



Use of Age-cohort Analysis to Study Dynamics of Changes in the Structure of Employment

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- Data source for employment trend (State and National Levels) :
 - 1) Population Census B series
 - 2) NSS Employment and Unemployment Survey (EUS)
- Indicators:
 - 1) Worker Population Ratio (Work Participation Ratio, WPR)
 - 2) Distribution of Workers by Industry
 - 3) Number of Workers by Sector/Industry
(estimated population*estimated WPR by sector/industry)
- Age-Cohort Analysis

Estimates by Mehrotra et.al.

		Absolute numbers (in million)				
		1993-94	1999-2000	2004-05	2009-10	2011-12
Total employment by sectors						
	Agriculture	241.5	246.6	268.6	244.9	231.9
	Manufacturing	38.9	42.8	53.9	50.7	59.8
	Non-Manufacturing	15.8	20.4	29.4	48.3	55.3
	Services	77.7	89.8	107.3	116.3	127.3
	Total workforce	374.0	399.5	459.1	460.2	474.2
Total Labour force		381.2	408.5	469.9	469.9	484.8
Unemployed		7.2	9.0	10.8	9.6	10.6
LFPR female (age 15 to 59)		45.2	41.7	45.4	34.5	33.1
LFPR male (age 15 to 59)		88.0	86.6	87.1	83.7	82.7

During the 7 years between 2004/05-2011/12年, workers in agriculture decreased by 36.7 million, and increased in construction and service sectors by 25.9 and 20 million, respectively.

The labour force participation ratio (LFPR) declined substantially by 12.3 percentage point for female, while it declined by 4.4 percentage point for males.



Change in the Share of Workers by industry and activity status, 2004/05 to 2011/12

	Rural			
	Males		Females	
	2004	2011	2004	2011
SE Agriculture	42.3%	38.9%	53.8%	48.2%
Ag Labour	24.7%	21.0%	29.9%	27.1%
Manufacturing	8.1%	8.4%	8.3%	9.7%
Construction	6.9%	13.0%	1.5%	6.7%
Services	18.0%	18.7%	6.6%	8.4%
Total	100.0%	100.0%	100.0%	100.0%

It is not clear from the table above that the decrease in self-employed in agriculture took place mainly females (16.7 million), rather than males (1.5 million).

	Urban			
	Males		Females	
	2004	2011	2004	2011
Agriculture	7.0%	6.5%	18.4%	11.2%
SE Manufacturing	7.8%	7.6%	18.9%	20.1%
RWW Manufacturing	12.5%	13.2%	5.5%	6.2%
SE Services	30.3%	28.1%	16.8%	16.1%
RWW Services	26.6%	28.0%	29.9%	35.9%
SE & RWW Construction	3.0%	3.5%	0.3%	0.6%
Casual Labour	12.8%	13.1%	10.3%	9.9%
Total	100.0%	100.0%	100.0%	100.0%

SE: Self-Employed, RE: Regular Wage Workers

- Analysis by Mehrotra et.al (2014) on employment trend during the last two decades is comprehensive, but unfortunately there are no rural/urban nor male/female distinctions. Thus it gives somewhat unprecise picture showing structural change in employment from agriculture to non-agriculture.
- The real situation is that the decrease in workers in agriculture is mainly occurred in 'female self-employed' workers who left agriculture and became non-workers.
- The percentage distribution of workers by industry sometimes lead to misunderstanding due to large scale change in total workers or labour force as the denominator.
- Here age-cohort analysis of the number of workers is expected to present more detailed picture of change.

Mehrotra S., J. Parida, S. Sinha, and A. Gandhi (2014), "Explaining Employment Trends in the Indian Economy: 1993-94 to 2011-12", EPW Vol.49 No.32, PP. 49-57.

