society, discussion of exclusion tends to focus on caste, tribe and to some extent community (especially Muslims). However, depending on context, many others are also vulnerable to some or all aspects of exclusion, either collectively – migrants, particular racial groups, women, the old – or individually – the disabled, those who have been convicted of crimes, those who have infringed some social code, those from broken homes, drug addicts.

Many of these problems can be examined individually, but the wider notion of social exclusion provides a powerful framework for both analysis and policy. First, it brings a focus on process. If you just count the number of poor people, you measure a state. However, exclusion always involves a social process, a set of mechanisms and relations that lead to deprivation – either to permanent exclusion, in which some groups live on the margins of society, or to various forms of vulnerability. A focus on process helps to understand how exclusion persists and its relationship with development. It also makes it easier to examine the ways in which different dimensions of exclusion reinforce each other.

Secondly, this approach highlights agency. While some exclusion may be passive or the result of neglect, many social actors are agents of exclusion, by pursuing their interests at the expense of others, or by establishing control over economic or social resources. On the other hand, some social actors and social groups may organize to prevent exclusion or promote inclusion – trade unions, community groups, religious bodies – but in doing so, they may also exclude others. In this process the state is a central actor, usually claiming to promote inclusion – hence the notion of inclusive development. Nevertheless, the state also reflects the interests of particular social groups, and is often guilty of forcing the integration of groups in ways they do not desire, most obviously in the case of indigenous and tribal peoples.

The last point is important, because inclusion is not necessarily the goal. Inclusion in what? There is a considerable literature on adverse inclusion, inclusion on unfavourable
terms. For example, inclusion in wage work without rights or security. Or inclusion in market societies without the capabilities needed to participate effectively. Or inclusion in the modern economy at the cost of cultural traditions and traditional rights.

In 2000, Amartya Sen prepared a paper that examined the concept and application of social exclusion (Sen, 2000). He highlighted some of the above points – how exclusion is bound up with social relations, how it may be active or passive, how it helps to analyse deep rooted problems such as long-term unemployment, and how it complements his own central concern with capability deprivation. He considers for instance, that “the investigation of poverty is both internally and externally supplemented in a fruitful way by the use of ideas of social exclusion” and that despite its European origin, it is of value in Asia too, with each part of Asia facing its own social exclusion problems. “The perspective of social exclusion reinforces – rather than competes with – the understanding of poverty as capability deprivation... if the idea is carefully used there is much to be gained from using the perspective of social exclusion in analysing the deprivation of basic capabilities and in assessing the policy issues that follow from these diagnoses.”

II. PRACTICAL APPLICATIONS

Let me now provide some illustrations of how the social exclusion approach has helped in identifying and responding to vulnerability and deprivation, in France, the UK and India.

In France, where the notion of social exclusion was first applied, it was seen as a structural issue. The main concern was the mutual reinforcement between multiple disadvantages - lack of access to the labour market, poor housing and infrastructure, inadequate public services and income poverty – which in turn left communities without an economic base and led to the loss of the skills and abilities that were needed for productive employment. The policy solution included “the minimum income for integration”, an income allowance that was based on a contract between individuals and the state, in which individuals were to commit to efforts for social integration, notably in the labour market, while the state provided training programmes, labour market information and a variety of social and infrastructure policies in deprived areas. Other social actors were also involved - trade unions, business and local communities. This multidimensional approach, based on social solidarity, was also taken up by the European Commission (1992).

This effort started in the late 1980s. In practice, the income support side lasted longer than the labour market integration side, because of a shortfall of job creation in the French economy. This led to the growth of precarious jobs which themselves created new forms of exclusion. Nevertheless, it certainly helped to limit the extent of extreme deprivation.
Turning to the UK, at that time there was little interest in social exclusion in Margaret Thatcher’s Britain. However, a few years later, after the election of the Blair government in 1997, social exclusion received a great deal of policy attention in the UK.

A Social Exclusion Unit was set up in the Prime Minister’s office to oversee the overall strategy, which was based on the integration of action by different ministries within a comprehensive approach to exclusion (United Kingdom, 2001). There were three key elements:

- Target the vulnerable before they are excluded (prevention).
- Provide routes to jobs and housing (integration).
- Enforce minimum standards in employment, crime, education, health.

The strategy stressed the need to provide public services to individuals in deprived areas – childcare, support and advice, training, public transport. It identified major sources of exclusion and aimed to act on them specifically – drugs; school dropout; discrimination; disability; broken families; long term unemployment; bureaucratic failures; lack of community support; lack of savings or other sources of security.

This approach led to significant progress in the UK, with a reduction in poverty among both children and pensioners, wider labour market access and improved health systems. Some of the adverse social trends of the Thatcher period were reversed. On the other hand, social exclusion was seen as an individual problem and there was little structural economic reform. If we compare this with the French programme, we can see that it was much closer to model 2 (individual specialization) than to model 1 (solidarity), which underlay action in France. The Blair government aimed to reduce social exclusion through private enterprise and the market, without dealing with the inequalities and exclusions that emerge in inadequately regulated markets. Without deeper reform, the social progress of the early years soon reached a ceiling.

III. THE INDIAN CONTEXT

Turning to India, the vocabulary of social exclusion was not much used in the decades after independence. The reality of social exclusion was certainly recognised for Scheduled Castes and Scheduled Tribes. However, the issue of caste discrimination was not placed in the wider context of exclusion and inequality. The focus of attention has always been on poverty rather than inequality, and while it is recognised that some groups are more vulnerable to poverty than others, there is an assumption that a rising tide will raise all boats. However, this focus on poverty has been at best incomplete and at worst misleading. It is static, because poverty is seen in relation to a fixed basket of goods and services, and this tends to divert attention away from process, although a process of exclusion is a major source of poverty.
Appasamy, Guhan and others (Appasamy et al., 1996) undertook the first major study on social exclusion in India that I am aware of in the 1990s. It focussed on health, education, social security, housing and sanitation, but not on employment, except in context of reservation policy. It made the important point that “the socially and economically backward sections are well incorporated into the social mainstream; the only problem is that the terms of incorporation are extremely unfavourable”. The process of exclusion and the terms of inclusion therefore need to be studied together. Similar comments have been made about the situation of Adivasis – many of whom have moved from exclusion to adverse inclusion. This has been extensively documented in India – see for instance the recent book on the subject edited by Dev Nathan and Virginius Xaxa (2012). Thorat and Newman’s book, Blocked by Caste (2010), is an important source on the exclusion of Dalits from labour markets, schooling and other social policies, which also highlights how unfavourable or selective inclusion needs to be considered alongside exclusion.

The most important single policy in India to overcome exclusion has been the policy of reservations in government jobs and educational institutions. There is little doubt that this has had some effect, and the proportion of government jobs held by Dalits and STs has gradually risen over time. However, the limitations of this approach are only too visible. First, there is a tendency for reservations to be most effective for the lowest skilled jobs. Second, new hierarchies are created within the excluded groups, as a creamy layer emerges. Three, any attempt to expand reservations from public to private sectors meets ferocious resistance. Fourth, the labour market becomes increasingly fragmented as more and more groups demand their share of reservations, some of them, among the OBCs, not particularly deprived (while some deprived groups, such as many poor Muslims, are not included). Above all, reservations have not been part of a coherent and wide-ranging effort to reduce exclusion – they only address one aspect of the problem, and only reach a fraction of the deprived population. Thorat and Newman (2010) insist on the need to combine anti-discrimination policies of this type with policies for social and economic empowerment.

The failure to achieve equal opportunity can also be seen in recent data from the India Human Development Survey (Thorat et al., 2016), which shows that Dalits and Adivasis remain at greater risk than others of remaining in or falling into poverty, even after taking into account their educational, financial and other social disadvantages. The process of exclusion needs to be addressed, rather than its manifestation.

Another important application of the social exclusion approach is with respect to gender inequality. Women too suffer from both exclusion and adverse inclusion. In the labour market, women are effectively excluded from a wide range of occupations, and this is a major cause of their low labour force participation; on the other hand, they
are over-represented in casual agricultural labour, as men move out of agricultural work into higher paying jobs in urban areas, from which women are often excluded. One reason is that women cannot migrate as easily as men. In general, women are more likely to find themselves in inferior labour market situations compared with men, less secure, less protected and lower paid. The array of intersecting inclusions and exclusions is also visible in family structures and hierarchies, where women often have specified and limited roles, which limit their wider social participation. Some of these factors are changing, but they still affect a large proportion of women. This exclusion extends to political, cultural, religious and other activities. The political exclusion of women is not overcome by local reservation policies and a few high-profile female politicians – political institutions continue to be dominated by men. It is particularly important to note the interaction between gender inequality and other aspects of social exclusion. Women from Scheduled Castes, for example, or women who suffer from disabilities, are particularly disadvantaged.

The annual India Exclusion Report (see Centre for Equity Studies, 2017 for the 2016 issue) is an important source of evidence on the extent of social exclusion and its consequences, reviewing a range of dimensions of exclusion – the latest report considers pensions, digital access, land and the legal system. Only one third of the population has some pension provision, and only 15 per cent participate in a formal system, so in this respect, a majority of the population suffers from exclusion. It finds that there is a strong tendency for the same groups to be affected by exclusion in different dimensions, because multiple sources of deprivation reinforce each other. Dalits, Adivasis, many Muslims, those with disabilities, slum dwellers, those in particularly degrading occupations, and historically disadvantaged or oppressed groups of women, all are repeatedly found to be vulnerable to different aspects of exclusion.

If we accept that these problems cannot be dealt with piecemeal, but require a comprehensive approach, the question is whether government policy is sufficiently integrated. This is a larger issue than I can deal with today, but certainly one has the impression that at present there is a range of uncoordinated social policies which each address a single issue – financial inclusion, small enterprises, cleanliness, job reservations, social security provisions – without recognizing that they are interdependent. This is not new; it was also true of earlier governments.

In discussing the concept of social exclusion in different models of society, I suggested that India has some features of the monopoly model in which there is a hierarchy of inclusions and exclusions. The situation is much more complicated than that, but there is an important lesson here: social exclusion is a part of a wider problem of inequality. In fact, in some ways, it is at the heart of the problem of inequality, for
unequal access to resources and opportunities are largely the result of processes of exclusion. In turn, inequality is at the heart of exclusion. Dealing with these issues requires a coherent approach to both analysis and policy, which recognises that poverty, deprivation and exclusion are not issues that can be addressed with partial approaches and specific policies for particular problems. Deeper changes in economic and social relations are needed.

**References**


Understanding the Context of and the Prerequisites for 'Inclusive Development' of the Scheduled Tribes in India – with Reference to AP&TS

B. Nageswara Rao*

An appropriate understanding of the concepts like ‘Social Exclusion’ and ‘Social Inclusion’ is an important aspect in inclusive development policy making and its execution. The terminological substitution of the poor/rich distinction by the exclusion/inclusion distinction makes an important innovation in social science research (Georg Vebruba, 2000). Eradication of poverty could not be possible with a single dimensional approach (income or consumption). Hence, these multidimensional approaches are considered to eradicate poverty particularly in the developing nations. These adjustments may be necessary for the success of inclusive development policies for marginalised sections in India (I bid). We need to understand the concepts along with the context of the issue and community. The geographical, cultural, social, political and economic institutional diversity makes huge difference in the performance of the policies. This paper made an attempt to understand in this way to understand the conditions of the tribal communities in India with special reference to the case studies of Andhra Pradesh and Telengana States.

I. INTRODUCTION

The term ‘Social Inclusion’ was originated in French Social Policy in the 1970s. It came into play in the 1980s economic crisis. When the State sponsored republican tradition of solidarity was in vogue. By the year 1990 the term was theorised by scholars like Bourdieu and luhmann. The European Commission (1995), and other bodies like World Health Organisation with UNESCO’s Management of Social Transformation Programme (Bessis 1995) have focused on the idea of reducing social exclusion and increasing social inclusion (Richard Edwards, Paul Armstrong and Nod miller, 2001). The concept of inclusion means the encompassing of the entire population in the performance of the individual function systems (Sonowal, C.J., 2008). The exclusion is the process through which individuals or groups are wholly or partially excluded from all participation in the society in which they live. In practice, the dominant sections of the society construct and reconstruct the members of these groups or categories as persons

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II. FROM POVERTY TO VULNERABILITY, AND SOCIAL EXCLUSION

The concept has two main defining characteristics. First, Social exclusion is a multi-dimensional concept. The dominant social groups may excluded vulnerable groups of the society from the common livelihoods, employment opportunities, earnings, property rights, housing, minimum consumption, education, social recognition and identity, political participation, citizenship personal contacts or respect (Silver 1994). It refers to exclusion (deprivation) in economic, social and political spheres. Second-less discussed in the literature but perhaps more relevant for the theoretical contribution of the concepts that the social exclusion implies a focus on the relations and processes that cause deprivation. The concept takes us beyond mere descriptions of deprivation, and focus attention on social relations and process and institutions that underlie and are part and parcel of deprivation (Arjan de Haan)4.

The notions of vulnerability are also closer to the concept of social exclusion. According to chambers (1989), vulnerability is not a synonym for poverty, whereas poverty means lack of basic needs, and it measures in terms of income or consumption. But vulnerability means insecurity, defencelessness, and exposure risk and shocks. A concept of vulnerability focus on the variety of dimensions of deprivation. The Noble prize winner Amartya Sen believes that social exclusion frame work reinforces the understanding of poverty as capability deprivation.5 And he draws attention to various meanings and dimensions of the concept of social exclusion (Sen 2000). Distinctions is drawn between situation where some people are being kept out (may even forced to excluded), and where some people are being included (may even forced to be included) in deeply un-favourable terms and described the two situation as ‘unfavourable exclusion’ and ‘unfavourable inclusion’. The ‘unfavourable inclusion’, with unequal treatment may carry the same adverse effects as ‘unfavourable exclusion’ (Sukhadeo Thorat 2010).

The main objectives of the social inclusion may be to improve the decision making capacity among the vulnerable sections in terms of democratization. It means these concepts gives confidence to the decentralization and bottom up approach. These concepts can identify the potential socio-economic aspects of the local excluded communities or people. These concepts also arrange social security nets among the poor or excluded people to eradicate vulnerability among them. This process is very much essential for the developing countries, but the relevance in adaptation of the concepts may differ from one to another among them. The degree of ‘similarity’ or ‘diversity’ is one of the major factors to determine the relevance in the adaptation of the concepts of social inclusion and exclusion.
III. THE DIMENSIONS OF THE CONCEPTS ‘SOCIAL INCLUSION’ AND ‘SOCIAL EXCLUSION’ IN INDIAN CONTEXT

The concept of social inclusion not only discuss about eradication of poverty beyond that it deal with the quality of life for both individuals and community at micro and macro levels respectively. The outcome from social inclusion is different form one community to another and one institution to another at micro level. It depends on the capability of group coping up of marginalized or excluded groups with the dominant social or economic groups of the society. At micro level social exclusion creates disempowerment among the excluded communities while social inclusion creates empowerment on the other. Whereas, at macro level, social exclusion creates anomie among the excluded communities, while social inclusion creates social cohesion among excluded communities. Similarly among the institutions at macro level, social exclusion creates socio-economic insecurity among excluded institutions while, social inclusion creates socio-economic security among excluded institutions. Institutional frame work is an instrument to transform the disadvantages from social exclusion into advantages by social inclusion, in other words transforming incapabilities into capabilities among the excluded communities at macro level.

The institutional frame work, functions and functionaries may differ from micro level to macro level, from institutions and communities to individuals. The strategies of social inclusion for Scheduled Castes are different from Scheduled Tribes in India by their diversified ethnicity, socio-economic and cultural functioning and structure. The level of empowerment at micro level, the level of social cohesion is different from caste groups from tribal groups by their diversified nature.

IV. THE RELEVANCE OF ‘SOCIAL INCLUSION’ TO THE TRIBAL COMMUNITIES IN INDIA

The relevance of the concepts of ‘social exclusion’ and ‘social inclusion’ may draw different attentions on Scheduled Castes (SCs) and Scheduled Tribes (STs) in India. Particularly, in the case of indigenous communities, there is a lot of confrontation with the concepts of ‘social exclusion’ and ‘social inclusion’ due to neo-colonial nature of the definitions as far as tribal communities are concerned. Indeed, the tribal communities have experienced cultural, religious identity crisis and economic exploitation in the name of development administration by inclusion with the dominant social groups in India. Their land has been alienated, most of their land has been excluded from them through forest policies and it became difficult to tribal communities to cop up with the outside world. In the case of the SCs, the situation is entirely different and they have been excluded from the common property rights, customary activities from centuries though SCs are a part and parcel of existing Hindu society, while STs they have their own culture, socio-economic and political system. SCs are dependent communities
while STs are independent and isolated from the other Hindu communities, due to these differences, the STs feel un-comfort by including them with the Hindu dominant social groups, while in the case of SCs, there is no alternative options like having their own assets and independent practice of their occupations. This dependency made SCs feel comfort in including with the other social groups of the society. This difference should be understood before application of the concept of ‘social inclusion’ for the development of STs in India (Ceety Khongsai, 2012).

V. EXISTING ASSIMILATION PARADIGM CONFRONTATION WITH PRACTICE AND THE PRINCIPLE OF TRIBAL COMMUNITIES IN INDIA

The term ‘Scheduled Tribes’ describes as an administrative and legal category. The politico-administrative category of STs includes relatively isolated and backward people. The colonial administrators identified tribal people with a variety of different names. Such as ‘Animist’ (Census report 1901), ‘Tribal Animists’ (Census Report 1911), ‘Hill and Forest Tribes’ (Census Report 1921), ‘Primitive Tribes’ (Census Report 1931), ‘Backward Tribes’ (Government of India Act 1935) and ‘Tribes’ (Census report 1941) (Verma, 1990). There was also a debate in the ‘Constituent Assembly’ on using the term ‘ST’. Jaipal Singh, the tribal representative favoured the use of the term ‘Adivasi’ instead of STs. But the term ST was unanimously accepted by the member of the Constituent Assembly. Dr. B.R. Ambedkar felt that the word ‘Adivasi’ is really a general term which has no specific legal de jure connotation, whereas ‘STs’ has a fixed meaning identification and differentiation, that is, to mark out a group of people different in physical features, language, religion, social organisation and so on (Ambagudia, J., 2007). The number of identified tribes was 212 in 1950 census, 312 in 1967, 427 in 1981 and now this number has increased to 701 today.

Keeping this view in mind, the founders of Indian constitution, particularly Dr. B.R. Ambedkar and Pandit Nehru have provided a paradigm to the development administration of the tribal communities. The discussion has been carried out on three paradigms like ‘Isolation’, ‘Integration’ and ‘Assimilation’ majority members of the constituent assembly have agreed to adopt ‘Assimilation paradigm’ for the development administration of the tribal communities. In this view, Verrier Elwin’s comment which made our elders to bend towards ‘Assimilation’ paradigm that must be remembered (Elwin, 2009).

This approach suggest that the problems of the tribal people can be resolved not by the exogenous frame works but with their own life and culture. Bringing change among them or assimilating them into a ‘mainstream’ society is needed as part of nation building process. This idea has facilitated to interfere the ‘State’ to regulate the structure and principles of the tribal societies. The protagonists of the of this school of thought argue that in due course, tribal people must gradually be assimilated with the
rest of the society and they will become like other non-tribal people and acquire the
culture, tradition and language of the non-tribal people living in their areas. The history
of India teaches that India is a diversified country culturally, ethnically. Particularly in
the case of tribal communities, ethnically and culturally they are different from Hindu
caste people. Their principle, values, priorities, worships, economic functions are
entirely different from Hindu caste groups. Dr. B. R. Ambedkar also discussed about
the merging of non-Hindu with the Hindus, deprived with the elite, vulnerable with
the educated, self-sufficient groups with the market oriented forces. Particularly he
pointed out that the ‘unfavourable social inclusion’ leads to further exclusion. And he
felt that there should be a ‘positive discriminative’ mechanism to protect the interests
of the weaker sections and un-organised sections against dominant groups. But some
of the members from the Constituent Assembly opposed this idea in the name of pure
nationalism. However, he took care about the North Eastern State and succeeded in
setting them into VI Schedule of the constitution with special administrative provisions.
However, the remaining tribal communities from remain States have been arranged in

As a part of this attempt, Panadit Jawaharlal Nehru made a significant contribution
in providing the basic principles for the STs development administration in India. He
advocated ‘Pachasheel,” the five pillars of the tribal upliftment. The five fundamental
principles area as follows: 1). Tribal people should be developed along the lines of
their own genius and nothing should be imposed upon them; 2). Respect for the
tribal rights on land and forests; 3). Minimum investment of outsiders (non-tribal
people) in their administrative and development in the tribal areas; 4). Administrative
and launching of multiple schemes should be avoided and effects should be made
within the frame work of their social and cultural institutions; and 5). Evaluation of
results should not be by statistics but by the quality of life (Vidyathi & Rai, 1985).11
The thing in practice was entirely different during the post independence period. The
concept of ‘Assimilation’ has interpretated as ‘Integration’ for the expanding the State
hegemony over the forest resources in the Scheduled areas or tribal areas during the
post independence period.

VI. THE ISSUE OF ‘ECONOMIC EXCLUSION’ AND CONSEQUENCES AMONG
THE TRIBAL AREAS

The nature of the ruling class or social group of the society reflects in the functioning
of the State. The interest of the dominant social groups is to exploit the rich forest
resources in the name of national interest or development of the nation. Obviously,
the state interest is nothing but the interest of the ruling class or ruling social
groups. Then the State interest is diverted to the forest resources and land during
the post-independence period. The State made strong forest policies in the name
of environmental protection, thousands of square kilometres of rich forest area has declared as either reserved forests or protected forests. The forest department became biggest land owner in India. Then the State has sanctioned lakhs of hectors and the forest land diverted to non-forest activities in the name of achieving economic growth without having specific inclusive distribution system.

The State also initiated several projects in the tribal areas to exploit the resources for faster economic growth. It has construction of Dams, industries and other developmental projects affected negatively to the local tribal communities and their traditional livelihoods during the post-independence period. If see the changes in the forest covering area, extent of reserved forests and protected forests during the post-independence period, one can understood the attitude of the State. The total forest covering areas has increased from 277232.00 Sq.K.M. in 1950-51 to 692027.00 Sq. K.M. in 2011. The compound Annual Growth rated is noted as 2.49 percent during the same period. The area under reserved forests also increased 132975.00 in 1950-51 to 254022.00 Sq.K.M. during the same period. Whereas the area under protected forests has increased more than five times. The compound Annual Growth Rate is noted as 7.63 percent during the same period. The tribal districts occupy 411881.00 Sq.K.M (Table 1) by 188 districts at all India level. It contains nearly 60.00 percent to the total forest area. It shows that tribal dependency on forest resources. But majority of the tribal communities have driven out of the forest by expanding the area under reserved and protected forests. Due to changes in the definition of the forests, and initiation of Wildlife (Protection) Act 1972, the extent of area under protected forests has increased more than five times and noted higher growth rate during the post-independence period. As a result, lakhs of households from thousands of habitations and hundreds of villages have been displaced from the forests.

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A study made in the case of chenchu tribal people who are living in the ‘Core area’ of the Nagarjuna Sagar and Srisailam Wildlife Sanctuary or Project Tiger- Achampet situated in Mahabubnagar district. Three kinds of villages are selected for the study. Total selected households are 220 and from them, 79 households are selected from Core area, 76 households from Non-tribal area and 65 households from Buffer area are selected for the study. The selected households had 243.10 acres of land in 1981. The Nagarjuna Sagar and Srisailam Wildlife Sanctuary established in 1982. The forest department has restricted the cultivation and collection of MFP and human trafficking in the Core Area of the Sanctuary. 141.00 acres of land occupied by the forest department and the operational and owned land declined to 2.00 acres in 2001 among the selected households. However, 145 acres of land is restored to only chenchu tribal households in the core area by the pressures of the ITDA and District collector under the provisions of FRA 2006. But the forest department is not allowed the tribal people to cultivate the land inside of the sanctuary. The forest department is trying to settle them outside of the core area. While the chenchu tribals are not agreeing for displacement. Now the issue in under the consensus between the tribals and forest department. The main reason for the confrontation is the duel attitude of the State towards tribal development. One hand it is initiating inclusive strategies and modern democratic principle like decentralisation and bottom up approaches for the tribal development administration and excluding the tribal households from the ownership and management of their forest resources through expanding the protected forests to the tribal areas on the other. The tribal households suffer not only by the expanding the protected forest area but also diverting the forest land for non-forest purposes.

Sunit Narain et.all (2005) stated that the tribal lives have deprived due to alarming displacement among the tribal communities. And it led to deprivation of livelihoods and increasing poverty among the forest based tribal communities. If see the statistics, total area of 19,70,998.93 hectors of forest land has diverted to mines, non-forest activities, roads, irrigation and infrastructural development during the post-independence period (Table 2).
Table 2

Changes in the forest covering area by classification during 1950-51 and 2011

<table>
<thead>
<tr>
<th>Classification of Forests</th>
<th>1950-51 Area in Sq.KM</th>
<th>%</th>
<th>2010-11 Area in Sq.KM</th>
<th>%</th>
<th>Compound annual growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserved Forests</td>
<td>132975.00</td>
<td>47.97%</td>
<td>254022.00</td>
<td>36.71%</td>
<td>1.52</td>
</tr>
<tr>
<td>Protected forests</td>
<td>45532.00</td>
<td>16.42%</td>
<td>254022.00</td>
<td>36.71%</td>
<td>7.63</td>
</tr>
<tr>
<td>Un-classified forests/open forests</td>
<td>98725.00</td>
<td>35.61%</td>
<td>157859.00</td>
<td>22.81%</td>
<td>1.00</td>
</tr>
<tr>
<td>Tribal district forest cover area</td>
<td>0.00</td>
<td>0.00%</td>
<td>411881.00</td>
<td>59.52%</td>
<td>0.00</td>
</tr>
<tr>
<td>Total forest area</td>
<td>277232.00</td>
<td>100.00%</td>
<td>692027.00</td>
<td>100.00%</td>
<td>2.49</td>
</tr>
</tbody>
</table>


The state and State’s interest are responsible for the diversion of the forest to non-forests. Major share of the dominant community individuals has benefited from the diversification of the forest land. On the other hand, lakhs of tribal households have displaced due to the construction of big dams, mines and others in the forest area. The State generated income from tribal areas and distributed to whole country. The dominant social groups and corporate class have benefited major share at the cost of lakhs of innocent displaced tribal lives and still the displaced tribal communities have been begging to the Government for social justice, restoration of livelihoods and to overcome the deprivation. Satyajit Singh (1997) noted that the total displaced people were 9,11,474, if you estimate the number of households (an idle family each 5 members) getting 1,82,295 households till 1997. But the huge number of households are displaced during the post reforms period (Table 3). Among the major tribal concentrated States, the highest number (54460) of households were displaced in Gujarat, the second heist number is noted in Bihar (46395), and Andhra Pradesh and Himachal Pradesh are followed by them in the case of displacement.

Table 3

Forest Area Diversification as on 2011

<table>
<thead>
<tr>
<th></th>
<th>Area in hectares</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mining activities (1980-12)</td>
<td>144690.35</td>
</tr>
<tr>
<td>2</td>
<td>Infrastructural development</td>
<td>46266.39</td>
</tr>
<tr>
<td>3</td>
<td>Non-forest activities</td>
<td>814054.00</td>
</tr>
<tr>
<td>4</td>
<td>Projects approved</td>
<td>864178.79</td>
</tr>
<tr>
<td>5</td>
<td>Diverted under Forest Conservation Act 1980</td>
<td>25725.67</td>
</tr>
</tbody>
</table>
All these socio-political and economic tensions have been taken place due to the ‘economic inclusion’ of tribal areas for the benefit of main stream society. The dominant social groups cannot exploit the forest resources directly in the forest and tribal areas by the constitutional safe guards and restrictions. But the State can enter into the tribal areas, can acquire either forest or tribal land through the ‘Land acquisition Act, 1894’ in the name of national interest. Hence, the dominant communities entered into the tribal and forest areas through the State power mechanism. They misinterpreted the concept of ‘Assimilation’ as ‘Integration’ and formulated integrated policies and strategies to expand their hegemony over tribal resources and forest areas. The principles of ‘Panchasheela’ has been diluted by the dominant ruling people for facilitating the exploitation of tribal areas resources in the name of national interest and faster growth which has not redistributed properly.

