

4th

Prof. Surjit Singh
Memorial Lecture

**Growth without Decent Employment:
How can India escape this
long-term trap?**

BY

PROF. K.P. KANNAN

Former Director

Centre for Development Studies (CDS), Trivandrum

MARCH 22, 2024



ESTD. 1981

विकास अध्ययन संस्थान

INSTITUTE OF DEVELOPMENT STUDIES, JAIPUR

Institute of Development Studies

The Institute of Development Studies, Jaipur (IDS) was established in 1981 at the initiative of a group of academicians, scholars, and administrators from Rajasthan. The Indian Council of Social Science Research (ICSSR) and the Government of Rajasthan (GoR) are the two main supporting agencies of the Institute. Being an autonomous organisation registered under the Societies Registration Act of 1958, the main objectives of the institute include: (a) contributing to the understanding of development processes and problems; (b) carrying out studies on contemporary issues; (c) contributing to the policy discourse through theoretical and empirical research; (d) carry out empirical and policy research on the local area and marginalised communities; and (e) providing a forum for intellectual debate and discussions on issues of contemporary relevance.

The Institute is a multi-disciplinary research organisation. It takes cognizance of the macro environment, planning processes, and strategies, including their socio-economic dimensions, and attempts to make interventions through research and dialogues. the Institute is specifically concerned with regional issues related to Rajasthan and western India. In addition to research, the institute believes in collaborative work and policy advocacy. As an ICSSR State Government-supported institute since its inception. It aims to promote research, training, consultation, and information dissemination in the state and beyond.

ESTD. 1981

4th

Prof. Surjit Singh
Memorial Lecture

**Growth without Decent
Employment: How can India escape
this long-term trap?**

By

Prof. K.P. Kannan

Former Director
Centre for Development Studies (CDS), Trivandrum

MARCH 22, 2024



ESTD. 1981

विकास अध्ययन संस्थान

Institute of Development Studies, Jaipur

**An Autonomous Research Institute under Indian Council of Social
Science Research (ICSSR) and Government of Rajasthan**

8B, Jhalana Institutional Area Jaipur-302 004 (India)

Tel: 91-141-270 5726

E-mail: contact@idsj.org; visit us at www.idsj.org

“Growth without Decent Employment: How can India escape this long-term trap?”

Abstract

For the last four decades, the Indian economy has grown around six percent per annum, an undoubtedly great feat only rivalled by a few countries, especially Japan in an earlier era and China more recently. Yet India's record in creating gainful employment, let alone decent employment, has been dismal in absolute terms and in a comparative perspective with other comparable Asian countries. Ever since the initiation of neoliberal economic reforms in 1991, the country has been witnessing a slow but steady process of jobless growth, including periods of jobloss growth. The lecture will focus on the main features of this long period of high growth without decent employment and the prospects of a continuing period of jobless growth due to a relentless process of technological innovations in advanced and some emerging economies like China. It will then outline a narrative to overcome this prospect based on a theme of "back to basics" that will call for a change in the country's economic policy framework with focused attention to link the potentialities of the frontier technologies to the needs of the low productivity sectors. Needless to say, the clamour of India transiting from its position as the fifth largest economy by aggregate income measure to a third position hardly acknowledges this grim reality of jobless growth, keeping a majority of Indians in a low-level income and insecurity trap.

**Growth without Decent Employment: How can India escape
this long-term trap?**

Prof. K. P. Kannan

Professor Rakesh Basant, Professor Vinish Kathuria, Members of Professor Surjit Singh's Family and Friends, I feel greatly honoured to have been invited to deliver this lecture in memory of a dear friend and professional colleague, Professor Surjit Singh, who passed away 11 years ago at the peak of his academic career. At the outset, therefore, let me express my thanks to the Institute of Development Studies, Jaipur and its current Director, Professor Vinish Kathuria.

Surjit was a very intent academic economist as well as a policy adviser. The intensity of his work resulted in a large number of books and research papers within a short span of 25 years of active professional life. I came to know him through my involvement in the work of the Indian Society of Labour Economics in which Surjit was also an active member. He became the Secretary of the Society and worked for the professional advancement of its activities and strengthening solidarity amongst its members. Our close association resulted in personal friendship that got stronger because of our shared concerns and visions for the country. While many of us shared our national concerns and its developmental challenges several of us also engaged in understanding the regional - i.e. state level – issues and challenges of development. In that sense, I would

like to commend Surjit’s considerable volume of work on understanding the Rajasthan economy.

For this memorial lecture today, I have selected a topic that, I think, is highly relevant both at the national and regional levels of this country. While there is no doubt that the economic reforms initiated at the national level have resulted in a faster pace of aggregate economic growth, the expected growth in employment has been conspicuous by its absence. The priority and concern for maximizing growth has, in fact, grown over time and now has become an obsession. The official boast of India transiting from its fifth to third position in the next few years as the largest economy in the world is what is dominating the political rhetoric in the country. It sums up the official strategy of maximizing aggregate economic growth no matter how and where it comes from. It no doubt reflects a strategy of „betting on the strong“ that privileges the private corporate sector, urban economy and the educationally and otherwise well-endowed in the society. Despite the slowdown in the trend rate of growth during the last decade, the rhetoric has grown only louder aimed to impress the people both in India and outside. But the reality of India’s position in terms of basic development indicators, is quite dismal when compared to its legitimate comparators like China and Indonesia or its neighbours in South Asia (see Table 1). In official US dollar terms, India now ranks as the fifth largest economy in the world. But in terms of purchasing power parity (PPP in Dollar), India

has a better rank at number three in the world. But look at the per capita income. The country's rank is 125. In Human Development Index (HDI) it is 130, way below its comparator China or Indonesia. In average educational levels the story is the same. The more worrying aspect is the high economic inequality that continues to increase. From the women's point of view, their labour force participation rate (LFPR) is one of the lowest in the world.

Table 1: Per Capita Income and a few selected indicators of development: India Compared.

