

Construction of Social Accounting Matrix for Andhra Pradesh for 2007-08 and Impact Analysis of MNREGA

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Abstract

SAM, an extension of the Input-Output model, is constructed for the state of A.P. for the year 2007-08. It consists of 73 producing sectors, two factors of production and nine categories of households, based on occupation and location (i.e. rural and urban). The main data sources used have been provided by the Directorate of Economics and Statistics of A.P. In addition, the sources are: NSSO's 66th round survey on consumer expenditure and NCAER's Income – Expenditure Survey 2004-05. At a number of places, all India coefficients based on the 2007-08 Input-Output Table have been used. This is the first SAM constructed for any state in India.

The impact of Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) on producing sectors of SAM and different categories of households have been estimated through the multipliers generated by this SAM. The multipliers estimated are output, value added, household income and employment multipliers.

MNREGA refers to the world's largest welfare program, run by the Government of India. It is a job guarantee scheme for rural Indians. It was enacted by legislation on 25 August 2005. It aims at enhancing the livelihood security of people in rural areas by guaranteeing hundred days of wage-employment in a financial year to a rural household whose adult members volunteer to do unskilled manual work.

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Introduction

A Social Accounting Matrix (SAM) is a single entry accounting representation of all transactions and transfers between different sectors, factors of production and institutions of the economy in a single framework. Each row of the SAM represents receipts of an account while each column stands for the expenditure. SAM is an extension of Input-Output (I-O) table. In I-O table final consumption expenditure, capital formation and trade are shown by product or industry of origin and intermediate consumption both by product or industry of origin and destination. Income generation is given by value added.

SAM in addition gives the inter-relationship between income distribution and final expenditure. Production of goods & services requires inputs and factors of production, viz. labour and capital. Inputs are made available as intermediate products from other sectors or same sector itself. The factors of production are contributed by the institutions (viz. households, firms and government). Institutions receive factors' payment as value added. The other sources of income of institutions are transfer payment from the government and remittances from rest of the world. Income, thus earned, is spent as the consumption expenditure on goods & services, paid to the government as taxes and the rest is saved. The demand of goods and services and factors of production is harmonized by imports. The saving is used as investment.

The basic structure of SAM is based on the following transactions and transfers in the economy. Production requires intermediate goods and the primary factors of production, viz. labour and capital. These factor endowments are contributed by the institutions (viz. households, firms and government), who in turn, receive factor payment as value added. Apart from value added, institutions get income from other sources such as transfers from the government and from rest of the world. Income is spent as the consumption expenditure on goods and services and for payment of taxes and the rest is saved for the future. Total supply in the economy has to be matched by the demand made by the institutions and capital formation, i.e. purchase of investment goods. In the SAM, extra breakdown of the household sector is done to reflect the role of people in the economy.

SAM for India

The construction of SAM for India was initiated in the early 1980's. Sarkar and Suliarao constructed the first SAM (1981). Since then, a number of SAMs have been constructed

for the Indian economy. The first detailed SAM for India was constructed for 1994-95 (60 sectors, two factors of production, six categories of occupational households, (separately for rural & urban), updated up to 1997-98 and to 2002-03. (See Pradhan et al 2006) SAM for 2003-04 consisting of 73 production sectors, two factors of production, and five household classes by expenditure level separately for rural and urban, was constructed for the Planning Commission (Saluja and Yadav 2006).

For 2007-08, a SAM consisting of 78 sectors, two factors of production (viz. labour and capital), nine household categories based on occupation and seven economic agents viz. households, private corporations, public enterprises, government, indirect taxes, investment (i.e. capital account) and rest of the world. This SAM has been constructed for the Planning Commission. (Pradhan et al 2013)

No SAM has been constructed at state level, although regional SAMs were constructed at IDF for 2003-04 for the Finance Commission. This is for the first time that a SAM for AP is being constructed.

Construction of SAM for AP for 2007-08

The schematic structure² of the SAM under the study has five major accounts: production, factors, institutions, capital, and rest of the world (ROW) accounts. The SAM has been disaggregated into 73 sectors (for concordance with I-O table 2007-08, see Table A1; Appendix), two factors of production (i.e. labour, capital), and seven economic agents—households, private corporations, public enterprises, government, indirect taxes, investment (i.e. capital account), and ROW. An attempt has been made to categorise households by occupation (i.e. principal source of income). Households have been decomposed into nine groups (i.e. five for rural and four for urban)

In the following section the details regarding methodology and data sources for construction of I-O table are given. Next section gives the methodology and data sources for building other blocks of SAM like the division of GVA into wage and non wage income, PFCE and personal income by economic categories of households. The SAM is given in Appendix Table A4.

Compilation of Input-Output Table

The required data for construction of I-O table are - sector wise values of output, input structure, estimates of sector wise consumption of various components of final demands.

² See Pradhan et al. 2006 for a detailed discussion on schematic structure.

Producing sectors

Agriculture

Crop wise values of output, along with those of by products are supplied by the Department of Economics and Statistics (DES) AP. For all India I-O table grain milling is included along with crops. For AP, however, we have taken grain milling as a separate sector under manufacturing. From CSO we could get the input structure excluding milling. We have used the all- India input structure to get the structure for AP. To get the GVA from crop husbandry the DES has given the total value of output of agriculture and the values of different inputs consumed. The total inputs incase of seed, fertilizers, organic manure, electricity, pesticides and diesel oil obtained by making use of all India coefficients are pro rata adjusted so as to get the values consistent with those given by the DES. DES, while taking the inputs does not consider the cost of feed as input. The reason for this is not known. Like in all India tables, we have taken the cost of animal services as inputs to various sectors under agriculture. In annual husbandry this is taken as an additional sector.

Other primary sectors

For animal husbandry sector the product wise values of output and also the GVA are available. The difference is allocated by making use of all India coefficients of inputs. The value of output of animal services is equal to the total of inputs of all the sectors under agriculture. The GVA of the sector is taken as zero. For forestry and fishery, the GVA and the values of output are made available by the DES. All India input structure is used. In case of mining, the values of output of different minerals are available for the state. All –India input structures of different minerals have been used to get their value added estimates. Pro rata adjustments are made in the structure to get the value added estimates given by the DES.

Manufacturing industries

Manufacturing industries are divided into registered and unregistered manufacturing. For registered manufacturing the details regarding gross value added (GVA), value of output, number of persons employed and emoluments received etc. are supplied to us by the DES, AP. These details have been utilized to get the GVA and values of output for different sectors, which are part of the SAM. These values are consistent with the values used for estimates of GVA from the registered sector, and also consistent with the values in the Annual Survey of Industries.

For unregistered manufacturing DES has given the GVA at 2-digit level of industrial classification. The estimates given by the DES have some limitations. The detailed estimates are prepared only for the year 2004-05 and for later years, these are worked out by using index numbers of industrial productions and wholesale price indices at 2 – digit

level. Values given by DES have been disaggregated at 3 and more digit level of classification by making use of proportions based on the unit level data of NSSO for the year 2005-06. GVA to output ratios are based on the NSSO estimates for the year 2005-06.

The estimates of GVA at 2-digit level given by the DES are significantly different from those of NSSO survey for 2005-06. These estimates obtained are adjusted to get the values consistent with those given by the DES. Sector wise Value of Output as well as GVA for registered as well as unregistered manufacturing are given in the table A2 (See Appendix).

Unregistered sector forms 24% of GVA and 20% of the value of output. The detailed inputs are not available. Also we don't have sector wise trade and transport margins and indirect taxes. We have therefore no option except to use the input structure based on the All- Input-Output table for the year 2007-08. This will create some margin of error in the inputs because of different components of products in sectors and different technology used in a state than the average coefficients for the entire country.

Electricity

The production of electricity as obtained by using corresponding ratio of GDP of AP to all –India is much more than its consumption (Rs 2071686 lakhs). If on the other hand the production is obtained as a ratio of physical output for all India and AP, the value of output is around 1030811 lakhs.

In the distribution of power, the production is given separately for Thermal, Hydro and Nuclear. There is a big proportion of power under Central Authorities. Its distribution among 3 major components is not given. For this sector, as a last resort, the output has been taken as equal to the distribution of power among various sectors and various components of final demand.