VII. THE ISSUE OF ‘SOCIAL AND POLITICAL INCLUSION’ AND THE CONSEQUENCES AMONG TRIBAL COMMUNITIES

The concept of ‘social inclusion’ used here in the broader sense that it included the political and economic spheres of activities. It also meant for geographical inclusion for the administrative purposes. The interventional mechanism into the tribal areas and people has been started during the British period. The expansion of ‘Land Revenue’ system and ‘Forest Policies’ to the tribal areas led to the social and political unrest in the tribal societies during the colonial period. The appointment of non-tribal Zamindars and forest officers in the tribal areas became trend in the Indian Tribal history. The Zamindars, Muthadars, Munasabdars and forest officers have overruled about the tribals and their resources. The land rights have been deprived; the tribal labourers lost their livelihoods sources, and tribal lost their customary rights and practicing traditional activities over their own resources due to hegemony of the State and State personnel. The commercial attitude and revenue motives of the British government pushed the tribals into stream poverty and made them more vulnerable. Unfortunately, during the post independence period, whoever the non-tribals entered into the tribal areas under the status of State personnel in the name of Zamindars, Muthadars, Munasabdars and forest officers, they did not get back to their own area (plain area). And their hegemony over the tribals and tribal resources and forest resources has been continued by their families during the post-independence period. The appointed non-tribal persons have
become settlers in the tribal areas and continued their hegemony over the local tribal people and resources. The State could not control the non-tribes after abolition of Zamindari system and modified forest policy during the post-independence period (Nageswara Rao, B., 2013). Some of the studies like Mohanarao, K (1996), Fernands (2001), Janardhan, B. (1994) and Nageswar Rao, B. (2013) studies provides the evidence for land alienation stated that around that 50.00 percent of the total tribal land has alienated by the non-tribals in the tribal areas at all India level. At least if see the incidence of land alienation in Andhra Pradesh, 3,40,491 acres of tribal land alienated as on 2003. Only 39.73 percent of the cases are decided in favour of the tribes, and 33.38 percent of the land has been restored to the tribal families Table 4). The percentage of land under possession is not identified and it may be too less. It also shows the interest of the State agencies in providing social justice to the tribal communities.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>State</th>
<th>Displaced population</th>
<th>Displaced families</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gujarat</td>
<td>272300</td>
<td>54460</td>
<td>29.87</td>
</tr>
<tr>
<td>2</td>
<td>MP</td>
<td>32700</td>
<td>6540</td>
<td>3.59</td>
</tr>
<tr>
<td>3</td>
<td>Bihar</td>
<td>231974</td>
<td>46395</td>
<td>25.45</td>
</tr>
<tr>
<td>4</td>
<td>Rajasthan</td>
<td>38400</td>
<td>7680</td>
<td>4.21</td>
</tr>
<tr>
<td>5</td>
<td>AP</td>
<td>169000</td>
<td>33800</td>
<td>18.54</td>
</tr>
<tr>
<td>6</td>
<td>AP</td>
<td>116000</td>
<td>23200</td>
<td>12.73</td>
</tr>
<tr>
<td>7</td>
<td>MP</td>
<td>32600</td>
<td>6520</td>
<td>3.58</td>
</tr>
<tr>
<td>8</td>
<td>Orissa</td>
<td>18500</td>
<td>3700</td>
<td>2.03</td>
</tr>
<tr>
<td>9</td>
<td>All</td>
<td>911474</td>
<td>182295</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Satyajit Singh, Taming the waters, OUP, 1997 and Government figures,

When the Gram Panchayat system introduced during post 1970s, the tribal communities or tribal habitations became minorities in every Gram Panchayat. They do not have an independent tribal Gram Panchayats to secure their identity, dignity, to protect their customary rights, possession of land, exploitation of forest resources, to protect their culture, traditions and beliefs. The dominant Hindu caste people became land owners and rulers in Gram Panchayats of tribal areas. The LTR Act 1959 and LTR Act 1970 could not control the land alienation completely and the hegemony of the non-tribals over resources during the post-independence period has been increased. The dominant Hindu caste people did not consider the interests of the tribal people due to their majority in number, economic strength and political power in the Scheduled Areas. The LTR Acts became weak and the dominant social group’s ruling government has introduced several G.O.s to legitimise their hegemony over the resources in the tribal areas and weakened the LTR Acts (Ibid).
This kind of integrative development strategies have led to un-favourable ‘social inclusion’ and further exclusion among the tribal communities as Dr. B. R. Ambedkar stated in the Constituent Assembly discussions when he was discussing on tribal issues. Dr. Ambedkar felt that the Gram Panchayat system should not be the same in tribal areas as in the Hindu caste groups. The administrative powers should not be decentralised to the local bodies till getting awareness and expanding education among the SCs and STs in the rural India. Because, the SCs and STs are minorities in every village and spread over the most of the villages, their interest may not be considered by the principle of ‘Majority decision’ in democracy by the majority Hindu caste groups in the local institutions or governing bodies.

One more evidence for the unfavourable inclusion of tribes with the local governing institutions of the dominant caste groups. Around 25 Chenchu tribal hamlets situated in the ‘core area’ of the Nagarjuna Sagar and Srisailam Wildlife Sanctuary or Project Tiger Achampet which is covered in the Mahaboob Nagar district area or jurisdiction. The chenchu tribals have been living since centuries in the same dense forest and remote areas. These 25 Chenchu tribal hamlets have situated within the distance of 20-25 k.m. with the number of 465 households. Appapur chenchu penta is a central hamlet to all hamlets and recently the forest department and ITDA have arranged metal road from Sraisailam highway to Appapur at the distance of 15 km. One Tribal welfare Primary School also constructed in Appapur, MFP collecting centre cum PDS centre also arranged. Appapur Chenchu penta is connected with the all remaining chenchu hamlets by foot path. If the Government declare Appapur as Tribal Gram Panchayat by merging all 24 hamlets, the chenchu tribal people can have their own panchayat institution, they can express their interests, they can make their own decisions, they can make their own plans for their development though their Gram Sabha and Garam Panchayat.

But these 25 chenchu hamlets are merged with the outside Gram Panchayats from the open forest and plain area where the non-tribals are nominated. 15 hamlets are included into Appaipally Gram Panchayat. It is dominated by Lambada tribe which is advance compared to chenchu tribals and are not interest to include with them. It is situated at distance of 40 km by foot path through dense forest and 70 km by bus road but the chenchu tribes do not have bus road. 9 chenchu hamlets are merged with the Eagala pents Gram Panchayt. Here also some of the non-tribals are living with the chenchu tribes. It is situated at the distance of 10 km. One hamlet Mallapur is merged with the Mannanur Gram Panchayat. It is dominated by non-tribals and situated at the distance of 35 km.

The chenchu tribal people do not know about the elections, about the Gram Panchayats, Gram Sabhas, functions and functionaries at Gram Panchayat level. All the funds which come in the name of the Chenchu tribals and their shares are misusing by the non-tribal at outside Gram Panchayts. The chenchu tribes are not able to get caste
certificate, income certificate, ration card and any kind of facility from the staff of the Gram Panchayats and other revenue departments offices. The inclusion of Chenchu tribal hamlets with the other tribal hamlets or non-tribal hamlets became a problem and led to social unrest. They are very clear that they are not interested to include their hamlets with the outside local institutions at any cost and they are furious about the non-chenchus.

However, the social inclusion of tribes with the non-tribal caste groups in the name local development administration, the exclusion of forest resources from the tribes in the tribal areas through the forest policies are unfair and unfavourable to the tribal communities. So one can understand that the applicability of the concepts of ‘social inclusion’ of a particular community or group depends on the nature and coping up capability with other communities. However, the parameters for measuring, understanding and implementing the strategy of social inclusion are different from one community to another and it depends upon the nature and socio-economic, political and cultural conditions of the community. Particularly, these parameters may different for tribal communities from Hindu caste groups in India.

**VIII. A SET OF ADDITIONAL INDICATORS FOR MEASURING SOCIAL INCLUSION AMONG THE TRIBAL COMMUNITIES**

The concepts of ‘Social inclusion’ and ‘social exclusion’ contains multi-dimensional analysis of poverty or vulnerability and related factors. The concept of social inclusion indicates the empowerment, cohesion, participative development which can be overcome the problem of poverty and vulnerability. It is not just increasing income or just having employment but it includes enhancing rights, participation and decision making (Ides Nicaise, 2008)\(^1\). The existing conceptual interpretation and understanding is not enough for policy design and implementation mechanism for the development of tribal communities in India. Addition to this some more parameters is required for appropriate policy making and implementation.

A set of separate indicators for the identification of vulnerability and poverty among the tribal communities are prepared which can help in building the way for social inclusion of tribal communities first with the State and later with the other social groups in the development process. It concentrates on three aspects of the vulnerable or social exclusion indicators: A). the quantity and quality of land and its nature of the ownership availed by the tribal communities compared to other communities in the same region and as well as national level. A comparative analysis gives the ideas which can support in framing strategies for the policy making for inclusiveness of the tribal communities. B). the violation of safeguards and protective measures by the State and as well as non-tribal communities on tribal communities is an important point. Atrocities against scheduled tribes committed by the State and non-tribal
communities for land and forest resources are parameter in this analysis. C). the fulfilment of tribal rights should be done by the participation of the local communities or individuals. In this process the local measures must be update with the national level and international level measures and parameters. The measures also must be considering the tribal traditional point of views and sentiments over the resources.

A set of separate indicators for the inclusive development of tribal communities

<table>
<thead>
<tr>
<th>Domain</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of land and exclusion from its ownership</td>
<td><strong>Quantity</strong>: Average per capita land holding by the tribal population compared to the non-tribes population in the same region and to rural and national averages</td>
</tr>
<tr>
<td></td>
<td><strong>Quality</strong>: Market value of an average landholding by a tribal household/ community compared to that held by a non-tribe household/ community. Is land quality adequate to sustain the traditional mode of production for tribal people</td>
</tr>
<tr>
<td></td>
<td><strong>Distribution</strong>: Percentage of the tribal population households who held no land or more than X amount of land in a given year and over time</td>
</tr>
<tr>
<td>The violation / denial of the right</td>
<td><strong>Landless population</strong>: Percentage of tribal population with no access top land compared to the rural and national averages and changes in landlessness over time</td>
</tr>
<tr>
<td></td>
<td><strong>Security of tenure</strong>: Proportion of tribal households/ communities who hold legally enforceable land titles compared to with non-tribal households</td>
</tr>
<tr>
<td></td>
<td><strong>Forced evictions</strong>: Number of tribal people removed from the lands that they had traditionally occupied. Relocation of the people without their free informed consent</td>
</tr>
<tr>
<td>Fulfilment of right</td>
<td><strong>Process</strong>: Ratification and implementation of international and national legislation on the right to land without discrimination and with the participation of tribal people. Existence and effectiveness of government institutions that address violations of tribal people’s right to land such as ombudsman, HR Commissions, local courts etc.</td>
</tr>
<tr>
<td></td>
<td><strong>Outcome</strong>: Percentage of the tribal population that control either individuality or collectively land they have traditionally occupied.</td>
</tr>
</tbody>
</table>


IX. PREREQUISITES BEFORE IMPLEMENTING SOCIAL INCLUSION STRATEGIES IN THE TRIBAL AREAS

The government agencies like forest department, tribal welfare department and revenues departments should consider the interest of the tribal communities and give space for the direct involvement and participation of the local representatives from tribal community organisations and elected representatives in the policy frame work and implementation process. The negligence in institutional formation in identifying protecting their rights is one kind of violation of their rights.

The tribal villages should be re-organised as tribal Gram Panchayats. The vulnerable tribal hamlets which are included into the non-tribal Gram Panchayats and dominant
advanced tribal communities should be excluded from them and must be re-organised as separate tribal Gram Panchayats to protect their rights and management of their own resources (Luca Tacconi (2007)). Scheduled tribal communities are minorities in the some of the villages in Scheduled Areas. Where the tribal people are minority in number, it is difficult to attain leadership or political power against non-tribal people. The non-tribal people could not consider the interests of the tribal people in Gram Sabha and implementation of developmental programmes.

In this view, there is need for re-organisation of tribal Gram Panchayats in the Scheduled areas. In those villages or Gram Panchayats the tribal people are minority in number, all the tribal households have to be consolidated from surrounding villages and re-organised as new tribal Gram Panchayats in the same area. Their landholdings also should be consolidated and situated near to the resident areas to prevent land alienation. This exercise facilitates the participation of tribal people in to decision making, policy frame work and implementation process. It leads to inclusion of scheduled tribes with the non-tribal communities and government agencies.

Re-organisation of tribal hamlets or villages in the Scheduled Areas

The life style among the tribal people is different from scheduled areas to the protected areas. The level of segregation among the tribal hamlets is more and average size of the hamlets is less in the protected areas compared to scheduled areas. The majority of the Primitive Tribal Groups live in the protected areas. They do not have the habit of cultivation and they depend on MFP collection and other traditional occupations. In the protected areas, most of the tribal hamlets are merged or included with the non-tribal Gram Panchayats for easy administration. The non-tribal people exploiting the tribal people and misusing the funds which have allocated for the development of tribal communities. The non-tribal people are not allowing the tribal people into the Gram Sabhas. For instance, in the NAgarjuna Sagar and Srisailam
Wildlife Sanctuary or Project Tiger-Achampet, around 25 Chenchu tribal hamlets are situated in the Cores area of the forest. Most of the chenchu hamlets have included or merged with the Appapipalli Gram Panchayat which is situated open forest area and outside of the core areas at distance of 70 km by bus road and 25 km by foot path. The remaining chenchu hamlets are included are merged with the Mannanur and other non-tribal Gram Panchayats un-fairly at the distance of 50 km to 60 km from the core are of the forest or Chenchu tribal hamlets.

In this view, the Primitive Tribal Groups hamlets should be separated from the either non-tribal Gram Panchayats and re-organised as separate tribal Gram Panchayats in their area. The number of tribal representation will be increased from the PTGs from the protected areas and it leads to inclusion of tribal communities to the State agencies and other social groups.

Re-organisation of tribal hamlets or villages in the Scheduled Areas/Core areas

The administrative approach of the forest department has to be shift from Top-Down to Bottom up to consider the interest, aspiration and participation of the local communities in the process of forest conservation and improving livelihood opportunities (Mathan 2010: 140-160). The Wildlife (Protection) should get amendments to recognise the powers and functions of local administrative institutions like Gram Panchayats and Gram Sabha. All the developmental programmes implementation should be link to the Gram Sabha at village level (Mathan 2010: 140-160). The forest department and other administrative bodies’ should recognise the importance of PESA Act 1996 and FRA 2006.
Table 5

Incidence of land alienation in the tribal areas of Andhra Pradesh in 2003

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Details</th>
<th>Number</th>
<th>Extent in acres</th>
<th>No. %</th>
<th>Area %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of cases disposed off</td>
<td>59849</td>
<td>256452</td>
<td>86.59</td>
<td>75.32</td>
</tr>
<tr>
<td>2</td>
<td>Cases rejected</td>
<td>31735</td>
<td>150227</td>
<td>45.91</td>
<td>44.12</td>
</tr>
<tr>
<td>3</td>
<td>Cases decided in favour tribes</td>
<td>27461</td>
<td>106225</td>
<td>39.73</td>
<td>31.20</td>
</tr>
<tr>
<td>4</td>
<td>Land was restored</td>
<td>23383</td>
<td>94312</td>
<td>33.83</td>
<td>27.70</td>
</tr>
<tr>
<td>5</td>
<td>Cases under pending</td>
<td>7663</td>
<td>31324</td>
<td>11.09</td>
<td>9.20</td>
</tr>
<tr>
<td>6</td>
<td>Number of non-tribal occupations/ cases filed</td>
<td>69119</td>
<td>340491</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Laxmana Rao, S; Priya Deshinkar and John Ferrington, 2006; EPW.

Table 6

Atrocity Cases disposed, Convicted, Acquittal and pending under the courts

<table>
<thead>
<tr>
<th>Type of case</th>
<th>1991</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Cases disposed off</td>
<td>0</td>
<td>0.00</td>
<td>8673</td>
</tr>
<tr>
<td>Conviction cases</td>
<td>125</td>
<td>1.56</td>
<td>700</td>
</tr>
<tr>
<td>Acquittal cases</td>
<td>1367</td>
<td>17.03</td>
<td>7420</td>
</tr>
<tr>
<td>Cases under pending</td>
<td>6537</td>
<td>81.42</td>
<td>107204</td>
</tr>
<tr>
<td>Total Cases</td>
<td>8029</td>
<td>100.00</td>
<td>123997</td>
</tr>
</tbody>
</table>

Source: National Commission for SCs/STs, 2005

X. THE DIFFERENCE BETWEEN NON-TRIBAL GRAM PANCHAYAT AND TRIBAL VILLAGE ADMINISTRATION

Gram Panchayat is a basic standard unit to initiate developmental schemes and programmes in India. From National Survey Organisations to local NGOs Gram Panchayat considered as basic and primary unit for benchmark data to understand the issues of either development or under-development for research investigations. Generally, majority of the non-tribal Gram Panchayats exists under Revenue Development Administration system, whereas the majority of the tribal hamlets or villages exist under multi-developmental administrative systems like Forest, Revenue and Irrigation development administrative systems. Forest, Revenue and Irrigation departments they have been following their own development administrative methods on the basis of their own administrative maps. Defining ‘Gram Panchayat’ or ‘Village’ is difficult in the tribal areas due to hitches of different development administrative systems.

Generally, Gram Panchayat defines with the geographical boundaries either by ownership of land owned by the resident’s or land under their occupation. It is easy in
Inclusive Development of the Scheduled Tribes in India

the case of non-tribal villages due to clarity in defining the rights over the resources by their ownership or occupations. But it is difficult in the tribal areas due to the overlapping between ‘De-Jure’ and ‘De-facto’ rights and practices. Their land rights are not formally recorded either under ownership or occupational. One cannot take into consideration about only cultivation in defining the village boundaries. The prime occupation Minor Forest Produce collection plays an important role which exists on the basis of customary rights to define the ‘village’ or ‘Gram Panchayat’ in the case of tribal areas.

Defining village boundaries on the basis of ‘customary rights’ became a challenge to the tribal development administration because, the forest department rules of wildlife sanctuaries and reserve forests would not consider the concept of ‘customary rights’ to define the village or Gram Panchayat in the tribal areas which is a big issue today. The ‘De-facto’ nature and practices of tribal customary rights like MFP collation are broad and occupy huge areas which are difficult to recognise ‘De-jure’ rights of the tribal people on the forest based areas.

XI. CONCLUSION

The concepts of social exclusion and social inclusion obtained importance in the present social science research. The multi-dimensional analysis of the problem of poverty and vulnerability is essential to frame new parameters to understand different facets of the poverty and vulnerability, the difference among the affecting factors from one community to another community is essential to frame inclusive strategies for the development of exclusive characterised community like tribes. Otherwise, un-faire inclusion leads to social tensions, to increasing extremism and further social exclusion. We have experienced with the forest policies, integrated development administration and in the case of North Eastern States religious issues.

We need to have a set of additional indicators for proper understanding of the nature of exclusion in the tribal communities which is different from other non-tribal communities. The land rights, cultivation rights, quality and quantity of the land resources are an important aspect of the analysis. The denial of recognised rights also an indicator of the social exclusion among the tribal communities. However, the tribal hamlets should be recognising as Gram panchayats or the tribal hamlets have to be re-organised into tribal Gram Panchayats for the institutional recognition and self-administration among them.

Notes


5. He refers to Gore’s (1995) stated reference for a social exclusion approach over the capability frame work, which ‘still remains wedded to an excessively individualists and insufficiently social view’.


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He refers to Gore’s (1995) stated reference for a social exclusion approach over the capability frame work, which ‘still remains wedded to an excessively individualists and insufficiently social view’.


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Quality of Life, Social Exclusion and Chronic Poverty among Tribals in Odisha

Siba Prasad Pothal*, Bishnu Charan Behera**, Bijaya Kumar Panda***

The study examines the quality of life, social exclusion and chronic poverty among the tribals of Odisha by using secondary data collected from various rounds of the National Sample Survey (NSS), published information of the Sample Registration System (SRS) Bulletins, Population Census Reports, National Family Health Survey (NFHS) Reports, Human Development Reports, etc. It analyses the magnitude, incidence, depth and severity of poverty among different social groups and across different NSS regions of the state using the estimates of Foster, Greer and Thorbecke (FGT) class of poverty measures such as head count ratio, poverty gap ratio and squared poverty gap ratio in per capita terms for each social group separately for the NSS regions as well as for the rural and urban sectors of the state. The study reveals that the tribals of the state have a long history of chronic poverty, social exclusion and inequality, all of which have a direct bearing on their quality of life and level of living. Several social, economic and institutional obstacles have remained major obstacles to the proper distribution of the benefits of economic growth among different social groups in the state. The trend in head count ratio (poverty ratio) in the state is influenced significantly by the differential trend in the social group poverty ratio.

Keywords: Tribals, Chronic poverty, Quality of life, Affirmative Action, Inclusive growth

I. INTRODUCTION

Improving the quality of life and level of living for different sections of the population is one of the key objectives of many programmes and policies of the government. Quality of life is a complex and multidimensional concept, reflecting the physical, psychological, social, economic and environmental dimensions of life. It goes beyond people’s mere material standard of living and focuses not only on income, employment and material resources, but also on other interacting elements of socio-economic well-being. It has emerged as an integrating approach to deal with the issues associated with the diverse needs and the ways of life of different segments of the population. Hence, the measurement and improvement of the quality of life is a major

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challenge for the government, NGOs, human development agencies and researchers (Rawls, 1999; Alkire, 2002: 181–205; Rahman et al., 2011: 43–52). There exists a positive correlation between improvement in quality of life and improvement in the well-being of individuals and communities.

At present, research on social indicators and the quality of life have been the focus of intense scientific and political interest and are well-established areas of social science. Many researchers have adopted both objective (e.g. income and other socio-economic indicators) as well as subjective (e.g. happiness and life satisfaction) approaches to better conceive of the quality of life (Flanagan, 1978: 138–147; Forget and Lebel, 2001: S3–S36; Diener et al., 2009). Some researchers follow the ‘level of living’ approach in order to empirically measure and assess quality of life and they mainly focus on objective descriptions to explain the living conditions. Such an approach focuses on what would be the determinants of quality of life, such as health, income, consumption pattern, occupation and working conditions, housing, education, social security, etc.

Odisha occupies an important position in the tribal map of India. The tribal population (Scheduled Tribes) of this state is 9.59 million, constituting nearly 22.85 per cent of the total state population and 9.2 per cent of the total tribal population of the country (Census of India, 2011). In the hierarchy of distribution of tribal population, Odisha occupies third position in India, the first two being Madhya Pradesh with 14.69 per cent and Maharashtra with 10.08 per cent. The tribals living in different parts of Odisha are located at varied stages of socio-cultural orientation and economic development, with different degrees of exposure to modernity and social change. Even after six decades of development planning, there has not been much tangible improvement in the socio-economic condition and quality of life of a great majority of the ST population in the country. It is hard to find any significant changes in the quality of life of these deprived and vulnerable sections of the population. In this study, an attempt has been made to analyse the status of quality of life of the tribals vis-à-vis other social groups through various determinants such as income, education, health, consumption, poverty, occupation and working conditions, housing, social security, etc.

II. OBJECTIVES OF THE STUDY

The specific objectives of the present study are:

1. To examine some of the common features and problems of the social groups to study the social and regional dimensions of poverty in Odisha.
2. To estimate the FGT (Foster, Greer and Thorbecke, 1984) class of poverty measures such as head count ratio, poverty gap ratio and squared poverty gap ratio to measure the incidence, depth and severity of tribal poverty in the state.
3. To analyse the variation of FGT class of poverty measures among the social groups over different regions of the state.
4. To examine various aspects of quality of life and level of living of tribals in Odisha.

5. To assess the impact of chronic poverty and social exclusion on the quality of life and level of living of tribals in the state.

III. METHODOLOGY OF THE STUDY

1. Data

The present study is based on secondary data. We have mainly used the NSS data collected by the National Sample Survey Organisation (NSSO) from the various rounds of Quinquennial survey. The NSSO is one of the leading data collecting agencies of the Government of India, adopting very scientific sampling methods. Different subjects are taken up for survey in different rounds of NSSO. The 66th round of NSSO (2009-10) includes the survey on household expenditure and was the eighth Quinquennial survey in the series of Quinquennial surveys conducted by NSSO every five years. Data on monthly total expenditure and per capita total expenditure is available for both 7 days and 30 days reference period. Though annual surveys on consumer expenditure selecting thin samples (only two households from each sample village/urban block) have been conducted in recent years (after the forty second round), most of the analysis and debates on poverty and consumption has centered on the Quinquennial surveys on consumer expenditure conducted by NSSO selecting thick samples (at least 10 households from each sample village/urban block. The NSS distinguishes four social groups – Scheduled Tribe (ST), Scheduled Caste (SC), Other Backward Class (OBC) and others. In this study, the OBC group and others are categorized under one group as ‘others’. We have estimated FGT class poverty measures to examine the level of incidence, depth and severity of poverty in the state. The other data sources for the present study include published information of the Sample Registration System (SRS) Bulletins, various reports of Population Census, National Family Health Survey (NFHS), Human Development Reports, etc. The study also uses data compiled and collected from literature, scholarly published research studies, and other published and unpublished secondary sources.

2. Methods of Estimation of Poverty

In this study, both traditional and sophisticated poverty ratios and indices are used to measure the magnitude, incidence, depth and severity of poverty among the social groups, especially among the tribals in Odisha. The traditional ratios are: (i) head count ratio, (ii) average and normalized poverty gap ratio and poverty intensity ratio, and (iii) normalized deficit ratio (poverty depth index). The sophisticated index is the FGT index (generalized deficit ratio). The detail of these poverty measures are given below.
3. **Head Count Ratio (H)**

The proportion of people below the poverty line is an index of poverty. This ratio is popularly known as the head count ratio. It is the simplest measure of poverty and is given by,

\[ H = \frac{m}{n} \]  

Where ‘m’ is the number of persons below the poverty line, ‘n’ is the size of the population and ‘H’ is the head count ratio. The head count ratio measures the incidence of poverty in a population. This measure does not satisfy monotonicity and transfer axioms. The head count ratio measure provides the same incidence of poverty as long as income changes do not cross the poverty line.

4. **Average and Normalized Poverty Gap Ratio and Poverty Intensity Ratio**

Poverty gap measures the total income necessary to raise everyone who is below the poverty line up to that line i.e. Total Poverty Gap (TPG) = \(\sum_{i=1}^{m} (z - y_i)\). On per capita basis, the average income shortfall or Average Poverty Gap (APG), \(\text{APG} = \frac{\text{TPG}}{m}\).

5. **Normalized Poverty Gap Ratio (NPGR)**

Since we are interested in the size of the relative poverty gap with respect to the poverty line, it is useful if the poverty gap is normalised dividing it by the poverty line. It is the sum of the relative poverty gaps of the poor and represented as:

\[ \text{NPGR} = \frac{\sum_{i=1}^{m} (z - y_i)}{z} \]  

Where \(\bar{y}\) is the average income of the poor and ‘z’ is the poverty line or threshold income. One advantage of this measure is that its value varies from 0 to 1. It is homogeneous of degree zero in individual income and also poverty line or threshold income. It satisfies both the focus and monotonicity axioms but violates the transfer axiom.

6. **Poverty Intensity Ratio**

Sen (1976) preferred to combine the features of normalized poverty gap (NPG) with the APG. This ratio is popularly known as the poverty intensity ratio and denoted as \(I_{I'}\). It is written as:
\[ I_p = \left( \frac{TGP}{nt} \right) = \left( \frac{APG}{z} \right) = \frac{1}{nt} \sum_{i=1}^{m} (z - y_i) = 1 - \frac{\bar{y}}{z}, \quad y_i < z \] (3)

Where \( \bar{y} \) is the average income of the poor and \( z \) is the poverty line. \( I_p \) is the normalisation of TGP by the income necessary by all the poor to become non-poor \( (\frac{mz}{nt}) \). It varies from 0 to 1. If the value of \( I_p \) is close to 1, intensity of poverty is high and if it is close to 0, intensity of poverty is low. It is also homogeneous of degree zero in individual incomes and the poverty line. It satisfies both the focus and monotonicity axioms but violates the transfer axiom.

7. Normalised Deficit Ratio or Poverty Depth Index

Poverty would have been zero if everyone in the society has income just equal to ‘\( z \)’. In this case, the total income of the society is equal to ‘\( nz \)’. If the TGP is normalized by ‘\( nz \)’, one can get the normalised deficit ratio or Poverty Depth Index (Watt, 1968). It is denoted as \( I_w \) where,

\[ I_w = \left( \frac{TGP}{n} \right) = \frac{1}{n} \sum_{i=1}^{m} (z - y_i) = \frac{m}{n} \left( 1 - \frac{\bar{y}}{z} \right) = H_p, \quad y_i < z \] (4)

This ratio is an improvement over the poverty intensity ratio in the sense that it is the product of poverty incidence ratio and poverty intensity ratio. Like the poverty intensity ratio, it satisfies the focus and monotonicity axioms but violates the transfer axiom.