Country	HDI Rank 2019	Per Capita Income 2019 (in 2017 PPP \$)	Rank in Per Capita Income	Mean Years of Schooling	Gini Coefficient (2000–18)	Secondary Education (25 Years & Above) (%)		LFPR (Female) (%)
						Female	Male	
US	17	63826	10	13.4	41.4	96.1	96	56.1
Japan	19	42932	29	12.9	32.9	95.3	92.3	52.7
Germany	4	55314	15	14.2	31.9	95.9	96.3	55.3
Russia	49	26157	47	12.2	37.5	96.3	95.7	54.8
Brazil	84	14263	83	8.0	53.9	61.6	58.3	54.2
South Africa	115	12129	101	10.2	63.0	75.0	78.2	49.6
China	87	16057	76	8.1	38.5	76.0	83.3	60.5
Indonesia	110	11459	106	8.2	39.0	46.8	55.1	53.1
India	130	6681	125	6.5	37.8	27.7	47.0	20.5
Bangladesh	134	4976	141	6.2	32.4	39.8	47.5	36.3
Pakistan	154	5005	139	5.2	33.5	27.6	45.7	21.9
Sri Lanka	73	12707	96	10.6	39.8	79.2	81.0	35.4
Nepal	143	3457	156	5.0	32.8	29.3	44.2	82.8

Notes: The HDI and Per capita income ranks are based on a total of 189 countries. LFPR for women based on ILO calculations where Unpaid Family Labour is not considered as workers.

Sources: Human Development Report (2021/2022)

From an employment perspective, India's remarkable story of growth hides a great disconnect in the form of a stubborn inability of the economy to transit towards a more decent employment regime characterized by gainful employment to all with some employment and/or social security. In this lecture I will summarize the main features of this great disconnect that have several manifestations and implications for poverty and, more importantly, in increasing inequality. I will then try to develop an alternative narrative that will involve a policy shift towards a „levelling up“ strategy to address the developmental deficits especially in rural areas as well as to reorient the economy based on environmental sustainability. Such a shift in strategy will also create opportunities for decent employment through appropriate policies. Here the modern and frontier technological innovations could also be deployed purposefully to create a sustainable green economy.

1. Unchanging size of the huge informal economy of employment dominated by informal workers in the informal sector despite a structural transformation of the economy.

At the core of the employment scenario the most visible form of disconnect between growth and decent employment is the almost unchanging statistic of the informal and formal sector employment in the ratio of around 80:20. It was 86:14 at the beginning of this century. But the more unchanging statistic is the division between informal and formal employment that

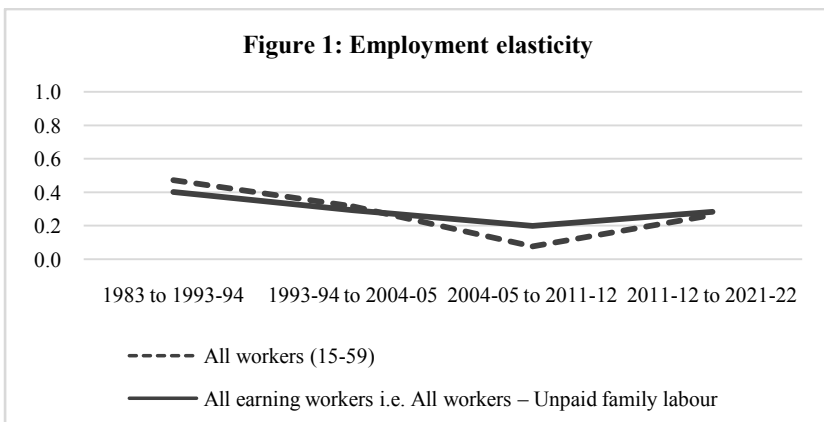
portrays a division of 92:8 at the turn of the century to the current one of around 89:11. What it means is that the half the employment in the formal sector is of an informal i.e. insecure type¹. This is despite a structural transformation of the economy whereby a shift away from employment in agriculture has taken place but more towards the service sector.

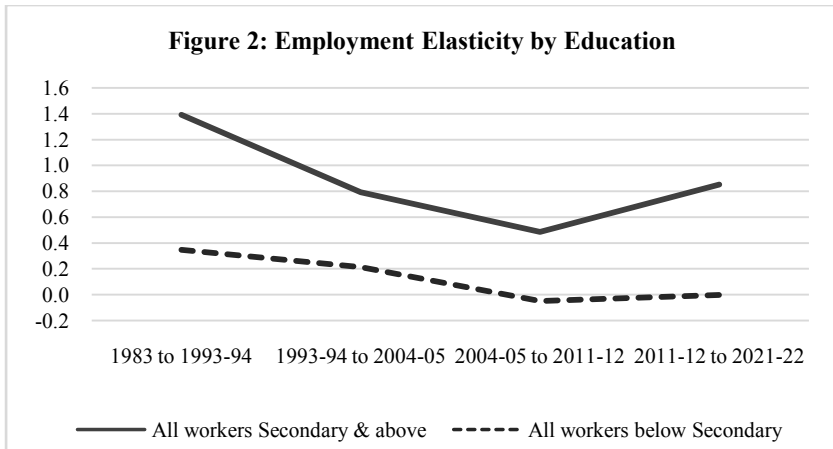
2. Decreasing ability of the growth process to create employment. In other words, a declining employment elasticity. The problem is more acute for the less educated (less than a secondary level) that currently forms 63 percent of the workforce.

While this dualism as between informal and formal employment is all pervasive irrespective of the sector of the economy, what needs to be noted first is the increasing disconnect between growth and employment generation as revealed by the employment elasticity with reference to aggregate growth in the economy. In Figures 1 and 2, I present the employment elasticity based on the National Sample Survey data from the employment-unemployment Rounds as well as the Periodic Labour Force Survey data. The overall elasticity of

¹Unorganised or informal Sector was defined as follows: “The unorganised sector consists of all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten total workers”. By implication, all enterprises not in this category are to be consisted as those in the organised sector. Unorganised or informal employment was defined as follows: “Unorganised workers consist of those working in the unorganised enterprises or households, excluding regular workers with social security benefits, and the workers in the formal sector without any employment/social security benefits provided by the employers” (NCEUS 2009: 12a).

employment includes those working as unpaid family labour. International Labour Organisation (ILO) does not consider „unpaid family labour“ as workers. When only the earning members are considered, there is some marginal improvement in the elasticity during the last two decades (see Figure 1). However, as reported earlier such employment elasticity has been characterized by deep division as between the educated and the less educated, defined as those with a secondary level of education and above and those below the secondary level. That the less educated stand at a disadvantage is quite clear (see Figure 2). From a social justice point of view, what we need to keep in mind is that the incidence of low education is the highest among the SC and ST communities followed by Muslims and the OBCs. India’s social inequality scenario follows the hierarchical structure of the Indian society (see Kannan 2021). It is also reflected in the incidence of informal employment and informal sector employment (see NCEUS 2008 and Kannan 2014).