Age-Cohort Analysis

Change in the distribution of workers by Age-cohort during the seven-years, 2004/05 to 2011/12

	2004/05	2011/12
Age Cohort ①	15–21	22–28
②	22–28	29–35
③	29–35	36–42



Change in Activity Status and Employment

Example:

Age-group of 15–21 years in 2004/05		Age group of 22–28 in 2011/12
Workers	Supposedly they were employed during 1998–2004	Workers un-changed
	Most of them were not or less educated	Changed job/Quit job/Left working/ Unemployed/Dead

Non-workers	Students	Workers
	Unemployed	Enter labour market and Started working
	Others	Employed Un-employed Non- workers

Method

(A) Because the NSS's total population and the number of workers are under-estimated, we have to adjust to the census-based population estimates. Based on the Age-Tables of Population Census 2001 and 2011, estimate the working-age population of each age-group of 7 year-interval separately for rural / urban, and male / female, for 2004/05 and 2011/12 . See the tables in the slide 9.

(B) The unit data of NSS EUS of 2004/05 and 2011/12 is used to estimate the proportion of various activity status. Then the proportion is applied to the estimated population for each age group. An example, rural males, is shown in the table in the slide 10.

Similarly the proportions of workers by educational attainment and employment status (SE, RE, C) are estimated for the age group 15-21 years in 2004/05 and 22-28 years in 2011/12 to study the change in employment situation of this age cohort.

Estimated Population by Age Group,
2004/05 (1000)

	RM	RF	UM	UF
15-21	55,542	49,093	24,622	21,572
22-28	45,458	45,330	22,359	20,881
29-35	41,685	39,908	19,881	18,363
36-42	32,218	30,999	15,739	14,189
43-49	22,133	21,901	11,252	9,924
50-56	21,999	20,139	9,956	8,626
57-63	13,794	15,037	5,760	5,449
64+	20,662	21,259	7,455	7,835
	253,490	243,667	117,025	106,839

Estimated Population by Age Group, 2011/12 (1000)

	RM	RF	UM	UF
15-21	62,498	55,893	28,088	25,286
22-28	50,375	48,396	26,743	25,692
29-35	44,167	42,880	23,689	22,546
36-42	37,166	36,371	19,990	18,933
43-49	27,128	26,531	15,455	14,365
50-56	24,831	23,267	13,155	11,972
57-63	16,783	18,006	8,587	8,049
64+	24,867	25,824	10,419	10,934
	287,815	277,168	146,126	137,778

Population Adjusted Estimates example Rural Males (1000 persons)

		Age group								
	Status	15-21	22-28	29-35	36-42	43-49	50-56	57-63	64+	total
NSS	11	14,690	20,772	20,069	17,648	13,116	12,934	7,792	8,063	115,083
Estimates	31	2,196	3,726	3,908	3,127	2,312	2,013	533	145	17,958
	51	11,801	13,937	13,138	10,611	6,486	5,757	2,213	1,370	65,313
	81	1,724	1,087	227	55	35	11	11	4	3,153
	91	18,107	1,037	33	2	0	-	2	24	19,205
	92-97	1,591	494	359	362	423	932	1,829	7,780	13,769
	Total	50,109	41,052	37,734	31,804	22,371	21,646	12,380	17,385	234,481
Population	11	16,283	23,001	22,170	17,878	12,976	13,145	8,683	9,582	124,413
Adjusted	31	2,434	4,125	4,317	3,167	2,287	2,046	593	173	19,414
Estimates	51	13,081	15,433	14,514	10,749	6,417	5,851	2,466	1,628	70,608
	81	1,911	1,204	250	56	34	11	13	4	3,409
	91	20,071	1,148	37	2	0	-	2	28	20,762
	92-97	1,763	547	397	367	418	947	2,038	9,246	14,885
	Total	55,542	45,458	41,685	32,218	22,133	21,999	13,794	20,662	253,490



Age heaping at multiples of 5 and 10 is a serious problem, particularly from 30 years. It is therefore very difficult to apply age-cohort analysis to the age groups above 29.