Other sectors

GVA estimates for all the sectors are made available by the DES. The all India input structures are used to get the structures for the state. We tried to use the NSSO survey on unincorporated non- agricultural enterprises conducted for the year 2010-11, for getting the GVA as well as values of output and also the input structure. The estimates of GVA obtained from the survey and those given by the DES are given in the table A3 (See Appendix) for different services sectors. For some services the DES has given the estimates for public, private organized and unorganized separately. For these sectors, GVA estimates, based on the survey are given against estimates for the unorganized part given the DES. There are wide differences between the estimates given by the two sources. Hence, we have used the GVA estimates from the DES and since we could not

get the reliable estimates of values of output and input structure from these data, we have used all- India structure.

Estimates of trade and also of hotels can be directly compared. DES estimate of trade in the unorganized part is 80% more than the estimate given by the NSSO. In the case of hotels, the DES estimate is more than 3 times that of NSSO estimate. For computer consultancy services the estimate given by the NSSO forms a small part of the GVA given by the DES. For ownership of dwellings NSSO has not given any estimate. For other service sectors also the estimates given by the NSSO may be on the same lines.

Final demand

Private Final Consumption Expenditure (PFCE)

NSSO survey data on consumption expenditure for 2009-10 is used to get the estimates for the state. Sector-wise estimates of expenditure are prepared for AP and all India. Sector-wise estimates of AP are divided by the corresponding all India estimates and multiplied with the all India sector wise estimates available from the I-O table 2007-08, to get the PFCE estimates at factor cost. It is known that the estimates from the NSSO are different from the estimates given by the NAS. By using this method it is assumed that the differences are of the same proportions for different sectors over states. The sector wise estimates thus obtained for AP are divided into different sections of population by making use of proportions of expenditure obtained from the NSSO.

Government Final Consumption Expenditure (GFCE)

The estimate of public administration for AP as percentage of the same for all India is applied to GFCE given in the all-India I-O table 2007-08. All India Structure is used. Although GFCE by state government and local bodies is available, this is not used because the expenditure done by the central government in the state is not available.

Gross Fixed Capital Formation (GFCF)

The estimate of GFCF is made available by the DES for different absorbing sectors of the economy. The distribution is unfortunately not available by type of assets. For construction sector the estimate is obtained by subtracting the total of all other uses from the value of output. For the remaining sectors namely increment to livestock, machinery and transport equipment, the all India structure is used. The errors introduced in GFCF are because of:

- (i) Using all – India ratio of GVA to value of output in construction and thus introducing error in the GFCF under construction and
- (ii) By using all- India structure for the remaining capital producing sectors.

Exports and Imports

For a sector when demand is more than supply, the net difference is taken as imports. If the supply is more than demand, the net difference is taken as exports. In the case of state the value of imports is equal to the value of items under each sector coming into the state and for exports; it is the value of items going out of the state. In a sector, there may be exports of some items and imports of some others. Since this data is not available at state level, there is no option but to treat the exports or imports net at a sector level. Change in inventories (CIS) is not taken into account. Trade along with CIS are the weakest part of the I-O table. DGCIS has started some work in the direction of getting some data on trade, but still no reliable data are yet available. RITES did a survey on goods transport by road for the year 2006-07, but that data has a number of problems like quantity of cars given in terms of tones.

Extension of I-O to SAM

This sections deals with the methodology and data sources for building other blocks of SAM.

1. Division of GVA into wage and non wage income

a) Agriculture and Allied activities. For different crops under agriculture, cost of cultivation studies (CCS) have been utilized to divide the GVA into wage and land and other non wage income. For crops, where CCS are not available, the average of other main crops has been used. CCS give the data of the wages to the hired labour as well as cost of the family labour. The wage estimates given in the SAM are, therefore, inclusive of the wages of the family labour.

b) For manufacturing industries, ASI gives the estimates of total emoluments and GVA from the registered sector. In case of unregistered sector we could not get similar data. The ratios of registered sector are used for unregistered sector also to get the wage and non wage income.

c) For other sectors the ratios of all India level are used.

2. Distribution of sector wise consumption expenditure by occupational categories of households

The total PFCE has been divided into the following nine categories of households by occupation level. Sector wise distribution of the total PFCE into PFCE by occupations is done by making use of the proportions of the sector wise expenditure by occupations, based on the NSSO survey on Consumption Expenditure for the year, 2009-10.

Table 1: Household categories based on occupation

RURAL		URBAN	
RH1	Non-agricultural Self Employed	UH1	Self Employed
RH2	Agricultural Labour	UH2	Salaried Class
RH3	Non-agricultural Labour	UH3	Casual labour
RH4	Agricultural Self Employed	UH4	Other Households
RH5	Other Households		

3. Distribution of household income by source of income

National Council of Applied Economic Research (NCAER) has conducted a survey on household income and expenditure for the year 2004-05. This survey is used to get the income expenditure ratios for all occupational categories separately for rural and urban areas.

The household income from rest of the world and government (i.e. transfer payments) as obtained from NAS 2011 has been first obtained for the entire state by assuming the proportions for the state based on the proportions of population. The total thus obtained is divided into various sections of the population in proportion to their population. This is a rough way of dividing the income. This distribution may not affect the utility of SAM, as the income sent by people from outside the state is not taken into account, because of non-availability of data. This is taken just to symbolically show that such source of income exists.

Capital Account

The capital account corresponds to the overall balancing of saving and investment. Net savings include savings by households, the private corporate sector, the public non-departmental enterprises, the government, and the ROW. Net savings plus depreciation equal gross domestic capital formation. The savings of different categories of households has been derived by subtracting their consumption and direct taxes from their total personal income. The retained earnings of the private corporate sector and the non-departmental public enterprises have been treated as their savings. For the government, the difference between revenue and current expenditure has been taken as its saving. Savings from outside the state meet the difference between gross domestic capital formation and gross domestic savings.

Problems with Construction of SAM

Private corporate sector transactions may be spread over states. In the public sector, some enterprises may have some percentage share of partnership along with private sector. The share of public enterprises, private corporate sector and government are based on certain assumptions and hence may not be accurate.

At a number of places all – India structure had to be applied because of non- availability of data at state level or our inability to do detailed studies at state level. For example, trade and transport margins are not available at state level and not available to us even all India.

For a number of sectors there are problems with the estimates, e.g. in case of maize the value of output is Rs. 2779 crore while the consumption in the state is only Rs. 460 crore. The output of transport equipment is Rs. 2316 crore while the requirement is Rs. 16316 crore. This may be the actual state or due to data problems.

The production of Air Transport sector as obtained by using GVA ratio of AP to all – India is much less than its consumption. Due to this reason Air transport sector's import is shown as coming from other states.

In Other services there is huge figure of exports. At all-India level also the estimate of exports is about 50% of the value of output.

State being an open economy, there is a problem of persons going out of the state and sending incomes to persons in the state and vice versa . No account of those can be taken under the present circumstances. Also no reliable data are available regarding values of items going out of the state and those coming into the state.

In the case of GVA and values of output of registered manufacturing sector, we had estimates of GVA and value of output supplied by the DES and those given in the published report of ASI by the DES for 2007-08. In some cases there are wide differences in the values given by the two sources e.g. GVA estimate given by the DES in case of coal tar products is Rs. 3682 lakhs while according to published ASI Report the value is Rs. 8786 lakhs.

As this is the first attempt to construct a SAM for a state, there are bound to be shortcomings which can be slowly removed or reduced.

Applications of SAM

Inspite of the short comings and data problems the constructed, a SAM is very useful and can be applied, as examples, in the following cases:

- (i) Impact of drought/slowdown on the economy in terms of loss of employment and in the revenue earned by the government.
- (ii) Impact of MNREGA and other social security schemes on different sectors of the economy and of different sections of the people.

(iii) Impact of changes in various other policy instruments.

The impact in these cases can be studied by use of output, income and employment multipliers.

Impact Analysis of MNREGA through SAM Multiplier

Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA): It refers to the world's largest welfare program, run by the Government of India. It is a job guarantee scheme for rural Indians. It was enacted by legislation on 25 August 2005. It aims at enhancing the livelihood security of people in rural areas by guaranteeing hundred days of wage-employment in a financial year to a rural household whose adult members volunteer to do unskilled manual work.