8. Foster, Greer and Thorbecke (FGT) Index

The advantage of using FGT class of poverty measures is that these measures are additively decomposable i.e. if the population is divided into mutually exclusive sub-populations, then poverty measures of population can be estimated as the weighted average of sub-population poverty measures where the share of the sub-population size in the total population are the respective weights. Poverty measures like the head count ratio (measures the incidence of poverty), the poverty gap index (measures the depth of poverty), and the squared poverty gap index (measures the severity of poverty) can be estimated using the following formula suggested by Foster, Greer and Thorbecke:
FGT (\( \alpha \)) = P_\alpha = \frac{1}{n} \sum_{i=1}^{n} \left( \frac{z - y_i}{z} \right)^\alpha \tag{5}

Where, ‘n’ is the number of people in the sample population, ‘m’ is the number of people below the poverty line, ‘\( y_i \)’ is the income of the poor individual ‘i’ and ‘z’ is the poverty line (income).

Depending on the value of \( \alpha \), the FGT index, \( P_\alpha \) index takes different forms (having different measures). If \( \alpha = 0 \), the numerators equal to H and we get the head count ratio (H). If \( \alpha = 1 \) i.e. FGT-1 (\( P_1 \)), we get the normalized deficit ratio (NDR) or the poverty gap index. If \( \alpha = 2 \) i.e. FGT-2 (\( P_2 \)), we get the squared poverty gap index or FGT index which can be written as:

\[
FGT2 = P_2 = \left( \frac{m}{n} \right) \left[ \frac{I_p^2 + (1 - I_p)^2 (C_p)^2}{I_p^2 + (1 - I_p)^2 (C_p)^2} \right] = H \left[ \frac{I_p^2 + (1 - I_p)^2 (C_p)^2}{I_p^2 + (1 - I_p)^2 (C_p)^2} \right] \tag{6}
\]

Where \( I_p \) is the poverty intensity ratio and \( C_p \) is the co-efficient of variation of income of poor persons. The measure \( P_2 (\alpha = 2) \) is invariably used as a standard poverty measures by the World Bank and the Regional Development Banks, and by a number of researchers.

IV. SOCIAL-ECONOMIC PROFILE OF SOCIAL GROUPS IN ODISHA

In this study, we are concerned about the socio-economic condition of the tribals of Odisha. Odisha is one of tribal dominated backward states of India characterised by persistent poverty, undernutrition, underemployment, low per capita income and inadequate development of socio-economic infrastructure, which have ravaged the state over the last six decades. The march of development in this poverty-stricken state has different types of impact on different sections of people. It tends to widen the existing inequalities and creates new types of inequalities. The tribals who have been subjected to social exclusion and discrimination are the great sufferers in this process. Chronic poverty is disproportionately high among the SC and the ST communities in Odisha, indicating wide disparities across social groups in the state. The multiple deprivations suffered by these socially and economically marginalized sections make it harder for them to escape from the poverty trap. The tribal communities are poorer than other social groups and are at the bottom of various indicators of development, including consumption and poverty.
Poverty patterns are very much related to social differentiation. Odisha has a very high share of ST and SC population. As per 2011 Census, the ST and the SC population accounts for 22.83 per cent and 17.12 per cent, respectively, of the total population of the state. The percentage of SC population increased marginally by 0.6 per cent but the ST population decreased by 0.7 per cent of the total population of the state during the last decade from 2001 to 2011. The SCs and the STs are the two socially disadvantaged groups in the state.

The SCs have been at the lowest end of the Hindu social caste hierarchy. The occupations that were ascribed to them by the social system were not only low in social ordering but also characterized by very low productivity and hence, low income. Moreover, the social system did not allow them occupational mobility and they have been at the lowest end of the socio-economic hierarchy. Over a long period in the past, this group continued practicing low earning occupations with little exposure to educational opportunities (Sundaram and Tendulkar, 2003: 1385–93).

The Scheduled Tribe, on the other hand, is not a part of the Hindu social hierarchy (Wasnik, 2009). The social and economic backwardness of the STs is due to their long time habitation in geographically isolated areas. Lack of exposure to education and isolation from the social mainstream made them vulnerable to exploitation by non-tribals, especially by money lenders, middlemen and agents of development. When uprooted from their traditional habitations and occupations, the STs were relegated to the lowest end of the economic hierarchy. Their economy is primitive and stagnant. Their social life is narrow and custom bound. Their ignorance and lack of general awareness keep them poverty ridden and underdeveloped through the ages. Poverty is rampant among the tribals with all its manifestations.

The residual omnibus social group ‘others’ consists of castes other than SCs in the Hindu social hierarchy and non-ST members of other religious communities. In the 55th NSS round, this residual (non SC/ST) group has been further subdivided into OBCs and the remaining others in the Hindu social hierarchy. Nevertheless, the households other than SC and ST households are categorised as ‘Others’ in the present study.

V. INCIDENCE, DEPTH AND SEVERITY OF POVERTY AMONG SOCIAL GROUPS IN ODISHA

The growth rate of an economy is a simple and summarized measure of how quickly the average income of people is rising. Poor growth is a major cause of continuing high poverty among the people in a state. Odisha has become a victim of chronic poverty and vulnerable human development for many years. The trend and variation in the magnitude, incidence, depth and severity of poverty across sectors, regions and social classes in the state are examined in this section.
1. Rural-Urban Analysis of FGT Measure of Poverty

The estimates on various poverty measures for rural and urban Odisha during the period from 1973-74 to 2011-12 are presented in Table 1. The magnitude of the absolute number of poor in rural Odisha first increased during the period from 1973-74 to 1983 and then decreased until 1999-00. However, it increased continuously in urban Odisha during the period from 1973-74 to 2004-05. The poverty ratio also declined in both rural and urban Odisha during the period from 1973-74 to 2011-12. The overall poverty ratio followed the same pattern in the state during the above period. However, the poverty ratio in rural areas is much higher than that of urban areas. Further, poverty ratio has declined at a faster rate in rural areas than urban areas indicating significant inter-sectoral variation in poverty ratio during the period 1973-74 to 2011-12. The poverty gap index and the squared poverty gap index have also declined in both the rural and urban areas of the state over the years. Both the poverty gap indices and the squared poverty gap indices have decreased at a faster rate in rural areas than that of the urban areas of the state.

Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Poor (in lakhs)</th>
<th>Poverty Ratio (HCR)</th>
<th>FGT-1: Poverty Gap Index (PGI)</th>
<th>FGT-2: Squared Poverty Gap Index (SPGI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
<td>Total</td>
<td>Rural</td>
</tr>
<tr>
<td>1973-74</td>
<td>146.3</td>
<td>14.2</td>
<td>160.5</td>
<td>0.673</td>
</tr>
<tr>
<td>1977-78</td>
<td>152.5</td>
<td>14.9</td>
<td>167.4</td>
<td>0.724</td>
</tr>
<tr>
<td>1983</td>
<td>157.3</td>
<td>15.3</td>
<td>172.6</td>
<td>0.684</td>
</tr>
<tr>
<td>1987-88</td>
<td>148.0</td>
<td>17.8</td>
<td>165.8</td>
<td>0.584</td>
</tr>
<tr>
<td>1993-94*</td>
<td>140.9</td>
<td>19.7</td>
<td>160.6</td>
<td>0.632</td>
</tr>
<tr>
<td>1999-00</td>
<td>143.7</td>
<td>25.4</td>
<td>169.1</td>
<td>0.481</td>
</tr>
<tr>
<td>2004-05*</td>
<td>157.5</td>
<td>26.6</td>
<td>184.1</td>
<td>0.608</td>
</tr>
<tr>
<td>2009-10*</td>
<td>135.5</td>
<td>17.7</td>
<td>153.2</td>
<td>0.392</td>
</tr>
<tr>
<td>2011-12*</td>
<td>126.1</td>
<td>12.4</td>
<td>138.5</td>
<td>0.357</td>
</tr>
</tbody>
</table>

Source: Planning Commission, Government of India.
Note: * poverty estimates using Tendulkar methodology.  

2. Trend of Regional Variation of Poverty in Odisha

The NSSO divides Odisha into three regions: Coastal, Southern and Northern regions. The Coastal region comprises nine districts: Balasore, Bhadrak, Kendrapara, Jagatsinghpur, Cuttack, Jajpur, Nayagarh, Khordha and Puri. The Southern region
includes twelve districts: Ganjam, Gajapati, Kandhamal, Boudh, Sonepur, Bolangir, Nuapada, Kalahandi, Rayagada, Nabarangpur, Koraput and Malkangiri. The Northern region includes the remaining nine districts: Bargarh, Jharsuguda, Sambalpur, Deogarh, Sundargarh, Kendujhar, Mayurbhanj, Dhenkanal and Angul.

The NSS region-wise poverty estimates reveal that the incidence of poverty has declined from 56.47 per cent to 24.1 per cent in the Coastal region, from 79.08 per cent to 50.80 per cent in the Southern region and from 72.28 per cent to 39.8 per cent in the Northern region of Odisha during the period 1983 to 2009-2010 (Refer to Table 2). The overall incidence of poverty has declined from 66.24 per cent to 37.3 per cent in the state during the above period. However, though the incidence of poverty has decreased over time in the state, the high incidence of poverty, of late, is a matter of serious concern. One possible important reason for the high incidence of poverty in the state might be the percentage of very poor people in the ST and SC population and in the backward Southern region of the state, which is dominated by ST and SC population.

<table>
<thead>
<tr>
<th>Year</th>
<th>NSS regions</th>
<th>All-Odisha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coastal</td>
<td>Southern</td>
<td>Northern</td>
</tr>
<tr>
<td>1983</td>
<td>56.47</td>
<td>79.08</td>
</tr>
<tr>
<td>1987-1988</td>
<td>47.67</td>
<td>80.29</td>
</tr>
<tr>
<td>1993-1994</td>
<td>45.57</td>
<td>66.07</td>
</tr>
<tr>
<td>1999-2000</td>
<td>31.51</td>
<td>81.28</td>
</tr>
<tr>
<td>2004-2005</td>
<td>43.50</td>
<td>78.00</td>
</tr>
<tr>
<td>2009-2010</td>
<td>24.10</td>
<td>50.80</td>
</tr>
</tbody>
</table>


Table 2 also reveals that the incidence of poverty is much higher in the Southern region as compared to the Coastal and the Northern regions of the state. Further, it is also marginally higher in the Northern region as compared to the Coastal region. The districts in the Southern region are inhabited by a large proportion of tribal population and are unevenly developed with respect to health and education facilities, income level, access to basic amenities and infrastructure, etc as compared to the districts of other regions. The chronically backward KBK region, which includes the undivided Kalahandi, Bolangir and Koraput districts, forms an important part of the Southern region of Odisha.

3. Incidence of Poverty among the Social Groups in Odisha
The aggregate poverty ratio hides significant differences in the poverty ratio among social classes (ST, SC and ‘Other’) as well as across different regions of Odisha. The
trend of poverty ratio in the state is also influenced significantly due to wide variation in the trend of poverty ratio among the social classes and in the trend of poverty ratio across the three NSS regions of the state. Table 3 reveals that the incidence of poverty is not uniform across all regions and among social groups. The incidence of poverty among the tribals was as high as 82.8 per cent in 2004-05 and 62.7 per cent in 2009-10. The incidence of poverty among the STs was significantly higher in the Southern NSS region than the other two regions of the state. About 88.6 per cent and 76.6 per cent of tribals were below the poverty line in this region in 2004-05 and 2009-10, respectively. The extent of poverty among tribals was 15.4 per cent higher than SCs, 31.3 per cent than OBCs and 49.7 per cent than others in 2004-05, whereas it was 15.6 per cent, 37 per cent and 40.8 per cent higher than SCs, OBCs and others, respectively, in 2009-10.

### Table 3

Region-wise and Social Group-wise Variation in the Incidence of Poverty from 2004-05 to 2009-10 (in %)

<table>
<thead>
<tr>
<th>NSS Region</th>
<th>2004-05</th>
<th>2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ST</td>
<td>SC</td>
</tr>
<tr>
<td>Coastal</td>
<td>75.4</td>
<td>55.6</td>
</tr>
<tr>
<td>Southern</td>
<td>88.6</td>
<td>78.5</td>
</tr>
<tr>
<td>Northern</td>
<td>80.6</td>
<td>77.9</td>
</tr>
<tr>
<td>Total</td>
<td>82.8</td>
<td>67.4</td>
</tr>
</tbody>
</table>

Source: Calculated from the NSS 61st and 66th rounds unit level data by Institute for Human Development (IHD) using Tendulkar Committee methodology.

Moreover, Table 3 also depicts that the incidence of poverty declined by 20.1, 20.3 and 25.8 percentage points for STs, SCs and OBCs, respectively, during the period from 2004-05 to 2009-10. This shows that the decline in poverty among tribals is less than that of other social classes. The decline in the incidence of poverty is higher in urban areas than in the rural areas and in the Coastal NSS region than in the Non-Coastal NSS regions of the state.

An analysis of social group-wise rural and urban variation in the incidence of poverty in Odisha during the period from 1983 to 2009-10 (Refer to Table 4) reveals a decreasing trend in the incidence of the poverty among all the social groups in both rural and urban areas of the state. However, though the incidence of poverty among the STs has declined over time, the rate of decline is sluggish. During the period from 1983 to 2009-10, the incidence of poverty declined by 23.52 percentage points for STs, 28.28 percentage points for SCs and 18.94 percentage points for all population in the state. Moreover, there is a wide rural and urban disparity in the incidence of tribal poverty in the state. The incidence of rural poverty for STs has marginally declined from 87.08 per cent in 1983 to 66.03 per cent in 2009-10.
Table 4
Rural and Urban Variation in Incidence of Poverty by Social Groups in Odisha

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Odisha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>87.08</td>
<td>83.82</td>
<td>82.20</td>
<td>73.08</td>
<td>84.52</td>
<td>66.03</td>
</tr>
<tr>
<td>SC</td>
<td>75.99</td>
<td>65.75</td>
<td>62.80</td>
<td>52.30</td>
<td>67.88</td>
<td>47.11</td>
</tr>
<tr>
<td>Other</td>
<td>58.52</td>
<td>47.31</td>
<td>52.40</td>
<td>33.29</td>
<td>47.90</td>
<td>25.21</td>
</tr>
<tr>
<td>All</td>
<td>68.43</td>
<td>58.62</td>
<td>59.30</td>
<td>48.04</td>
<td>60.80</td>
<td>39.20</td>
</tr>
<tr>
<td>Urban Odisha</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>73.73</td>
<td>61.37</td>
<td>58.10</td>
<td>59.38</td>
<td>53.40</td>
<td>34.14</td>
</tr>
<tr>
<td>SC</td>
<td>69.53</td>
<td>59.52</td>
<td>39.04</td>
<td>72.03</td>
<td>63.74</td>
<td>47.10</td>
</tr>
<tr>
<td>Other</td>
<td>41.86</td>
<td>37.87</td>
<td>34.80</td>
<td>34.18</td>
<td>42.40</td>
<td>34.18</td>
</tr>
<tr>
<td>All</td>
<td>49.66</td>
<td>42.58</td>
<td>40.68</td>
<td>43.59</td>
<td>37.60</td>
<td>25.90</td>
</tr>
<tr>
<td>Odisha Combined</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST</td>
<td>86.22</td>
<td>82.34</td>
<td>80.60</td>
<td>72.08</td>
<td>82.80</td>
<td>62.70</td>
</tr>
<tr>
<td>SC</td>
<td>75.38</td>
<td>65.35</td>
<td>60.60</td>
<td>55.08</td>
<td>76.40</td>
<td>47.10</td>
</tr>
<tr>
<td>Other</td>
<td>56.16</td>
<td>45.92</td>
<td>39.55</td>
<td>33.48</td>
<td>51.50</td>
<td>25.70</td>
</tr>
<tr>
<td>All</td>
<td>66.24</td>
<td>56.75</td>
<td>59.50</td>
<td>47.31</td>
<td>57.60</td>
<td>37.30</td>
</tr>
</tbody>
</table>


VI. CHRONIC POVERTY AND QUALITY OF LIFE OF THE TRIBALS

The situation of chronic poverty among the tribals of Odisha indicates that the tribals are living under conditions where they fail to meet the minimum standard of living. They experience multiple deprivations, such as lack of good health, better education, and better standard of living such as better sanitation, safe drinking water, provision of social inclusion, better housing, etc. All these factors result in a poor quality of life and level of living among tribals in the state. The Human Development Indices (HDIs) of tribals continue to be much lower than the rest of the population in terms of all quality of life parameters, such as education, health, nutrition, consumption pattern, sanitation and housing condition, etc. This section briefly analyses the impact of chronic poverty on the quality of life and the level of living of the tribals in Odisha.

1. Educational Status

The tribals are at different levels of educational development. The spread of education among them is not very much encouraging which is evident from the status of their educational indicators. It is observed that the tribal literacy rate in the state, according to the 2011 Census, is 52.24 per cent, which is considerably lower than that of the SCs (69.02 per cent) and the state average of 72.90 per cent. The female literacy rate is at a very low level (41.20 per cent) for tribals as against 58.76 per cent for SCs and the state average of 64.01 per cent. The level of literacy and education among tribals in the tribal dominated Southern Odisha is also found to be a matter of concern. It was observed that all the efforts to promote tribal education in this region fall far short of the specific educational needs in the tribal areas.
2. Health Status

The infant, neonatal, child and maternal mortality rates are robust indicators of the health status of a population. There exist very high infant, child and maternal mortality rates in the tribal areas of Odisha, indicating the fatal synergy between insufficient dietary intake and unhealthy environments. The infant mortality rate (IMR) was found to be 78.7 for STs compared to 53.1 for others in the year 2005-06. At the national level, on the other hand, the IMR for the STs was found to be about 62.1 compared to 48.9 for others in the same year. The neonatal mortality rate (NNMR) for the STs in Odisha was 54 compared to 31.7 for others in 2005-06. The NNMR was 39.9 for STs compared to 34.5 for others at the national level. Thus, it indicates that both the IMR and NNMR for tribals in Odisha are much higher than those at the all-India level. The maternal mortality rate (MMR) was found to be 235 per 1, 00,000 live births in the state in 2012-13, compared to 178 at the national level. High MMR reflects poor social and economic status of women that inhibits them from adequate access to quality health care.

The tribals suffer from high incidence and heavy burden of communicable, non-communicable and genetic diseases, resulting in high infant, child and maternal mortality rates. The tribal people in Odisha suffer illnesses of greater severity and duration and the incidence of morbidity is high among them. It is observed that their poor health status is directly linked with important factors such as malnutrition, absence of sanitary facilities and better housing, poor hygiene, illiteracy, and lack of access to opportunities and facilities such as safe drinking water and health care services.

3. Food and Nutrition

The food intake of tribals is deficient in quantity and quality and they suffer from severe malnutrition. According to the WHO, malnutrition is frequently a part of the vicious cycle that includes poverty and disease. The three factors, viz., malnutrition, poverty and disease are interlinked in such a way that each contributes to the presence and performance of the others.

Most tribals in Odisha fail to consume adequate energy, protein and micronutrients, which in turn leads to nutrition related problems characterized by stunting, wasting, underweight, undernutrition of children, low birth weight, lower body size of adults, anemia, and iron, Vitamin A and B deficiency. High prevalence of nutritional deficiency and chronic energy deficiency (CED) are observed among ST women. A substantially higher proportion of tribal women of the state are found to be underweight with BMI<18.5 kg/m². The incidence of anemia among them is high as compared to other social groups. The magnitude of undernutrition is significantly high among preschool
children in the Integrated Tribal Development Areas (ITDA) areas of Odisha (NNMB, 2009). Micronutrient deficiency is a serious contributor to childhood morbidity and mortality.

4. **Housing Condition**

The housing conditions of most tribals in the state are very poor, with poor ventilation, lighting and lack of household amenities. The bulk of ST houses do not have electricity as a source of lighting. In many instances, cattle and men are huddled in one room. There is no separate kitchen in many tribal houses. Due to lack of access to clean fuel, majority of tribal households use smoke-producing domestic fuel, such as firewood, crop residue and cow dung cake. Overcrowded and poor living conditions contribute significantly to the spread of airborne diseases such as tuberculosis and respiratory infections such as pneumonia.

5. **Sanitation, Hygiene and Safe Drinking Water**

Many tribals of Odisha living in hilly terrain or forested areas, with poor infrastructure, low level of literacy and awareness, suffer from poor household sanitation. Among all Indian states, Odisha is seen to be the lowest with only 7.1 per cent ST households against 22 per cent of all households in having latrine facilities within the premises (Census 2011). Many tribals defecate in the open. Fecal-oral-transmitted infections are common in tribal areas, leading to diseases like diarrhea and cholera. As per Census 2011, only 3.4 per cent of ST households in the state have bathing facilities inside the household. Many tribal households do not have access to any form of drainage. Only 1.1 per cent of ST households in Odisha have wastewater outlets connected to closed drainage.

Many tribal areas lack adequate supplies of safe drinking water. As per Census 2011, only 6.2 per cent of the ST population of the state has drinking water facilities within the premises. Generally, the tribal people fetch drinking water from springs, rivers and ponds. In many instances, they rely on the same source of water for drinking purposes, bathing, scrubbing cattle, washing clothes, etc. Such unsafe drinking water sources are responsible for the periodical spread of water-borne diseases like diarrhoea, dysentery, cholera, guinea worm, tapeworm, etc.

6. **Social Exclusion, Affirmative Action Policies and Tribal Quality of Life**

The concept of affirmative action recognizes the fact that the state needs to affirm and uphold the economic and political rights of the historically discriminated groups that have been disabled economically, socially and educationally. This encompasses economic empowerment through access to education, healthcare, employment and social protection schemes. Both the central as well as state governments have taken
several steps for broad-based improvement in the quality of life of people through a variety of social, economic and institutional means that encompass both income and non-income dimensions. Substantial resources have been made available through many schemes and specialized development packages for addressing concerns associated with poverty, unemployment and illiteracy among tribals.

Different approaches have been followed for development in scheduled areas, keeping in mind special needs of the tribal communities. The Tribal Sub Plan (TSP) is an example, which was adopted in the fifth Five Year Plan with a focus on integrated development of tribal areas. Wherein all programmes, irrespective of their sources of funding, operate in unison in order to achieve the common goal of bringing such areas at par with the rest of the state and improving the quality of life of tribals living in those areas. The ITDAs, the Modified Area Development Approach (MADA), and the pockets and the Particularly Vulnerable Tribal Group projects are the important components of the TSP approach. Moreover, the Government of Odisha, in its pursuit to enhance the level of development of the tribal communities, has initiated special programmes such as provision of housing facilities, legal aid, rehabilitation of victims, reservation in employment, etc. All these affirmative action policies aim at achieving the constitutional objectives of welfare and development of tribal communities. To effectively address the problem of high incidence and persistence of poverty, the Government of Odisha has constituted a Poverty Task Force (PTF) with a mandate to develop poverty reduction strategies for ST, SC and other social groups.

However, though there has been some improvement in the socio-economic conditions of tribal communities, they have not yet been integrated effectively with larger society. The benefits of affirmative action programmes are not percolating uniformly to all sections of the population. The socio-economic development in Odisha has followed varied patterns, with some areas showing faster improvement while others show a slowdown and even regression. The volume of such improvement has been lower among the tribal communities than other social groups, indicating that the tribals continue to lag behind other segments of the population. They are not yet on an equal footing with mainstream society on any well-being indicator and the process of marginalization of tribal people has gone on unabated. Many tribal communities of the state have historically remained disadvantaged and have long suffered from discrimination and exclusion. As a result, not only do they suffer relentlessly from problems like severe poverty and multiple deprivation, diseases and illness, malnutrition, loss of their customary resource base, indebtedness, etc., but also in many instances, they have been victims of the ill effects of the modern process of industrialization, urbanization and globalization. All of these problems affect their quality of life adversely.
Ignorance, lack of exposure to education and isolation from the social mainstream have made the tribals vulnerable to exploitation by non-tribals, especially by moneylenders, middlemen and agents of development. Their social life is narrow and custom bound. The consumption pattern of the tribals depicts a dismal picture about their standard of living. Their food intake is deficient in quantity and quality, and they suffer from under-nutrition and malnutrition. Their consumption pattern is highly skewed in favour of cereals under food items and liquor and intoxicants under non-food items. Lack of employment opportunities is a major problem faced by a bulk of the tribals. Consequently, poverty among the tribals is rampant among them with all its manifestations. The vulnerability of tribal women living in remote areas is extreme and they are the most deprived people in the state.

VII. CONCLUSION

Conclusions may be summarized as:

1. The status of most of the socio-economic indicators of the tribals is relatively low and their performances are far from satisfactory as compared to their non-tribal counterparts in Odisha.

2. The poverty ratio in rural areas is much higher than that of urban areas. It has declined at a faster rate in rural areas than the urban areas indicating significant inter-sectoral variation in poverty ratio in the state during 1973-74 to 2011-12.

3. Both poverty gap indices and the squared poverty gap indices have decreased at a faster rate in rural areas than that of the urban areas of the state during 1973-74 to 2011-12.

4. The incidence of poverty is much higher in the Southern NSS region of the state as compared to the Coastal and the Northern regions, and it is higher in the Northern region as compared to the Coastal region of the state.

5. The incidence, depth and severity of poverty are higher for STs as compared to SCs, OBCs and Others in the Southern region of the state as well as in the state as a whole.

6. The health status of tribals is poor and their accessibility to health care services is relatively lower than other social groups in the state.

7. The incidence and degree of malnutrition is relatively higher for ST households compared to SC, OBC and Other households in Southern Odisha as well as in Odisha.

The foregoing analysis reveals that the tribal communities are poorer than other social groups and are at the bottom on various indicators of development. Most of them are generally stricken with absolute poverty. During the last six and half decades
of planning, the centre as well as the state governments have implemented a good number of developmental and anti-poverty programmes with the avowed objectives of reducing regional and social poverty. However, not all these developmental measures could yield desired results. Despite the measures undertaken so far to remove regional disparities and augment economic development of Odisha, only a fraction of the benefits have trickled down to the tribal population. The trend in poverty ratio in Odisha is influenced significantly by the differential trend in the social group poverty ratio. Majority of the tribals in the state are living in conditions of abject poverty devoid of any meaningful living conditions.

The challenge of tribal development is to improve their quality of life. A better quality of life usually calls for better education, higher standards of health and nutrition, better housing conditions, higher income, less poverty and availability of better opportunities. However, the overall quality of life of the tribal masses in the state is far from satisfactory. Hence, they deserve special attention by governmental and non-governmental agencies for leading a life comparable to that of non-tribals. There is an imperative need to look for practical solutions for tribal problems.

Proper implementation of affirmative action policies would act as a vital instrument for bringing about social, economic and political inclusion and a long-term integration of people, particularly those excluded from the mainstream of any society. However, the magnitude of economic deprivation of tribal communities depicts the failure of the government in several respects to translate constitutionally guaranteed rights and guidelines for policies into development practices. In this context, more focused intervention is needed in order to enhance the pace of development among tribal communities and improve their quality of life.

For framing the development schemes, the aspiration level of the tribal people should be carefully assessed and their needs are to be given due recognition. Several structural changes at the grassroots level in the tribal areas are crucial for improving their level of living and for their proper integration with the mainstream of the society. Conceptualization of a well-articulated development strategy with special emphasis on poverty reduction, implementation of employment and income generating programmes, promotion of participatory processes, and strengthening of social security system and service delivery mechanisms will help promote socio-economic development of the deprived sections of the society.

Notes
2. The undivided districts of Koraput, Balangir and Kalahandi (KBK districts) have been divided into eight districts since 1992-93. These districts are the most backward and poverty-stricken
districts of Odisha. The economic development of these districts through a long-term action plan (LTAP) has been a major challenge for the state as well as the central government. The state government has attached top priority to promote balanced regional development in these backward districts.

3. The major goal of the new health policy of the Odisha Government was to reduce the MMR to 100/100,000 live birth (Millennium Development Goal target) by the year 2010. The recent figures show that the reduction in MMR is much below this target set. However, Odisha now shows signs of significant progress in improving maternal health. For example, between 1998 and 2003, MMR reduction in the state was only nine points, but it declined 45 points between 2006 and 2009 (SRS). Thus, it is anticipated that Odisha may achieve the Millennium Development Goal target within a few years.

References


Social Exclusion and Household Poverty among the Vulnerable Tribal Groups in Odisha

Brajaraja Mishra*

The main objective of this paper is to examine the levels of deprivation and incidence of poverty among the Kandha tribe located in the Gajapati district of Odisha. About 200 sample households belong to Kandha, Sudha Savar and other communities were interviewed to understand the depth and breadth of their poverty. This paper also examines the factors that are responsible for persistence of poverty among these households. It is found that the levels of deprivation and incidence of poverty among the Kandha households are significantly higher than that of other communities. The main factors responsible for persistent poverty among them are lack of resource endowments and exclusion of communities from basic economic benefits. It is suggested that adequate attention should be given to the more vulnerable groups in terms of their access to various public provisions/opportunities, which will enable them to enhance resource base and reduce the depth and breadth of poverty.