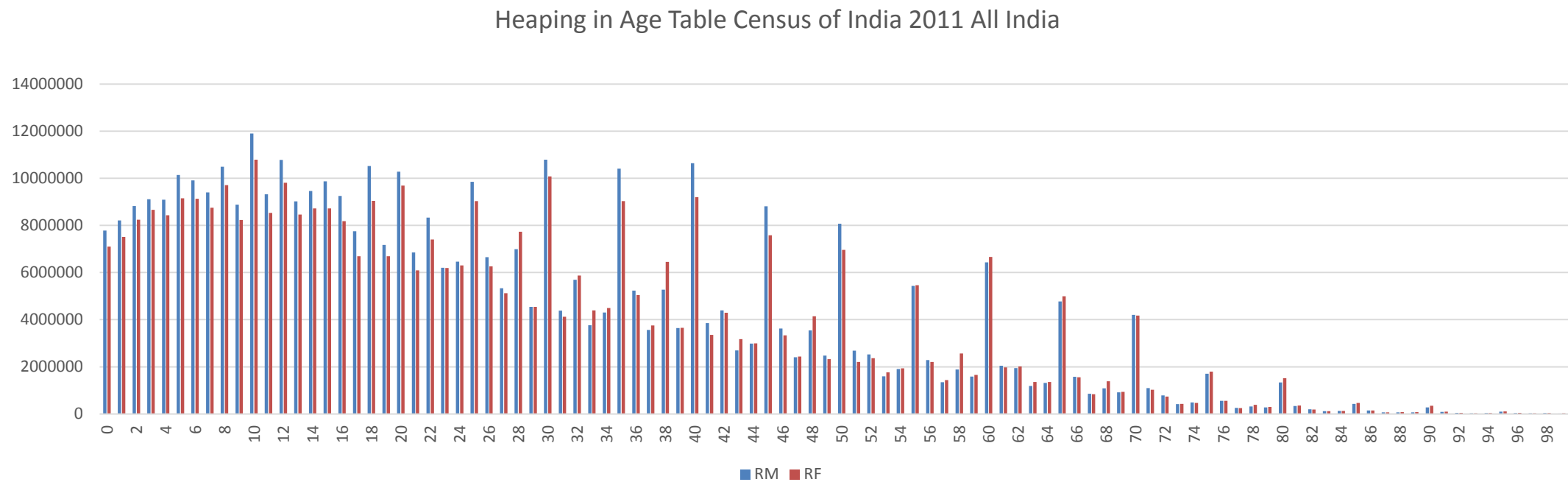


Table Change in the number of workers by age-cohort

Age group of 15-21 years in 2004/05: discussed later

Age group of 22-28 years in 2004/05

Rural males: Workers in agriculture (self-employed and agricultural labour) decreased and workers in construction increased. The shift from agriculture to construction is observed. Expansion of construction in rural areas need careful look as short-term migrants are regarded as rural residents.

Rural females: The number of workers decreased a lot, most of them are leaving from S.E. in agriculture and agricultural labour. The workers in construction increased due to participation in MGNREGA. Employment in service sector increased.

Urban males: Fresh entrants into labour market are employed in service sector (Self-employed, and regular wage worker) , manufacturing industry and construction.

Urban Females: There has been a marked increase in regular wage worker in service sectors among young women.



Table 3 (A) Age Group-wise Number of Workers by Employment Status and Industry (Rural Male)								
								(1000 person
2004/05	Age at 2004/05		15-21	22-28	29-35	36-49	50+	Total
	SE Ag		12,308	16,051	14,423	21,849	25,624	90,254
	Ag Labourers		8,885	10,570	10,875	13,623	8,556	52,509
	Manufacturing		3,006	3,977	3,697	4,198	2,446	17,323
	Construction		2,690	3,678	3,324	3,507	1,535	14,735
	Service sector		4,908	8,284	8,681	10,297	6,005	38,175
	Total		31,797	42,559	41,001	53,474	44,166	212,997
2011/12	Age at 2011/12	15-21	22-28	29-35	36-42	43-56	57+	0
	SE Ag	8,468	14,827	14,795	13,162	21,348	16,100	88,701
	Ag Labourers	5,437	9,159	9,367	7,842	10,828	4,957	47,589
	Manufacturing	2,487	4,788	3,859	2,979	3,506	1,585	19,204
	Construction	4,567	7,140	6,197	4,914	5,298	1,677	29,793
	Service sector	3,361	9,019	9,198	7,800	9,686	3,407	42,471
	Total	24,319	44,933	43,416	36,697	50,666	27,727	227,759
Change	SE Ag	8,468	2,519	-1,256	-1,261	-500	-9,524	-1,554
	Ag Labourers	5,437	274	-1,203	-3,033	-2,795	-3,599	-4,920
	Manufacturing	2,487	1,782	-118	-718	-691	-860	1,881
	Construction	4,567	4,450	2,520	1,590	1,790	142	15,058
	Service sector	3,361	4,111	914	-881	-611	-2,598	4,296
	Total	24,319	13,136	856	-4,303	-2,808	-16,439	14,762