SAM Multiplier

The concept of SAM may be represented in matrix form as

$$X = Z + E \quad \dots (1)$$

Where, X is total output, Z is endogenous demand and E is exogenous demand. Since, endogenous demand is proportionally related to total output, therefore, equation (1) may be written as

$$X = MX + E \quad \dots (2)$$

Where, M represents coefficient matrix. The equation (2) may be rewritten as

$$X = (I-M)^{-1}E \quad \dots (3)$$

In equation (3), $(I-M)^{-1}$ represents SAM multiplier. The size of the multiplier depends upon number of accounts in the SAM considered as exogenous vector. The lesser the number of accounts considered as exogenous vector, the higher is the value of SAM multiplier and vice-versa. It also implies that the higher the number of accounts considered as endogenous vector, the higher is the value of SAM multiplier.

In the present study, government, indirect taxes, capital account and rest of the world have been assumed exogenous vectors.

Measurement of SAM Multiplier Effect

In an economy, any change due to the exogenous sectors has impact on the interlinked production sectors, factors and institutions. The impact may be direct, indirect or induced. The SAM multiplier effect measures the increment in the output vector X due to the change in exogenous demand. The increment in production account is termed as output effect; and the increment in households and corporate accounts is termed as income

effect. Thus, the income effect comprises of households' income effect and corporate income effect. The employment effect is obtained by multiplying output effect and employment coefficients.

The direct income effect has been measured as the amount determined by government to spend as wages and transfer payment given to households. The indirect income effect has been measured as difference of total income effect and direct income effect. The direct output effect has been measured as expenditure made by households on different commodities, expenditure on construction materials and government expenditure on different commodities as administration cost due to direct income effect. The indirect output effect has been measured as difference of total output effect and direct output effect. The direct, indirect and total employment effects have been measured as multiplication of employment coefficient with direct, indirect and total output effects respectively.

Distribution of Expenditure on MNREGA in 2011-12 in the SAM Framework

In Andhra Pradesh, Rs. 4180.14 crore has been spent under MNREGA in 2011-12 in which Rs. 864.58 crore, Rs. 2818.08 crore and Rs. 497.48 crore have been spent on construction materials, wages and administration respectively. For multiplier analysis, these expenditures have been distributed in the SAM framework. The expenditure on construction materials in MNREGA has been distributed according to the technical coefficients of materials used in the construction sector. Since, MNREGA aims to provide employment to rural unskilled labourers, the expenditure as wage has been divided in proportion to the labourer's income of rural agricultural labourers (RH2) and rural non-agricultural labourers (RH3). The expenditure on administration has been distributed according to the proportional expenditure by government on different sectors.

Impact on Output

The findings show that the total impact on increment in output due to expenses under MNREGA is Rs. 10515.76 crore (see Table 2). The increment in output of primary, secondary and tertiary sectors are Rs. 2522.87 crore, Rs. 3629.10 crore and Rs. 4363.79 crore respectively. The direct output effects for primary, secondary and tertiary sectors are 17.65 percent, 35.84 percent and 46.51 percent of total direct output effect respectively. The indirect output effects for primary, secondary and tertiary sectors are 27.06 percent, 33.87 percent and 39.07 percent of total indirect output effect respectively. It indicates that the MNREGA has highest impact on the output of tertiary sectors followed by secondary sectors. It infers that people spend more on products Among tertiary sectors highest increment in output has been observed for trade and hotels (i.e. 11.98 percent) followed by land transport including via pipeline (i.e. 5.88 percent). Among secondary sectors highest increment in output has been observed for grain milling

(i.e. 4.31 percent) followed by petroleum products (i.e. 4.16 percent). Among secondary sectors highest increment in output has been observed for livestock (i.e. 4.66 percent) followed by fruits and vegetable (i.e. 3.50 percent).

Table 2: Output Effect (in Rs. Crore)

S. No.	Sector	Output Effect in Value			Output Effect in Percentage		
		Direct	Indirect	Total	Direct	Indirect	Total
1	Paddy	2.12	293.73	295.85	0.06	4.14	2.81
2	other cereals	23.91	45.58	69.48	0.70	0.64	0.66
3	Maize	0.37	7.07	7.44	0.01	0.10	0.07
4	gram+pulses	48.45	89.83	138.28	1.41	1.27	1.31
5	Sugarcane	0.35	61.58	61.93	0.01	0.87	0.59
6	Groundnut	9.04	64.31	73.35	0.26	0.91	0.70
7	Other oilseeds	13.67	50.68	64.35	0.40	0.71	0.61
8	Cotton	0.00	23.45	23.45	0.00	0.33	0.22
9	Tobacco	0.34	3.75	4.09	0.01	0.05	0.04
10	fruits+veg	140.75	227.57	368.32	4.11	3.21	3.50
11	Other crops	49.09	183.75	232.84	1.43	2.59	2.21
12	Animal services (agricultural)	0.00	48.78	48.78	0.00	0.69	0.46
13	Livestock	204.48	285.51	489.99	5.97	4.03	4.66
14	Forestry and logging	58.10	69.96	128.06	1.70	0.99	1.22
15	Fishing	41.08	61.31	102.39	1.20	0.86	0.97
16	Coal and lignite	0.78	36.82	37.61	0.02	0.52	0.36
17	Natural gas	0.55	27.09	27.64	0.02	0.38	0.26
18	Crude petroleum	0.00	317.91	317.91	0.00	4.48	3.02
19	Iron ore	0.01	5.24	5.25	0.00	0.07	0.05
20	other minerals	11.92	13.94	25.86	0.35	0.20	0.25
	Primary Sectors	605.01	1917.86	2522.87	17.65	27.06	23.99
21	Sugar	26.91	50.68	77.59	0.79	0.71	0.74
22	veg & animal oils	47.70	125.33	173.03	1.39	1.77	1.65
23	Tea and coffee processing	6.84	9.63	16.47	0.20	0.14	0.16
24	Miscellaneous food products	151.54	227.79	379.33	4.42	3.21	3.61
25	grain milling	204.98	248.49	453.47	5.98	3.51	4.31
26	Beverages	53.18	60.87	114.05	1.55	0.86	1.08
27	Tobacco products	24.86	32.33	57.19	0.73	0.46	0.54
28	Textiles	65.17	102.89	168.06	1.90	1.45	1.60
29	wearing apparel	57.14	89.09	146.22	1.67	1.26	1.39
30	Wood and wood products	26.59	37.04	63.63	0.78	0.52	0.61
31	paper & printing	37.73	104.64	142.36	1.10	1.48	1.35
32	Leather	10.22	17.13	27.35	0.30	0.24	0.26
33	Rubber products	2.01	21.24	23.25	0.06	0.30	0.22
34	Plastic products	11.56	48.87	60.43	0.34	0.69	0.57
35	Petroleum products	102.80	335.00	437.79	3.00	4.73	4.16
36	Coal tar products	11.63	6.27	17.90	0.34	0.09	0.17
37	Fertilizers	0.32	101.77	102.08	0.01	1.44	0.97