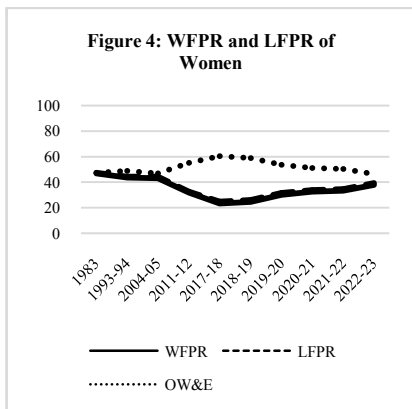
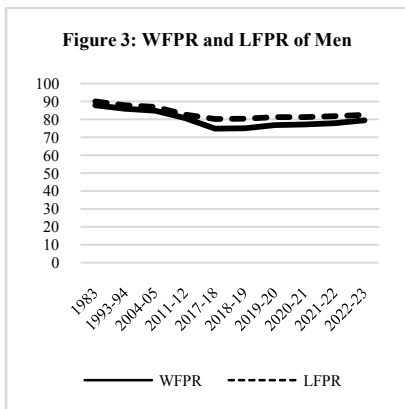


3. *Women increasingly excluded from the labour market; of those included participation as gainful workers, regular workers are significantly lower than men. The disconnect also manifests as lower wages than men.*

Employment elasticity per se does not say anything about the level of participation. One of the great disconnects between growth and employment in the Indian economy is manifested in the low participation of women in the work and labour forces. To get the best results, we have calculated the WFPR and LFPR out of the Working Age Population of 15 to 59 years and the results are given in Figures 3 and 4. Both the men's and women's WFPR and LFPR declined steadily since 1983 and reached the lowest point in 2017-18, some recovery is discernible in the last two/three years. But the point to note is the very low level of women's participation that was a little

more than half of men but now touching less than half. This has been subjected to detailed analysis and debate and the fact it is even lower than some of the neighbouring countries in South Asia is even more a pointer to the disconnect between growth and employment, let alone decent employment, of women. While some of the decline is compensated by increase in educational participation, what we found among 25-59 age group is a definite decline of WFPR from 50.7 in 1983 to 45.5 in 2022-23 and for LFPR from 50.9 to 46.4.

Women’s exclusion from wage labour or earning self-employment is indicated by the share of Unpaid Family Labour (UFL) category in total workers that has remained stable over the last 40 years despite the high growth performance of the economy. It was 19.5 percent of the Working Age Population (WAP) (15-59 years) in 1983 that increased to 22.6 in 1993, 23.6 percent in 2004-05 and then back to 18.3 percent in 2022-23.



In fact, unpaid family labour is not counted as work in international definition adopted by the ILO. About 100 countries do not recognize this as work in their statistics. Therefore, internationally, both men's and women's WFPR in India comes down, much more.

But the other great disconnect that is not adequately discussed is the category pertaining to women that is out of the labour force and education and lumped into „domestic duty.“ Only a small share of them is seeking work that comes under the category „Unemployed.“ But there is no question asked as to whether they would accept work/employment if one is offered. In the experience of the implementation of the MG-NREGS it was revealed that many joined the scheme although they were earlier classified as „domestic duty.“ Here again those out of the labour force and education, that in my view represents the underutilization of labour, remained stable even by using the best denominator of WAP in the age group of 15-59 years. In 1983 it was 47.3 and 48.8 percent in 1993-94 that went up to 60 percent in the difficult employment year of 2017-18 i.e. immediately after the demonetization of high value currency. It then declined to only 50 percent in 2021-22 and then to 46.3 percent in 2022-23. It is significant to note that the category of out of labour force and education is negligible for men ranging from 1 to 3 percent of the WAP. The fact that a good part of women in out of labour force and education could be „discouraged workers“ and those unable to seek work due to lack

of institutional mechanisms - especially for less educated adults – are not recognized in the national survey methodology so far.

The great disconnect, especially for women, does not end by this exclusion from the labour market. When one is participating in employment, the quality of employment is such that only a minority of workers in India enjoy the basic condition of being a regular wage labour. For both men and women taken together it is 24.8 percent of the total workers in 2022-23 while it was a mere 14.7 percent in both 1983 and 1993-94. Access to wage labour on a regular basis is one of the criteria for „decent work“ stipulated by the ILO. By this measure, the fast-growing India projected as the fifth largest economy does not have more than a quarter of its population by this definition. For men alone it increased from around 19 percent of total workers in 1983/94 to 27.7 percent in 2022-23. What should be alarming is the near stagnation in this share since the difficult year of 2017-18 at around 26.2 percent. The situation of women workers is more depressing, to say the least. It increased from 5.8 and 6.8 percent in 1983/94 to reach 24 percent in 2018-19 and then slowly but steadily declined to 18.6 percent of the total workers in 2022-23. Despite increasing their educational levels, women are losing out on the quality of jobs that they can access. This face of the „Vikasit Bharat“ is not something that sits comfortably with the boast of being the fifth largest economy poised to become the third in a few years.

The other category of wage labour is the vulnerable one called „casual employment“ in which both the better educated men and women are opting out and the less educated find themselves unable to access. It was 27.2 and 30.1 percent in 1983 and 1993-94 respectively for men and then declined to 22.3 percent in 2022-23. For women the decline is faster from 35.4 and 37.1 percent in 1983 and 1993-94 respectively to 17.8 percent in 2022-23. One could interpret this either as a sign of decreasing opportunities in a relative sense or arising out of questions of dignity and low wages or both for women. The sum and substance of such a process is that a majority of workers in India are creating their own economic space for employment to eke out a living that is officially categorized as „self-employment“ including those who are Unpaid Family Labour. It was 55.3 and 52.9 percent in 1983 and 1993-94 respectively and remained at that level of 54.3 percent in 2022-23. That half of the male workers are also in this category is also something that, according to me, speaks about the great disconnect between high growth and access to wage labour. For most women, it is now the last refuge either to earn an income or contribute to the earning of the family without being paid separately. It increased from 58.7 and 56.1 percent in 1983 and 1993-94 respectively to 63.6 percent in 2022-23. It had come down to 50.8 percent in 2017-18 perhaps indicating the difficulties in carrying on such independent work because of demonetization. But since then, it steadily increased.