Table 3 (B) Age Group-wise Number of Workers by Employment Status and Industry (Rural Female)								
								(1000 person)
2004/05	Age at 2004/05		15-21	22-28	29-35	36-49	50+	Total
	SE Ag		8,191	11,114	11,995	18,285	12,987	62,572
	Ag Labourers		5,049	6,609	7,648	9,905	5,450	34,661
	Manufacturing		2,305	2,132	1,884	2,299	1,025	9,645
	Construction		346	370	382	433	176	1,706
	Service sector		673	1,532	1,627	2,312	1,450	7,593
	Total		16,563	21,757	23,536	33,235	21,088	116,178
2011/12	Age at 2011/12	15-21	22-28	29-35	36-42	43-56	57+	Total
	SE Ag	4,584	7,403	8,553	8,622	11,476	5,192	45,830
	Ag Labourers	2,617	3,924	5,249	4,853	6,557	2,506	25,706
	Manufacturing	2,010	2,055	1,832	1,357	1,425	660	9,337
	Construction	477	981	1,364	1,395	1,404	658	6,278
	Service sector	622	1,435	1,621	1,615	1,856	813	7,963
	Total	10,309	15,798	18,619	17,842	22,718	9,829	95,114
Change	SE Ag	4,584	-787	-2,561	-3,373	-6,809	-7,795	-16,742
	Ag Labourers	2,617	-1,124	-1,360	-2,796	-3,348	-2,944	-8,955
	Manufacturing	2,010	-251	-301	-527	-874	-365	-308
	Construction	477	635	994	1,014	970	482	4,571
	Service sector	622	762	90	-12	-456	-637	370
	Total	10,309	-765	-3,138	-5,694	-10,517	-11,259	-21,064

Table 3 (C) Age Group-wise Number of Workers by Employment Status and Industry (Urban Male)								
								(1000 persor
2004/05	Age at 2004/05		15-21	22-28	29-35	36-49	50+	total
	Agriculture		591	905	967	1,863	1,983	6,309
	SE manufacturing		952	1,312	1,367	2,023	1,294	6,948
	RW manufacturing		1,527	2,997	2,416	2,852	1,311	11,103
	Construction		1,296	2,011	1,877	2,125	954	8,263
	SE service		2,329	5,295	6,379	8,371	4,678	27,052
	RW sevice		2,093	4,651	5,009	7,842	4,073	23,669
	CL manuf.+service		1,309	1,534	1,253	1,262	503	5,861
	Total		10,097	18,704	19,269	26,339	14,795	89,205
2011/12	Age at 2011/12	15-21	22-28	29-35	36-42	43-56	57+	total
	Agriculture	484	956	1,170	1,123	2,107	1,270	7,110
	SE manufacturing	788	1,381	1,464	1,545	2,210	891	8,279
	RW manufacturing	1,360	3,720	3,157	2,344	3,099	557	14,237
	Construction	1,269	2,597	2,624	2,027	2,417	604	11,538
	SE service	1,520	4,766	6,701	6,190	8,283	3,102	30,562
	RW sevice	1,726	6,792	6,547	5,609	8,098	1,605	30,376
	CL manuf.+service	1,005	1,485	1,375	901	1,126	389	6,281
	Total	8,152	21,696	23,039	19,738	27,340	8,419	108,383
Change	Agriculture	484	365	265	156	244	-712	802
	SE manufacturing	788	428	152	178	186	-402	1,330
	RW manufacturing	1,360	2,193	161	-72	246	-754	3,134
	Construction	1,269	1,300	613	150	293	-351	3,274
	SE service	1,520	2,437	1,406	-189	-88	-1,576	3,510
	RW sevice	1,726	4,698	1,896	599	256	-2,468	6,707
	CL manuf.+service	1,005	176	-159	-352	-137	-114	419
	Total	8,152	11,598	4,334	469	1,001	-6,377	19,178 ¹⁵