S. No.	Sector	Output Effect in Value			Output Effect in Percentage		
		Direct	Indirect	Total	Direct	Indirect	Total
38	Pesticides	0.07	7.83	7.90	0.00	0.11	0.08
39	Chemicals	76.02	241.50	317.52	2.22	3.41	3.02
40	Cement	38.61	12.95	51.56	1.13	0.18	0.49
41	Other non-metallic mineral prods.	29.01	19.54	48.55	0.85	0.28	0.46
42	iron & steel	85.09	86.27	171.36	2.48	1.22	1.63
43	Non-ferrous basic metals	0.05	40.43	40.48	0.00	0.57	0.38
44	metal products	32.77	44.89	77.66	0.96	0.63	0.74
45	non electrical machinery	9.57	52.56	62.13	0.28	0.74	0.59
46	Electrical industrial Machinery	0.00	6.26	6.26	0.00	0.09	0.06
47	Electrical wires & cables	6.94	4.20	11.15	0.20	0.06	0.11
48	Batteries	0.57	4.30	4.87	0.02	0.06	0.05
49	Electrical appliances	7.22	10.41	17.63	0.21	0.15	0.17
50	Communication equipments	23.48	56.21	79.69	0.69	0.79	0.76
51	Other electrical Machinery	0.01	14.03	14.04	0.00	0.20	0.13
52	Electronic equipments(incl.TV)	10.94	24.08	35.02	0.32	0.34	0.33
53	transport equipment	46.50	101.40	147.90	1.36	1.43	1.41
54	Jems & jewellery	7.51	18.07	25.58	0.22	0.25	0.24
55	Miscellaneous	12.66	36.93	49.59	0.37	0.52	0.47
	Secondary Sectors	1228.20	2400.90	3629.10	35.84	33.87	34.51
56	Construction	118.02	118.50	236.52	3.44	1.67	2.25
57	Electricity	56.48	154.21	210.68	1.65	2.18	2.00
58	Water supply	4.85	5.60	10.45	0.14	0.08	0.10
59	Railway transport services	17.36	39.85	57.21	0.51	0.56	0.54
60	Land tpt including via pipeline	186.49	432.07	618.56	5.44	6.10	5.88
61	Water transport	6.92	15.19	22.11	0.20	0.21	0.21
62	Air transport	8.62	19.78	28.40	0.25	0.28	0.27
63	Supporting and aux. tpt activities	10.01	23.31	33.32	0.29	0.33	0.32
64	Storage and warehousing	0.16	4.92	5.08	0.00	0.07	0.05
65	Communication	25.35	63.67	89.02	0.74	0.90	0.85
66	trade+hotels	326.41	933.27	1259.68	9.52	13.17	11.98
67	banking+insurance	63.16	214.43	277.60	1.84	3.03	2.64
68	Ownership of dwellings	195.98	311.81	507.78	5.72	4.40	4.83
69	Education and research	151.45	131.34	282.79	4.42	1.85	2.69
70	Medical and health	67.99	83.49	151.47	1.98	1.18	1.44
71	Computer services	0.07	9.55	9.62	0.00	0.13	0.09
72	Other services	160.79	208.84	369.63	4.69	2.95	3.52
73	Public administration	193.86	0.00	193.86	5.66	0.00	1.84
	Tertiary Sectors	1593.97	2769.83	4363.79	46.51	39.07	41.50
	Total Output	3427.17	7088.59	10515.76	100.00	100.00	100.00

Households' Income Effect

The total households' income effect due to MNREGA is Rs. 6906.05 crore. The direct and indirect households' income effects are Rs. 2818.08 crore and Rs. 4087.97 crore respectively. It indicates that the indirect income effect is higher than that of direct income effect. The direct income effect has been observed only for Rural Agricultural Labour (i.e. 73.41 percent) and Rural Non-agricultural Labour (i.e. 26.59 percent). However, the total income effect of rural households (i.e. 77.71 percent) is higher than that of urban households (i.e. 22.29 percent). Among the all households, the highest income effect has reached to Rural Agricultural Labour (i.e. 41.14 percent) followed by Rural Non-agricultural Labour (i.e. 15.15 percent). It indicates that due to MNREGA the impact due to MNREGA is higher for rural households than that of urban households in terms of income effect.

Table 2: Households' Income Effect (in Rs. Crore)

Household Category	Direct	Indirect	Total
Rural Non-agricultural Self Employed	0.00 (0.00)	438.64 (10.73)	438.64 (6.35)
Rural Agricultural Labour	2068.62 (73.41)	772.22 (18.89)	2840.84 (41.14)
Rural Non-agricultural Labour	749.46 (26.59)	297.10 (7.27)	1046.56 (15.15)
Rural Agricultural Self Employed	0.00 (0.00)	714.55 (17.48)	714.55 (10.35)
Rural Other Households	0.00 (0.00)	326.07 (7.98)	326.07 (4.72)
Rural	2818.08 (100.00)	2548.58 (62.34)	5366.66 (77.71)
Urban Self Employed	0.00 (0.00)	513.24 (12.55)	513.24 (7.43)
Urban Salaried Class	0.00 (0.00)	755.11 (18.47)	755.11 (10.93)
Urban Casual labour	0.00 (0.00)	146.53 (3.58)	146.53 (2.12)
Urban Other Households	0.00 (0.00)	124.51 (3.05)	124.51 (1.80)
Urban	0.00 (0.00)	1539.38 (37.66)	1539.38 (22.29)
Total	2818.08 (100.00)	4087.97 (100.00)	6906.05 (100.00)

Note: Values in parenthesis are percentage of the respective total.

Revenue Effect

The expenditure on MNREGA by government has impact on its revenue also. It has been observed that there is collection of taxes of Rs. 580.80 crore (See Table 3). Moreover, the revenue collection through direct taxes (i.e. 71.19 percent) is higher than indirect taxes (i.e. 28.81 percent). It indicates that the expenditure through these programmes has significant impact on the income of income tax paying class.

Table 3: Revenue Effect (in Rs. Crore)

	Taxes
	413.47
Direct Taxes	(71.19)
	167.32
Indirect Taxes	(28.81)
	580.80
Total Revenue	(100.00)

Note: Values in parenthesis are percentage of total revenue.

Employment Effect

The employment effect of multipliers has been measured in terms number of people get job due to multiplier effect and has been obtained by multiplication of sector-wise employment coefficient³ and output increment. The increase in employment due to expenditure through MNREGA is 4349 hundreds (See Table 4).

Table 4: Employment Effect

S. No.	Sectors	Employment	
		Value (in Hundreds)	Percentage of Total
1	Paddy	1032	23.74
2	other cereals	362	8.32
3	Maize	50	1.15
4	gram+pulses	714	16.42
5	Sugarcane	69	1.58
6	Groundnut	43	0.99
7	Other oilseeds	83	1.92
8	Cotton	60	1.39
9	Tobacco	34	0.79
10	fruits+veg	61	1.41
11	Other crops	47	1.07
12	Animal services(agricultural)	24	0.54
13	livestock	238	5.47
14	Forestry and logging	7	0.17
15	Fishing	27	0.63
16	Coal and lignite	4	0.10
17	Natural gas	0	0.01
18	Crude petroleum	4	0.09
19	Iron ore	0	0.01
20	other minerals	8	0.18
	Primary Sectors	2869	65.98
21	sugar	3	0.07

³ Employment coefficients for all India have used here due to unavailability of data for Andhra Pradesh. The coefficients for all India have been estimated on the basis of data from NSSO and ASI.

S. No.	Sectors	Employment	
		Value (in Hundreds)	Percentage of Total
22	veg & animal oils	5	0.10
23	Tea and coffee processing	2	0.04
24	Miscellaneous food products	51	1.17
25	grain milling	61	1.40
26	Beverages	9	0.22
27	Tobacco products	66	1.53
28	textiles	34	0.78
29	wearing apparel	92	2.11
30	Wood and wood products	33	0.76
31	paper & printing	22	0.50
32	leather	6	0.15
33	Rubber products	1	0.02
34	Plastic products	3	0.08
35	Petroleum products	1	0.03
36	Coal tar products	0	0.00
37	Fertilizers	2	0.04
38	Pesticides	0	0.01
39	chemicals	13	0.30
40	Cement	2	0.04
41	Other non-metallic mineral prods.	17	0.39
42	iron & steel	7	0.17
43	Non-ferrous basic metals	2	0.04
44	metal products	5	0.12
45	non electrical machinery	3	0.07
46	Electrical industrial Machinery	1	0.01
47	Electrical wires & cables	1	0.02
48	Batteries	0	0.01
49	Electrical appliances	2	0.04
50	Communication equipments	7	0.17
51	Other electrical Machinery	1	0.03
52	Electronic equipments(incl.TV)	3	0.07
53	transport equipment	20	0.47
54	Jems & jewellery	2	0.05
55	Miscellaneous	4	0.10
	Secondary Sectors	484	11.12
56	Construction	72	1.66
57	Electricity	9	0.20
58	Water supply	1	0.03
59	Railway transport services	7	0.16
60	Land tpt including via pipeline	134	3.08
61	Water transport	1	0.02

S. No.	Sectors	Employment	
		Value (in Hundreds)	Percentage of Total
62	Air transport	1	0.02
63	Supporting and aux. tpt activities	4	0.09
64	Storage and warehousing	1	0.03
65	Communication	15	0.34
66	trade+hotels	408	9.37
67	banking+insurance	26	0.60
68	Ownership of dwellings	0	0.00
69	Education and research	118	2.72
70	Medical and health	44	1.00
71	Computer services	3	0.07
72	Other services	119	2.73
73	Public administration	34	0.78
	Tertiary Sectors	996	22.90
	Total	4349	100.00

In general, it has been observed that the employment generation is highest in primary sector (i.e. 65.98 percent) followed by tertiary sector (i.e. 22.90 percent). It may be due to the higher employment coefficient of these sectors. Among primary sectors, the highest employment has been observed in paddy (i.e. 23.74 percent) and grams and pulses (i.e. i.e. 16.42 percent). Among secondary sectors, the highest employment has been observed in wearing apparel (i.e. 2.11 percent) and Tobacco products (i.e. i.e. 1.53 percent). Among tertiary sectors, the highest employment has been observed in trade and hotels (i.e. 9.37 percent) and Land transport including via pipeline (i.e. i.e. 3.08 percent). It may be inferred that these sectors are highly employment generating sectors.