Keywords: Exclusion, Tribals, Deprivation, Multidimensional Poverty, Resource Endowment, Economic Benefits

I. INTRODUCTION

The European Commission defines social exclusion as “multiple and changing factors resulting in people being excluded from the normal exchanges, practices and rights of modern society. Poverty is one of the most obvious factors, but social exclusion also refers to inadequate rights in housing, education, health and access to services. It affects individuals and groups …who are in some way subject to discrimination or segregation” quoted from (Omtzigt, 2009, pp-4). It takes account of “disadvantage in relation to certain norms of social, economic or political activity pertaining to individuals, households, spatial areas or population groups; the social, economic and institutional processes through which disadvantage comes about; and the outcomes or consequences for individuals, groups or communities” (Percy-Smith, 2000, pp-3). Even though social exclusion is mostly explained in terms of poverty, it goes beyond the narrow concept of poverty. In simple terminology, poverty refers to a situation when income or resources fall below a particular level, and policy response implies a mere distribution of resources to poor
households. However, social exclusion discusses the exclusion of certain communities over certain things i.e. public provisions or access to certain goods and commodities that are desirable or normal (ibid). In other words, it involves the “lack or denial of resources, rights, goods and services, and the inability to participate in the normal relationships and activities, available to the majority of people in a society, whether in economic, social, cultural or political arenas” (Levitas, et al., 2007, pp-25). Thus, social exclusion is always discussed in terms of multidimensional deprivation.

Discussion on social exclusion among tribal communities is of importance. Tribals are the most vulnerable group in society. Among the tribal groups, Particularly Vulnerable Tribal Groups (PVTGs) are socio-economically more vulnerable and need special attention. They are mostly nomadic, shifting cultivators and pastoralist communities with no permanent habitat. Their position among social groups regarding various socioeconomic performances is very low. It is widely felt that the destitute circumstance of tribals is not a chance of misfortune, but a byproduct of systematic exploitation. They are deprived in many forms. National and State governments forcibly exploit/assimilate/harass the tribals by enforcing strict legal provisions which tend to destroys their indigenous culture, tradition, livelihoods, and social organizations, most of the time (Springate-Baginski, et al., 2009; Bose, 2011; Aggarwal, 2011; Vasundhara, 2004; Indira, 1992; Singh & Kaur, 2009). Displacement and relocation of tribals has been carried out due to various development projects like dams, ports, irrigation projects, etc. with a multiplier effect of increased deprivation. Besides, they were deprived of safety net programmes such as Indira Awaas Yojana (IAY), Integrated Child Development Service (ICDS), Jawahar Gram Samridhi Yojana (JGSY), Food for Work Programme, Public Distribution System (PDS), etc.

Of late, it was recognized that depriving tribals from many services and provisions was unethical. The Fifth and Sixth Schedules of the Indian Constitution spoke about the protection of tribals from exploitation; preserving their natural land endowment for their economic empowerment; and to cognate social and economic democracy with liberty, equality, fraternity and dignity. Article 46 of the Directive Principles of State Policy also states that, “the state shall promote with special care the educational and economic interests of the weaker sections of the people, and, in particular, of the Scheduled Castes and Scheduled Tribes, and shall protect them from social injustice and all forms of exploitation”. The Supreme Court of India further stated that land is the most important natural and valuable asset for tribals. It is an imperishable endowment meant for sustainable living, maintenance of social and economic equality, enhancement of economic empowerment and a safety net during acute crisis (Supreme Court of India, 1997).

Thus, from ethical point of view and for policy decisions, it is important to discuss the incidence and causes of social exclusion in the tribal areas of India. Odisha is one of the states comprising the largest number of tribal communities. Persistent poverty and deprivation of resources, opportunities and public provisions have become major
research issues for policy solutions, in order to bring these vulnerable groups into mainstream society. However, research studies mostly discussed the factual causes of deprivation by focusing on their livelihood dimensions (Behera, 2016; Sinha and Behera, 2013). It warrants a discussion on other dimensions of deprivation. Thus, the main objective of this paper is to analyse the levels of deprivation of tribals (mainly the vulnerable tribal group) in multidimensional facets, and identify the factors preventing them from overcoming poverty. It focuses on the factors that cause exclusion in this vulnerable section from various services and provisions.

II. DATA BASE AND METHODOLOGY

This study is based on the primary data collected from 221 sample households living in the Gajapati district of Odisha. These sample households belongs to both tribal and non-tribal communities. Among these, 89 households belong to the Kandha tribe, 97 belong to the Sudha Savar tribe and the rest are a mixed household of different non-tribal communities (Other Traditional Forest Dwellers, in short OTFDs). For analytical simplicity and comparison among the social groups, all households are grouped into three categories i.e. Kandha, Sudha Savar, and OTFD. The analysis has been carried out to understand how Kandha households in comparison to the Sudha Savar and OTFD households are socially excluded and living in poverty. For a better understanding, the uni-dimensional aspect of poverty (income deprivation) along with multidimensional poverty has been discussed to justify the appropriateness of discussion on multidimensional poverty among vulnerable tribal households in Odisha.

The estimation of the uni-dimensional approach i.e. income poverty is based on the poverty line as suggested by the Tendulkar Committee for identification of poor households in rural areas of Odisha. The income threshold for identification of the poor in rural areas of Odisha for the years 2004-05 and 2009-10 at 2004-05 prices respectively are Rs 407.78 and Rs. 567.10 per capita per month. Based on this, the income cut-off point for the year 2012-13 at 2004-05 prices is estimated as Rs 663 per capita per month.

Multidimensional poverty is estimated based on the methodology developed by Oxford Poverty and Human Development Initiative (OPHI) (Alkire & Foster, 2007). It is a two-step procedure. First, nine indicators under six dimensions are considered for the construction of multidimensional poverty. Indicator-wise household level deprivations have been estimated by using cut-off points as shown in annexure 1. Score 1 is assigned to indicators if the household is deprived on that indicator and 0 is assigned if not deprived. The set of individual levels of deprivation are combined into an index by using three types of weights: equal weight, frequency weight and statistical weights. Principal Component Analysis (PCA) based on polychoric matrix is used for generation of statistical weights. Second, this index has been divided into two parts by setting the cutoff point. The households whose index score fall below the threshold limit are treated as poor. It is found from the field study that about 82.8 per cent of households have PDS cards. Thus, in cutoff points for identifying
poor households are decided in such a manner that the proportion of poor households should be close to 82.8 per cent. The Multidimensional Head-count Ratio (H) is defined as the proportion of poor households among all households under consideration. Household level Average Depth of Deprivation (A) has been calculated as the total number of deprivations experienced by a poor household, divided by the possible number of deprivations that can be experienced by all poor households. The Adjusted Headcount Ratio (H) is the total number of deprivations experienced by all poor households divided by the maximum possible number of dimensions experienced by all households.

III. HOUSEHOLD LEVEL DEPRIVATION AND INCIDENCE OF POVERTY

1. Levels of Deprivation

*Income deprivation*: Table 1 shows the level of deprivation among the sample households. It shows that about 70 per cent of sample households are unable to get minimum income for subsistent living. The levels of income deprivation among the Kandha, Sudha Savar and OTFD households respectively are 92, 58 and 49 per cent signifying that Kandha households are the most deprived section. It is estimated that the gross income derived from all sources of livelihood activities amount to Rs. 67.47 lakh per annum with a monthly per capita income of Rs. 562. The share of income derived from agriculture and wage employment activities are more to household income whereas income derived from forestry and livestock production have a negligible share in household income. As most Kandha households belong to pastoralist communities, lack cultivated land and mostly rely on Non-Timber Forest Product (NTFP) gathering, they are unable to generate adequate income for their subsistence living.

<table>
<thead>
<tr>
<th>sl. no</th>
<th>Indicator</th>
<th>Kandha (89)</th>
<th>Sudha Savar (97)</th>
<th>OTFD (35)</th>
<th>Total (221)</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inadequate income</td>
<td>92.1</td>
<td>57.7</td>
<td>48.6</td>
<td>70.1</td>
<td>35.460***</td>
</tr>
<tr>
<td>2</td>
<td>Low calorie intake</td>
<td>52.8</td>
<td>40.2</td>
<td>51.4</td>
<td>47.1</td>
<td>3.278</td>
</tr>
<tr>
<td>3</td>
<td>Food insufficiency</td>
<td>56.2</td>
<td>18.6</td>
<td>11.4</td>
<td>32.6</td>
<td>38.380***</td>
</tr>
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<td>4</td>
<td>Illiteracy</td>
<td>25.8</td>
<td>39.2</td>
<td>28.6</td>
<td>32.1</td>
<td>4.025</td>
</tr>
<tr>
<td>5</td>
<td>Dropout ratio</td>
<td>16.9</td>
<td>14.4</td>
<td>14.3</td>
<td>15.4</td>
<td>0.248</td>
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<tr>
<td>6</td>
<td>Suffering from illness</td>
<td>60.7</td>
<td>56.7</td>
<td>25.7</td>
<td>53.4</td>
<td>13.098***</td>
</tr>
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<td>7</td>
<td>Improper housing structure</td>
<td>93.3</td>
<td>87.6</td>
<td>62.9</td>
<td>86.0</td>
<td>--</td>
</tr>
<tr>
<td>8</td>
<td>Unprotected source of water</td>
<td>89.9</td>
<td>45.4</td>
<td>62.9</td>
<td>66.1</td>
<td>41.236***</td>
</tr>
<tr>
<td>9</td>
<td>Contaminated drinking water</td>
<td>78.7</td>
<td>41.2</td>
<td>45.7</td>
<td>57.0</td>
<td>28.677***</td>
</tr>
</tbody>
</table>

*Note*: Figure in the bracket is number of sample households. ***p < 0.01.

*Source*: Field Study, 2012
Low calorie intake: The consumption pattern among social groups show that rice and finger millet consumption is more among the Sudha Savar households, while little millet and Italian millet consumption is more among the Kandha households. Consumption of green gram and Bengal gram is more among the Sudha Savar and OTFDs and horse gram is more among the Kandha households. The consumption of milk, egg, fish, vegetables and sugar is more among the OTFDs followed by the Sudha Savar households. The consumption of fruits and leafy vegetables is more among the Kandha households.

The consumption pattern shows that maintenance of adequate calorie intake and food sufficiency for the whole year is a big challenge for many tribals. About 47 per cent of sample households are unable to attain the minimum daily calorie intake of 2000 kcal. About 76 per cent of consumer units are deprived of the Normative Calorie Intake (NCI) of 2700 kcal. About 43 per cent of consumer units are unable to maintain the calorie intake of 70 per cent of the NCI due to lower consumption of nutritious food items like pulse, milk, meat, fish and egg. Most households consume pulses only once a week, perhaps due to lower production of pulses. Households also occasionally consume egg, fish and meat. Only those households with goats and poultry consume meat and eggs frequently. The consumption of milk and milk-based items is also limited to a few households (32 per cent) as these items are more costly. However, like non-vegetarian food, households do not show much interest in milk and milk products. However, leafy vegetables are consumed almost daily because these are collected from the forest or are available at a lower price. Low agricultural production, less income and low purchasing power are some of the reasons for their inability to consume an adequate quantity of food items to maintain proper calorie norms. They have not benefited from public provisions like PDS.

Food insufficiency: It is found that, about 32.6 per cent of sample households are unable to get sufficient quantity of food all months of the year. Food deficiency is both acute and seasonal. Acute food crisis is mostly attributable to lower food production and inability to purchase from the outside market. On the other hand, seasonal food crisis is more prevalent during the rainy season. During this time, all household members become so busy in cultivation activities and are unable to visit markets located in distant places to purchase food items. However, many households are not much aware of the quantity and quality of food items to be taken to maintain NCI. Thus, instead of prioritizing a food balance, preference is given to food items available at lower rates. Table 1 clearly shows that a comparatively larger proportion of Kandha households are deprived of food sufficiency and the difference in proportion households deprived from food sufficiency is significantly different among these three social categories.

Illiteracy: The highest educational background of the family shows that about
32 per cent of the households are illiterate and 38 per cent have primary education. Only 6 per cent of the households are able to send their children for higher education. However, the level of education among all the social categories is not significantly different from each other. Household’s educational attainment depends on several factors. Higher educational attainment is observed in the case of more land-owning households. Schools are located in far-flung places. It is too difficult for younger children to go walk long distances for primary education. In some villages, there are no schools, and if any, they face problems like absence of teachers and lack basic facilities such as midday meals, schoolrooms, toilets, etc. As a result, households are not interested in sending their children to school. Still, a majority of households believe that education is not necessary for their children. In their opinion, educational attainment is not an important factor for livelihoods improvement. It is so because their ongoing cultivation activities or NTFP harvesting practices depends more on skill and labour, rather than on school education. They also experience the negative impact of school education in residential schools and other schools outside their village in terms of poor quality (overcrowded, lack necessary infrastructure, high health risk, poor learning, not livelihood oriented, no employment guarantee, etc.), disturbed lifestyle (alcoholic, gambling), and aggressive (disobedient, not helping in the ongoing livelihood activities). Another fact is also very clear that still they could not visualize the utility of higher education as colleges/ universities are far from their reach. It implies that households feel that the present educational system is not sufficient enough to improve their livelihood.

**Dropout rate:** School dropout rate in the age group of 5-14 years is another phenomenon. School dropout is observed in 16 per cent of households. Further, out of the total school going children in the age group of 5-14, about 68.14 per cent dropped out in between. The dropout rate is more severe in the case of the Kandha group, even though the difference in proportion among social groups is not statistically significant. Among several factors, most male children are not interested in their education while parents are not interested in their daughters’ education. Disinterest of male children towards education may be partly due to a low parental education and guidance, and their own perception regarding the utility of education. The tribal cultural belief does not permit girls to venture out of home. From childhood onwards, girls are forced to learn cooking and other domestic activities including childcare and collection of water. Involving in all types of domestic activities at an early age and following all types of social restrictions (e.g. not to go outside the home alone, not mix with opposite gender, etc.) that an adult tribal women is practicing, girls at an early age feels more mature like their mother and shy of going to school. Early marriage is another major hindrance to girls’ education. Distance is another factor for parents not sending their girl children to school. However, in recent years, schools have opened
in some villages and children are showing a keen interest in learning. It is to be noted that some people have intentionally informed high expenditure as the cause of school dropouts. Surprisingly, no household has reported that school dropout is a result of poverty, which forces children to support household work, family labour or income.

* Diseases: It is found that 53 per cent of the sample households have suffered from diseases out of which 19 per cent have suffered from malaria and 14 per cent from diarrhea. Among the social groups, the Kandha and Sudha Savar are more exposed to both malaria and diarrhea, while a very few people among the OTFD tend to suffer from any of these diseases. The main reason for a higher incidence of health problems is lack of awareness about health related problems. Cleanness is another issue. The same place is used for sleeping, cooking and keeping domestic animals. People, along with their pets and cattle, sleep in the veranda, which attracts mosquitoes. Rather than using mosquito nets, households use traditional precautionary measures such as generating smoke from cow dung, crop residuals and firewood to avoid mosquitoes while sleeping. However, it is not successful for a longer period. It is found that only 22 per cent of sample households use mosquito nets while sleeping. Households believe that the utility of money spent on purchasing mosquito nets is less than the money spent on necessary goods like food and cloth. Thus, households prefer to spend money on food items rather than mosquito nets. As a result, households are more prone to malaria.

* Poor housing structure: About 86 per cent of the households are living in *katcha* houses. Only a few households have a *pucca* house. In sample villages, the structure of almost all the houses is same—*katcha* house consisting of one big room at the center and two verandahs, one in the front of the room and other in the back of the room. The front verandah is used for sleeping, keeping cattle and leisure, whereas, the back verandah is used for cooking and other household activities. To maintain privacy, households mostly prefer using the back verandah for all types of household activities. The main room is used for multipurpose activities like sleeping, storing foodstuffs, other essentials, cooking, and other household activities. Larger sections of households having *katcha* houses are attributable to the lack of adequate livelihood activities. For these households, food and other household amenities are more important than *pucca* houses. Since income generated from livelihood activities is just sufficient to maintain food and other household expenditures, it is very difficult to spend on better housing structure.

* Poor access to protected source of drinking water: Table 1 shows that on an average, about 66 per cent of sample households do not have access to protected sources of drinking water. Significantly a fewer Sudha Savar households are deprived from protected sources of drinking water. The main sources of drinking water found in
sample villages include public taps, tube wells, unprotected dug wells, springs and other surface water bodies. The public tap is connected to only one sample village and a regular supply of water is not possible throughout the year. A few years back, water storage points were constructed in high elevation points and drinking water was provided through public taps to few villages on a pilot basis. However, this mechanism was failed due to less water availability. Tube wells were also found only in a few villages and are almost dysfunctional. As a result, households are forced to consume water from the unprotected sources i.e. open wells and rivers/drains.

Poor water quality: Many water sources are polluted and not suitable for direct consumption. Open wells and springs are more exposed to dust and falling objects like leaves, dust, and human and animal residue. About 35 per cent of the households have reported that water is dirty due to exposure to residue while about 22 per cent of households agree that there is a change in taste and/or color of water. However, the households are neither taking any precautions for making water safe for consumption nor do they have any water purification mechanisms. In most cases, water is strained by a piece of cloth before being used for drinking and cooking. Households consume polluted water due to lack of adequate knowledge and non-availability of purification mechanisms. As a result, households are more exposed to various waterborne diseases.

Table 2 shows the number of deprivations faced by sample households. About 1 per cent of households are deprived in all indicators whereas only 0.5 per cent of households are not deprived in any dimension. Out of nine indicators, most households are deprived by 4-5 indicators. While more Kandha households are deprived by 6-7 indicators, more Sudha Savar and OTFD households are deprived by 4-5 indicators. It is also clearly visible that about 1 per cent of Kandha households and 3 per cent of OTFD households are deprived by almost all indicators. A larger proportion of Kandha households deprived by more deprivations is a matter of concern.

<table>
<thead>
<tr>
<th>No of Deprivations</th>
<th>Kandha (89)</th>
<th>Sudha Savar (97)</th>
<th>OTFD (35)</th>
<th>All (221)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>1.1</td>
<td>0.0</td>
<td>2.9</td>
<td>0.9</td>
</tr>
<tr>
<td>8</td>
<td>7.9</td>
<td>0.0</td>
<td>0.0</td>
<td>3.2</td>
</tr>
<tr>
<td>7</td>
<td>22.5</td>
<td>4.1</td>
<td>2.9</td>
<td>11.3</td>
</tr>
<tr>
<td>6</td>
<td>25.8</td>
<td>8.2</td>
<td>5.7</td>
<td>14.9</td>
</tr>
<tr>
<td>5</td>
<td>19.1</td>
<td>26.8</td>
<td>14.1</td>
<td>21.3</td>
</tr>
<tr>
<td>4</td>
<td>16.9</td>
<td>26.8</td>
<td>25.7</td>
<td>22.6</td>
</tr>
<tr>
<td>3</td>
<td>4.5</td>
<td>17.5</td>
<td>17.1</td>
<td>12.2</td>
</tr>
<tr>
<td>2</td>
<td>2.2</td>
<td>13.4</td>
<td>25.7</td>
<td>10.9</td>
</tr>
<tr>
<td>1</td>
<td>0.0</td>
<td>2.1</td>
<td>8.6</td>
<td>2.3</td>
</tr>
<tr>
<td>0</td>
<td>0.0</td>
<td>1.0</td>
<td>0.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2012
2. Levels of Household Poverty

Table 3 shows that, on an average, about 78 per cent of people are below the income poverty line. It further shows that about 90 per cent of Kandha households are living below the income poverty line which is significantly higher than the incidence of income poverty among the Sudha Savar (58 per cent) and OTFD (49 per cent) households. A higher dependency into livestock and NTFP gathering and lower agricultural and wage employment activities are the main reasons for keeping a larger mass of Kandha households in the income poverty trap. The reason for a lower income from forestry and livestock may be ill-defined property rights over forest resources and grazing lands. It is also clearly visible from Table 3 that the severity of income poverty is significantly less among the OTFD households who are mostly dependent on wage-employment activities. Table 3 further shows the incidence of multidimensional head count ratio across social groups by considering equal, frequency and statistical weights. These estimates give quite similar results. All three estimates show that more than 94 per cent of sample households are poor in multidimensional facets. Further, mean difference of poverty among Kandha households is significantly more than that of the Sudha Savar and OTFD households. However, the difference in the incidence of poverty among the Sudha Savar and OTFDs is not statistically significant.¹

Table 3
Household Level Income Poverty and Multidimensional Poverty across Social Groups

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Uni-dimensional head count ratio</th>
<th>Multi-dimensional head count ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Equal weight</td>
<td>Frequency weight</td>
</tr>
<tr>
<td>Kandha</td>
<td>89</td>
<td>0.9213</td>
<td>0.9551</td>
</tr>
<tr>
<td>Sudha Savar</td>
<td>97</td>
<td>0.5773</td>
<td>0.8351</td>
</tr>
<tr>
<td>OTFD</td>
<td>35</td>
<td>0.4857</td>
<td>0.5429</td>
</tr>
<tr>
<td>Total</td>
<td>221</td>
<td>0.7014</td>
<td>0.8371</td>
</tr>
</tbody>
</table>

F 20.832*** 17.989*** 7.933*** 10.992***

Table 4 shows the intensity of deprivation among these three social categories. It shows that on average, all poor households are deprived by 56 per cent of all indicators under consideration. While all poor Kandha households are deprived by 64 per cent of all indicators on average, these estimates for the Sudha Savar and OTFD households respectively are 50 per cent and 43 per cent. It further shows that even though the mean difference in levels of deprivation of Kandha households from Sudha Savar and OTFD households is statistically significant, the mean difference in levels of deprivation between the Sudha Savar and OTFD households is not statistically significant.

¹Note: MD-Mean Difference, “” p < 0.01, “”p<0.05 per cent level. K-Kanda, S-Sudha Savar, O-OTFD,
significant. It implies that, despite tribal status, the level of deprivations of Sudha Savar households is similar to other non-tribal households.

Table 4
Levels of Deprivation and Adjusted Headcount Ratio among the Social Groups

<table>
<thead>
<tr>
<th>Social groups</th>
<th>Average depth of deprivation</th>
<th>Adjusted head count ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Equal weight</td>
<td>Frequency weight</td>
</tr>
<tr>
<td>Kandha</td>
<td>0.6458</td>
<td>0.6495</td>
</tr>
<tr>
<td>Sudha Savar</td>
<td>0.4842</td>
<td>0.5044</td>
</tr>
<tr>
<td>OTFD</td>
<td>0.5205</td>
<td>0.4769</td>
</tr>
<tr>
<td>Total</td>
<td>0.5622</td>
<td>0.5670</td>
</tr>
<tr>
<td>F</td>
<td>26.125***</td>
<td>27.392***</td>
</tr>
</tbody>
</table>

Note: *** p < .01, **p<.05 per cent level. K-Kanda, S-Sudha Savar, O-OTFD,

Table 4 further shows the incidence of Adjusted Headcount Ratio among these social groups. It suggests that significantly more Kandha households are below the adjusted multidimensional poverty line. It is noticed that higher deprivation among the Kandha households keeps them in the poverty trap. But since the levels of deprivation among the Sudha Savar and OTFD households are not significantly different from each other, their level of poverty is also not significantly different. It implies that higher is the levels of deprivation, higher is the severity of poverty and the incidence of poverty can be significantly reduced by reducing the extent of deprivation.

It is further noticed that the incidence of deprivation and multidimensional poverty in the case of Kandha households are close to each other whereas these are not closer in the case of Sudha Savar and OTFD households. It implies that while the incidence of deprivation is spread among the entire section of the Kandha society, the levels of deprivation among the Sudha Savar and OTFD is concentrated to few households.

IV. DETERMINING FACTORS OF POVERTY

The analysis suggests that Kandhas are the more deprived section. Even though Sudha Savar is a tribal group, their poverty depth and breadth is significantly less and quite similar to other non-tribal communities. It is of eminent importance to discuss why one tribal group is in an abysmal condition whereas the other tribal group is not. Table 5 shows the factors influencing household poverty. The dependent variable is adjusted headcount ratio with PCA weight. The independent variables of the study are various demographic, social, economic and public provisions factors that may affect the levels of poverty (annexure 2). It shows that outstation migration, possession of land title, access to credit, number of days worked under National Rural Employment Guarantee
Act (MGNREGS), access to hospital, and agricultural yield rate are important factors that reduce the incidence of poverty.

It implies that access to economic activities and government provisions are main contributing factors in reducing household poverty. Among the economic factors, the most important factor is outstation migration. The poverty level among households who have at least one family member migrated to the city is significantly lower than other households. Outstation migration is prevalent only in 17 per cent of the households. While at least one family member in 34 per cent of OTFD and 21 per cent of Sudha Savar households has migrated, such phenomenon is observed only in the case of 6 per cent of Kandha households. The outstation migration has two dimensions: demand-pull and supply push. Distress migration is observed among the Kandha households who for their survival seasonally migrate to other states. On the other hand, Sudha Savar and OTFD households migrated to states like Gujarat, Kerala and Tamil Nadu and get involved in skilled and higher wage employment activities. Some of these households have more landownership. However, they prefer to lease-out their lands and work in other cities at a higher wage rate.

Table 5
Determinants of Household Poverty

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>0.338***</td>
<td>0.117</td>
</tr>
<tr>
<td>Social category: Sudha Savar#</td>
<td>-0.041</td>
<td>0.045</td>
</tr>
<tr>
<td>Social category: OTFD#</td>
<td>-0.180***</td>
<td>0.068</td>
</tr>
<tr>
<td>Sex of the household head</td>
<td>0.104**</td>
<td>0.046</td>
</tr>
<tr>
<td>Family Size</td>
<td>0.020*</td>
<td>0.008</td>
</tr>
<tr>
<td>Possession of land title</td>
<td>-0.106*</td>
<td>0.041</td>
</tr>
<tr>
<td>Agricultural yield rate</td>
<td>-0.0001***</td>
<td>0.00003</td>
</tr>
<tr>
<td>Total livestock owned</td>
<td>0.003</td>
<td>0.003</td>
</tr>
<tr>
<td>Access to credit</td>
<td>-0.064*</td>
<td>0.033</td>
</tr>
<tr>
<td>No. of days worked under MGNREGS</td>
<td>-0.015*</td>
<td>0.007</td>
</tr>
<tr>
<td>Outstation migration</td>
<td>-0.163***</td>
<td>0.050</td>
</tr>
<tr>
<td>Distance from the primary water source</td>
<td>0.004**</td>
<td>0.001</td>
</tr>
<tr>
<td>Distance from the market</td>
<td>0.008**</td>
<td>0.002</td>
</tr>
<tr>
<td>Access to ration card</td>
<td>0.043</td>
<td>0.037</td>
</tr>
<tr>
<td>Access to hospital</td>
<td>-0.108*</td>
<td>0.063</td>
</tr>
<tr>
<td>Area under forest</td>
<td>0.002</td>
<td>0.001</td>
</tr>
<tr>
<td>F</td>
<td>11.464***</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.523</td>
<td></td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.477</td>
<td></td>
</tr>
</tbody>
</table>

Note: Dependent Variable: Adjusted Headcount Ratio (PCA weight), #Base category: Kandha, ***significant at 1 per cent level, **significant at 5 per cent level, *significant at 10 per cent level,

Possession of land title is another important factor in reducing household poverty. About 64 per cent of households possess land titles, either from the revenue department or through recognition under the Forest Rights Act (FRA). Possession of land titles among the Kandha, Sudha Savar and OTFD households are 23 per cent, 91 per cent and 91 per cent respectively (Annexure 2). Households who possess land titles feel more secure than other households while making any investment for land improvement or adopting commercial agricultural practices. It implies that possession of land titles attracts more investment and thereby generates more income from agricultural production. Since fewer Kandha households possess land title, their chance of reduction of poverty is comparatively lower than that of Sudha Savar and OTFD households.

Agricultural yield rate, even though it has a negligible contribution, also significantly reduces household poverty. A lower contribution of the yield rate is so because most of the cultivated lands are located in high elevation areas that are least fertile. Cultivation of commercial crops like vegetables and cereals like paddy is not possible in these lands. Households are forced to cultivate inferior crops like ragi, suan and other millets with low productivity. A higher yield rate is observed in the case of the few households involved in cashew plantation.