Table 2: Percentage of Self Employed among women including Unpaid Family Labour.

Year	A	B
1983	58.7	34.9 (59.5)
1993-94	56.1	39.0 (69.5)
2022-23	63.6	36.4 (57.2)

Notes: A = All Self-employed; B = Unpaid Family Labour Figures in brackets show the percentage of UFL in total SE.

4. A stark wage-disconnect: Majority of workers receive less than the recommended minimum wages.

Having access to wage work does not necessarily a guarantee of receiving even a recommended minimum wage that is considered necessary to meet the subsistence requirements (see Government of India 2019). Of course, there is an improvement since 2017-18 when this minimum wage was recommended as a national floor level wage but summarily rejected by the central government that appointed this expert committee.

In 2017-18, 68 percent of the wage workers (regular plus casual) received a wage less than this recommended minimum (see Table 3). That has now declined to 58 percent. For women the decline is from 82 to 64 percent while for men it is from 64 to 56 percent. What is important to note is that even in the regular wage worker category the decline is only a three-percentage point i.e. from 52.8 to 49.7. Over all, more than half

the wage workers in India do not get a wage that is reckoned as subsistence wage. I think such a situation is the result of a stubborn refusal to enact national floor level wage by the government of India while trumpeting its „success“ in maximizing aggregate economic growth and projecting to become the third largest economy in the world.

Table 3: Table: Percentage of Workers Receiving Less Than Recommended Minimum Wage.

CWS Status	Rural			Urban			All		
	Male	Female	M+F	Male	Female	M+F	Male	Female	M+F
Percentage of workers receiving Wage Less Than Rs. 375/Day/Capita, 2017-18									
Regular Worker	58.0	79.8	62.3	43.7	60.1	47.3	49.1	66.7	52.8
Casual Worker	85.1	98.7	88.4	64.0	96.0	69.2	80.8	98.4	84.7
All Wage Workers	75.8	93.4	79.8	48.4	66.1	52.1	64.1	82.4	68.1
Percentage of workers (15+) receiving less than Rs.456/day/capita (2021-22 value of recommended minimum wage of Rs.375 in 2017-18)									
Regular Worker	57.8	77.6	61.8	39.1	54.9	42.9	46.1	62.2	49.7
Casual Worker	71.4	65.6	69.7	52.4	67.2	54.9	67.2	65.8	66.8
All wage workers	66.6	68.6	67.1	42.2	57.0	45.5	56.0	64.1	58.0
Self employed	54.2	31.9	46.4	31.8	49.3	35.7	48.3	34.7	44.0
Total workers	59.3	43.5	54.3	38.1	53.9	41.6	52.0	46.1	50.3

Notes: For self-employed in 2022-23, the figures represent per capita per day earnings. Source: Computed from unit level data from relevant PLFS.

5. *Yet another, perhaps sharpest, disconnect is the absence of any social security for an overwhelming share of workers.*

The dimensions of the great disconnect between growth and decent employment is truly humongous when one considers the aspect of social security that to me is at the core of a modern civilized society. A pre-Covid exercise revealed that only 19 percent of the wage workers in India enjoy one or more social security. Of course, part of it emanates from the structure of employment where only a quarter of the workers are regularly employed and hence could be reckoned to have an identifiable employer. But then the discussion of a socialized system of social security has been there for quite some time. In recent times, the NCEUS worked out in some detail the contours of such a collective social security system along with a national minimum wage. But it has so far fallen in deaf years. Instead, the policy preference has been to cannibalize the recommendations of various committees and commissions and come out with non-statutory schemes for selected segments of workers or poorer households. Such a mish-mash social security systems could not cover not more than one-fifth of the workers.

The Process of Creative Destruction under conditions of Rapid Growth

With such high growth co-existing with low levels and pace of growth of employment not to speak of its low quality of low wages and lack of social security, the question that arises is what kind of growth is this? In real terms (2011-12 constant prices)

the national income has increased by 5.21 times (521 percent) between 1993-94 and 2022-23, and the per capita income by 3.21 times (321 percent). It is not the case that there is no employment creation or that the quality of employment for some at the top of the ladder are rising including higher wages and other non-wage forms of remuneration. The neoliberal economic reforms have, in my view, unleashed a more vigorous process of creative destruction *a la* Schumpeter (1966)² than before. With the steady pace of opening the economy for increasing trade, investment and technology transfer several economic activities and sectors are subject to various forms of technological and other forms of innovations. Those with higher education and skill, urban residence and better social networking have gained in this process of new employment creation while those without such initial conditions have stood to lose. While old types of jobs are getting eliminated, new jobs are emerging but in an uneven manner. The resultant net employment creation has not been adequate not only to provide employment to the unemployed as well as to those „discouraged workers“ current out of labour force into employment but also of low quality especially in providing employment and/or social security.

²Schumpeterian notion of innovation is embedded in his idea of „creative destruction“. “In capitalist reality as distinguished from its textbook picture, it is not that kind of competition which counts but the competition from the new commodity, the new technology, the new source of supply, the new type of organization (the largest-scale unit of control for instance) – competition which commands a decisive cost or quality advantage and which strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives.” (Schumpeter 1966:84).

A summary of the sector-wise scenario based on the educational level show that close to four-fifth (79.1 percent) of the net employment generated has gone to those with educational level of a Secondary (10 year) pass or higher while a mere one-fifth (20.9 percent) has gone to the less educated (see Table 4, Col. 6, Row on Whole Economy). Within this distribution the more advantaged groups are men in urban areas especially those with a graduate level or above. Women with higher education and in urban areas has benefitted but their share in total workers is quite low. However, the ground reality of Indian workers is that close to two-thirds (63 percent) of adult workers belong to the educational category of less than secondary level of education. With fewer employment opportunities as well as low wages when employed and without any social security, the poorer classes have been left out, by and large, of the economic benefits of employment in the high growth period. That is also a pointer to the underlying cause of the emergence of increasing economic inequality. The social dimension of such a process is also noteworthy in that those better positioned by way of education and residence are from the Socially Advantaged Group while those at the bottom of the left-out category belong to the SC and ST sections of the population.

Table 4: Net employment generation among workers (15 Years and Above) During the Last Four Decades (in Million).