Conclusion

The present exercise, which is first in its kind, has tried to construct a SAM for the state of A.P. for the year 2007-08. It consists of 73 producing sectors, two factors of production and nine categories of households, based on occupation and location (i.e. rural and urban). The main data sources used have been provided by the Directorate of Economics and Statistics of A.P. In addition, the sources are: NSSO's 66th round survey on consumer expenditure and NCAER's Income – Expenditure Survey 2004-05. At a number of places, all India coefficients based on the 2007-08 Input-Output Table have been used. The SAM for Andhra Pradesh has been shown in appendix (see Table A4).

For policy analysis, SAM multiplier analysis has been studied for the MNREGA. It has been observed that MNREGA has significant impact on the highest impact on the output of tertiary sectors followed by secondary sectors. The income effect due to MNREGA is higher for rural households than that of urban households. A significant impact on the

revenue of government and on the employment generation has also been observed due to this programme. It may be concluded that the total impact of MNREGA on the economy is many times higher than the amount of expenditure spending through this programme.

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Appendix

Table A1: The list of Sector concordance with CSO I-O Table

S. No.	Sectors in SAM for Andhra Pradesh	Sectors Numbers of all India I-O (2007-08)
S1	Paddy	1
S2	other cereals	2+3+4
S3	Maize	5
S4	gram pulses	6+7
S5	Sugarcane	8
S6	Groundnut	9
S7	Other oilseeds	11
S8	Cotton	13
S9	Tobacco	17
S10	fruits+veg	18+19
S11	Other crops	10+12+14+15+16+20
S12	livestock	21+23+24
S13	Animal services(agricultural)	22
S14	Forestry and logging	25
S15	Fishing	26
S16	Coal and lignite	27
S17	Natural gas	28
S18	Crude petroleum	29
S19	Iron ore	30
S20	other minerals	31-37
S21	sugar	38+39
S22	veg & animal oils	40+41
S23	Tea and coffee processing	42
S24	Miscellaneous food products	43
S25	grain milling	
S26	Beverages	44
S27	Tobacco products	45
S28	textiles	46-51
S29	wearing apparel	52+53+54
S30	Wood and wood products	55+56
S31	paper & printing	57+58
S32	leather	59+60
S33	Rubber products	61
S34	Plastic products	62
S35	Petroleum products	63
S36	Coal tar products	64
S37	Fertilizers	67
S38	Pesticides	68
S39	chemicals	65+66+(69-74)

S. No.	Sectors in SAM for Andhra Pradesh	Sectors Numbers of all India I-O (2007-08)
S40	Cement	75
S41	Other non-metallic mineral prods.	76
S42	iron & steel	77+78+79
S43	Non-ferrous basic metals	80
S44	metal products	81+82
S45	non electrical machinery	83-87
S46	Electrical industrial Machinery	88
S47	Electrical wires & cables	89
S48	Batteries	90
S49	Electrical appliances	91
S50	Communication equipments	92
S51	Other electrical Machinery	93
S52	Electronic equipments(incl.TV)	94
S53	transport equipment	95-100
S54	Watches and clocks	101
S55	Jems & jewellery	103
S56	other manufacturing	102+104+105
S57	Construction	106
S58	Electricity	107
S59	Water supply	108
S60	Railway transport services	109
S61	Land tpt including via pipeline	110
S62	Water transport	111
S63	Air transport	112
S64	Supporting and aux. tpt activities	113
S65	Storage and warehousing	114
S66	Communication	115
S67	trade+hotels	116+117
S68	banking+insurance	118+119
S69	Ownership of dwellings	120
S70	Education and research	121
S71	Medical and health	122
S72	Other services	123-129
S73	Public administration	130

Table A2: Sector wise Estimates of GVA and Value of Output for Registered and Unregistered Manufacturing Sectors

Sec. No.	Sector Name	REGISTERED		UNREGISTERED		TOTAL	
		GVA	OUTPUT	GVA	OUTPUT	GVA	OUTPUT
25	sugar	19561	255861	80632	367601	100193	623462
26	veg & animal oils	47405	697230	4935	33547	52340	730777
27	Tea and coffee processing	9634	75614	0	0	9634	75614
28	grain milling	124616	1672737	124625	687030	249241	2359767
29	Miscellaneous food products	91978	951741	86847	640962	178825	1592703
30	Beverages	38445	202560	9970	33441	48415	236001
31	Tobacco products	104715	334425	85796	156575	190511	491000
32	textiles	138950	609089	104878	257313	243828	866402
33	wearing apparel	6398	33284	57691	148125	64089	181409
34	Wood and wood products	9572	60706	87021	205984	96593	266690
35	paper & printing	156430	553963	83558	337985	239988	891948
36	Leather and leather products	3160	22266	11426	30260	14586	52526
37	Rubber products	98040	211209	1846	10413	99886	221622
38	Plastic products	33061	288506	38507	217205	71568	505711
39	Petroleum products	269356	2705667	0	0	269356	2705667
40	Coal tar products	3682	19698	0	0	3682	19698
41	Fertilizers	80876	483434	0	0	80876	483434
42	Pesticides	31487	129094	0	0	31487	129094
43	Other chemicals	406542	1463100	21874	98043	428416	1561143
44	Cement	509660	960236	1457	3918	511117	964154
45	Other non-metallic mineral prods.	174581	588667	111583	290971	286164	879638
46	iron & steel	630608	2215757	3725	26912	634333	2242669
47	Non-ferrous metals	39670	97414	6784	49014	46454	146428
48	metal products	98719	721983	121485	482087	220204	1204070
49	non electrical machinery	115624	454098	6587	26139	122211	480237
50	Electrical industrial Machinery	91664	538192	2955	10582	94619	548774
51	Electrical wires & cables	9182	81926	938	8604	10120	90530
52	Batteries	57279	238720	229	835	57508	239555
53	Electrical appliances	118	1032	238	2671	356	3703
54	Communication equipment	15408	260659	0	0	15408	260659
55	Other electrical Machinery	5712	32378	2989	14743	8701	47121
56	Electronic equipments(incl.TV)	56917	131888	13035	47259	69952	179147
57	transport equipment	50136	222930	2470	8703	52606	231633
58	Jems & jewellery	2622	24817	27166	65500	29788	90317
59	other manufacturing	16138	188581	9130	119910	25268	308491
	Total	3529186	17316064	1110377	4382332	4658323	21911794

**Table A3: GVA Estimates of Service Sectors from DES and NSSO Survey 2010-11
(in Rs. Lakhs)**

code	Names of the sector		DES* (GVA)	NSSO (GVA)
64	Railways		567560	
		mechanised transport	2412653	
		public part	255774	
		private part	2156879	
		non-mechanised transport	182561	
65	Land tpt including via pipeline		5007867	558000
66	Water transport		187524	85
67	Air transport		90681	0
68	Supporting and aux. tpt activities		134083	21240
69	Storage and warehousing		28523	893
70	Communication		984330	46560
		Trade	6157618	
		public	169895	2006400
		private sector	5987723	
		<i>private organised</i>	2371520	
		<i>private unorganised</i>	3616203	
		Hotels	1677402	361536
		public	8293	
		private sector	1669109	
		<i>private organised</i>	493551	
		<i>private unorganised</i>	1175558	
71	trade+hotels		7835020	2388000
72	banking+insurance		2595085	86880
73	Education and research		2681681	474000
74	Medical and health		732967	141600
75	Other services		2317685	319200
77	computer consultancy services		2837527	20880
78	real estate		167118	49320
79	Legal Services		65911	18960
81	Ownership of dwellings		3696036	