Access to credit is another important factor in reducing the incidence of poverty. There is no formal institution (i.e. banks) in disbursement of credit. Only private traders are very active in disbursing credit by interlocking input-credit-output market. It is found that on an aggregate; about 50 per cent of sample households have access to informal sources of credit. It was observed that, significantly more Sudha Savar and OTFD households have access to informal sources of credit (Annexure 2). To reduce operational complexity, traders show keen interest in disbursing agricultural inputs to the more landowning farmers of Sudha Savar and OTFD households with the expectation that these households are more secure in terms of landownership, able to follow agricultural intensification measures and could repay loan in time. Since access to informal source of credit is strongly related to higher input use or agricultural intensification and farm profit, the level of deprivation of these households is comparatively less.

Number of days worked under the MGNREGS plays a significant role. More households of each social group benefited under MGNREGS even though few working days were generated. Households mostly worked in afforestation activities carried out by the forest department. Since such activities were carried out by giving equal opportunities to all households, irrespective of their income status, it benefited all social groups equally.

Access to health institutions significantly and negatively influences household poverty. The incidence of poverty among households who were able to approach
hospitals in case of any health problems is lower than households unable to do so. Households forced to approach local traditional healer for all types of diseases prefer to visit hospitals when illness is severe. Higher health expenditure and difficulty in approaching hospitals could be reasons. The continuation of severity of illnesses due to low expenditure and inaccessible hospitals has adverse effects on household well-being.

More factors that increase the incidence of poverty are gender of the household head, family size, distance from the market and distance from primary sources of drinking water. The analysis shows that the incidence of poverty among male-headed households is significantly higher than female-headed households. However, this result is quite inconsistent with earlier studies in that female-headed households involve less income generating activities and live in acute poverty. It further shows that large family sizes are one of the biggest challenges for these households. It implies that there may be more dependents in the family who, instead of supporting family income, become a burden. Distance from the market is the most important factor for increasing incidences of poverty. Long distance from the market prevents them from purchasing essential food items and other commodities, particularly in the rainy season. Forced and distress sale of agricultural and forest products is also attributable to it. Due to the difficulty in approaching the outside market with more produce, lack of adequate storage facilities around the market place and no guarantee of sale of all items being carried out to the market place with great difficulty, households are forced to sale their produce at whatever the agreed price is.

Drinking water sources located far away also increases the incidence of poverty. The Sudha Savar households are comparatively in a better position than the OTFD and Kandha households (Annexure 2). Bore wells installed in Sudha Savar villages are in functional conditions. However, bore wells installed in other villages are not in functional conditions due to lower maintenance. They are used to collect drinking water from an open well dug in some agricultural field located outside the village. The Kandha households are treated as inferior to other communities and are not allowed to collect drinking water from villages of other communities. More time in fetching water and higher dependency on unprotected drinking water sources not only cause income loss due to loss of wage employment days, but also force households to drink contaminated water and suffered from various waterborne diseases such as diarrhea.

V. CONCLUSION
From the above analysis, it is clear that the Kandha households are the most vulnerable group in society. They are socially excluded and poverty ridden. Persistence of higher poverty among these households is mainly attributable to their comparative
disadvantages concerning assets, endowments, entitlements, opportunities and public provisions. They are socially excluded from the mainstream society. Since generations, due to living in inaccessible areas, they lack basic assets and endowments. Their claims over land and other forest resources were not recognized due to various reasons. They were victims of the supremacy of government decisions and negligence of government officials. Adequate attention is not being given to bring them into mainstream society by identifying their challenges. The Sudha Savar group, despite being a tribal community, due to their resource endowment, association with mainstream society and better access to government provisions, are socially and economically better off. Thus, in this scenario, some measures can be taken for their overall development by reducing the incidence of poverty and breaking the barriers of social exclusion.

Access to institutional credit is one of the prime requisites to reduce forced dependency on traders. Bank branches under the leading bank scheme can be opened within a 10 km radius of the villages. More post office branches can be opened in the villages and credit can be provided to households at nominal rates of interest. Households need to be motivated about the benefit of repayment and developing saving behavior. The concept of Bank Correspondent and Bank Mitra Group can also be opted to increase access to institutional credit and improving recovery rate (CESS, 2016). Advertisements about access to institutional credit and various credit schemes announced by the government can be undertaken so that interested people can explore such benefits.

Reduced land fertility and lower water table are other major hindrances for rapid agricultural development. An adequate provision can be given to the development of existing water bodies to support not only agricultural production but also increase drinking water for people and animals. Horticultural crops can be promoted in areas where cultivation with assured irrigation is not possible. Since these areas are suitable for cashew and mango, landholding support can be given for the spread of these crops.

Market failure is the biggest challenge that needs to be corrected. There is a need to develop all types of infrastructure (cement floors with roofs for shadow, cold storage, drinking water and toilet, etc.) around the weekly market. Steps need to be taken to remove intermediaries in the trading process. Farmer Producer Cooperatives and Self-Help-Groups can be promoted to develop better bargaining power through collective marketing.

Households can be encouraged to claim titles upon the forestlands under cultivation under FRA. They can also be informed about the procedure to claim community rights over the NTFPs and other forest resources under the FRA. Such a process will provide more security and thereby attract more investment and credit, and control illegal land transfer to the non-tribals.
An emphasis can be given to the creation of wage employment activities. More employment days can be created under MGNREGA and for ensuring efficiency, this program can be converged with programs sponsored by the Forest Department. However, one of the biggest challenges in the successful working of MGNREGA is irregular payments, which need to be corrected immediately. Adequate skill can be imparted to the youth, by introducing vocation course in the school education. The acquired skills will help them for a better livelihood either in their own locality or in case of migration to other cities.

Vocational education can be included in the school education. Adequate finance can be provided to the educated skilled youth for self-employment activities. The skill development activities carried out by ITDA should be more rigorous and reach out to weaker sections in society. It can also monitor and support youths in promotion of self-employment activities.

The state should give priority to acute water problem in these areas. Traditional water harvesting structures can be renovated. The water carrying capacity of canals, creeks and streams need to be enhanced through distillation. More bore wells need to be installed in every hamlet and old bore wells can be repaired at an urgent basis.

Due to remoteness of the areas, households are unable to approach concerned government. officials located far from their villages. On the other hand, government officials don’t visit inaccessible areas and inform people about the procedure of getting benefits from various schemes. There must be a proposal for the construction of all-weather roads to all villages within stipulated time. All-weather roads can bring people to mainstream society. They can approach government officials, people, local institutions, and the market and learn many things for self-development. The government officials can also reach out to poor and deprived people to spread word about various provisions made under various socio-economic development programmes.

References


## ANNEXURE 1

### Deprivation Cut-off points and Weights

<table>
<thead>
<tr>
<th>Sl. no</th>
<th>Indicators</th>
<th>Dimension</th>
<th>Deprivation cut-off point</th>
<th>Equal weight</th>
<th>Frequency weight</th>
<th>PCA weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inadequate income</td>
<td>Income</td>
<td>Per capita monthly income below Rs. 663 at 2004-05 price</td>
<td>0.167</td>
<td>0.068</td>
<td>0.090</td>
</tr>
<tr>
<td>2</td>
<td>Low calorie intake</td>
<td>Food</td>
<td>Per capita daily calorie intake less than 2000 kcal</td>
<td>0.083</td>
<td>0.120</td>
<td>0.069</td>
</tr>
<tr>
<td>3</td>
<td>Food insufficiency</td>
<td>Food</td>
<td>If food availability is not adequate for all the months of a year</td>
<td>0.083</td>
<td>0.153</td>
<td>0.097</td>
</tr>
<tr>
<td>4</td>
<td>Illiteracy</td>
<td>Education</td>
<td>None of the household member is literate</td>
<td>0.083</td>
<td>0.154</td>
<td>0.070</td>
</tr>
<tr>
<td>5</td>
<td>dropout ratio</td>
<td>Education</td>
<td>Any child 5-14 years is currently not in school</td>
<td>0.083</td>
<td>0.192</td>
<td>0.076</td>
</tr>
<tr>
<td>6</td>
<td>Incidence of illness</td>
<td>Health</td>
<td>Any member suffered by any avoidable diseases</td>
<td>0.167</td>
<td>0.106</td>
<td>0.001</td>
</tr>
<tr>
<td>7</td>
<td>Improper housing structure</td>
<td>Shelter</td>
<td>Structure of the house is katcha</td>
<td>0.167</td>
<td>0.032</td>
<td>0.040</td>
</tr>
<tr>
<td>8</td>
<td>Unprotected source of water</td>
<td>Water</td>
<td>If principal sources of drinking water are not protected</td>
<td>0.083</td>
<td>0.077</td>
<td>0.280</td>
</tr>
<tr>
<td>9</td>
<td>Contaminated drinking water</td>
<td>Water</td>
<td>If there is a change in taste and color of drinking water</td>
<td>0.083</td>
<td>0.098</td>
<td>0.276</td>
</tr>
</tbody>
</table>

*Note: Protected sources of drinking water include public taps, bore wells, hand pumps, and protected open wells.*
ANNEXURE 2

Description of the Independent Variables of Study

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Indicators</th>
<th>Description</th>
<th>Kandha</th>
<th>Sudha Savar</th>
<th>OTFD</th>
<th>Total</th>
<th>F</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sex of the household head</td>
<td>1=Male/0=female</td>
<td>0.888</td>
<td>0.918</td>
<td>0.971</td>
<td>0.914</td>
<td>1.132</td>
<td>--</td>
</tr>
<tr>
<td>2.</td>
<td>Family Size</td>
<td>In No.</td>
<td>5.742</td>
<td>5.330</td>
<td>4.257</td>
<td>5.326</td>
<td>7.056</td>
<td><strong>K&amp;O, S&amp;O</strong></td>
</tr>
<tr>
<td>3.</td>
<td>Possession of land title</td>
<td>1=Yes/0=no</td>
<td>0.2360</td>
<td>0.9072</td>
<td>0.9143</td>
<td>0.6380</td>
<td>97.415**</td>
<td><strong>K&amp;S, K&amp;O</strong></td>
</tr>
<tr>
<td>5.</td>
<td>Total livestock owned</td>
<td>In No.</td>
<td>3.562</td>
<td>4.835</td>
<td>1.885</td>
<td>3.855</td>
<td>5.037</td>
<td><strong>S&amp;O</strong></td>
</tr>
<tr>
<td>6.</td>
<td>Access to credit</td>
<td>1=Yes/0=no</td>
<td>0.326</td>
<td>0.639</td>
<td>0.571</td>
<td>0.502</td>
<td>10.266**</td>
<td><strong>K&amp;S, K&amp;O</strong></td>
</tr>
<tr>
<td>7.</td>
<td>No. of days worked under MGNREGA</td>
<td>In No.</td>
<td>3.834</td>
<td>3.920</td>
<td>3.545</td>
<td>3.831</td>
<td>0.222</td>
<td>--</td>
</tr>
<tr>
<td>8.</td>
<td>Out station migration</td>
<td>1=Yes/0=no</td>
<td>0.067</td>
<td>0.216</td>
<td>0.343</td>
<td>0.176</td>
<td>7.948**</td>
<td><strong>K&amp;S, K&amp;O</strong></td>
</tr>
<tr>
<td>9.</td>
<td>Distance from the primary water source</td>
<td>In minute</td>
<td>24.944</td>
<td>10.155</td>
<td>13.429</td>
<td>16.629</td>
<td>53.166**</td>
<td><strong>K&amp;S, K&amp;O</strong></td>
</tr>
<tr>
<td>10.</td>
<td>Distance from the market</td>
<td>In km</td>
<td>20.618</td>
<td>15.856</td>
<td>27.143</td>
<td>19.561</td>
<td>20.949**</td>
<td><strong>K&amp;S&amp;O</strong></td>
</tr>
<tr>
<td>11.</td>
<td>Access to ration card</td>
<td>1=Yes/0=no</td>
<td>0.6854</td>
<td>0.8969</td>
<td>1.000</td>
<td>0.8281</td>
<td>12.797**</td>
<td><strong>K&amp;S, K&amp;O</strong></td>
</tr>
<tr>
<td>12.</td>
<td>Access to health institutions</td>
<td>1=Yes/0=no</td>
<td>0.921</td>
<td>0.959</td>
<td>0.857</td>
<td>0.928</td>
<td>2.031</td>
<td>--</td>
</tr>
<tr>
<td>13.</td>
<td>Area under forest</td>
<td>In ha.</td>
<td>9.471</td>
<td>23.685</td>
<td>50.093</td>
<td>22.143</td>
<td>123.018**</td>
<td><strong>K&amp;S&amp;O</strong></td>
</tr>
</tbody>
</table>

Note: *** p < .01 per cent level. K-Kanda, S-Sudha Savar, O-OTFD,
This paper builds on the existing literature and investigates the significance of social group in explaining wellbeing aspects in terms of nutritional outcomes of adult men and women and quality of life of households reflected in household amenities Index. The variations in the observed nutritional outcomes (BMI and heights) of individuals have been explained at various levels of nutritional outcomes with quantile regressions. In addition, the study looks at the contextual effects of district characteristics on quality of life of households, with mixed effects maximum likelihood regression. District health Survey- 4 for 2012-13 provides the data for analysis. Social group has no significant influence in explaining the variations in body mass index (BMI), for men and women after controlling for the individual characteristics such as education age and household characteristics such as household amenities Index, the land-owning status of the households and urban-rural land related status etc. In total contrast, the Social group is significant in explaining the long-term inter-generational nutritional outcome reflected in the heights of men and women. Caste significantly influences the quality of life represented by household amenities. District contextual effect of poverty, urbanization and regular salaried employment influence quality of life reflected in household amenities.

Keywords: Social Group, BMI, Height, Household amenities

I. INTRODUCTION

Wellbeing, of an individual, household, a group or a nation, in terms of the social, economic, psychological and health status can be measured in a specific context with chosen indicators. Wellbeing is an interdisciplinary concept. High level of wellbeing is associated with positive condition and low level of wellbeing with negative conditions. Wellbeing is important both at the aggregate (national or province level) and at the individual or group level. Most governments are preoccupied with the growth in Gross Domestic Product (GDP) to the neglect of individual and group wellbeing. Narrow measures of GDP growth and financial market performance are often confused with measures of welfare. As pointed out in Stiglitz-Sen-Fitoussi Report of 2009, distorted policy priorities result from flawed measurement. Policies should be aimed at increasing societal welfare, not GDP. Further, what matters is not just

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inequality in income and consumption but inequalities in capacities, and life chances of those born under different circumstances. Political voice and civic participation are likewise important. Recognizing this, the ‘Open Working Group’ recommended ‘Sustainable Development Goals’. Goals 8, 10, 11 and 16, to be achieved by 2030, refer to the concept of inclusion. Goal 10 specifically seeks to ‘empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other statuses’. Public policy and its implementation shapes, the wellbeing of regions, social groups and individuals. Public policy in India contributed to decline in poverty but inequality is on the rise in recent years. Though income poverty declined other deprivations exist (Radhakrishna. R, et al 2013).

Being born in a specific setting distinguishes the social groups in India. Poverty and deprivation exist across all social groups, but the scheduled castes and scheduled tribes in India are more disadvantaged. They remain disadvantaged, despite the affirmative action mandated by the constitution of India. Political representation, jobs in public sector and seats in higher education, in proportion to their population mainly constitutes the affirmative action. Other government schemes, such as Land Distribution, Education scholarships, Residential schools etc. have also been implemented for them in India. The legislation to allocate funds in the budget in proportion to their population was enacted in the composite state of Andhra Pradesh albeit not implemented so far in practice. The impact of long-term affirmative action has been a hotly debated issue in India. Hence a large body of literature exists on this topic. Several aspects of the disadvantaged social groups vis-à-vis other social groups were analyzed from time to time.

This paper builds on the existing literature and investigates the significance of social group in explaining some basic wellbeing aspects in terms of nutritional outcomes of adult men and women (BMI and Heights) and quality of life of households based on household amenities Index, after controlling for other variables. Further, the variations in the observed nutritional outcomes (BMI and heights) of individuals have been explained at various levels of nutritional outcomes with quantile regressions. In addition, the study looks at the contextual effects of district characteristics on quality of life of households, with mixed effects maximum likelihood regression. The rationale behind the use of district characteristics is to see if a prosperous geographical location; location with a low level of poverty, higher regular employment potential, a higher level of urbanization and political advantage for the disadvantaged, influence the quality of life of the household. Further, an interaction of district characteristic with the social group has been examined to observe the relative advantage for the quality of life of the households. District health Survey- 4 for 2012-13 provides the database for analysis.
This analysis has a special relevance, as it refers to a newly bifurcated state (province) of Andhra Pradesh (residual) in India, where the economic and social dynamics have substantially changed after bifurcation. The caste-based political context and agriculture-based social stratification, of the state, enhance the importance of the disadvantaged social groups as they can be potential game changers for the electoral fortunes of the political parties. Their quality of life across the districts is a concern of public policy. An improvement has the potential for substantial reduction in the multi-dimensional poverty of the state.

The rest of the paper is organized into three sections. Section one gives an overview of the literature on disadvantaged social groups in India. This section also elaborates the context of the changed socio-economic composition of the bifurcated states. The second section gives the data, methodology, and results on the significance of a social group for nutritional outcomes in residual Andhra Pradesh. The third section presents data methodology and results on the significance of social group for the quality of life (represented by household amenities Index) in the state. This section also elaborates the contextual effects of district characteristics and the interaction of caste with district characteristics, on the quality of life of the households. Conclusions and policy implication follow section three.

II. SOCIAL GROUPS AND THE CONTEXT OF ANDHRA PRADESH

Several studies including those of Sundaram and Tendulkar 2003, Thorat .A, 2010, bring out the deprivation aspect of scheduled castes and scheduled tribes clearly. The incidence of landlessness is more among scheduled castes and scheduled tribes compared to other groups. Other backward classes owned most of the land and leased out more land, while scheduled castes owned less and leased in more land (Sharma 2007). These two groups are generally disadvantaged in aspects such as basic education, profitable entrepreneurship, remunerative employment, etc. (Desai, , and Dubey 2012, Deshpande, Satish 2006, Deshpande, Ashwani 2011, Deshpande, Ashwini and Sharma, 2013, Cowling, et.al, 2014).

In the central part of India, including parts of Andhra Pradesh adjacent to central and eastern India, scheduled tribes are the most marginalized groups, below the levels of scheduled castes, despite all the legislation that seek to protect their land and forest rights. It is mostly due to unjust laws, lacunae in the laws and their non-implementation. Scheduled tribes face severe discrimination and exploitation and land alienation and identity crisis (Xaxa2005 and 2016, Guha, 2007, Banerjee 2007). Others have shown that indices of Human development human poverty and gender development were 30% lower for scheduled tribes compared to others in India (Sandip Sarkar, et.al, 2006). Further, it is argued that the resources allotted to safeguard the interests of the
scheduled castes and scheduled tribes are inadequate, for the Commissioners of social welfare and Tribal welfare, hence, they tend to be ineffective (James and Srinivasa Reddy 1979). Basic public provisioning of safe drinking water sanitation, literacy etc., were inadequate in Andhra leaving a large percentage of the population without basic amenities (CESS report 2016). Within in the disadvantaged social groups, there is considerable inequity based on the geographical location, education, land and asset ownership etc. (Balagopal 2005, Ramaswamy 2002, Sambaiah, 2009).

Bifurcation of Composite Andhra Pradesh State into two smaller states (Telangana and Andhra Pradesh (Residual), Andhra for short, resulted in a changed socio-economic composition in both the states. This was the result of economic inequity across social groups and across geographical regions in erstwhile Andhra Pradesh. It is well known that after bifurcation, Telangana has a higher level of urbanization (39%) compared to Andhra Pradesh (residual) (29.6%) as per 2011 census. As per the estimates of statistics and program implementation, the Net state domestic product per capita was higher for Telangana (Rs. 51017) than Andhra (Rs. 44831) in 2014-15 at constant prices. The table below gives sectoral shares of gross value added and the worker shares of the sectors.

| Table 1 |
|-----------------|-----------------|
| GVA share and workforce shares in Andhra and Telangana |
| Andhra | Telangana |
| GVA share | Worker share | GVA share | Worker share |
| 29 | 55 | 13 | 56 |
| 24 | 18 | 27 | 18 |
| 47 | 27 | 60 | 26 |
| 100 | 100 | 100 | 100 |

Source: Govt. of AP 2016; Govt. of Telangana 2016
Govt. of India, Labour bureau 2013-14

Poverty levels are higher in Andhra at about 11.2% compared to 8.8% in Telangana (CESS report 2016). Due to loss of Hyderabad that contributed 50% of state GDP (Gross Domestic Product) to the composite state, Andhra after bifurcation has a much lower share of the previous revenue and much higher share of the population in 13 densely populated districts. Thus, the economic profile of Andhra is different from that of Telangana at present.

The social composition has also changed in Andhra. As per Srikrishna Committee Report 2010, the upper castes constituted 32% of the population in coastal Andhra and 24% in Rayalaseema. The upper caste population in Telangana was much less at about 10.7% of the total population. The calculations of upper castes by ‘Srikrishna
Committee’ to advise on bifurcation in 2010, were based on 2001 census data and National sample survey (NSS) estimate of backward castes (BCs). If we apply the same methodology to 2011 census and use NSS 2011-12 proportions of BCs, we get about 21.7% as the upper caste population in residual Andhra, almost double that of Telangana. Andhra has 46.8% BCs, 17.1% scheduled castes and 5.1% scheduled tribes. As per NSS 2011-12, the poverty rate was high at 31% for scheduled tribes, 14% for scheduled castes compared to 10.42% for backward castes and 6.2% for other castes (CESS Report 2017).

It is the perception of upper caste hegemony and regional domination of Andhra that lead to the bifurcation (Kalpana et al., 2010). Caste was a dominant factor in the politics of the composite Andhra Pradesh in both the bifurcated parts. Caste-based suppression and subjugation played dominant role in parts of Andhra and Telangana in earlier decades leading to caste-based uprising and caste-based consolidation across the four social groups in both the regions, albeit the advantage to a particular group differed across districts (Srinivasulu 2002, Sambiah 2009, Prasad, 2015, Balagopal 2005).

III. Wellbeing across Social Groups in Nutrition Outcomes

‘Body Mass Index’ and ‘Heights’ of persons are an outcome of adequate nutrition and achieving the expected growth trajectory of an individual. This is the very basic minimum aspect for carrying out normal physical and intellectual activities. These outcomes depend upon the access to relevant resources over a period time (sometimes, over a generation) and not just their access at present. These outcomes depend upon the access to food, safe drinking water, sanitation, and health, which in turn depends upon affordability of the household as well as the public provisioning of these amenities by the government. Education is an important factor as it enables the person to earn enough, gain nutrition knowledge, and also utilize the public services, effectively.

Body Mass Index and Heights of adults across social groups were examined earlier. Previous work on BMI found double burden (chronic energy deficiency on one hand and obesity on the other) of malnourishment among disadvantaged groups in developing countries (Subramanian, S. V, et.al, 2009). Age, ethnic differences, and socioeconomic status, education of the parents and so on influence Body Mass Index. Those born in the past two decades show higher BMI trajectories (Clarke, et.al, 2009). In India, and in other low and middle-income countries, the association between socioeconomic status and obesity is positive while in developed countries the association is negative. The transition of lower socioeconomic groups from low BMI to high BMI is related to the stage of development (Subramanian et. al 2013). In a study based
on NFHS-3 (2005-06) data the author argued that the gender gap in chronic energy deficiency has been quite low in India and almost non-existent in higher income groups. Across social groups, it was very low in other castes and in backward classes (Sunny Jose 2008). Navaneetham and Jose (2008), based on the same data in another paper show that around 40 percent women in rural India were chronic energy deficient (CED). This is 15 percentage points higher than the incidence among urban women. There is a reduction in CED rates with age for women, as we move from 20 to 40 to 49 years of age. Older women in urban areas show a higher rate of overweight and among states like Tamil Nadu, and Kerala (Seshadri, 2009).

In respects of heights, ethnicity, nutrition, and sanitation play an important role but the relationship between adult heights and income appears to be inconsistent and unreliable as heights can improve over time for low-income population (Deaton, 2007). In a detailed study across Indian states between 1983 and 2004-5, Deaton concludes that the heights have increased both for men and women but the improvement was higher for men than women. Further, the influence of growth in per capita expenditure rate on the rate of growth in heights was similar for both men and women. The growth differential in heights is not related to growth in per capita expenditure. Deaton concluded that income height relationship is an unreliable one (Deaton, 2008).

His studies further show that nutrition outcomes depend upon age, but the trajectories may differ across ethnic groups and across generations, in the sense those born in recent decades may gain weight and height earlier in life. Age-adjusted heights and un-adjusted heights did not show much difference in earlier studies (Deaton 2008). In our study, age is used as one of the determinants of nutrition outcome rather than making any arbitrary adjustments to the dependent variable, viz., BMI and Heights. Further, the BMI quantiles and height quantiles also take care of age, since age is positively related to BMI and negatively related to heights.

IV. Data and Methodology

The data for the analysis comes from the District Level Health Survey - 4 of 2012-13. In addition, the district level data on employment, poverty, and urbanization come from National Sample Survey (NSS) 2011-12 and census 2011. The estimation of OLS and Quantile regressions for Andhra use the same set of dependent variables as detailed below except that other castes is the base category in OLS while there was no base category in Quantiles.

Caste or major social group (the term used interchangeably) has been coded as a categorical variable in the DLHS-4 data, and it has been used without change. Numbers 1, 2 and 3, stand for scheduled caste, scheduled tribe, and other backward castes respectively. ‘Others’ category, which forms the base group in our analysis, was
Household amenities index created, uses available data on four household amenities. Five categories of toilets, five categories of drinking water sources, five categories of cooking fuels and four categories of houses have been given scores in the ascending order of quality of the amenity. These scores are added to each household and divided by four to get the average index of quality of life for each household. For example, treated drinking water supply through taps within the dwelling gets a score of five, treated tap water near the dwelling gets a score of four, the dependence on natural ponds and rivers gets a score of one, the other sources such as wells and bore wells and hand pumps get in-between scores. The average score varies for the amenities Index between 4.75 and 1.25 and it is a continuous variable.

A categorical variable was created for land-class by location for rural and urban areas. The rural landless were coded as 1. Codes of 2, 3, and 4 represent rural land-owning class, urban landless and urban land-owning class respectively. The other variables used are: Any type of treatment of drinking water (1= treatment 2= no treatment), Any usual member in the household covered by health insurance or health scheme (1= Y & 2= N), land area owned by the household and, area of irrigated land owned by the household, and education as the number of years of schooling, Age of the individual or household head in months, Ratio of females to males in the households, household size are the other variables used.

BMI quantiles and height quantiles arrange all the individuals, males, and females separately in the increasing order of or Body mass index or heights, keeping those with lowest BMI or height in the 20th quantile and those with higher BMI and height in the top 80th quantile (Koenkar R. 2005). This differentiation tells us at what level of BMI or height does caste and other variable matters most for men and women. The OLS results tell us the average effect. OLS and quantile results may differ in some instances.

i) Results of Body Mass Index of Men and Women in Andhra

Ideally, if the other variables such as household amenities, land ownership, land location categories, education, age, access to health care, etc., which are in a way, proxy for having enough to eat and keep healthy, over a period, are similar, it should not matter to which caste one belongs. If caste makes a difference in a significant manner particularly in an adverse manner even after controlling for other factors, obviously then caste discrimination exists. The results are presented in Table 2.1. The quantile regression results for men and women’s BMI are given in Appendix tables 2.1 to 2.4.

In respect of the Andhra, social group was mostly insignificant and it had no adverse impact on body mass Index of men and women after controlling for a set of household and individual characteristics in OLS3. For men in all quantiles, caste has no significant influence on BMI, clearly showing that BMI as a nutritional outcome is not
influenced by caste for men. A possible reason for the insignificance of caste for Men’s BMI could be the access to sufficient calories to poorer sections of the population, either through cheaper grain in rural area or availability through the Public distribution system. Holding a Below Poverty Level ration card by a household would not tell us about the contribution of PDS to total calories. Many studies have shown that PDS makes a contribution to calories at the margins, in times of low incomes or high prices, though the contribution of PDS to total calories is not high. The price elasticity of consumption also changes at various levels of calorie consumption (Jha et.al, 2010, Avinash et. al, 2015).

For women, the social group did not show any negative significant influence based on the social group in OLS. In the 80th quantile, the top quantile none of the women suffer from chronic energy deficiency. Within each range of BMI, below the 80th quantile, women of other castes record a significantly higher BMI compared to the women of remaining three social groups. The insignificance of caste influence for men and significant caste influence for women in quantiles clearly point to the intra household discrimination in food distribution. It is of concern in lower BMI quantiles for some social groups. This specifically points to the caste gender intersection that needs to be targeted. On the other hand, the insignificance of caste in the top quantile shows that there could be obese women in all Castes. Obesity, as well as chronic energy deficiency among SC and ST and BC castes, has been emerging as a stage of nutritional transition in India.