Industry	Change between 1983 & 1993-94	Change between 1993-94 & 2004-05	Change between 2004-05 & 2011-12	Change between 2011-12 & 2021-22	Change between 1993-94 & 2021-22
A. Those BELOW SECONDARY (R+U) and (M+F)					
Primary Sector	31.59	12.70	-39.41	-8.87	-35.58
Secondary Sector	10.93	18.65	20.62	7.16	47.43
Service Sector	8.88	15.85	8.83	1.22	25.88
Whole Economy	51.39	48.19	-9.96	-0.51	37.73
B. Those SECONDARY & ABOVE (R+U) and (M+F)					
Primary Sector	9.46	11.34	10.52	14.31	36.17
Secondary Sector	5.79	7.11	9.44	18.29	34.84
Service Sector	13.44	21.42	10.26	42.37	72.02
Whole Economy	28.69	39.87	30.22	72.93	143.02

Notes: R+U = Rural plus Urban; and M+F = Male plus Female.

Source: Computed from unit level data from relevant NSS Rounds and PLFSs.

If I may take a leap from here to the overall economic divide in the country, it would appear that one-third of the people could be deemed to be non-poor going by the international poverty line of PPP \$ 3.2 per capita per day. This is supported by the share of workers receiving a wage above the subsistence requirements as per the recommended national minimum wage by the Satpathy Committee. The share of workers with an educational attainment of at least a secondary level also supports this statistic. A basic but highly sensitive sign of health of the

children also supports this. It appears that the top quarter of the population could be reckoned as the rich and the middle class, broadly defined. From an economic inequality point of view (asset or income distribution), this might seem somewhat liberal. However, there is worrying inequality even among this one third is not something that I would dispute. In fact, international estimates show that close to 10 percent of Indians i.e. 140 million, enjoy a per capita income of around US \$ 15 thousand³. That percentage is close to the share of households owning a car (see Table 5).

Table 5: One Third – Two Third Syndrome in Indian Society as between the Poor and Non-Poor.

Indicators	A	B= 100-A	Sources
One-third non-Poor?			
Households above PPP \$3.2 per capita per day	33	67	2018-19 (See Kannan 2022: 594)
Anaemia children age 6-59 months who are NOT anaemic	33	67	NFHS-5
Workers getting a recommended minimum wage or above (Satpathy Committee)	32	68	2017-18
Percentage of adult workers (15 years and above) with a Secondary or above level of education	37	63	2021-22
Percentage of households owning a refrigerator	38	62	NFHS-5

³According to the World Inequality Lab (see Kumar, et.al. 2024), 10 percent of Indians have 57.7 percent of India’s national income. In 2023, this works out to a per capita income of US\$15,124 for the top 10 percent of the Indian population.

Growth without Decent Employment: How can India Escape this long term trap?
– Prof. Surjit Singh Memorial Lecture

A quarter of the population Rich and Middle Class?			
Percentage of households with at least one member with a Graduate degree or above	25	75	2022-23 PLFS
Percentage of regular workers in total workers	25	75	2022-23 PLFS
Percentage of households owning three appliances (TV, Refrigerator and Washing Machine)	16	84	2021 NFHS-5
Close to one-tenth Rich?			
Percentage of households owning a car	8	92	NFHS- 5
Percentage of Indians with a per capita income of US\$10 thousand or above	8	92	
Urban advantage			
Percentage of households owning a refrigerator	63	37	NFHS- 5
Percentage of households with at least one member with a Graduate degree or above in Urban areas	40	60	2022-23 PLFS
Percentage of households owning three appliances (TV, Refrigerator and Washing Machine)	33	67	2021 NFHS-5
Percentage of households owning a car	14	86	2021 NFHS-5
Rural disadvantage			
Percentage of households owning a refrigerator	25	75	2021 NFHS-5
Percentage of households with at least one member with a Graduate degree or above in Rural areas	17	83	2022-23 PLFS
Percentage of households owning three appliances (TV, Refrigerator and Washing Machine)	8	92	2021 NFHS-5
Percentage of households owning a car – Rural	4	96	2021 NFHS-5

The most powerful argument such a process of unequal growth and distribution would be the larger international scenario whereby most countries are now playing by the rules of the neoliberal economic logic. For developing countries this has indeed been a difficult choice. Successive regimes in India not only followed this logic but seem to excel in pushing it forward as much as possible both in internal and external economic management. Of course, the scenario is changing with the realization of rich Western countries that the process of neoliberal economic regimes across the board have hurt their economies both in market competition and consequent employment creation. But the retreat from an earlier version of neoliberal economic policy regime is through unilateral policies and programmes to protect and regulate investment and employment of a kind that suits their national interests. For developing countries, the problem has been one of subordinating their agenda of developmental transformation to the diktats of neoliberal economic logic.

The Coming of Frontier Technologies and its Uncertain Disruptive Impact

The unrelenting process of technological change and its corollary of organizational changes in work and work stations has no doubt been present in India. The availability of a critical mass of technically educated youth in the early nineties onwards gave rise to the information technology sector. But the country lagged, and continue to lag, in the production of hardware

required for this sector that would have provided some impetus to the manufacturing sector and corresponding employment generation. The widespread adoption of computerization in the economy and the developments in internet technology of communication has further given rise to new economic activities such as the gig and platform economy. But its impact on net employment generation, difficult as it is, is yet to be assessed.

On the success of this technological advances new frontier technologies are emerging with significant investments in the advanced rich economies including China. Given India's own size and the need to keep with such fast developments, the country is also focusing its attention on investments in these frontier arrears, albeit limited by its financial capacity. The UNCTAD (2023) has already taken note of these developments in the frontier technologies and have come out with its 2023 edition of the Technology and Innovation Report titled *Opening green windows: Technological opportunities for a low-carbon world*. While spelling out the status in developing/ emerging economies compared to the advanced economies, it underscores the enormity of the challenge for poorer countries. It lists 17 frontier technologies (see Table 6) that are emerging in the world today and talks about its prospect of employment creation but without an estimate of the employment destruction in industries that will decline or disappear. Eight of these frontier technologies are based on the advances in the digital economy, while another seven are based on developments in renewable

energy and its applications. Two remaining frontier technologies are still in research and development stage that are also going to create a process of creative destruction.