*DES: AP

Table A4: Social Accounting Matrix for Andhra Pradesh, 2007-08

(in Rs. lakh)

Sector	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21
S1	51557	0	0	0	0	0	0	0	0	0	0	0	27775	0	0	0	0	0	0	0	139
S2	0	2202	0	0	0	0	0	0	0	0	0	2583	33838	0	0	0	0	0	0	0	715
S3	0	0	2243	0	0	0	0	0	0	0	0	0	16093	0	0	0	0	0	0	0	27
S4	0	0	0	12192	0	0	0	0	0	0	0	7467	29237	0	0	0	0	0	0	0	125
S5	0	0	0	0	8347	0	0	0	0	0	0	0	6394	0	0	0	0	0	0	1	353349
S6	0	0	0	0	0	29772	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
S7	0	0	0	0	0	0	10673	0	0	0	0	0	0	0	0	0	0	0	0	0	35
S8	0	0	0	0	0	0	0	950	0	0	0	0	0	0	0	0	0	0	0	0	0
S9	0	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0
S10	0	0	0	0	0	0	0	0	0	15179	0	0	695	0	0	0	0	0	0	0	1405
S11	0	0	0	0	0	0	0	0	0	0	5717	161479	343940	132	0	0	0	0	0	22	161
S12	107216	3054	26547	28145	3622	34186	15332	37639	1205	15164	26479	0	0	0	0	0	0	0	0	0	37
S13	12490	168	4270	1247	585	4369	1695	3992	26	1444	9344	0	2470	0	0	0	0	0	0	1	416
S14	0	0	0	0	0	0	0	0	0	0	0	0	791	5203	0	0	0	0	0	2	1
S15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26013	0	0	0	0	0	190
S16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6564	0	0	94	84	108
S17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	0	0	23	2
S18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62	0	0	0
S19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0
S20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	239	1
S21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3101
S22	0	0	0	0	0	0	0	0	0	0	0	20113	34742	0	0	0	0	0	0	0	151
S23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
S24	0	0	0	0	0	0	0	0	0	0	0	1160	20038	0	5041	0	0	0	0	158	454
S25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	69
S27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S28	0	0	0	0	0	0	0	0	0	0	0	115	18927	35	10020	0	0	0	0	11	85
S29	117	5	13	9	8	13	11	14	2	18	19	0	0	3102	26335	225	56	39	160	261	162
S30	139	6	15	11	9	16	13	16	2	21	22	0	0	184	564	1304	99	31	130	903	612
S31	376	16	41	30	25	43	36	44	7	57	61	0	0	2509	0	341	19	13	50	288	1405
S32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
S33	8	0	1	1	1	1	1	1	0	1	1	0	0	1782	0	973	119	82	567	2702	0
S34	0	0	0	0	0	0	0	0	0	0	0	0	0	255	0	0	0	0	0	72	777
S35	10990	322	1558	1921	314	1757	592	1174	223	2497	3909	0	0	7904	13494	7346	487	478	2877	14897	9924
S36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0
S37	176150	7367	34220	16411	17342	28631	19419	40109	16540	23574	48070	0	0	166	0	0	0	0	0	0	165
S38	911	17	34	218	33	211	86	663	62	120	10086	0	0	149	0	0	0	0	0	0	26
S39	0	0	0	0	0	0	0	0	0	0	0	807	4316	2	1058	8675	951	414	1868	31394	732

Table A4: Social Accounting Matrix for Andhra Pradesh, 2007-08

(in Rs. lakh)

Sector	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15	S16	S17	S18	S19	S20	S21
S40	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	213	0
S41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	116	0	344	35
S42	0	0	0	0	0	0	0	0	0	0	0	0	0	2	481	0	0	0	0	52	0
S43	0	0	0	0	0	0	0	0	0	0	0	0	0	29	22	0	0	0	0	18	0
S44	0	0	0	0	0	0	0	0	0	0	0	0	0	354	538	2530	332	300	1837	2065	4
S45	625	27	85	85	42	93	71	92	23	2531	4670	0	1813	1987	0	10580	1965	1280	2495	17488	2365
S46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	129
S47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106
S48	2	0	0	0	0	0	0	0	0	0	0	0	0	374	0	0	0	0	0	3	0
S49	46	2	5	4	3	5	4	5	1	7	8	0	0	15	0	4	1	1	3	8	78
S50	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	2	92
S51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	92
S52	158	7	17	13	11	18	15	19	3	24	26	0	0	82	0	73	16	11	45	58	69
S53	278	12	36	34	19	39	30	39	9	854	1568	0	0	3633	32972	3633	197	22	32	892	315
S54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
S55	40	2	4	3	3	5	4	5	1	6	6	0	0	2378	0	42	24	45	23	98	293
S56	9267	400	1060	849	619	1121	925	1154	209	9388	17033	81	862	4210	0	986	790	1082	184	10860	2865
S57	37358	2352	4568	2643	3116	2923	678	4750	790	4456	10324	0	0	529	0	9949	876	263	1399	15622	6083
S58	230	10	25	18	15	26	22	27	4	35	37	0	0	35	0	76	33	23	6	57	1
S59	3288	142	356	260	220	372	315	388	62	498	529	688	1873	766	207	2897	336	230	213	5690	283
S60	2375	102	257	188	159	269	229	280	45	359	384	19298	45657	21215	9949	10011	653	345	1062	13727	5502
S61	475	20	51	38	32	54	44	56	9	72	78	70	645	129	245	231	19	14	30	165	115
S62	11873	511	1285	938	793	1343	1141	1401	225	1797	1922	344	787	18	5	179	42	29	84	159	154
S63	0	0	0	0	0	0	0	0	0	0	0	2139	5142	193	946	1002	210	43	103	780	471
S64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	40	28	17	95	0
S65	294	13	32	23	20	33	28	35	6	44	48	0	0	999	0	475	47	15	199	1471	2226
S66	41145	1773	4462	3260	2748	4671	3960	4855	800	6227	6669	107613	240619	13696	15573	6325	461	342	1189	13298	157160
S67	0	0	0	0	0	0	0	0	0	0	0	0	5968	298	1197	5301	471	284	721	15180	19838
S68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S69	48	2	5	4	3	5	5	6	1	7	8	0	0	0	0	6142	106	79	384	603	0
S70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S71	4	1	2	6	0	8	26	1	0	0	0	0	0	1518	0	41	4	3	119	196	631
S72	676	28	72	48	45	69	39	80	12	103	110	0	0	5698	0	2663	550	385	2525	27850	3069
S73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
labour	563717	24809	95628	131492	73143	208277	76623	124343	38371	577013	282171	0	1051594	245724	493715	142479	14045	10491	29354	275491	4279
capital	651177	32219	107838	170764	94988	270481	99508	161479	49831	749345	366444	0	835559	214523	319077	310149	30574	22838	63897	599689	95914
RH1																					
RH2																					
RH3																					
RH4																					
RH5																					
UH1																					
UH2																					
UH3																					
UH4																					
Pvt. Corp.																					
Pub. Enter.																					
Govt																					
NIT	-95634	-3726	-6830	-8895	-4942	-11181	-3969	-6576	-5134	-3748	-8474	-25369	-60649	5509	3177	10399	740	1232	1985	13357	-53085
Capital A/C																					
ROW		227671		229291	241503		38003			48436	382170	3215		128959			162613	1928608			
Row Total	1587393	299535	277899	591249	442823	577630	265562	377039	103373	1455530	1169439	301805	2669128	674299	960628	551650	216993	1969227	113650	1066641	623461

Table A4: Social Accounting Matrix for Andhra Pradesh, 2007-08

(in Rs. lakh)