Table 3 (D) Age Group-wise Number of Workers by Employment Status and Industry (Urban Female)								
								(1000 persor
2004/05	Age at 2004/05		15-21	22-28	29-35	36-49	50+	Total
	Agriculture		523	653	914	1,389	927	4,406
	SE manufacturing		949	859	1,108	1,170	490	4,576
	RW manufacturing		236	325	323	322	119	1,325
	Construction		3	22	24	17	11	77
	SE service		414	767	878	1,267	708	4,034
	RW sevice		747	1,494	1,537	2,341	1,039	7,157
	CL manuf.+service		337	403	645	761	343	2,489
	Total		3,208	4,523	5,429	7,266	3,637	24,064
2011/12	Age at 20011/12	15-21	22-28	29-35	36-42	43-56	57+	Total
	Agriculture	186	353	525	672	883	359	2,978
	SE manufacturing	748	1,058	1,176	1,052	966	335	5,334
	RW manufacturing	266	360	352	362	263	36	1,639
	Construction	9	26	73	28	19	-	155
	SE service	196	725	944	962	1,065	379	4,271
	RW sevice	690	2,435	2,144	1,617	2,269	383	9,538
	CL manuf.+service	215	401	590	580	634	218	2,638
	Total	2,312	5,358	5,803	5,273	6,098	1,708	26,553
Change	Agriculture	186	-169	-128	-243	-506	-568	-1,428
	SE manufacturing	748	109	317	-56	-204	-155	759
	RW manufacturing	266	124	27	39	-59	-83	314
	Construction	9	23	50	4	2	-11	78
	SE service	196	311	178	84	-202	-329	238
	RW sevice	690	1,688	649	80	-72	-656	2,380
	CL manuf.+service	215	64	187	-65	-127	-125	149
	Total	2,312	2,150	1,280	-156	-1,168	-1,928	2,489



Employment Situation of age group of 15-21 years in 2004/05.

There are two types of comparison: one is a comparison between two age groups of 15-21 years in 2004/05 and 2011/12. The other is a comparison of employment situation of age cohort of 15-21 years in 2004/05 (and 22-28 years in 2011/12).

- (1) A Comparison of young workers of age 15-21 years between 2004/05 and 2011/12. How the employment situations of less educated workers changed?
- (2) Change in employment situation of those workers of age 15-21 years in 2004/05 and 22-28 in 2011/12. What is the change in employment situation of less-educated workers? Continuing the same job, Changed, or quitted the jobs?
- (3) Employment situation of fresh entrants into labour market among age group 22-28 in 2011/12. They are educated workers, with Higher Secondary, Diploma, College and above. What is their employment situation?



Next tables show Educational Attainment of workers of age 15-21 years.

Those who proceed to higher education increased and educational attainment has been improved substantially during the 7 years. As a result, the number of workers of age 15-21 years decreased.

However, the share of less educated among young workers of age 15-21 is more than 40 percent, RM 46%, RF 57%, UM 44%, and UF 43%. Their employment situation shows a decline in self-employed in agriculture, agricultural labour, and increase in construction.

In Urban areas, the change is not conspicuous for males, but share of female regular wage worker in service sectors markedly increased.



Table 6 Distribution of Population of Age Cohort aged 15-21 years in 2004/05 by Educational Attainment and Usual Activity Status