Formidable challenges are ahead if a country like India aspires to catch up in these frontier technologies. Development of these technologies and their application in commercial production are largely in developed countries with the US in the lead. But China is emerging as a second runner. But the developing countries do not make a mark. India has made some mark in specific areas such as Electric Vehicles but the progress has been slow. These technologies are expected to further the goal of adopting green technologies and hence consistent with mitigation of climate disasters.

However, the UNCTAD Reports reminds the developing countries that “The report is built around the concept of green innovation – creating or introducing new or improved goods and services that leave lighter carbon footprints and open up green windows of opportunity. Developing countries now have opportunities to catch up, reduce poverty, and at the same time help tackle climate change and set the world on a more sustainable course” (p. xv).

China is leading in the share of patents in these frontier technologies. 56 percent in green frontier technologies, 49 percent in Industry 4.0 frontier technologies and 27 percent in other frontier technologies as against 35, 33 and 32 for the US.

This shows how the other countries especially developing ones are far behind. India has some place in solar PV and electric vehicles but still a long way to go to catch up with China.

The net impact on jobs of this continuing process of creative destruction calls for detailed examination. According to the UNCTAD report cited earlier “As with previous waves of automation, frontier technologies have both destroyed old jobs and created new ones. Current job expectations may be more pessimistic because of increasing capacity of AI to mimic human intelligence and recent job cuts by some big technology companies, nevertheless the alarmist scenarios often fail to take fully into account that not all tasks in a job are automated, and, most importantly, that technology also creates new products, tasks, professions, and economic activities throughout the economy. The net impact on jobs will depend on the final balance between creation and extinction” (p.16).

The ILO has strongly recommended a transition to a green economy and its World Employment and Social Outlook Report of 2018 predicts a positive impact on employment. Taking the example of transition to a green energy, the report estimates that “Measures taken in the production and use of energy, for example, will lead to job losses of around 6 million as well as the creation of some 24 million jobs. The net increase of approximately 18 million jobs across the world will be the result of the adoption of sustainable practices, including changes in the energy mix, the projected growth in the use of electric vehicles,

and increases in energy efficiency in existing and future buildings. In order to ensure a just transition, efforts to promote the green economy must be accompanied by policies that facilitate the reallocation of workers, advance decent work, offer local solutions and support displaced workers.”

Most technologies are registering robust growth in demand for newly skilled personnel. But an overwhelming share is in the US because it is the companies there who have the patents and production systems with complete control over the technologies. This is a big challenge for developing countries like India, despite its capacity to produce skilled personnel. The R&D and industry base is quite weak. As the UNCTAD Report underlines, state intervention is called.

Table 6: New technologies, employment potential and possibilities of green growth:

A. FRONTIER DIGITAL TECHNOLOGIES			
S. No.	Technology	Impact on the economy/employment	Impact on environment and climate change
1.	Artificial intelligence	Yet to be assessed	Possibilities for promoting a green economy
2.	Internet of things	?	Great potential for promoting green economy
3.	Big data	?	?
4.	Blockchain	?	?
5.	5G	Pro-growth but limited	?

Growth without Decent Employment: How can India Escape this long term trap?
– Prof. Surjit Singh Memorial Lecture

		access	
6.	3D printing	Net job loss?	?
7.	Robotics	Net job loss?	?
8.	Drone technology	?	?
B. GREEN FRONTIER TECHNOLOGIES			
9.	Solar PV	Net employment creation	Pro-green growth
10.	Concentrated solar power	Net employment creation	Pro-green growth
11.	Biofuels	Net employment creation	Pro-green growth (Impact on food security?)
12.	Biogas and biomass	Net employment creation	Pro-green growth
13.	Wind energy	Net employment creation	Pro-green growth
14.	Green hydrogen	Net employment creation	Pro-green growth
15.	Electric vehicles	Net employment creation	Pro-green growth
C. OTHER FRONTIER TECHNOLOGIES			
16.	Nanotechnology	?	?
17.	Gene editing	?	?

Notes: Frontier technologies whose impact on employment is currently uncertain but may have the potential to contribute to net employment and pro-environment; Green technologies in the field of energy are expected to meet the growing demand for energy in the economy while existing sources are transformed to reduce carbon emissions; ?–refers to paucity of studies focusing on net employments effects as well as impact on environmental sustainability.
 Source: Compiled from UNCTAD (2023).

As we noted earlier, the overall situation in employment in the Indian economy since the initiation of neoliberal economic reforms is nothing to cheer about. On the contrary, there are

several concerns about the ability of the economic system to create gainful employment to the extent warranted as well as its quality. That has affected the capacity of the economy to reduce poverty through the provision of decent employment. What has been happening is a process of creative destruction is beyond doubt. Such a process leads to the creation of new job opportunities in some sectors while some others lose the existing employment, the notable one being agriculture. Such a process of creative destruction is not entirely due to developments internal to the economy; in fact, it is largely a byproduct of the increasingly integrated nature of the economy to the rest of the world. Creative destruction is largely the result of innovations broadly defined *a la* Schumpeter. But much of the creative destruction is centred on technological progress and its consequent impact on organisation of production, marketing, working systems and so on. This is not something that national authorities can determine or even regulate in any effective manner. Moreover, the life of new technologies is becoming shorter as newer technological progress is overtaking the earlier ones. All these have reduced the employment elasticity globally and in most countries. But for countries like India, the great dilemma arising out of this disconnect between growth and employment is the challenge of continuing poverty and underdevelopment in many sub-sectors of its economy and the prospect of joblessness among the working age population.

Does this mean there is no room for developing an alternative narrative that could address the agenda of developmental transformation of the country in general and most people surviving on subsistence employment in general, especially in rural areas? Does this summing up mean that there are no real prospects of generating employment that could be brought under some national framework of social security and minimum wages?

Given the onward march of technological progress that is affecting all types of economic activities and the uncertainty that it creates on the impact of employment, one could be tempted to answer in the positive. However, given the challenges of underdevelopment and the imperative for a country like India to embark seriously on a path of green transition, I think there is enough scope for new net employment creation. However, it would call for a change in the objective of economic development from one of maximizing growth – as articulated in the official boast of Indian becoming a third largest economy from its current fifth position – to one of growth with employment and development. This would call for an explicit Employment Policy.