Sector	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33	S34	S35	S36	S37	S38	S39	S40	S41
S1	7902	22	0	1442095	0	0	1	0	0	42	0	0	1	0	0	1	0	0	0	0
S2	1718	39	23620	49348	2447	0	2	1	0	30	0	1	1	0	0	180	7	0	0	0
S3	255	5	2977	14838	175	0	1	0	0	0	0	0	6	0	0	0	1	0	0	2
S4	699	17	10733	105949	89	1	1	0	0	0	0	4	9	12	0	478	15	0	0	1
S5	1498	21	39001		7015	10366	11	2	0	1	0	1	24	2	0	66	13	4073	0	31
S6	219157	1	2381	804	2	0	0	0	0	0	0	0	0	0	0	0	1	130	0	0
S7	128855	7	15892		38	0	5	1	0	0	0	5	15	8	0	579	19	1590	0	11
S8	1536	0	29		1	0	113630	4098	0	0	1	5	590	0	0	2	0	407	0	1
S9	1	0	258		0	28601	0	0	0	0	0	0	6	0	0	0	0	24	0	0
S10	2685	155	268246		20848	0	11	5	1	7	0	4	276	119	0	42	22	3057	0	6
S11	30607	29222	18193	23651	1079	914	7565	529	201	2691	891	14402	10299	306	6	177	344	7566	15	1238
S12	1006	0	1863		39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S13	1557	80	138412		712	0	2555	507	505	29	8566	3424	3734	267	0	4984	231	5864	1	336
S14	3	0	484		81	16808	128	99	65335	59745	1	154	3407	25	9	13	67	3189	1	164
S15	591	37	64195		117	9	1	0	1	0	0	0	18	4	0	9	46	1250	0	3
S16	587	77	863		234	431	1826	126	902	9808	1	254	586	425	2364	2386	433	8258	54150	12827
S17	1	0	730		12	0	558	639	1	13	0	258	1088	74087	500	24274	584	14673	22253	3059
S18	0	0	0		0	0	0	2	0	0	0	0	0	1897798	5106	32800	0	29208	0	67
S19	0	0	2		0	0	0	0	1	0	0	24	114	3	17	0	1	281	1267	4765
S20	1	0	226		21	0	158	11	159	304	2	229	293	71	24	6039	363	8848	37863	28059
S21	471	126	42157		26967	107	9	2	2	1	0	2	68	55	1	17	136	5009	1	50
S22	89705	20	38436	147795	211	0	13	1	5	4	0	4	178	25	1	55	215	3850	0	53
S23	4	986	552		58	66	0	0	0	0	0	0	0	0	0	0	0	8	5	0
S24	11060	1364	110179	11568	40533	16390	2084	107	126	4460	124	224	2815	1021	23	1023	1941	29366	409	4028
S25	0	0	121443	0	555	0	0	0	0	0	0	0	0	0	0	0	0	1722	0	0
S26	5	0	679		8394	0	41	1	5	38	0	7	258	215	1	68	274	2768	1	123
S27	0	0	521		0	57742	0	0	0	0	0	0	11	0	0	4	0	59	0	17
S28	364	33	1260	778	440	663	117896	32908	1147	2554	730	2155	2240	123	8	148	272	5955	383	2229
S29	397	90	2581	1594	1167	941	33362	10004	1837	6101	413	4246	4896	229	11	250	292	4829	1777	2378
S30	4321	262	6698	4137	221	5773	2666	523	9435	11627	54	234	1094	395	10	553	716	8821	1827	2181
S31	4752	470	23213	14338	4093	12380	5130	948	3170	232537	90	351	6834	889	17	37	578	10054	3480	3211
S32	0	0	29		10	0	1262	1959	384	299	12389	3651	4097	25	0	12	104	1337	1	112
S33	0	0	14		10	0	225	249	1346	475	105	3854	2963	86	1	12	155	1919	16	500
S34	2044	318	7999		4333	675	7791	1474	3706	9980	279	1791	93011	1003	15	923	1005	28603	58312	5397
S35	3241	693	12821	39488	2032	1980	11335	1276	1378	12751	262	2013	5599	141592	862	42995	2728	51860	45003	62947
S36	0	0	20		8	0	4	2	1	0	0	14	67	499	455	14	70	1238	542	5508
S37	1363	0	2747		57	0	7	2	397	3	2	1416	54	32874	82	139683	2032	22999	0	164
S38	174	0	608		182	1247	162	3	735	715	0	19	486	251	4	1285	23272	18539	0	313
S39	9739	127	16301	1793	9478	7853	64937	8316	8524	62165	1223	37305	151951	19975	1870	79429	28576	445746	18588	59686

Table A4: Social Accounting Matrix for Andhra Pradesh, 2007-08

(in Rs. lakh)

Sector	S22	S23	S24	S25	S26	S27	S28	S29	S30	S31	S32	S33	S34	S35	S36	S37	S38	S39	S40	S41
S40	0	0	25		0	0	1	0	0	0	0	12	44	212	10	4	19	4936	11808	15380
S41	28	2	3044		138	59	115	32	198	1121	7	92	298	60	27	52	108	6930	7913	39278
S42	0	0	11		2	0	79	94	4986	1559	93	3996	4395	87	11	7	370	2021	85	20744
S43	0	0	167		21	0	57	24	1163	382	19	796	3992	169	84	47	466	4600	25	17785
S44	48	1	1163		75	789	548	401	2312	3376	146	2217	2310	61	4	10	183	1503	28	8072
S45	871	224	4137	2555	870	1384	5374	3246	1415	3480	292	3671	2780	1394	61	3829	2599	7698	450	5609
S46	0	0	1		0	0	21	5	53	50	15	163	349	1	0	1	19	237	0	254
S47	0	0	0		0	0	10	1	3	3	4	49	99	0	0	0	0	79	0	253
S48	0	0	0		0	0	7	10	1	2	2	13	21	0	0	0	1	4	0	169
S49	0	0	1		0	0	7	3	133	2	4	136	115	0	0	0	9	63	13	87
S50	0	0	0		0	0	44	5	74	99	21	161	349	0	0	0	3	354	1	594
S51	0	0	2		0	0	118	127	278	257	53	1207	924	19	0	357	133	2430	2	1043
S52	2	0	4		0	0	117	148	96	4231	29	286	573	1	0	29	8	467	0	517
S53	5	0	12		0	0	12	47	339	12	52	4160	736	0	1	0	9	144	4	1143
S54	0	0	1		1	0	29	8	76	77	20	28	117	0	0	4	0	262	0	239
S55	4	13	390	0	24	83	997	765	252	3471	210	542	2005	342	3	568	195	4944	95	3111
S56	943	267	19801	12230	636	966	6474	3823	719	14455	162	733	1626	2146	80	841	652	10422	2119	74967
S57	8204	3463	32309	11403	5747	2084	27426	1926	1517	18535	417	3253	9789	19398	259	7877	3548	41139	28477	22100
S58	4	0	158		119	0	118	6	1	3	0	13	13	8	0	72	40	338	1	71
S59	1202	36	4635	2863	445	3714	1152	330	847	2948	100	424	1429	16760	465	3535	287	7651	14305	7065
S60	15732	16361	62238	38442	7956	17292	67202	7707	11253	52357	2283	6828	19707	18764	479	26212	2917	65580	30526	44181
S61	2257	38	3141	1940	898	525	208	22	592	868	14	48	192	1503	40	803	141	1603	1928	1217
S62	765	13	687	424	220	1359	845	132	1292	1272	98	405	1375	8193	57	1197	253	5615	2736	3689
S63	1621	2071	4503	2781	874	1006	7172	795	1035	4836	182	662	1879	1730	52	2430	277	5104	2537	3008
S64	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S65	919	53	7111		484	1766	1964	1063	843	2477	117	623	788	3463	46	764	530	5031	2927	1787
S66	99129	3610	244356	155868	23757	47925	81873	17902	24820	55894	6322	13035	32759	35408	1641	26120	12070	101206	62381	60555
S67	22029	4143	47308	29220	8315	12442	20945	4624	9311	19941	989	4136	9422	35247	267	10065	3506	38524	14217	10755
S68	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S69	1	0	1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S70	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S71	1643	159	2100		441	3578	2988	467	406	5045	146	305	1157	2834	9	1333	157	3282	150	2621
S72	1649	1158	14916	10510	870	9937	31959	7840	1370	5075	274	1284	11345	1450	131	1530	887	18591	268	5671
S73	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
labour	8898	2023	98354	62310	17429	104781	102408	49349	29944	59997	13565	8990	20755	8081	994	10514	0	85683	30667	57233
capital	43442	7611	80471	186931	30986	85730	141420	14740	66649	179991	1021	90896	50813	261275	2688	70362	31487	342733	480450	228931
RH1																				
RH2																				
RH3																				
RH4																				
RH5																				
UH1																				
UH2																				
UH3																				
UH4																				
Pvt. Corp.																				
Pub. Enter.																				
Govt																				
NIT	-4920	195	-14707	-15886	4041	32631	-8663	1975	5406	33753	734	5398	26470	114677	903	-23671	3705	58868	24142	42041
Capital A/C																				
ROW	21781				211592			524019	141033		69571	0			144357	154814		518365		
Row Total	752558	75614	1592703	2359767	447600	490999	866402	705428	407723	891948	122097	230612	505711	2705667	164055	638248	129094	2079508	964155	879637