(1,000 persons)										
Sector	Age group	Usual (PS+SS) Activity Status	Educational attainment (general)							
			Below				Higher			
			primary	Primary	Middle	Secondary	secondary	Diploma	College +	Total
Rural Male	Age group 15-21 years in 2004/05	Workers	11,186	6,915	8,616	3,358	1,321	175	224	31,797
		Unemployed	365	293	435	432	236	60	90	1,911
		Student	640	2,372	7,765	5,956	2,927	143	263	20,071
		Others	916	342	358	77	61	0	8	1,763
		Non-workers	1,921	3,008	8,558	6,465	3,224	203	361	23,745
		Total	13,108	9,923	17,174	9,823	4,545	379	586	55,542
	Age group 22-28 years in 2011/12	Workers	11,481	6,655	10,583	7,622	4,652	930	3,008	44,933
		Unemployed	46	83	179	258	255	159	710	1,690
		Student	8	8	65	227	1,221	100	1,297	2,924
		Others	326	78	147	188	36	1	51	828
		Non-workers	380	169	391	673	1,512	260	2,057	5,442
		Total	11,861	6,824	10,974	8,295	6,164	1,190	5,065	50,375
Rural Female	Age group 15-21 years in 2004/05	Workers	8,741	2,763	3,238	1,169	486	86	75	16,563
		Unemployed	74	72	168	182	171	35	61	762
		Student	416	1,496	4,364	3,363	1,895	70	170	11,782
		Others	9,945	3,415	3,978	1,818	686	23	120	19,986
		Non-workers	10,434	4,984	8,510	5,363	2,752	129	351	32,531
		Total	19,175	7,747	11,748	6,532	3,238	214	426	49,093
	Age group 22-28 years in 2011/12	Workers	7,521	2,494	2,546	1,499	795	164	779	15,798
		Unemployed	21	4	72	123	135	40	329	725
		Student	8	1	17	126	435	21	638	1,246
		Others	12,435	4,495	5,783	3,676	2,514	186	1,537	30,627
		Non-workers	12,464	4,500	5,872	3,926	3,084	247	2,504	32,598
		Total	19,985	6,994	8,419	5,425	3,879	412	3,282	48,396

Sector	Age group	Usual (PS+SS) Activity Status	Educational attainment (general)							
			Below				Higher			
			primary	Primary	Middle	Secondary	secondary	Diploma	College +	Total
Urban Male	Age group 15-21 years in 2004/05	Workers	2,438	2,357	3,146	1,253	578	156	168	10,097
		Unemployed	161	195	446	235	129	79	117	1,364
		Student	212	651	3,326	4,091	3,597	204	367	12,451
		Others	293	110	192	56	30	1	28	710
		Non-workers	666	956	3,964	4,382	3,757	284	512	14,525
		Total	3,104	3,313	7,110	5,635	4,334	440	679	24,622
	Age group 22-28 years in 2011/12	Workers	3,058	2,450	4,441	3,652	2,498	803	4,794	21,696
		Unemployed	76	49	149	121	220	82	939	1,635
		Student	7	0	25	133	909	269	1,677	3,020
		Others	112	23	45	42	75	4	88	392
		Non-workers	195	73	218	296	1,204	356	2,703	5,047
		Total	3,253	2,522	4,659	3,948	3,701	1,159	7,498	26,743
Urban Female	Age group 15-21 years in 2004/05	Workers	1,080	613	710	331	242	83	148	3,208
		Unemployed	17	68	94	89	120	33	114	536
		Student	106	495	2,506	3,396	3,018	170	417	10,108
		Others	2,405	1,445	2,068	1,084	552	19	145	7,719
		Non-workers	2,529	2,008	4,668	4,569	3,689	221	677	18,363
		Total	3,609	2,621	5,378	4,900	3,931	304	825	21,572
	Age group 22-28 years in 2011/12	Workers	1,053	478	723	462	483	190	1,969	5,358
		Unemployed	17	20	27	54	73	36	600	828
		Student	0	0	32	65	539	68	1,301	2,006
		Others	3,331	1,741	3,172	3,110	2,632	263	3,251	17,500
		Non-workers	3,348	1,762	3,231	3,229	3,244	368	5,152	20,334
		Total	4,401	2,240	3,954	3,691	3,727	558	7,121	25,692



Change in Employment Situation by educational attainment for the age cohort of 15-21 years in 2004/05

Rural Males: Workers of educational attainment below primary school changed jobs from self-employed in agriculture and agricultural labour to construction. Those fresh entrants with middle-pass got job in construction.

It is interesting to note that fresh entrants with Secondary • Higher secondary got job in self-employed and service sector. About 40 percent of workers with diploma got jobs in manufacturing industry. College graduates are either self-employed in agriculture or employed in service sector. This is partly due to the fact that employment opportunities for non-technical college graduate is limited (invisible unemployment of highly educated persons) and partly due to the fact that farming recently more market oriented and requires technical knowledge and skills.