Back to Basics: An Employment Policy to address the basic developmental deficits but within the framework of Environmental Sustainability

I would start this narrative by recalling the recommendations of the erstwhile National Commission for Enterprises in the

Unorganized Sector (see NCEUS 2009). Its approach to addressing the problems of the unorganized/informal sector that employs four-fifth of the workers was to adopt a “levelling up” strategy of growth and development. The underlying logic was that the formal sector of the economy has acquired sufficient strength to grow on its own with increasing capital intensity, adopting new technologies, export capabilities and employing increasingly highly educated and skilled workforce. The attention should then shift to the unorganized/informal sector to address its developmental deficits and productive employment creation. This calls for an approach that should simultaneously address the deficits in human development as well as enhancing the productivity of the low productivity sectors in the economy. The point about human development, especially education and health, arises out of the ground reality of more than half the workers in the self-employment category dominated by own-account workers with or without unpaid family labour for assistance. Here the crucial capital, in my view, is the health of the worker. Ill-health or sickness means loss of employment and income. A health-related catastrophic event would sink the family into deep poverty. A national level social security for the workers in this vast sector is therefore imperative. It should also cover old age and life insurance. I do not think current policy perspective recognizes the value of social security in reducing the vulnerabilities associated with the ability to work sustainably and its indirect potential to enhance productivity of the workers in the unorganized sector.

While the school education levels are increasing for the workers, the most recent data show that two-thirds of workers belong to the category of less than secondary level of education including illiterates and those not above primary level of education. An adequate level of education, at least with a secondary pass, seems to be critical in not only accessing new jobs but also dealing with modern IT and ICT-based digital systems for financial transaction, information gathering, inter-personnel communication, taxation and a whole host of other requirements related to employment, especially self-employment.

The explicit adoption of an Employment Policy would then enable the state to focus on addressing the development deficits starting with the primary sector of the economy that has the lowest worker productivity. Here the need for adopting an environmentally sustainable approach has enormous relevance. For example, this would call for land and water management appropriate to the ecological and other contexts. Water is the critical or leading input in agriculture a la Ishikawa (1967). But water management cannot be separated from land management and hence it must be considered together. It would also involve agricultural extension work reaching out to the small and marginal farmers who constitute most of the farmers and cultivating half the land. While this would mainly focus on agriculture there is considerable work to be done in livestock rearing and management, fisheries, and forestry. The

environmental degradation that has taken place to the land and water ecosystems during the last half a century or so is quite enormous as in the cases of landslides, breaching of river embankments, destruction of forest cover, shrinking of rivers and water bodies like lakes and silting up of dams. Ecological restoration works on these fronts is one of creation and repair of natural capital, the foundation on which agricultural and other primary activities are carried out. It also reduces the adverse impacts of natural calamities when preventive works are undertaken. The services of modern technologies such as remote sensing and artificial intelligence would help this process of restoring the capital property of the natural resources. In that sense, modern and frontiers technologies could be appropriately blended to create employment. The main economic factor here is the public or collective goods character of these works which must come largely from public investment. Existing public employment programme – the MG-NREGS – has not been able to meet this challenge given its highly restrictive budget compared to the need and various other limiting factors including the cap on days of employment. But it could be revised appropriately in conjunction with other agricultural and rural development programmes. However, the resources required for this would be far more than what is currently allocated. A shift of focus in public investment from urban to rural will then be called for.

A similar shift of focus away from private corporate sector and in favour of Micro and Small industries will also be necessary under an employment policy that is linked to growth at the level of small establishments. Although many schemes and programmes exist for a long time the magnitude of investment, support for technological upgradation, addressing environmental issues and promoting a green economy has been hugely inadequate. A significant share of output of this sector is by way supplying to the large corporate sector by way of sub-contracting, piece-rate, putting out and various other forms of work organisation to take advantage of cheap labour arising out of subsistence necessities of households. That is where the urgency for implementing statutory national minimum floor wage becomes critical to protect the workers from overexploitation. But this also help increase the effective demand for wage goods in the economy and contribute to a more broad-based growth. Several models of developing this sector exists, as for example in cluster-based approach to industrial development.

Here again policies could help in directing the application of modern and frontier technologies to the benefit of the micro and small industrial sector. The fact that the Indian industrial sector lacks a critical minimum „middle“ or medium industry sector points to the polarized nature of industrial organizational form in the country. Table 7 summarizes the focus areas, which will

have impact on the economy, especially employment creations and on the environment.

Table 7: Examples of areas for engineering employment with growth in India

	Focus areas	Impact on the economy especially in employment creation	Impact on environment and climate change
1.	Integrated Land and Water Resource Management. Anti-desertification, soil moisture retention, etc.	Largely located in rural areas. Helps enhancing productivity and production of crops.	Stabilizes land and water resources.
2.	Ecological restoration of damaged and degraded landscapes and water bodies.	Restoration and strengthening of the „natural capital“ in the economy.	Less local level damages to the land and water resources.
3.	Afforestation and greening the land.	Anti-desertification measures. Creating Miyawaki-type forests. Creating agro-forestry.	Acts as carbon sinks. Create Miyawaki forests in urban areas that would also act as carbon sinks.
4.	Waste management	To expand the recycling economy and provide a better public health ecosystem.	Less pollution of air and water.
5.	Developing Eco-friendly alternatives in construction materials	Better less carbon foot-print housing and other buildings for both rural and urban living. Development of the local economy through demand for locally available materials.	Reduces carbon emission and contributes to the global public good

Growth without Decent Employment: How can India Escape this long term trap?
– Prof. Surjit Singh Memorial Lecture

6.	Artisanal and Industrial Clusters	Create artisanal and industrial clusters using ecofriendly materials and techniques in construction. Provide common facilities to enhance productivity, product quality and competitiveness.	Pollution control facilities can be created and better managed in clusters rather in isolated work spaces.
7.	Small scale energy development	Identifying and preparing plans and implementing projects for small and micro hydel power projects. Small scale solar energy projects.	As less carbon emitting projects, they contribute to a cleaner environment.
8.	Developing the renewable energy sector	Large scale projects for solar power, wind power and so on	Preventing/reducing future carbon emission arising from increased use of fossil fuel energy.
9.	Provision of decent Housing Condition	Indirect impact on health, dignity and an ability to demand minimum wages and to increasing productivity	Green housing amenities: Opportunity for environment-friendly (low carbon intensity) materials and thus to reducing the rate of growth of carbon emission.
10.	Skill development for the above		

While most of these elements in an alternative narrative of growth with decent employment are well known, including from the experience of currently advanced countries especially in the East and South East Asian region, the policy attention is

increasingly biased towards the urban and the corporate segment of the economy. Given the imperative to engineer a transition towards a green economy and the decent job and developmental deficits in the country, such a bias must change to avoid further polarization of the economy and its consequent economic and social inequalities. Since most of these developmental interventions call for not only a shift in the strategy of development but also a shift in fiscal policy to meet the additional resource requirements. One is an efficient tax collection system and the other is a progressive regime of taxation. Such additional resources will have to be exclusively deployed for creating the sort of public and collective goods as indicated above. That would be a genuine path for inclusive development.