<table>
<thead>
<tr>
<th>Table 2.1</th>
<th>Andhra Pradesh (residual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Obs:18990</td>
<td>No. of Obs:22381</td>
</tr>
<tr>
<td>BMI Male AP</td>
<td>Female AP</td>
</tr>
<tr>
<td>House hold amenities Index</td>
<td>0.7039463</td>
</tr>
<tr>
<td>Social Group</td>
<td></td>
</tr>
<tr>
<td>Scheduled Castes</td>
<td>0.4442419</td>
</tr>
<tr>
<td>Scheduled Tribes</td>
<td>1.0685</td>
</tr>
<tr>
<td>Other Backward Castes</td>
<td>0.3250336</td>
</tr>
<tr>
<td>Years of schooling</td>
<td>0.1149112</td>
</tr>
<tr>
<td>Health scheme/insurance</td>
<td>0.6749694</td>
</tr>
<tr>
<td>land owned by the H.Hold</td>
<td>-0.0037409</td>
</tr>
<tr>
<td>Irrigated land owned by H.Hold</td>
<td>0.0488755</td>
</tr>
<tr>
<td>Any treatment of Drinking water</td>
<td>-0.2448459</td>
</tr>
<tr>
<td>Female/male ratio of the H.hold</td>
<td>-0.0180134</td>
</tr>
<tr>
<td>Age in months</td>
<td>0.0024179</td>
</tr>
<tr>
<td>land-location Category</td>
<td>-0.1689497</td>
</tr>
<tr>
<td>_cons</td>
<td>20.65786</td>
</tr>
</tbody>
</table>

Adj R2 =.00130025
Adj R2 =.01104163

0.000
0.071
0.078
0.295
0.769
0.615
0.000
0.052
0.000
Household amenities show a positive significant influence on the Body Mass Index of both men and women in Andhra. Household amenities are significant across all quantiles both for men and women in Andhra. Hence to eliminate chronic energy deficiency, household amenities such as sanitation, drinking water, cooking fuel etc., will have to be of better standards.

Years of schooling and age show positive significant influence on body mass Index of males and females in Andhra. Age has a positive influence on BMI of both men and women, in the sense, older persons show significantly higher BMI than younger persons both in OLS and all quantiles.

Further a household with more females than males had insignificant influence on men’s and Women’s BMI in OLS results. In contrast, it has the expected positive influence in all quantiles for male BMI and negative significant influence on all quantiles for female BMI. What it means is that if the household has more females than males they feed the male members well at the cost of female members and hence males in these households have better BMI and the women have lower BMI, even when all the other conditions are the same. Within a set of individuals with smaller variation in BMI as in a quantile, the gender discrimination is apparent, but cannot be captured in the overall aggregation.

Land ownership seems to influence women’s BMI positively and not men’s BMI but land ownership does not influence BMI of men and women in all the quantiles. Landed urban-rural categories are not significant for BMI of males but significant for females in OLS. In contrast, all the quantiles for men and women show a significant influence of this land location categorization on BMI. What it means is that compared to men and women in urban landed households, the BMI of persons in other households, urban landless, rural landed and rural landless was lower.

Any treatment to make water safe appears to have a significant influence on the BMI of both men and women in all the BMI quantiles while they are insignificant in the OLS both for men and women. Similarly, participation in a health scheme or insurance for anyone in the household has an insignificant influence at the average level, but a positive influence on BMI in all quantiles for men and women except in the lower quantiles (20th and 40th) for women. This household variable only indicates the awareness of health issues rather than the actual use of the scheme or health insurance as it does not pertain to the individual whose BMI is measured.

(ii) Results of Heights of Men and Women
Heights of men and women depend upon better nutrition in terms of both quality and adequacy, health care and environmental hygiene in the childhood as well as adolescence. The height of a person also has an intergenerational nutrition improvement
effect, meaning, the younger generation is taller than the older generation, within the same household. The social group is a significant factor determining the height of a person for both males and females, showing that past discrimination in nutritional intake matters. Compared to those belonging to the other castes, scheduled tribes, scheduled castes and other backward classes, males and females were shorter (Table 2.2).

Age has a significant negative influence on the heights of both males and females in Andhra. Younger males and females were taller than the older males and females in Andhra. This is an indication of intergenerational improvement in nutrition outcomes, both in OLS and for quantiles both for men and women. As expected, education has a positive impact on the height of a person both for males and females in OLS. Household amenities consisting of sanitation, drinking water, housing and cooking fuel invariably contribute to the heights of men and women both in OLS and quantile regressions. Basic needs will have to be met for better nutritional outcomes.

<table>
<thead>
<tr>
<th>Significance of Social group on heights</th>
<th>Andhra Pradesh (Residual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height_meters</td>
<td>adjusted $R^2 = 0.01918868$ adjusted $R^2 = 0.01445$</td>
</tr>
<tr>
<td>House-hold amenities</td>
<td>Male AP P&gt;</td>
</tr>
<tr>
<td>Scheduled Caste 1</td>
<td>-0.01628 0.000 -0.0137021 0.000</td>
</tr>
<tr>
<td>Scheduled Tribe 2</td>
<td>-0.01936 0.000 -0.0171736 0.000</td>
</tr>
<tr>
<td>Other Backward Castes 3</td>
<td>-0.00873 0.000 -0.0098545 0.000</td>
</tr>
<tr>
<td>Years of Schooling</td>
<td>0.001245 0.000 0.0008016 0.000</td>
</tr>
<tr>
<td>Health insurance/scheme</td>
<td>0.001221 0.505 -0.0044725 0.007</td>
</tr>
<tr>
<td>Land ownership</td>
<td>0.000144 0.082 0.0001062 0.120</td>
</tr>
<tr>
<td>Irrigated land owned by HH (acres)</td>
<td>0.001059 0.004 -0.0004548 0.384</td>
</tr>
<tr>
<td>Any treatment of Drinking water</td>
<td>-0.00764 0.000 -0.0004236 0.807</td>
</tr>
<tr>
<td>female/male ratio in the HH</td>
<td>0.01238 0.034 -0.0057917 0.239</td>
</tr>
<tr>
<td>age_inmonths</td>
<td>-1.3E-05 0.005 -0.0000221 0.000</td>
</tr>
<tr>
<td>land_location category</td>
<td>0.003637 0.000 0.0011301 0.217</td>
</tr>
<tr>
<td>cons</td>
<td>1.598169 0.000 1.523428 0.000</td>
</tr>
</tbody>
</table>

Land ownership and irrigated land has significant influence on men’s heights but not on women’s heights in OLS. None of the quantiles for men and women indicates any influence of land ownership on heights of men and women. This is probably due to low return on less fertile lands in many parts of the state. Interestingly, ownership of irrigated agricultural land had a positive influence on men’s heights in all quantiles except the top one but not on female heights. It may mean that irrespective of the asset pattern, there is intra household discrimination and hence no gain to the females from more assets, while men get the advantage. Land location variable with the landless rural household as the base category has a significant influence on the heights of men and women in OLS as well as quantiles, except in the lowest quantile for women. It means compared to the male and female members of the household belonging to the landless
rural category, men and women of other categories are taller. The ratio of females to males in the household show significant positive influence on men’s heights, but there was no influence on female heights. Quantiles do not show any influence except in the lowest quantile for men (Table 2.2 and Appendix table 2.3 and 2.4).

V. Quality of Life - Household Amenities Index
This section analyses the variation in wellbeing in terms of quality of life based on Household Amenities Index. Irrespective of the levels of poverty measured in terms of some minimum income, the quality of life depends upon, access to clean drinking water, sanitation, good housing, and clean cooking fuel. These are some of the basic minimum needs. It is possible that some of these needs are not met even for those who are above the poverty line. Rural areas and the disadvantaged social groups do not get the basic minimum quality of life. Public provisioning could improve the quality of life as poor depend upon subsidized housing and cooking fuel. Public taps for drinking water and public toilets cater to the poor. The data shows that these amenities are much harder to access than some of the consumer durables such as television sets and mobile cell phones. Hence, consumer durable have not been considered to measure the quality of life.

(i) Data and Methodology
Household amenities Index as described in the previous section is the dependent variable in this section. Body Mass Index and Heights refer to Individuals within the households and quality of life refers to households. In addition to the data used in the previous section a few more independent variables are used in this section. Consumer durables such as a car, jeep or a van that reflects wealth have been considered in addition to the land owned and irrigated land owned to explain the quality of life. The independent variables include social groups, land ownership categories, sex, age and education of the household head, size and sex composition of the household. Ownership of motor vehicles and holding of BPL card have been introduced as binary variables.

The model includes 4 district characteristics viz., the percentage of people below poverty line, Percentage of urban population, the percentage of regular salaried employees to the in the total workforce and political advantage to SC and ST groups in the district. The underlying assumption is that a household located in a more urbanized district with lower poverty rate and better employment facilities will enjoy a better quality of life. The political advantage has been calculated by the authors. Assembly seats are allotted to SC and ST castes in each district based on the absolute population of these groups in the district. Further percentage of SC and ST population in the total district population gives some electoral advantage to the people of that
district. Multiplying the percentage of the population of SCs and STs with the number of seats allotted gives us the relative advantage of SC & ST groups in one district compared to other districts. This is a relative political advantage of one district over the other for the underprivileged social groups. The rationale in including this variable as a district characteristic is the assumption that relatively more resources are allotted to the poverty groups in these districts and hence the overall quality of life of the household should be influenced. In other words, we are hypothesizing a positive significant influence of political advantage on quality of life of disadvantaged groups that would improve the quality of life of all households in the district.

This section examines the contribution of the social group, household characteristics as well as the contextual effect of the district characteristics in explaining the variations in quality of life of the households. Further, the study explores the effect of interaction between social group and the district characteristics. The interaction of caste of the household with district characteristics shows whether caste disadvantage can be overcome by living in a better off district. A random intercept model that gives random parameters is more suitable for this analysis. This multilevel analysis uses “Mixed effects Maximum Likelihood regression” method.

For all the mixed effects regressions the fit was good as seen from the Wald test chi square as well as the Chi bar square of the LR test. Simple OLS regression was also calculated. The goodness fit as seen from the adjusted R-square values was satisfactory. Only the ML regression results have been presented for discussion. The results are given in the Table 3.1.

(ii) Results of Quality of Life Across Social Groups
The question being answered is whether social group influences the quality of life after controlling the other household characteristics. The results show that significant quality of life index differentials exist across social groups, even if the level of endowments are similar in terms of land and transport owned and the age, education of the household head. Compared to other castes, the base category, scheduled castes, scheduled tribes and backward castes were worse off. Compared to rural landless, rural landed households, urban landless and urban landed households are better off with respect to quality of life. While ownership of irrigated land improves the quality of life, ownership of land has no influence on it. This is probably due to semi-arid land and higher farm sizes and low productivity. BPL card obviously contributes to the lower quality of life as it is held only by the poor. Holding a card may have an impact on consumption at the margins, but it cannot be captured by this binary variable.

Female-headed households or households with more females do not have any influence on life quality. Age of the head of the household and the level of education
improves the quality of life of households. While social group discrimination is obvious, gender discrimination by the head of the household is not apparent in the quality of life in contrast to the BMI in which gender discrimination was apparent.

<table>
<thead>
<tr>
<th>Table 3.1</th>
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<tbody>
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<td>Obs per group: avg = 258</td>
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<td>Log likelihood = -3820.0364</td>
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<tr>
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</tr>
<tr>
<td>Prob &gt; chi2 = 0.0000</td>
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<tr>
<td>hh_amenities</td>
</tr>
<tr>
<td>Social Group : Base= Other Castes</td>
</tr>
<tr>
<td>SC</td>
</tr>
<tr>
<td>ST</td>
</tr>
<tr>
<td>OBC</td>
</tr>
<tr>
<td>Land _Location: Base = Rural landless households</td>
</tr>
<tr>
<td>Rural landed</td>
</tr>
<tr>
<td>Urban landless</td>
</tr>
<tr>
<td>Urban landed</td>
</tr>
<tr>
<td>Land owned</td>
</tr>
<tr>
<td>Irrigated land</td>
</tr>
<tr>
<td>Motor vehicle</td>
</tr>
<tr>
<td>Edu. Head of the H.hold</td>
</tr>
<tr>
<td>Household size</td>
</tr>
<tr>
<td>Females/males in the H.hold</td>
</tr>
<tr>
<td>Age of the HH head</td>
</tr>
<tr>
<td>BPL card holder</td>
</tr>
<tr>
<td>Poverty_dist</td>
</tr>
<tr>
<td>Regularemploy_dist</td>
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<td>Urbanpop_dist</td>
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<td>_cons</td>
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<td>var(Residual)</td>
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<tr>
<td>LR test vs. linear reg.: chibar2(01) = 185.11 Prob &gt;= chibar2 = 0.0000</td>
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</table>
(iii) Contextual Effects of District Characteristics on Quality of Life

The quality of life of the poor improves only with effective public provisioning. The state government provides water, sanitation, housing, and cooking fuel, food grains at subsidized prices, old age pensions and variety of other benefits to the poor. The government also provides employment of last resort, through job cards for 100 days for all those who are willing to take up manual work. Public provisioning is important to improve quality of life among poor households.

Effective governance depends upon the administrative efficiency, which varies from one district to the other. It is an unexplained variable specific to the district captured in district fixed effects. A number of factors such as the agro-climatic background, employment potential, land-man ratio, natural resources such as water fertile land, etc., are specific to the district. The overall contribution of the district to the variation in quality of life was small but significant in Andhra as seen from the intercept term (Table 3.1).

The random coefficient model shows a significant influence of the education of the household head, the age of the household head, and the extent of land owned and irrigated as significant contributors to the variation in quality of life. Household size has a significant negative contribution in Andhra. As expected, BPL card holders show a significantly lower quality of life.

Household level effects (lower level) do not change with the inclusion of district parameters, but contextual effects of the district parameters change with the introduction of other district parameters, and interaction terms. The contextual effect gives the net effect after removing the within the district effect from the between the group effects. The coefficient for the district parameter gives its contextual effect. District parameter contextual effects bring out some important points. If the level of poverty is low in the district, quality of life in terms of basic minimum amenities will be better for the households, as can be seen from the significance of the poverty variable. Level of urbanization of the district and better employment potential in terms of high regular employment also show significant influence on the quality of life of the households in Andhra. The district contextual effects being significant means that households have a better quality of life in the districts with low poverty, higher urbanization, and higher regular employment potential. It means that district prosperity is reflected in the better quality of life for the households.

When we interact caste with poverty and the other district characteristics, the interaction terms for caste with poverty turns significant and positive. It means that a household of higher caste living in a high poverty district still has a better quality
of life. But poverty alone has a negative effect on quality of life. Thus, caste is an overriding factor for wellbeing compared to the poverty level of the district. The interaction of high regular employment potential with caste is negative showing that regular employment is important for better quality of life than caste but the impact of regular employment is positive. Urban caste interaction becomes insignificant (Table 3.2).

After the introduction of the interaction term, Caste becomes significant and positive for SCs and OBCs compared to OCs, but insignificant for scheduled tribes. What it means is that as the districts get more prosperous, the difference between OCs and SCs and OBCs at the average level decline for the same level of education, assets age etc., OCs of a poor district may be worse off than the OBCs and SCs of a prosperous district when other household characteristics are the same. Introduction of the Contextual effect of district political advantage makes the poverty parameter insignificant. The contextual effect of the district political advantage of SCs and STs on quality of life of the households appears to be positive. The problem seems to be the higher level of political advantage for the SCs in prosperous low poverty districts (Tables 3.3). Analysis of Scheduled castes households alone with the political advantage for SCs indicates the significance of political advantage and renders the poverty parameter and other district parameters insignificant. Ownership of irrigated land, urban employment, age and education of the households are the only other significant variable explaining the quality of life within scheduled castes of Andhra.

VI. Conclusions and Implication to Public Policy

In a nutshell, the main findings of the paper are that the impact of the social group on short-term nutrition outcomes such as body mass index of men and women has been muted. The discrimination was insignificant for men in OLS and all quantile regressions, without an exception. This is probably due to the more effective public distribution system and agriculture base of the state, which provides basic calories to the poor at affordable prices. The BMI quantiles for women show a significant influence of the social group. This is a pointer to intra-household discrimination of women in poor households, a case in point for gender caste intersection neglect. Discrimination by caste is quite apparent in heights of adults. Nutrition over childhood, adolescence, and adulthood together determine the height of an individual. Here again, the gender discrimination is apparent as assets such as land ownership and irrigated land influence men’s heights positively but insignificant for women’s heights. All the same inter-generational catching up is apparent in all quantiles.
### Table 3.2

| Social Group (Base = Other castes) | Coef.   | Std. Err. | z      | P>|z| |
|-----------------------------------|---------|-----------|--------|------|
| SC                                | 0.4345945 | 0.20851  | 2.08   | 0.037 |
| ST                                | 0.126264 | 0.175468 | 0.72   | 0.472 |
| OBC                               | 0.2424722 | 0.128065 | 1.89   | 0.058 |

| Location_land (Base = Rural land less) | Coef.   | Std. Err. | z      | P>|z| |
|----------------------------------------|---------|-----------|--------|------|
| urban land 1.247477                     | 0.534246 | 2.34      | 0.020 |
| urban landless 1.832564                 | 0.535601 | 3.42      | 0.001 |
| urban land 2.171406                     | 0.92213  | 2.35      | 0.019 |

| Land owned | 0.0005585 | 0.000997 | 0.56   | 0.575 |
| Irrigated land | 0.0139851 | 0.00345 | 4.05   | 0.000 |
| Motor vehicle | -0.101706 | 0.076955 | -1.32  | 0.186 |
| Edu. Head of the H.hold 0.0381813        | 0.002732 | 13.98    | 0.000 |
| Household size -0.010618                 | 0.006196 | -1.71    | 0.087 |
| Females/males in the H.hold 0.089663     | 0.076964 | 1.16     | 0.244 |
| Age of the HH head 0.0082656              | 0.000974 | 8.48     | 0.000 |
| BPL card holder 0.1812836                 | 0.050517 | 3.59     | 0.000 |
| poverty_dist | -0.042888 | 0.012422 | -3.45  | 0.001 |
| caste *poverty int | 0.0042429 | 0.001415 | 3.00   | 0.003 |
| regular employ_dist | -0.055338 | 0.022996 | -2.41  | 0.016 |
| caste *employ int | 0.005435 | 0.003173 | 1.71   | 0.087 |
| urbanpop_dist | 0.0150659 | 0.011823 | 1.27   | 0.203 |
| caste * urban int | 0.0024074 | 0.001744 | 1.38   | 0.167 |
| _cons | 1.266196 | 0.638794 | 1.98   | 0.047 |

### Random-effects Parameters

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<tr>
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<th>Std. Err.</th>
<th>(95% Conf. Interval)</th>
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LR test vs. linear regression: chibar2(01) = 184.55 Prob >= chibar2 = 0.0000
### Table 3.3

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</tr>
</tbody>
</table>

| hh_amenities | Coef. | Std. Err. | z      | P>|z| |
|--------------|-------|-----------|--------|------|
| Social Group: Base: Other castes |        |           |        |      |
| Scheduled Castes | -0.4765245 | 0.04157 | -11.46 | 0.000 |
| Scheduled tribes   | -0.6303079 | 0.051831 | -12.16 | 0.000 |
| Other Back ward Castes | -0.3062339 | 0.033349 | -9.18 | 0.000 |

| Land _Location: Base = Rural landless households |        |           |        |      |
| Rural landed | 1.142325 | 0.535532 | 2.13   | 0.033 |
| Urban landed | 1.720564 | 0.536803 | 3.21   | 0.001 |
| Urban landed | 2.039206 | 0.924908 | 2.20   | 0.027 |
| Land owned    | 0.0005877 | 0.001 | 0.59   | 0.557 |
| Irrigated land | 0.0137969 | 0.003458 | 3.99 | 0.000 |
| Motor vehicle | -0.1183846 | 0.077112 | -1.54 | 0.125 |
| Edu. Head of the H.hold | 0.0380941 | 0.002739 | 13.91 | 0.000 |
| Household size | -0.0106332 | 0.006216 | -1.71 | 0.087 |
| Females/males in the H.hold | 0.0941093 | 0.077218 | 1.22 | 0.223 |
| Age of the HH head | 0.0085388 | 0.000976 | 8.75 | 0.000 |
| BPL card holder | 0.1794894 | 0.050674 | 3.54 | 0.000 |
| Political representation | 0.0065431 | 0.002807 | 2.33 | 0.020 |
| Poverty_dist  | -0.0166496 | 0.011012 | -1.51 | 0.131 |
| Regularemploy_dist | -0.0430699 | 0.01746 | -2.47 | 0.014 |
| Urbanpop_dist | 0.0220755 | 0.008775 | 2.52 | 0.012 |
| _cons         | 1.472252 | 0.637879 | 2.31   | 0.021 |

<table>
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<th>Random-effects Parameters</th>
<th>Estimate</th>
<th>Std. Err.</th>
<th>(95% Conf.)</th>
</tr>
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<tr>
<td>var (Residual)</td>
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<td>0.013809</td>
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LR test vs. linear reg: chibar2(01) = 107.15 Prob >= chibar2 = 0.0000

Nutritional outcomes are determined by several factors, but household amenities appear to be an important factor. The analysis of quality of life Index based on the household amenities indicated that caste remains a significant factor even after controlling for household characteristics and district characteristics. This is an indication of clear caste discrimination. It points to a possible deprivation of household amenities in SC and ST habitations.
District contextual effects on household quality of life are small but significant. District characteristics such as level of poverty, the proportion of people in regular jobs, and urbanization positively influence the quality of life of the households. While both social group of the household and the level of poverty of the district in which the household is located influence quality of life of the household, the interaction effect clearly indicates the overriding effect of social group. No matter where the household is located if it belongs to a higher caste it will be better off, even after controlling for other variables.

Political advantage due to political representation and a higher concentration of SCs and STs at the district level had a positive impact on their quality of life of all households. Analysis exclusively for scheduled castes shows a significant contextual effect of political advantage on quality of life, of scheduled castes but makes the contextual effect of poverty insignificant. It is because, in Andhra, political advantage appears to be high in some better off districts. It is not clear whether the geographical advantage of low poverty benefited the Scheduled castes or it was a negotiated political advantage. It may also have a bearing on the long-standing social group polarization and consolidation of scheduled castes in the prosperous districts of Andhra.

The major implication to public policy is one of looking into nutritional issues of women in isolation and at caste gender intersection and not in the context of a household. This calls for a special program of nutrition awareness and gender sensitivity and equity in food intake for women in the households of disadvantaged groups and especially in households with more females than males. Caste-based effective public provisioning services in SC and ST habitations of all geographical regions and especially in poor geographic locations can address improvements in quality of life. Enhancement of political advantage of Scheduled castes in poor districts in local administration platforms apart from the assembly seats may also benefit the disadvantaged social groups, by giving them a voice. Most of all Household amenities have to be improved in all SC and ST habitations. Irrespective of where the SC and ST households are, (high poverty or low poverty district), their housing and household amenities need improvement.

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Thorat Sukhadeo and Nidhi Sadana Sabharwal, “Caste and Social Exclusion: Concept, Indicators, and Measurement in India’s Children: Essays on Social Policy Published in print: 2015


### Appendix A2.1 Body Mass Index (Andhra)

**Male AP**  
Number of obs = 18990  

| bmi     | Coefficient | P>|t|       |
|---------|-------------|----------|
| q20     | 0.7519994   | 0.000    |
| hh_amenities*** | 0.07519994 | 0.000    |
| caste   | -0.017208   | 0.604    |
| Health Insurance ** | 0.1909041 | 0.023    |
| Land owned | -0.002395 | 0.961    |
| Irrigated land * | 0.0355751 | 0.061    |
| Treated water*** | -0.2970105 | 0.004    |
| femalehh_ratio*** | 1.300504  | 0.000    |
| age_inmonths*** | 0.0008858 | 0.000    |
| land_location** | 0.1103424 | 0.026    |
| _cons*** | 17.25212    | 0.000    |

Pseudo R2 = 0.0290

### Appendix A2.2 Body Mass Index (Andhra)

**Female AP**  
Number of obs = 22381  

| bmi     | Coefficient | P>|t|       |
|---------|-------------|----------|
| q20     | 0.8597581   | 0.000    |
| hh_amenities*** | 0.07519994 | 0.000    |
| caste*** | 0.0745608  | 0.003    |
| Health Insurance | 0.0715601 | 0.316    |
| Land owned | -0.0101578 | 0.143    |
| Irrigated land | -0.0270386 | 0.386    |
| Treated water*** | -0.3122687 | 0.000    |
| femalehh_ratio*** | -1.436498 | 0.000    |
| age_inmonths*** | 0.001772  | 0.002    |
| land_location*** | 0.2244989 | 0.000    |
| _cons*** | 17.23762    | 0.000    |

Pseudo R2 = 0.0397

### Appendix A2.3 Body Mass Index (Andhra)

**Male AP**  
Number of obs = 18990  

| bmi     | Coefficient | P>|t|       |
|---------|-------------|----------|
| q60     | 1.109446    | 0.000    |
| hh_amenities*** | 1.109446  | 0.000    |
| caste   | 0.0001522   | 0.996    |
| Health Insurance*** | 0.3720273 | 0.000    |
| Land owned | -0.0019093 | 0.699    |
| Irrigated land | 0.004413  | 0.811    |
| Treated water*** | -0.5703687 | 0.000    |
| femalehh_ratio*** | 1.783224  | 0.000    |
| age_inmonths*** | 0.001521  | 0.000    |
| land_location*** | 0.1339795 | 0.003    |
| _cons*** | 18.27517    | 0.000    |

Pseudo R2 = 0.0336

### Appendix A2.4 Body Mass Index (Andhra)

**Female AP**  
Number of obs = 22381  

| bmi     | Coefficient | P>|t|       |
|---------|-------------|----------|
| q60     | 1.405788    | 0.000    |
| hh_amenities*** | 1.405788   | 0.000    |
| caste*** | 0.074533   | 0.009    |
| health insurance** | 0.2123494 | 0.022    |
| Land owned | -0.0092049 | 0.388    |
| Irrigated land | -0.0287709 | 0.133    |
| Treated Water** | -0.2263936 | 0.012    |
| femalehh_ratio*** | -1.358099 | 0.000    |
| age_inmonths*** | 0.0028966 | 0.000    |
| land_location*** | 0.2508681 | 0.000    |
| _cons*** | 17.91144    | 0.000    |

Pseudo R2 = 0.0491

### Appendix A2.5 Body Mass Index (Andhra)

**Male AP**  
Number of obs = 18990  

| bmi     | Coefficient | P>|t|       |
|---------|-------------|----------|
| q80     | 1.356307    | 0.000    |
| hh_amenities*** | 1.356307   | 0.000    |
| caste   | 0.0257682   | 0.408    |
| Health insurance*** | 0.5095275 | 0.000    |
| Land owned | -0.006902  | 0.296    |
| Irrigated Land | -0.013433 | 0.575    |
| Treated water*** | -0.425115 | 0.002    |
| femalehh_ratio*** | 2.140097  | 0.000    |
| age_inmonths*** | 0.0022201 | 0.000    |
| land_location*** | 0.197924  | 0.003    |
| _cons*** | 20.59385    | 0.000    |

Pseudo R2 = 0.0300

### Appendix A2.6 Body Mass Index (Andhra)

**Female AP**  
Number of obs = 22381  

| bmi     | Coefficient | P>|t|       |
|---------|-------------|----------|
| q80     | 1.773593    | 0.000    |
| hh_amenities*** | 1.773593   | 0.000    |
| caste   | 0.0493349   | 0.160    |
| Health insurance*** | 0.5029544 | 0.000    |
| Land owned | -0.0074912 | 0.621    |
| Irrigated Land | -0.0371746 | 0.228    |
| Treated water** | -0.3343358 | 0.019    |
| femalehh_ratio*** | -1.648974 | 0.000    |
| age_inmonths*** | 0.0045649 | 0.000    |
| land_location*** | 0.4551728 | 0.000    |
| _cons*** | 19.79514    | 0.000    |

Pseudo R2 = 0.0489
### Appendix A.2.5 Heights (Andhra)

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Inclusive Growth: Some Reflections on the Concept and Measures for Progress*

C.H. Hanumantha Rao**

This paper builds on the existing literature and investigates the significance of social group in explaining wellbeing aspects in terms of nutritional outcomes of adult men and women and quality of life of households reflected in household amenities Index. The variations in the observed nutritional outcomes (BMI and heights) of individuals have been explained at various levels of nutritional outcomes with quantile regressions. In addition, the study looks at the contextual effects of district characteristics on quality of life of households, with mixed effects maximum likelihood regression. District health Survey- 4 for 2012-13 provides the data for analysis. Social group has no significant influence in explaining the variations in body mass index (BMI), for men and women after controlling for the individual characteristics such as education age and household characteristics such as household amenities Index, the land-owning status of the households and urban-rural land related status etc. In total contrast, the Social group is significant in explaining the long-term inter-generational nutritional outcome reflected in the heights of men and women. Caste significantly influences the quality of life represented by household amenities. District contextual effect of poverty, urbanization and regular salaried employment influence quality of life reflected in household amenities.