Rural females: Among those less educated workers engaged in self-employed in agriculture and agricultural labour, a substantial portion quitted working though some started working in construction (NREGA). Those highly educated women started working in service sector, school teacher, for example.

Urban males and females: young workers with limited educational attainment worked as a casual labour in manufacturing and service sectors but shifted to construction. Fresh entrant workers with secondary school education and higher got jobs in self-employed or regular wage labour in service sectors.

Table 7 (A) Number of Workers by Employment Status, Industry and Level of Educational Attainment (Age Cohorts 15-21years in 2004/05 and 22-28 years in 2011/12

Rural Male (1000 persons)									
sector, sex and age	employment status and industry	Educational attainment (general)				Higher Secondary	Diploma	Collge+	total
		Below primary	Primary	Middle	Secondary				
Age 15-21 in 2004/05	SE Ag	3,710	2,456	3,694	1,592	699	53	103	12,308
	Ag Labourers	4,299	2,048	1,912	489	117	5	15	8,885
	Manufacturing	814	810	855	381	98	38	10	3,006
	Construction	1,124	674	639	173	68	10	2	2,690
	Service sector	1,239	927	1,516	723	339	69	94	4,908
	Total	11,187	6,915	8,616	3,358	1,321	175	224	31,797
Age 22-28 in 2011/12	SE Ag	3,115	1,786	3,604	2,953	2,050	162	1,155	14,827
	Ag Labourers	3,672	1,660	1,949	1,177	546	50	105	9,159
	Manufacturing	905	687	1,203	803	550	343	297	4,788
	Construction	2,493	1,429	1,824	855	349	72	118	7,140
	Service sector	1,297	1,095	2,002	1,834	1,157	303	1,332	9,019
	Total	11,481	6,655	10,583	7,622	4,652	930	3,008	44,933
Change	SE Ag	-595	-671	-90	1,361	1,350	109	1,053	2,519
	Ag Labourers	-628	-388	37	688	429	45	90	274
	Manufacturing	91	-123	347	422	452	305	288	1,782
	Construction	1,369	755	1,186	682	281	62	116	4,450
	Service sector	58	167	486	1,110	818	234	1,237	4,111
	Total	294	-260	1,966	4,264	3,331	755	2,784	13,136

Table 7 (B) Number of Workers by Employment Status, Industry and Level of Educational Attainment (Age Cohorts 15-21years in 2004/05 and 22-28 years in 2011/12

Rural Female									(1000 persons)
sector, sex and age	employment status and industry	General Education				Higher Secondary	Diploma	Collge+	total
		Below primary	Primary	Middle	Secondary				
	SE Ag	4,117	1,395	1,723	625	281	16	27	8,191
Age 15-21 in 2004/05	Ag Labourers	3,263	739	800	198	39	9	1	5,049
	Manufacturing	928	513	523	221	83	26	11	2,305
	Construction	261	36	40	9	0	0	0	346
	Service sector	171	80	151	116	83	35	36	673
	Total	8,741	2,763	3,238	1,169	486	86	75	16,563
	SE Ag	3,623	1,047	1,321	731	469	14	198	7,403
Age 22-28 in 2011/12	Ag Labourers	2,264	768	557	286	40	2	9	3,924
	Manufacturing	793	483	380	210	124	11	54	2,055
	Construction	644	132	132	59	5	2	6	981
	Service sector	196	64	157	214	157	136	511	1,435
	Total	7,521	2,494	2,546	1,499	795	164	779	15,798
	SE Ag	-494	-348	-402	106	188	-2	171	-787
Change	Ag Labourers	-999	29	-244	88	1	-7	8	-1,124
	Manufacturing	-135	-31	-143	-11	40	-15	44	-251
	Construction	383	96	91	50	5	2	6	635
	Service sector	25	-16	6	97	74	101	475	762
	Total	-1,220	-270	-692	330	309	79	704	-765

The method used in this study is a new approach that needs a lot of improvements, like linking rural and urban labour markets with migration data, and finding some techniques to overcome the problem of age-heaping.

Thank you