It is my ardent hope that the younger generation of researchers in development economics in general and Indian economic development in particular will apply their time and knowledge on the formidable task of creating decent employment in the country I think academics interested and working on the developmental transformation of the country has a duty to develop this alternative narrative to bring it to the centre of the public discourse.

References

- Bharti, Nitin Kumar, Lucas Chancel, Thomas Piketty and Anmol Somanchi (2024), *Income and Wealth Inequality in India, 1922-2023 The Rise of the Billionaire Raj*, Working Paper No. 2024/09, World Inequality Lab, Paris.
- Government of India (2019), *Report of the Expert Committee on Determining the Methodology for Fixing the National Minimum Wage*, Ministry of Labour and Employment, New Delhi.
- International Labour Organization (2021), *World Employment and Social Outlook: The role of digital labour platforms in transforming the world of work*, International Labour Organization, Geneva.
- International Labour Organization (2018), *World Employment and Social Outlook: Greening with jobs*, International Labour Organization, Geneva.
- Ishikawa, Shigeru (1967), *Economic Development in Asian Perspective*, Kinokuniya Book Store, Tokyo.
- Kannan, K.P. (2014), *Interrogating Inclusive Growth: Poverty and Inequality in India*, Routledge, New Delhi and Oxon, U.K.
- Kannan, K. P. (2021), „India’s Social Inequality as Durable Inequality: Dalits and Adivasis at the Bottom of an Increasingly Unequal Hierarchical Society“ in Arsel, Murat, et. al. (eds.), *Reclaiming Development Studies: Essays for Ashwani Saith*, Anthem Press, London and New York.

Kannan K. P. (2022) „India’s Elusive Quest for Inclusive Development: An Employment Perspective“ in *The Indian Journal of Labour Economics*,65: 579-623.

National Commission for Enterprises in the Unorganised Sector (NCEUS) (2008), *Conditions of Work and Promotion of Livelihoods in the Unorganized Sector*, Academic Foundation, New Delhi.

National Commission for Enterprises in the Unorganised Sector (NCEUS) (2009a), *Definitional and Statistical Issues*, Government of India, New Delhi.

National Commission for Enterprises in the Unorganised Sector (NCEUS) (2009b), *The Challenge of Employment: An Informal Economy Perspective*, Academic Foundation, New Delhi.

Schumpeter, J.A. (1966), *Capitalism, Socialism and Democracy*, Unwin University Books, London.

United Nations Conference on Trade and Development (UNCTAD) (2023), *Technology and Innovation Report: Opening green windows: Technological opportunities for a low-carbon world*, Geneva.

United Nations Development Programme (2021/22), *Human Development Report 2021/22*, Washington.

Prof. Surjit Singh Memorial Lecture Series:

- **1st Prof. Surjit Singh Memorial Lecture:** *The Rural–Urban Question and Growth*, Prof. Y.K. Alagh, December 06, 2014.
- **2nd Prof. Surjit Singh Memorial Lecture:** *Social Ventures and Innovative Entrepreneurial Solution: An exploratory Analysis*, Prof. Rakesh Basant, April 16, 2021.
- **3rd Prof. Surjit Singh Memorial Lecture:** *Economic Transformation of the Indian Economy: Retrospect & Prospect*, Prof. Lakhwinder Singh, December 15, 2022.
- **4th Prof. Surjit Singh Memorial Lecture:** *Growth without Decent Employment: How can India Escape this Long-term Trap?*, Prof. K.P. Kannan, March 22, 2024.

Prof. Surjit Singh

Former Director

Institute of Development Studies (IDS), Jaipur

Prof. Surjit Singh was the Director of the Institute of Development Studies, Jaipur (IDSJ) for more than six years from February 01, 2007 to December 04, 2013. He Joined IDS Jaipur in 1988. He was Chair Professor, Bank of India Chair on Rural Credit at IDS, Jaipur for three years from November 20, 1997 to November 19, 2000. He has been member of various committees and task forces at the National and State Level. Prof. Singh was appointed member of Committee to Prepare a Roadmap for the Panchayats, Ministry of Panchayati Raj, Government of India 2010-2011. He was appointed member of Working Group on Micro, Small and Medium Enterprises (MSMEs) Growth and Working Group on Decentralized Planning in Agriculture for the 12th Five Year Plan (2012-2017), Planning Commission, Government of India. During his short academic life, he published 14 books and 126 papers in National and International Journals.



Prof. K.P. Kannan

Former Director

Centre for Development Studies (CDS), Trivandrum

Professor K.P. Kannan, a former Fellow and Director of the Centre for Development Studies, Trivandrum, is currently an Honorary Fellow there. He is also the Academic Chairman of the Laurie Baker Centre for Habitat Studies in Trivandrum. He was a member of the International Panel on Social Progress, a collective initiative of social scientists from different parts of the world, which prepared a global report on Society in the 21st Century in June 2018 (published by Cambridge University Press). Professor Kannan has had several UN assignments, the most important of which was as an Expert Member in the Technical Secretariat of the World Commission on Social Dimension of Globalisation constituted by the ILO in Geneva (2002-03). During 2005-09, he was a Member of the National Commission for Enterprises in the Unorganised Sector (NCEUS) appointed by Prime Minister Manmohan Singh that prepared several major reports on the informal economy and informal workers in India. In 2008, he was conferred the first VV Giri Memorial Award for his contributions to social security for workers in the informal sector. He was awarded a National Fellowship by the ICSSR during 2016-18.

Professor Kannan has authored, co-authored, or edited twelve books as well as several research papers.



INSTITUTE OF DEVELOPMENT STUDIES, JAIPUR

8 B Jhalana Institutional Area, Jaipur - 302 004, (Raj.)

E-mail: contact@idsj.org, visit us at: www.idsj.org

Call us at: 0141-2705726



@IDSJ, JPR



@IDS_JPR



@IDSJ.Official