Keywords: Social Group, BMI, Height, Household amenities

I. INTRODUCTION

The acceptance of the idea of Inclusive Growth among policy makers in India, notably after 2004, is due to the experience of the post-reform period, when poverty reduction was slower than expected and economic inequalities increased significantly with various deprivations such as under-nutrition, lack of adequate health care and education coming to the fore.

However, there is little clarity among many on the concept of inclusive growth. Very often, it is loosely used by identifying it with welfare schemes like Employment Guarantee and Public Distribution of Food grains, which do not, by themselves, make for inclusive growth. After all, several such schemes have been there in India

* Key-note address delivered at the inaugural session of the 18th IASSIAnnual Conference on 3 December 2017 in Guntur, Andhra Pradesh.
** Hon. Professor, Centre for Economic and Social Studies, Hyderabad. Email: chennamaneni@cess.ac.in
throughout the planning era to mitigate the distress caused to weaker sections of society. To my mind, economists are yet to formulate a cogent theory of Inclusive Growth and work out alternative models of achieving such growth, where equity and social justice are built into the growth process itself as distinct from measures for social welfare, which are a necessary consequence of the failure to achieve inclusive growth.

Considering the current profile of poverty and income inequality in India, it appears that the sectors calling for greater attention in terms of investment and institutions are agriculture, rural non-farm sector, manufacturing, health and education. In terms of regions, the states in the Central and the Eastern regions require greater attention.

While the above priorities are clear on a priori grounds, it seems to me that the kind of professional exercises done during the early years of planning in India, would be useful for clinching the targets of Inclusive Growth. Two types of exercises come to mind. First, for reducing the regional disparities in per capita GSDP to a certain targeted level, say, over a 15-year period, what would be the investment requirement in the Eastern Region, given the Capital-Labour, and Capital-Output ratios for this region? Second, the investment requirements in each of the five priority sectors, e.g. agriculture, rural non-farm sector, manufacturing, health and education, at the macro-level for the country as a whole needs to be spelt out. Such exercises could provide some broad guidelines for policy, while at the same time imparting some realism to the official pronouncements on Inclusive Growth.

The 12th Five-year Plan came out with a blueprint of Inclusive Growth. It defines ‘Inclusive Growth’ as a growth process that is broad-based or one in which wider sections of the population, especially those marginalized and hitherto excluded, participate. ‘Inclusive Growth’ implies, stepping up GDP growth rate in the slow growing or less developed regions through the development of necessary physical and social infrastructure. This includes greater priority to agriculture, which contributes to food security and provides a livelihood for nearly half the labour force in the country at present and high priority to the rural non-farm sector and manufacturing so as to generate greater employment opportunities and ensure rise in wages.

It is understood that setting sectoral priorities right is not sufficient for achieving inclusive growth. Marginalized groups can avail of opportunities for setting up enterprises and securing jobs in these sectors only when they have access to resources such as land and capital, education and skills without being subjected to various forms of discrimination.

II. Social Inclusion – The Present Status

The incidence of poverty has been most pronounced among the SCs, STs and Muslims. According to the India Human development Report 2011, the SCs, STs and Muslims suffer
the most because of poor health status: the most striking shortcoming of our public health system has been the failure to reach out to the bottom of the pyramid, to the 300 million people who are often excluded.

The problem of illiteracy in both rural and urban areas has been most pronounced among SCs, STs, and Muslims, and relatively more pronounced among females. The report points out that the combination of low public expenditure on both health and education has had serious, long-lasting, adverse consequences for India’s human development levels, and suggests that establishing publicly funded educational institutions alone can ensure greater participation from among the educationally disadvantaged communities.

III. Feminization of Agriculture

The feminization of agriculture is largely a consequence of male labour in the household taking up non-farm work. Management of farms by women may become widespread among marginal, small and medium farms in course of time with male members of households increasingly taking up non-farm work.

Management of farms by women should be regarded as an opportunity as well as a challenge. Opportunity, because it enables empowerment of farm women who have greater familiarity with enterprises like dairy and horticulture, which are going to be the major sources of farm income. Challenge because women lack property rights on land and farming becomes an additional responsibility for them apart from household work. They have lower literacy levels and a lack of experience in dealing with agricultural support systems, including extension services, which are male-dominated.

IV. Some Recent Developments

Of late, there are certain encouraging developments concerning social inclusion, pointing to the possible factors responsible for such favourable outcomes and the direction in which policies can be focused for accelerating desirable changes.

According to the report, SCs, STs and Muslims have been converging towards the national average in terms of literacy rates. Health indicators for these marginalized groups are also converging with the national average, although in absolute terms, the overall situation continues to be worrisome. Over the same period between 2004-5 and 2009-10, the unemployment rate among workers belonging to these three groups declined in both rural and urban areas. Poverty has declined for these groups at an accelerated rate between 2004-05 and 2009-10, which is higher than the overall or average annual rate of decline.

These encouraging developments should not come as a surprise. The year 2004 was a watershed one after 15 years of economic reforms, when the government at
the centre made an explicit commitment, for the first time, to implement economic reforms with human face. Among many policy initiatives taken in the social sector, two major Welfare Programmes to mitigate the distress caused to these sections are the Mahatma Gandhi National Rural Employment Guarantee Programme and the Programme for the Welfare of Minorities. On all accounts, these two programmes had a distinctly better impact.

At the state level, according to HDR 2011, “the experience of Kerala and Tamil Nadu demonstrate that the ‘destiny’ of population can be changed through appropriate policies that address the needs of the marginalized communities. The analysis makes a strong argument for all state governments to act as agents of change to make the development process truly inclusive.” It may be noted that in both Kerala and Tamil Nadu, the system of Public Distribution of Foodgrains has been functioning successfully. These states also ensure better accountability of programme performance through Panchayati Raj Institutions.

With respect to the feminization of agriculture in the country, a silver lining is that apart from their familiarity and expertise in managing certain farm enterprises, women farmers have performed extremely well when adequately empowered, as exemplified by the work of Women’s Self-Help Groups. This experiment needs to be extended for the provision of various services, including marketing, by organizing small and marginal farmers into groups.

Since Feminization of Agriculture is a major challenge, it calls for strong policy initiatives, right from the national level. This is required for dealing with issues such as strengthening land inheritance rights for women, endowment of property rights on houses built with public assistance, improving literacy level and awareness among women farmers, measures to lighten the burden of their household work, and sensitizing the agricultural support systems, including credit institutions, about the needs of women farmers and, in particular, inducting women functionaries in large numbers in agricultural extension system to assist women farmers.

V. Governance

The observations on governance in the 12th Plan document are worth mentioning as they are based on an in-depth analysis of past performances, stating that, “The experience with Plan programmes has clearly established the central role of a socially mobilized and aware community as a decisive determinant of success... The states that have emphasized the role played by social mobilization and have made specific financial and human resource provisions which have invariably succeeded. It is the participation of users in the planning, implementation and social audit of these programmes that has proved critical to their success.”
The basic issue is a political one of ensuring a much quicker response of our democratic system to the needs and aspirations of the poorer and marginalized sections of society. The shift in policy towards economic reforms with human face and the strategy of inclusive growth adopted in the 11th and 12th Plans did represent the response of our democratic system to the growing discontent among the poorer sections. However, the pace of change has been too slow, halting and even retrogressive sometimes because of resistance from parties with vested interest.
**Book Review**


To measure sustainable development – the concept of wealth as a complementary indicator to GDP was given by World Bank in 2006 with the launch of document, ‘Where is the wealth of nations?’ With the next in series, ‘The changing wealth of nations 2018’ is a significant document which shows that there has been a significant growth in global wealth between 1995 and 2014; with rapid growth in Asia. However, the inequality in overall wealth persists as several low-income countries in sub-Saharan Africa experienced a decline in per capita wealth. The document recognised ‘Human capital’ as the most important component of wealth as some Asian countries like India are harnessing ‘demographic dividend’. The document also addresses low female work participation rates. Next, the document addresses the challenge of ‘Resource curse’ with dependency on non-renewables and acknowledges renewable natural capital as a unique asset.

The first part of the document has shown global and regional trends in wealth from 1995 to 2014; where wealth has been estimated according to four asset classes: produced capital, natural capital, human capital and net foreign assets. The document shows that while high-income OECD countries are facing the problem of ageing of the labour force; low and middle income countries are soon catching up as their share of human capital in total wealth is rising. This is responsible for much of the global convergence in wealth.

Second part of document includes some case studies. The document discusses diversified development in ‘natural resource’ rich African countries with the case studies of Ghana and Niger. The case studies also discuss development in these countries in context of election cycles and political stability. Next, the document discusses multi-factor productivity in selected petroleum producers: Bolivia, Ecuador, Arab republic of Egypt, Gabon, Kazakhstan and Oman. It found a consistent relationship between growth rate of produced capital and the growth rate of natural resource extraction among these countries. The document next discusses the challenges for carbon rich nations as advances in renewable resource technologies nudge the traditional source of prosperity. Thus, these countries need to focus on diversification of their economic assets.

The third part of document discusses gains in human capital in context of the ‘Growth model’. It emphasizes on education, skill-development and female work-force participation to harness maximum benefits from human capital. The document
discusses the case study of Morocco, which harnessed its human capital by investing in early childhood development and reforms in education sector, labour market and gender equality.

The last part of the document discusses some important issues like the impact of air pollution on human health and wealth and the impact of subsidies on global marine fisheries wealth. The last chapter reviews recent advances in remote sensing and environmental modelling and argues that such advances support decision making processes; thus making the best use of a nation’s wealth.

This document is a necessary read during recent times of changing definitions of wealth and global convergence towards a sustainable future. It is a right mix of quantitative and qualitative research. Apart from just stating the facts, the document has also analysed data in detail. The discussion has taken into account several dimensions of development that contribute towards the wealth of nations. However, the document also takes the discussion towards the role of strong institutions and good governance in generating social capital by increased international co-operation.

The document also seems to be a proponent of Malthusian theory where it blamed growing population in sub-Saharan African countries for negative wealth creation per person in these countries, in spite of being rich in natural resources. It failed to acknowledge that development leads to population control rather than the other way round. Poverty and deprivation weaken the foundations of a nation and lead to human suffering. Population of a nation must be a beneficiary of development rather than the means of wealth generation where the only solution seems to be population control as a myopic vision.

In one of the chapters, the document recognizes the importance of renewable sources of energy and has discussed in detail the risks faced by carbon-rich nations that rely completely on export of fossil fuel resources for wealth creation. Here it is important to know that this rat race of getting ahead in economic development is putting pressure on the environment where increased consumerism is rapidly eating up available natural resources. New theories of economics must be conceptualised, which gives importance to complacence and the slow pace of life. This concept of ‘wealth of nations’ needs to be developed further as there is a scope as well as necessity for the evolution of this concept.

Regarding human capital wealth, the document has emphasized on gender equity towards wealth creation. Here it fails to recognise household work as contributing to wealth creation. It blames the low participation of women in income generating activities for gender skewness in human capital. It also recognizes the role of education and health towards generating human capital wealth. Here the document discusses the ‘growth model’ where populations are both contributor as well as beneficiaries of
sustainable development. The document also discusses case study of Morocco where education sector reforms and emphasis on early childhood development resulted in its economic development greater than the surrounding African countries. It admires progressive gender laws in Morocco regarding women’s rights.

One of the chapters has estimated economic loss in terms of human capital exposed to dangerous levels of air pollution. The reductionism of human capital loss as labour loss sounds offensive where labour income losses has been calculated from air pollution by region. The exposure of infants and children to dangerous levels of air pollution needs to be mentioned. This is poisoning the future of our nations. Irrespective of contribution in wealth generation, the loss of human health due to alarming levels of air pollution is a matter of concern. The roots of this pollution is increased industrialisation, commercialisation, consumerism and the fast pace of life. We need to acknowledge that the craving for increased wealth is leading us nowhere, but is polluting our bodies and our souls. The futures of our children are at stake. After all, our children cannot eat gold biscuits. They need toxin-free food to eat and fresh air to breathe. What else could be more valuable than the health of our children?

In one of the chapters, the document also seems to blame subsidies given to fisheries in various countries for a downward trend in fisheries wealth. The document estimated that revenues generated from fisheries are unable to cover its cost. This seems to be a very technical vision as the logic seems to ignore the social aspects associated with subsidization in fisheries. After all, we are generating wealth for the human beings. What use is this wealth if generated at the cost of human suffering?

To conclude, the document has taken a wide landscape while discussing the changing wealth of nations. It has touched some of the social as well as scientific issues. At the same time, it adhered to its ideology and focused on progressive society even at the cost of some marginalised communities sustaining on subsidies. At the end, I would like to say that wealth should only be a means of living and the living should not be reduced to just a means of generating wealth. During ancient times, we used to have the barter system where the whole purpose was to get work done and get life going. With changing times, we developed currencies and the purpose was somehow reduced to possess more currency. Now we are even trading in virtual currency. So far has our obsession with currency reached. Could we please stop valuing everything in US Dollars and start respecting each other and this beautiful nature? After all, the most worthy things in life cannot be measured in terms of wealth.

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Summary of the Proceedings

3-5 December 2017

Proceedings of the 18th IASSI Annual Conference 2017 on Inclusive Developments: Perspectives and Policies Held at Acharya Nagarjuna University, Guntur, In Collaboration with Centre for Economic and Social Studies, Hyderabad

The three day 18th IASSI Annual Conference 2017 was held on “Inclusive Developments: Perspectives and Policies” from 3rd to 5th December 2017 at Nagarjuna University, Gunturu, A P. The Conference was organized by Acharya Nagarjuna University (ANU), Guntur in collaboration with Centre for Economic and Social Studies (CESS), Hyderabad. The Conference had 7 plenary Sessions and 8 technical sessions. The first four parallel technical sessions were 1A, 1B, 2 and 3. The topic for 1A and 1B technical sessions were Economic Development, Equity and Social Inclusion (Section I). The topics for Technical session 2 and 3 were Livelihood and Employment Opportunities, and Urban Development, respectively. In the parallel technical sessions i.e. 4A, 4B, 5A and 6A - education was the topic for technical sessions 4A and 4B. Session 5A had papers on Economic Development, Equity, and Social Inclusion (Section II) and Social and Political Institutions was the topic for session 6A. The other parallel sessions were 5B, 6B, 7A, 7B and 8. Technical session 5B was again on Economic Development, Equity, and Social Inclusion (Section II), 6B on Social and Political Institutions, 7A and 7B on Technology and Skills and the last technical session was on Health. The Tarlok Singh Memorial Lecture was delivered during Plenary Session 5 by Prof. D Narasimha Reddy, former Professor and Dean, School of Social Sciences, University of Hyderabad. A “Symposium on Child development: Issues of Child Rights and Child Protection (Supported by UNICEF)” was organised in plenary Session 4. Plenary Session 6 was conducted on “Symposium on Human Development in Andhra Pradesh and Telangana: Challenges and way forward”. In Plenary Session 7A, the “Round table Discussion on: Reforming Higher Education in India with National and International Perspectives” was conducted.

Inaugural Session

The inaugural session was held at the Main Hall, Auditorium, ANU, Guntur. The session started with Prof. A. Rajendra Prasad, Vice Chancellor of ANU, welcoming the Guest of honour, Prof. V. K. Malhotra, Member-Secretary, Indian Council of Social Science Research, New Delhi and other dignitaries. After the opening remarks by Prof. S. R. Hashim, Chairman, IASSI, the inaugural address was given by Prof. V.
N. Pandit, former Vice Chancellor, Sri Sathya Sai Institute of Higher Learning. Prof. Pandit presented a historical perspective of progress and prosperity. In spite of the achievements related to economic development, sociological changes, and political processes, problems such as unemployment, poverty, inequality, corruption, etc., persist. Making it important for social thinkers to promote a multidisciplinary approach by undertaking all-inclusive research on the prevailing social and human problems. It is important that an ethical and moral attitude should be cultivated, particularly among those responsible for policy formulation and implementation.

The inaugural session was presided over by Prof. R. Radhakrishnan, Chairman, CESS. The Presidential Address dealt with some aspects of the performance of the Indian Economy in the post-reform period covering growth, employment and pathways towards inclusive growth. Prof. Radhakrishnan was of the opinion that the present pattern of development comprising high growth, slow expansion of productive employment and worsening inequalities is not inclusive, which may ultimately act as a hindrance to high growth. It is necessary to eliminate barriers to inclusive growth and macro-economic policies should be aligned as such. Inclusive growth reduces poverty in its multiple dimensions. Many policies that are effective in reducing poverty also increase growth. It is essential to recognize that the Indian economy should sustain productivity led high growth in the long term to compete in the globalizing world.

This was followed by felicitating Prof. Y. K. Alagh, Chancellor, Central University of Gujarat. The session concluded by a vote of thanks by Prof. M. Koteswar Rao, Dean, College Development Council, Acharya Nagarjuna University and Local Organizing Secretary, IASSI.

Plenary Session 1

The session was chaired by Dr. R.B. Barman, Chairman, National Statistical Commission, New Delhi. A keynote address through video on “Inclusive Growth: Some Reflections on the Concept and Measures for Progress”, was given by Prof. C. H. Hanumantha Rao, Honorary Professor, Centre for Economic and Social Studies, Hyderabad. He addressed the need for all-inclusive development giving greater priority to agriculture, rural non-farm sector, manufacturing, health and education at the micro level for the country as a whole. According to him, poverty is more pronounced among the SCs, STs and Muslims. These groups, according to the India Human Development Report 2011, suffer the most, having poor health status. The public health system has not reached these vulnerable groups. Illiteracy is a larger occurrence among these groups, more so among the females. Though the feminization of agriculture has taken place leading to addition in income, it has also become a challenge for women as they do not have property rights and farming becomes an added responsibility along with domestic work. Since 2004, the Central government started implementing economic
reforms with a human face with various policy initiatives taken in the social such as the Mahatma Gandhi National Rural Employment Guarantee Programme and the Programme for the Welfare of Minorities. The Human Development Report of 2011 reveals that between 2004-5 and 2009-2010, the literacy rates and health indicators of the SCs, STs and Muslims have been converging towards the national average. During this period, poverty also declined at an accelerated pace which is higher than the average annual rate of decline. However, the pace of change has been slow due to the resistance from parties with vested interests.

**Plenary Session 2**

The session was chaired by Prof. Atul Sharma, Chairman, OKDISCD, Guwahati. Prof. Muchkund Dubey, President, Council of Social Development, New Delhi and Prof. Jerry Rodgers were the speakers in this session. Prof. Dubey spoke about primary schooling in India. He was of the opinion that school education in India is in doldrums. After independence, priority was not given to education. After the enactment of The Right to Education (RTE) Act, 2009, enrolments in schools increased but the quality of education declined. There has been commercialization of education. Economic reasons have led to the shutdown of a large number of schools in states like Rajasthan, Chhattisgarh and Madhya Pradesh. He suggested that The RTE Act should give utmost importance to infrastructure and resources, and stated that a new deadline for the implementation of the act should be laid down.

Prof. Jerry Rodgers, Visiting Professor, Institute for Human Development, New Delhi and former Director International Institute of Labour Studies, Geneva, discussed social exclusion in Indian society.

**Plenary Session 3**

Prof. D Narasimha Reddy, former Professor and Dean, School of Social Sciences, University of Hyderabad chaired the third Plenary Session. The first speaker was Prof. M. A. Kalam, Adjunct Professor, Loyola Institute of Business Administration, Chennai. He emphasized upon equal opportunity with regard to entrepreneurship irrespective of caste. Ashwini Deshpande has argued that though there has been an increase in the representation of Dalits in entrepreneurship, upper castes are still over represented. The Dalit Chamber of Commerce and Industry was formed to overcome caste-based discrimination.

The second speaker Prof. Manoj Panda, Director, Institute of Economic Growth, Delhi presented a paper titled “Social time preference Rate: Estimates for the Indian Economy”. Prof. Shashanka Bhide, Director, Madras Institute of Development Studies, Chennai, presented the paper titled “Structure of poverty, poverty dynamics and poverty reduction”. The growth of agriculture according to a World Bank Study is
important for the reduction of poverty. Prof. Biswajit Chatterjee, former Professor of Economics, Jadavpur University, Kolkota, was of the opinion that education and health facilities for the poor provided by the government is one solution for the reduction of poverty. Prof. Kailash Sarap, National Institute of Rural Development and Panchayati Raj, Hyderabad is of the opinion that along with the national employment policy for the whole country, a state employment policy for every state in India is needed, as conditions differ from state to state. In Odisha, during the last decade (2005-15), there has been a reduction of poverty by 25 percent. Female labour participation in rural areas in Odisha declined during the last five years (2012-17): 90 percent of employment in Odisha is either self-employment or casual employment. The participation of the SC, ST population in the MGNREGA programme is declining in Odisha.

**Plenary Session 4**

Symposium on Child development: Issues of Child Rights and Child Protection (Supported by UNICEF)

The session was supposed to be chaired by Prof. Srijit Mishra, Director, NCDS, Bhubaneswar. Due to other work in the IASSI conference, it was chaired by the Co-chair Prof. Shiva Reddy of Osmania University. The two divisions of CESS, i.e. Division for Child Studies (DCS) and Young Lives (YL) presented their research findings, which were relevant for this session.

The DCS team, led by Prof. S. Vijay Kumar, includes Mr. N. Narasimha Reddy, Ms. B. Sriparna, Ms. M. Sowjanya, and Mr. Ch. Pavan Kumar. A brief presentation on the programmes and performances of DCS was made by Prof. S. Vijay Kumar. DCS is a joint initiative of CESS and UNICEF, started in 20.11.2013 to strengthen evidence on child development issues and policy initiatives. It promotes research, conducts evaluation on child rights programmes, produces thematic papers, planning to execute Diploma Programs in Child Studies, encourage research scholars to conduct child related research, policy analysis, online knowledge hub and building partnerships for better results. In a short span of 48 months, they have shown lot of works, which are handy to policy makers and other stakeholders. In their empirical research, they conducted a constituency wise analysis of drinking water and sanitation in AP and Telangana and organised the management of work load and work patterns among public health functionaries. A pilot study in Vishakhapatnam on deciphering, determinants, the impact of rising rates of caesarean sections and offering potential solutions conducted with community based system dynamics – exploring dynamics of maternal child health and complementary feeding practices – was conducted.

The division provides policy support to various governmental departments in Telangana, Andhra Pradesh and Karnataka and 10 international agencies. This wing also prepared fact sheets, bringing key indicator wise data on children accessible through Android and iPhone apps. They organised 4 lectures, the first one was
delivered by APJ Abdul Kalam and the next one was by Prof. Y V Reddy. They also launched the child protection resource centre.

Young Lives (YL) is an international longitudinal study on childhood poverty located in CESS, Hyderabad. In India, the quantitative study was led by Prof. S Galab and Dr. P Prudivikar Reddy is the senior researcher in the research project. YL collects longitudinal data in 4 countries i.e. Ethiopia, Vietnam, Peru and India and in India, it is united A P. So far, the study collected 5 rounds of data from the same children and their households. The latest round i.e. 5th round data was collected in the year 2016-17. Dr. P Prudhvikar Reddy presented the major findings of the research study. The results of the study pertaining to seven sample districts of undivided A P i.e. 3 districts (Hyderabad, Mehboobnagar and Karimnagar) from Telangana and 4 districts (West Godavari, Ananthapuram, Cuddapah and Srikakulam) from Andhra Pradesh. The results reveal that between 2002 and 2016, there has been a remarkable improvement in housing quality, availability of consumer durables, access to services, and overall wealth in both Telangana and AP. However, malnutrition is still prevalent and the reduction of malnutrition of children is not commensurate with the increase in the wealth status of the households. It is surprising to note that the learning levels of students in private schools fall faster than government school children. He also highlighted the prevalence of child marriages despite enacting laws, youth and labour market skills that include possession of digital skills. This was followed with a panel discussion on child protection issues.

The panelists comprised Prof. S. Galab, Director, CESS, Hyderabad; Prof. K. Hanumantha Rao, CESS, Hyderabad; Prof. C. Ravi, CESS, Hyderabad; Prof. Susanta Mahapatra Amrita Vishwa Vidyapeetham, Kochi and Dr. M. Sridevi, Consultant, IHD, New Delhi. Prof. Hanumanha Rao spoke about child rights and child protection under 4 major heads viz, Right to Survival, Right to Participation, Right to Development and Right to Protection. According to him, awareness among stakeholders regarding rights is to be campaigned for, followed by documentation and dissemination. He also touched upon other dimensions of child rights. He said that infrastructural facilities and quality of teachers is better in government schools but parents tend to send their children to private schools. Dropout is another critical problem. Prof. Ravi talked about Child Poverty for which sufficient data is not available. Intra-household distribution of children living in poor families is to be examined. 31 percent of children live in poverty as against 23 percent of overall poverty. State wise data shows that there is a 14% gap between children and overall poverty in Chattisgarh and 12% in West Bengal. Child poverty is increasing than overall poverty in Madhya Pradesh and Chattisgarh as compared to India. It is high in Kerala, HP and less in Jharkhand, Bihar, Chattisgarh. Surprisingly, Gujarat stood at 19th place. According to Prof. Susanta Mahapatra, 8.1 million children are out of schools and majority of them belong to
disadvantaged groups. He found major gender gaps in education and health. He suggested prevention, intervention and rehabilitation for mitigating the problem. He also discussed the programmes, legislations and opportunities to overcome the problems. He concluded by stating that Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR) should be curbed ensuring child protection. Dr. M Sridevi presented on “Nutritional situation of Mother and Child in Chennai slums”. She spoke on the impact of socio economic factors on nutritional status in urban slums, and the health and hygienic conditions associated with nutritional status. She concluded that feeding and caring for children is necessary.

Prof. Shiva Reddy in his concluding remarks appreciated the commitment of the two divisions of CESS for their commendable works on children. Because of their efforts, addressing child rights has increased over the past few decades. He suggested that the divisions should not limit their work to 2 or 3 states but to extend to the entire region of Southern India. He concluded the session by summarizing the remarks of the panelists.

Plenary Session 5

_Tarlok Singh Memorial Lecture_

Prof Sudipto Mundle, Emiritus Professor, National Institute of Public Finance and Policy, New Delhi chaired the session.

Prof. D Narasimha Reddy, former Professor and Dean, School of Social Sciences, University of Hyderabad, presented the Tarlok Singh Memorial Lecture on 5th December, 2017 on the topic, “Epistemic, Ethical and Value Questions in Social Sciences: The Past Experience and the Present Challenges”. The lecture was presented in three parts. The first part dealt with the state of higher education and social science research in contemporary India with declining public funding. Neo-liberal reforms suggested that higher education was a ‘non-merit good’ that need not be funded by the state and that expansion of higher education would require enormous financial resources which cannot be met by the state and hence the need for private investment, including Foreign Direct Investment (FDI), in higher education. Financial support for research has become more motivated by specific, short-term and often commercial concerns. The problems of declining public funding, declining quality of higher education and poor quality of research from social science scholars from Indian universities, was highlighted in the lecture. The dangers of profit making commercialization of education in India and the reluctance of reputed foreign universities and research institutions to enter the sector was also highlighted.

In the second part, Prof. Narasimha Reddy referred to some welfare economists but was largely confined to the development in positive economics and its criticism until
1970. The third part was on public value of Social Sciences referring to what is expected of a social scientist. The role of social scientists as public intellectuals is to essentially learn from the public and share knowledge with the public. The enhancement of the public value of social sciences lies in the ability to interact with the public that would have reason to value social science research.

The session concluded with the thanks from the chairperson.

Plenary Session 6
Symposium on Human Development in Andhra Pradesh and Telangana: Challenges and way forward.

The session was chaired by Prof. Maria Saleth, former Director, Madras School of Economics, Chennai and co-chaired by Prof. L K Mohan Rao, former Principal, College of Arts and Commerce, Andhra University, Visakhapatnam. The first paper was presented by Prof Galab, Director, CESS. He presented a brief overview of the Human Development Reports of the states. The development report of CESS for the unified state of Andhra Pradesh was first published in 2007. The second report was published in 2012 for the combined state of AP. After the bifurcation of the state, the report for the New Andhra State was published in 2016 and for Telangana, the report was released in 2017. The first Human Development report of SC of Telangana is expected to be published by CESS in 2018. The methodology used for bringing out these HD reports is of those used in UNDP reports. Prof. S Galab concluded his presentation by summarizing the findings of the HD report i.e. improvement in Human Development ranking - visible more in income than in education and health, positive linkages between economic growth and education, decline in HD Disparity, the key role of resource endowment, public policy, community response and governance. Prof. C. Ravi, CESS, presented the Human Development Index Report in Andhra Pradesh. He talked about the points of concern in the report such as the inefficient infrastructure in education, good enrolment but low completion rate, IMR & MMR at the bottom level and the fertility rate being at 1.7.

Prof E Revathi, CESS, concentrated on Telangana State while presenting the HD Report 2017. After the bifurcation of the state in 2014, there was development discrimination with low infrastructure and the challenge before the government of the “Reinventing of Telangana” by redesigning policies to suit the state and to face various problems, especially the agriculture crisis. The report reveals that there is a gap between SCs and other castes, though the inequalities between SC and ST have decreased. The gender gap has decreased though educational difference is high. Among Muslims, the HDI has increased. The situation of health facilities and availability of drinking water and toilet facilities are not adequate. She concluded her presentation by remarking that an all-inclusive growth is the key to human development.
Dr A Aparna, CESS, presented the SCHD Report, 2012. A detailed report on the social structure of SC in Telangana was presented. The priority is to promote inclusive development through decentralization and evaluate the performance of various social groups with regard to the assessment of SCs in relation to BCs across the region. The session concluded with remarks by panelists -- Prof. Manoj Panda, Director, IEG, New Delhi; Prof. Srijit Mishra, Director, NCDS, Bhubaneswar; Prof. S. Indrakant, RBI Chair Professor, CSD, Hyderabad and Prof Kalam, Loyala Institute of Business Administration, Chennai.

Plenary 7
Round Table Discussion on: Reforming Indian Higher Education with National and International Perspectives

This session was chaired by Prof. S. R. Hashim, Chairman, IASSI. Prof. P Vijaya Prakash, former Vice-Chairman, AP Council of Higher Education, stressed that teachers are crucial for the improvement of higher education and present day teachers act as mentors. Prof. P Narasimha Rao, Vice-chairman, AP Council of Higher Education, reviewed the present status of higher education in India. He suggested that more funds should be allocated for higher education and also stressed the need for increasing manpower in higher educational institutions. Prof. S Ramakrishna Rao, Vice-Chancellor, Krishna University, suggested that teachers should be trained in research institutions and importance should be given to the ideas of teachers for the attainment of better education. Prof. B. Balamohan Das, former Vice-Chancellor, Acharya Nagarjuna University, emphasized that quality of education is very important for the development of the nation. Prof. K.R.S.Sambasiva Rao, Vice-Chancellor, Mizoram Central University, Mizoram, pointed out the importance of the regularity of teachers in higher education. He concluded that everyone should work wholeheartedly for the welfare of the society.

Prof. Atul Sharma spoke on “Equality and Quality” of higher education, highlighting global education. According to him, skill development, in which India is lagging behind, is being promoted by foreign universities. He found a significant difference between “higher education” in advanced countries and in India. He mentioned that societal transformation is needed for the development of higher education. He highlighted the steering committee headed by APJ Kalam for the development of education, health, space technology, biotechnology, etc. for overall development. He mentioned poor enrollment of women in higher education and the need for improvement. He observed inequalities in education based on gender, region, rural, urban and other social groups. He suggested that accessibility and equality are important elements for the improvement of higher education. Prof. J.B.G.Tilak highlighted the inequalities in higher education and factors resulting in the present situation. He gave a few
suggestions for the improvement of higher education including long term vision, appropriate measures for the recruitment of teachers and steps to reduce inequalities among the rural and the urban, different states, among regions, gender, etc.

Prof. K.C. Reddy emphasized various issues of higher education such as quality of education, compartmental system in present educational system, faculty recruitment, funding for private/unaided institutions. He emphasized on the need for the privatized model of education, giving priority to maintaining quality and enrollment in higher education. He stressed the need of collaboration between research institutions and universities for the enhancement of higher education. Prof. A. Rajendra Prasad spoke on challenges in higher education and emphasized that the recruitment of teachers is necessary for the strengthening the higher education. It is necessary for teachers to have regular attendance for the improvement of education. He stressed that teacher commitment is necessary for the development of higher education.

The session concluded with Prof. S.R. Hashim, briefing the plenary session and extending the vote of thanks.

**Technical Sessions**

**Technical Session 1-A: Economic Development, Equity and Social Inclusion**

This session was chaired Prof. Manoj Panda and the Discussant was Prof. Purushottam.

Prof. JVM Sarma, University of Hyderabad, presented the first paper, titled “Transaction value tax: An alternative regime for India”. He observed that India, like many countries in the world, has engaged with the problem of simplifying tax systems. The existing tax systems are inordinately complex, inefficient, inequitable and costly to administer. He talked about a new form of taxation with a universal base namely the value of economic transactions. The paper examined the desirability and feasibility of replacing the present system with a single comprehensive revenue neutral Transaction Value Tax (TVT). The TVT will have a single purpose—revenue collection with least interference in economic activity. To achieve these ends, it contemplates revenue neutrality, base broadening, the reduction of marginal tax rates, a single flat tax rate, the elimination of tax loopholes, the end of tax returns and information returns and the automatic electronic assessment and collection of taxes.

The second paper, “Social Expenditures at Sub-National Level in India: Populism Versus Human Capital Formation” was presented by Susanta Mahapatra, Amrita Vishwa Vidyapeetham, Kochi. Using secondary data from 1983-84 to 2013-14, the paper examined the composition and trends of social expenditures in Odisha. The composition and trends of social expenditures in Odisha reveals little priority towards productive social expenditures, significant priority towards education and relatively more priority towards transfer payments than the level of employment generation and
healthcare facilities. Although education has been given significant priority, outcomes have not been realized. The increase in the priority of transfer payment and decrease in the level of social expenditures may lead to a reduction in the income generation capacity of the state.

“Redefining International Refugee Regime and Need for Inclusiveness: A Case Study from India” by S. Suba Yoga, Saveetha University, Chennai was presented next. The paper analyses factors influencing agricultural migration and its further impact on food security. It throws light on environmental refugees who face humanitarian and livelihood problems due to changing climatic factors. Environmental refugees comprises mass migration of people, which began before the Industrial Revolution, due to natural environmental degradation or catastrophes, including hurricanes or storms that caused major flooding, or owing to scarcity of land resources. She concludes that the inclusion of climate refugees in the international arena will prove that humanity still prevails in the world.

The next paper presented was “Inclusive Growth and Development Outcome in Major Indian States” by Paramasivan S Vellala, Institute of Technology, Nirma University, Ahmadabad, Mani K Madala and Utpal Chhattopadhyay, NTIE, Mumbai. This paper outlines the problems encountered in defining the concept of inclusive growth and issues related to measurement. There is a lack of an ideal definition of inclusive growth and it remains a challenge in measuring inclusive growth. More grounded theories are necessary for advancing the debate on inclusive growth. There are a few issues which remain unresolved like the relationship between fiscal redistribution and inclusive growth, the impact of monetary policies in general and inflation in particular on inclusive growth, the impact of technological advancement on growth inclusiveness, the relationship between structural reforms and inclusive growth and the impact of labour market reforms on inclusive growth.

After all the papers were presented, Prof. Purshotham suggested to JVM Sarma that the transaction tax model needs more analysis with respect to how it will be effective and how much revenue loss is expected. He also pointed out that GST is criticized widely and hence newly suggested tax systems should be more effective and this paper needs more discussion by subject experts. He also mentioned Susanta Mahapatra’s paper by stating that he studied elaborated data from 1987-2014 and examined the changes in social expenditure trends in Odisha. With respect to Suba Yoga’s paper, he opined that it is an international legal issue.

Technical Session 1-B: Economic Development, Equity and Social Inclusion (Section I)
The Chairman of this session was Prof. C. Ravi, CESS, Hyderabad, and the discussant was Prof. Kanakalatha Mukund, Chennai.
The first paper in this session titled “An Agenda for Inclusive and Efficient Growth in the Gujarat Model of Governance: How to Make the Tortoise Finally Turn?” was presented by Munish Alagh, SPIESR, Ahmadabad. The paper tried to look into the case of agriculture, higher education and community retail in Gujarat and focuses on possibilities of efficient as well as inclusive growth in Gujarat. It emphasizes that for effective and inclusive growth, political elitism must be replaced on the ground by collective action. The next paper, “Climatic change, Vulnerability, Agrarian Community and Food Grain Yield: State Level Analysis in India” is a joint paper by G Sridevi, G Jagadeesh and Amalendu Jyotishi, School of Economics, University of Hyderabad and was submitted by G Jagdeesh. This paper examines climate change vulnerability characteristics among agrarian communities in different states of India. It also estimates the impact of climate change on food grains in India. The impact of climate change on food grains’ composite vulnerability is measured through panel data analysis using fixed effect and random effect models. Madhya Pradesh was found to be the most vulnerable state and Daman & Diu the least vulnerable. Further, the study also reveals that climatic factors have significant impacts on food grain yield.

The next paper titled, “Coal Mining Induced Pollution: A Threat to Sustainable Livelihood in Odisha” was presented by Pabitra Singh, Berhampur University, Bhanja Bihar, Odisha. According to the paper, coal serves as the only natural resources and fossil fuel available in abundance in Odisha. A stream of benefits is generated from coal mining in Odisha in terms of revenue yield, export earnings, industrialization and employment generation. The major environmental challenges encountering the coal industry in Odisha are mining induced pollution, displacement, illegal mining, natural resource depletion or degradation. It affects the sustainable livelihood of rural communities. The negative impact of mining on health, land, water, air, plants and animals, and livelihoods of people can be reduced by careful planning and implementation of mining. The session concluded with remarks by the discussant, Prof. Kanakalatha Mukund, on the papers presented.

Technical Session 2: Livelihood and Employment Opportunities

The session had five presentations and was chaired by Prof. Shashanka Bhide, MIDS, Chennai.

K.V.S.S. Narayana Rao, National Institute of Industrial Engineering (NITIE), Mumbai, presented the first paper, “Employment and Job Creation - Potential of Mudra Finance Scheme - Data Analysis and Interview Based Perspectives”. The Mudra Finance Scheme was launched by the Government of India to provide finance to micro sector units through banks. The targets set for Mudra Finance credit were achieved by the banking sector in the last two years. The target for the year 2017-18 is set at Rs. 2.44 lakh crores. The targets are increasing every year. The next paper was presented by
V. Divyathejomurthy, Acharya Nagarjuna University, Guntur, titled “Rural Poverty Alleviation through Women Empowerment”. The Indian Government needs to assign importance to women empowerment in poverty reduction. As the socio-economic empowerment of women is mainly related to their participation in decision making with regard to the raising and distribution of resources, i.e. income, investment and expenditures at all levels, special efforts are made to enhance their capacity to earn besides enlarging their access to and central ownership of community assets. With access to economic assets, women will be encouraged to take up self-employment through various entrepreneurial ventures through micro-credit, microfinance, training programmes, and other related women programmes etc., which are more convenient and allow them to play their dual roles, within and outside the home, effectively.

The third paper, “MGNREGS, A Wasteful Expenditure or an Anti-Poverty Programme for Inclusive Development: Evidences from Micro Level Analysis in West Bengal” was presented by Dipanwita Chakraborty, Institute for Social and Economic Change, Bangalore. The study is conducted in West Bengal. MGNREGS is supposed to give work during rural economic emergencies, but the study of most of MGNREGS works are given during or just before the agricultural peak period. Though it does put the MGNREGS participant agricultural labourers in a favourable position to be able to bargain for higher wages from employers, but whenever MGNREGS works are allotted by the panchayat, the labourers evade farm and non-farm works at variable extents. This very decision makes them eventually suffer in both ways. Moreover they do not get timely payment nor do they get due compensation even though they work at a stretch. The next paper was presented by S. Surapa Raju, NIRD, Hyderabad. The title of the paper was “Impact of Climate Variations on Livelihoods of Fishers: A Study in Coastal Andhra”. The paper aimed to know the impact of climate variations on the livelihoods of coastal fishers of Andhra Pradesh. Fishers’ livelihoods are more vulnerable due to adverse changes in livelihood assets due to climate variations; such as changes in sea (natural asset), changes in physical, financial, human and social assets. Hence, the government has to focus more on the design and supply of suitable fish craft technology to catch the currently accessible fish at deep sea. Encourage group fishing and supply of crafts to group of fishers for improving the livelihoods of fishers.

Technical Session 4-A: Education

The session was supposed to be chaired by Prof. J B G Tilak, Distinguished Professor, Council for Social Development, New Delhi but due to pre-occupation, the discussant Prof. K Shiva Reddy, Osmania University, Hyderabad chaired the session.

The first presentation was by Dr. P. Prudhvika Reddy. He presented the paper titled “Trends in Rural Literacy in the States of Andhra Pradesh and Telangana: A Disaggregate Analysis” jointly written by V N Reddy, D. Sree Rama Raju, S. Sudhakara
Reddy and P. Prudhvikar Reddy, CESS, Hyderabad. The paper consisted of two parts. The first part examined literacy rates, gender disparity in literacy rates and rural urban differences in literacy rates in 2011 in the two Telugu speaking states of Andhra Pradesh and Telangana across social categories and made a detailed comparison with the rest of India. The second part contained a detailed analysis of trends in the literacy rates of females and males, gender disparity in literacy rates, intensities of child population in the age group 0-6 years and child sex ratio in the age group of 0-6 years at the rural mandal level across various districts and regions in rural Telangana and Andhra Pradesh using census data from 1090 rural mandals, common for the 1991, 2001 and 2011 censuses. The paper strongly recommend that rural mandals with a child sex ratio less than 950 need special attention, since adverse child sex ratio will have implications on the gender equity and literacy of future generation. The combined state of Andhra Pradesh has made substantial progress during the two decades i.e. 1981 to 2001 but the results of the 2011 Census figures do not show an encouraging picture. The next paper titled, “Status of School Education in the United Andhra Pradesh: A Critical Analysis with Reference to Right to Education’ was presented by M. Srinivasa Reddy, CESS, Hyderabad. The article examines the implementation of the RTE Act since 1st April 2010, in the state of Andhra Pradesh in particular and the nation in general. The study covers several government and private schools to assess the implementation of RTE in letter and spirit. The study critically examined the physical, human, financial resources available at government and private schools in the selected areas of the study and suggested several measures be taken up for better results.

The paper jointly written by Dr. P. Prudhvikar Reddy and Prof. S Galab, CESS, Hyderabad, titled “Schooling and Learning Outcomes in Andhra Pradesh: An Evidence from Young Lives- a Longitudinal Study” was presented by Dr. Reddy. The paper stressed that schooling is one of the most powerful instruments for reducing multi-dimensional poverty and promoting sustained, human development-led growth. A child’s future can depend a lot on the type of education she/he receives at the secondary level. Secondary education can be instrumental in shaping and directing the child to a bright future. The paper highlighted that despite enormous increase in the enrolment rate, the learning levels of the students are falling down, more so, in case of those studying in private institutions.

**Technical Session 4 B: Education**

Prof. Balmohan Das, former Vice-Chancellor, Acharya Nagarjuna University, was the Chairman of the session and Prof. Swarna Vepa, CESS, Hyderabad, the discussant.

“Community Participation for the Quality Enhancement of Elementary Education” by B. K. Bajpai, Giri Institute of development Studies, Lucknow, was the first paper presented in the session. The paper reveals that out of the total state budget in Uttar
Pradesh, a huge amount has been earmarked for primary education. However, there is a high rate of dropouts in the state. The paper finds basic anomalies in the functioning of School Management Committees (SMCs), as the main vehicles of community participation, across the states. The paper suggests that mainstreaming and retention of children can be achieved with proper support of community members in general and other members involved in different committees of the schools. The next paper titled “Caste and Educational Attainments of Urban Poor Children: Equity is Away” was presented by Archana Sinha, Indian Social Institute, New Delhi. The study indicates that the education status of children associated with unclean occupations has improved to some extent because of the Right of Children to Free and Compulsory Education Act. Gender discrimination among children who continue with their education, is observed in both situations, that is, when currently engaged in the unclean occupation as well as when they have given-up their engagement with unclean occupations. In both cases, there are a higher number of males than females who still continue with their education in Uttar Pradesh. The dropout percentage is higher among children from households still engaged in unclean occupations when compared to households that have given-up unclean occupations. There is a gender difference in dropouts currently engaged in unclean occupations. Male dropouts are higher than female children in households currently engaged in unclean occupations. The dropout of male and female children amongst the given-up category is in equal proportion. The next paper was, “A Study on Understanding Teachers’, Parents’ and Students’ Attitudes in and towards Inclusive Classroom Settings” by Ritika Chawla, India School Leadership Institute (ISLI), Hyderabad. She opined that it is necessary to have an open mindset and attitude towards inclusive classroom settings. This could be truly beneficial for the students’ educational as well as personal life. Sangeeta Bhamidipati and N. Satya Kishan, Gitam University, Visakhapatnam were the joint author of the paper titled, “Issues of Quality of Education: The Perpetual Conundrum Registration Fee Transferred to Bank”. This paper focused on the existing conditions in the educational system, challenges faced by the government, the teaching fraternity and students as well. Having good quality of education should be a reality. For this, the government, faculty, academicians and responsible citizens should all work in unison. The session concluded with remarks by the discussant Prof. Swarna Vepa, CESS, Hyderabad.

**Technical Session 5-A: Economic Development, Equity and Social Inclusion (Section-II)**

The session was chaired by Prof S. Galab and four presentations were made.

The first presentation “Identifying the ‘Poor’ and ‘Backward’ ” was by Rohit Mutatkar, Centre for Study of Social Exclusion and Inclusive Policies, TISS, Mumbai. The paper reveals that socially disadvantaged groups in India, such as SC, ST, OBC,
DNT and Muslims each suffer from a different typology of exclusion and it is necessary to recognize their distinct nature and causes of deprivation and ethnic group disparities within these categories. In India, the focus of various policies is reservation policies, but it is necessary to address poverty and deprivation among these groups in their multiple dimensions. The policymakers in India need to formulate and implement more universal and self-targeting programmes. The next paper was presented by Dr. B. Nageswara Rao, “Understanding the context of and the prerequisites for ‘Inclusive development’ of the Scheduled Tribes in India-with reference to AP&TS”. He stressed that it is necessary to have a set of additional indicators for the proper understanding of the nature of exclusion in the tribal communities, which is different from other non-tribal communities. Land rights, cultivation rights, quality and quantity of land resources are important aspects of the analysis. The third paper titled “Social Exclusion and Household Poverty among the Vulnerable Tribal Groups in Odisha” were by Brajaraj Mishra, CESS, Hyderabad. The paper examined the levels of deprivation and incidence of poverty among the Kandha tribe located in the Gajapati district of Odisha. The study reveals that the main factors responsible for persistent poverty among the tribals are lack of resource endowments and exclusion of communities from basic economic services. The last presentation was by M. Sowjanya titled, “PLHIV Sensitive Social Protection: A Case Study on Conditional Cash Transfers Under NTR Barosa Pension Scheme in Andhra Pradesh”, by S. Vijay Kumar, CESS; M. Sowjanya, CESS; Meena Som, UNICEF HFO; Deepak Kumar Dey, UNICEF and Ch. Pavan Kumar, CESS. The paper discusses the NTR Bharosa Pension brought about by the AP government as social protection for the vulnerable sections of society.

Technical Session 6-A: Social and Political Institutions

The session was chaired Prof. Yerram Raju, Former Dean, Administrative Staff College and Prof. R Sudarsan Rao was the Discussant.

A combined paper, “In what ways local planning can contribute to inclusive development?”, by N.L. Narasimha Reddy, CESS; Prof. Vijaykumar, CESS; Deepak Dey, UNICEF HFO; K. Chandramouli, and P. Sudhakar Reddy, CESS was presented. This paper provides detailed analysis of activities planned and implemented under Gram Panchayat Development plans (GPDP) since 2015, when the Gramajyothi program was initiated and examines inclusion issues. The next paper “A Study on the Issues and Challenges Existing in Interlinking Rivers in India and the Changes that are to be brought in the Indian constitution” was presented by Madhu Manjari Lakshmanan, Saveetha School of Law, Chennai. This paper analyses the water resources of the country and the priority towards the interlocking of rivers to satisfy the requirements of the southern states facing severe water inadequacy. “Riots: A Social Reform from a Social Issue” by A. Gladius and L. Madhu Manjari, Saveetha School
of Law University, Chennai, was the next paper presented. The paper focuses on the causes of various outbreaks of violence and whether riots can be justified. It also tries to discuss the role played by the concept of social protection in the context of rioting. The session ended with the remarks from the discussant.

**Technical Session 5-B: Economic Development, Equity and Social Inclusion (Section-II)**

Prof. Kailas Sarap S R Sankaran, Chair, NIRD&PJ, Hyderabad, chaired the session and Prof. C.S.C Shekhar, IEG, New Delhi, was the discussant. Four papers were presented in this session. The first presentation was “SC/ST-Sub-Plan: A Step towards Inclusive Development in Andhra Pradesh” by K. Madhu Babu, Acharya Nagarjuna University, Guntur. The paper looks into the effectiveness of the SC/ST sub plan in Andhra Pradesh. The study finds that though there has been some progress among these groups based on various indicators, they still lag behind other social groups. The second presentation was titled “Living Condition of the Scheduled Tribes Population in Andhra Pradesh” (With reference to the Visakhapatnam District) by Dr. K. Kishore Babu, Post-Doctoral Fellow, Dept. Of Economics, Acharya Nagarjuna University, Guntur. The paper analysed the rights of STs in India and Andhra Pradesh and the socio-economic and demographic status of the ST population in the study area.

The next presentation, “Quality of Life, Social Exclusion and Chronic Poverty among Tribals in Odissa”, was by Siba Prasad Pothal, TMSS Women’s Degree College, Hyderabad, Telangana; Bishnu Charan Behera and Bijay Kumar Panda, Berhampur University, Berhampur, Odisha. The study examined the quality of life, social exclusion and chronic poverty among the tribals of Odisha by using secondary data collected from various rounds of the National Sample Survey (NSS), published information of the Sample Registration System (SRS) Bulletins, Population Census Reports, etc. “Contribution of Corporate Social Responsibility towards India in Achieving Inclusive Growth” by Jyoti Tanwar, Arun Kumar Vaish and N V M Rao, BITS-Pilani, was the next presentation. The paper concentrates on the contribution of Corporate Social Responsibility (CSR) towards the all-inclusive growth of our country. It also highlights the challenges faced by corporates in giving their 100% to the society.

**Technical Session 6-B: Social and Political Institutions**

The session was chaired by Prof. G Hargopal, Visiting Professor, National Law School of University and the discussant was Prof. Biswajit Chatterjee. Prof. G Hargopal in his opening remarks highlighted people’s participation in the process of development. Three papers were presented in this session.

“Electoral Reservations and Political Participation of Women in India” by K. Malakondaiah, TRR Government Degree College and K. Sree Lakshmamma, Hindu College, Guntur, Andhra Pradesh was the first presentation. The paper suggests
that the participation of women and their engagement in the electoral process is an important marker in calculating the maturity and efficacy of democracy. Women are underrepresented and removed from decision-making levels. The paper pointed out that even after seventy years of independence, efforts in improving women’s representation did not yield positive results due to the male dominant society. Gotru Sanjay Chakravarthy, Nagarjuna University, Andhra Pradesh, made the second presentation titled “Women as Administrators: Women in the Indian Foreign Service”. The study focuses on women administrators in the Indian Foreign Services. The entry of women into this field has been very late. As India’s female diplomats are striding the world stage with confidence, more and more women are inclined towards joining the IFS. However, there are still a few barriers to be broken. Prof. Biswajit Chatterjee in his concluding remarks suggested that steps should be initiated to pass the long-pending women’s reservation bill and concluded how to attract women to IFS.

Technical Session 7-A: Technology and Skills

The session was chaired by Prof. K C Reddy, former Chairman, AP Council of Higher Education and Prof. Kalam, Loyala Institute of Business Administration, Chennai, was the discussant. Two papers were presented in this session.

The first presentation was “Skilled Workers, Endangered Livelihoods Status of Handloom Weaving in Telangana”, by Kanakalatha Mukund, CESS, Hyderabad. The paper focused on the status of weavers, the distress experienced when they migrate and change their occupation and government initiatives related to the handloom sector. The second presentation was, “Skill Development and Entrepreneurship for Micro and Small Enterprises “by Balla Appa Rao, Andhra University, Visakhapatnam and D. Nagayya, NI-MSME, Hyderabad. The paper finds that skill Development and Entrepreneurship for enterprise promotion in various sectors by training the youth in modular and motivational skills is the desirable direction for developing employable skills among the youth. The third presentation was made by K.S.Rao from Giri Institute for Development Studies, Lucknow on “Skill Development Programmes in India: An Analysis for Grants of MSDE” that provided critical analysis of MSDE. I.C.Awasthi, Institute for Human Development made a presentation on “Skill Development in Uttar Pradesh: Regional Disparities among the Social Groups” that has clearly brought out that the overall social group inequality in general education has reduced but in the case of technical education and vocational training it has increased in 2011-12 over 2004-05 in all the four regions in Uttar Pradesh.

Technical Session 7-B: Technology and Skills

The Chairman of the session was Prof. P. Vijaya Prakash, former Vice-Chairman, Council of Higher Education, Govt. of Andhra Pradesh. Susanta Mahapatra, Amrita Vishwa Vidyapeetham, Kochi were the discussants.
P. Purushotham, CESS presented the first paper, “Grassroots Level Informal Educational Institutions in Building Knowledge, Skills and Attitudes among Rural Students”. The paper stresses that the policy imperative before the nation is on how to enhance the relevance of learning to cater to the needs and aspirations of rural young people. Considering the fact that a large number of children, particularly SC, ST, small and marginal farmers, are dropping out of the educational stream midway in the country every year, it is necessary to reorient the educational system to fulfill their educational needs. Knowledge and skill upgradation is important in this regard. “Technology Distributions– New Employment Opportunities and Need for New Skills” by Challa Maruthy Subrahmanyam, P. Srinivasa Reddy and A Sai Manideep, Guntur, Andhra Pradesh was the next presentation. Technology disruptions in banking, retail, healthcare, taxi and education sectors created new opportunities, and some jobs are now unwanted. Old skills and the old ways of doing business are being replaced by new skills. This calls for a new form of education and imparting of skills. The education sector should gear up for providing these skills in order to groom the new workforce.

**Technical Session 8: Health**

The session was chaired by Prof. K Hanumantha Rao, Adjunct Professor, CESS, Hyderabad and co-chaired by Prof. S Indrakant, RBI Chair Professor, CSD, Hyderabad. The discussants were Dr. B Sambi Reddy former consultant, CESS, Hyderabad and Dr. Rohit Mutatkar, TISS, Mumbai. The first presentation titled, “Social Group and Wellbeing in Nutritional Outcomes and Quality of Life”, was presented by Swarna Sadasivam Vepa, Centre for Economic and Social Studies, Hyderabad. The paper is based on existing literature and investigates the significance of social groups in explaining some basic wellbeing aspects in terms of nutritional outcomes of adult men and women (BMI and Height) and quality of life in households based on the Household Amenities Index, after controlling other variables. Caste also significantly influences the quality of life represented by household amenities even after controlling variables such as household assets, education and other characteristics of the household.

The second paper presented was “Poverty and Nutrition Status among the States in India: An Analysis” by M. Sridevi, IHD, New Delhi. The next presentation was made by Parupally Anjaneyulu, CESS, Hyderabad, “Analysis of Sanitation in South Asian Countries: A Special Reference to India“. Sanitation lies at the root of many other development challenges, as poor sanitation impacts public health, education and the environment. Sanitation was one of the most off-track Millennium Development Goals (MDG). The paper, based on secondary data, focuses mainly on sanitation conditions in South Asian countries, including India and its states.
Valedictory Session

The Valedictory Session began with the welcome address by Prof. M. Koteswar Rao, Dean, College Development Council, ANU, Guntur. He briefed the chief guest about the conference, IASSI and said that conference has discussed many important issues in the context of education and development. Prof. Y K Alagh, Chancellor, Central University of Gujarat, gave the valedictory address. He expressed that India must trade, in goods and services and foreign exchange and do it efficiently. However, Indian economists must also try to answer questions such as the strategic path of the final stages of India’s open economy macro reforms, trading consequences on the structure of the economy and its impacts, and India’s role in expanding concentric circles of influence and cooperation. India must participate in the global dialogue on reform in a more positive and thought-out manner, based on its own experience.

The session ended with a vote of thanks by Prof. Alakh Narain Sharma, Member Secretary, IASSI.
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