Table A4: Social Acounting Matrix for Andhra Pradesh, 2007-08

(in Rs. lakh)

Sector	S42	S43	S44	S45	S46	S47	S48	S49	S50	S51	S52	S53	S54	S55	S56	S57	S58	S59	S60	S61	S62
S1	0	0	8	0	0	0	0	0	0	0	0	0	0	46	3	6	0	0	0	2	0
S2	0	0	14	0	0	0	0	0	0	0	0	0	0	83	6	11	0	0	35	3	0
S3	0	0	2	0	0	0	0	0	0	0	0	0	0	13	1	2	0	0	0	0	0
S4	0	0	6	0	0	0	0	0	0	0	0	0	0	36	2	5	0	0	1561	0	0
S5	0	0	8	0	0	0	0	0	0	0	0	0	0	69	66	384	0	0	0	0	0
S6	0	0	0	0	0	0	0	0	0	0	0	0	0	37	20	61	0	0	0	0	0
S7	0	0	3	0	0	0	0	0	0	0	0	0	0	99	46	162	0	0	0	0	0
S8	0	0	3	0	70	3	0	0	1	1	1	0	0	15	0	2	0	0	0	0	0
S9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S10	1	0	59	2	1	0	0	0	0	0	0	2	0	343	25	44	0	0	0	0	0
S11	42	13	212	98	43	40	12	1	33	14	26	102	0	502	22245	110	5	0	77681	314	0
S12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S13	26	15	140	284	100	37	2	3	48	17	26	21	0	624	2928	28	0	0	0	0	0
S14	155	4	373	247	28	2	0	0	22	3	32	60	0	1399	211998	308	0	2	0	0	0
S15	0	0	14	0	0	0	0	0	0	0	1	0	0	79	5	17	0	0	0	0	0
S16	157179	13539	44255	693	508	23	27	2	26	1295	24	259	143	597	409	70418	1	578	0	1	0
S17	43086	472	5635	843	314	8	39	2	263	63	6	16	4	129	115	18405	15	0	0	0	0
S18	8	0	1328	13	0	0	0	0	0	0	0	0	0	0	0	786	0	0	0	0	0
S19	56806	129	5591	101	42	4	1	1	307	29	0	52	0	88	141	161	0	0	0	0	0
S20	14957	8633	21299	219	502	62	806	4	267	944	285	177	5404	729	128790	199	0	0	0	0	0
S21	704	35	139	2	0	0	0	0	0	3	0	1	0	73	10	22	0	0	0	0	0
S22	1	1	17	6	4	0	0	0	4	1	5	4	0	152	15	95	0	0	370	50	0
S23	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
S24	2500	92	2484	157	107	3	52	1	32	20	23	170	1	394	63	267	0	0	188	74	0
S25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S26	87	8	40	5	14	0	0	0	2	3	2	2	0	38	2	18	5	0	0	15	0
S27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S28	172	38	869	288	501	871	176	5	169	111	122	233	12	2193	22259	223	0	37	1792	0	0
S29	416	73	1548	686	634	602	347	8	463	100	165	101	5	1358	6099	1595	59	10	60519	1026	617
S30	981	37	1827	1083	996	185	364	16	1136	117	313	298	47	2431	109806	1670	99	13	331	1276	841
S31	713	96	2601	732	2020	418	1390	20	843	217	299	237	17	4005	17518	2579	189	522	24954	455	248
S32	138	12	366	318	1009	76	75	5	90	122	75	814	1	1618	51	30	0	0	502	0	0
S33	438	64	1468	1728	1254	691	840	6	146	118	128	2686	1	1279	760	156	11	3	101584	482	307
S34	2290	325	11552	3023	4554	2475	3275	65	2805	526	1260	1311	51	11190	2070	90	10	3	22190	794	5731
S35	47527	1919	15600	1992	4240	559	1354	44	1563	630	441	1022	87	2904	96580	62296	155	9507	848995	4012	7790
S36	22075	913	3913	47	79	1	255	1	67	107	3	25	9	92	125609	2212	0	7	0	0	0
S37	2	1	54	23	409	29	3	0	4	7	6	4	0	36	3415	58	768	0	0	0	0
S38	184	3	332	32	23	1	650	0	2	1	2	1	0	27	781	229	0	0	52	0	0
S39	11353	4139	20721	4057	7026	8009	16450	78	4113	1610	1685	3274	97	16803	338374	5093	341	13	5793	10196	3762

Table A4: Social Accounting Matrix for Andhra Pradesh, 2007-08

(in Rs. lakh)

Sector	S42	S43	S44	S45	S46	S47	S48	S49	S50	S51	S52	S53	S54	S55	S56	S57	S58	S59	S60	S61	S62
S40	322	11	262	34	4	0	0	0	28	28	1	68	0	224	417007	17	0	0	0	0	0
S41	2311	59	1351	532	911	198	961	56	3097	215	563	332	3	1118	247525	58	1	31	3064	0	0
S42	367837	8062	225125	70609	83192	6863	4283	413	16546	4582	4487	23667	82	22084	918979	1035	107	23	45	0	0
S43	242902	23532	159949	25019	30964	23978	30995	171	7537	5450	945	2123	899	8675	505	797	0	0	14	0	0
S44	35837	3676	62883	22595	25498	5424	9097	162	4701	2184	3094	13067	64	10137	259449	413	71	42	20495	422	7
S45	13437	878	51682	91870	45236	2582	4600	229	6262	2072	3196	24472	12	13239	20019	9677	336	556	58333	626	0
S46	1154	75	4305	3398	35931	1980	5392	67	4145	701	1689	1148	2	3595	18	20983	17	480	0	0	0
S47	239	73	645	293	9843	1492	2657	21	2025	459	1037	240	0	544	74997	19	0	12	7296	779	97
S48	198	56	671	240	2121	45	18618	7	615	235	433	125	1	155	152	52	2	2	18980	44	15
S49	175	18	767	1163	779	97	52	62	2092	199	510	1230	0	294	388	94	4	201	12	29	257
S50	432	62	1924	2392	4665	339	2208	276	46045	716	13589	505	4	5833	5	7	43	796	77	390	0
S51	3356	391	17555	9945	39480	2366	7783	139	22592	1432	21410	7474	411	6678	92	11043	21	313	3	22	0
S52	811	35	3843	2261	7059	238	980	57	14954	782	15737	988	4	7021	1056	549	74	29	84	430	281
S53	2823	279	10335	5757	2380	309	455	15	622	347	157	40475	3	1879	6443	4162	65	82952	77040	23770	151
S54	96	231	1374	373	592	9	87	5	198	98	237	170	25354	4079	1	2	0	0	0	0	0
S55	1529	145	4667	2072	2848	574	222	41	1396	409	988	1031	6249	32373	43032	4953	88	10612	14222	225	7273
S56	2500	243	7925	5072	10404	492	652	40	4156	401	1035	1290	684	3634	1101597	13626	5042	39619	26495	1624	2873
S57	51661	2684	18021	4925	10217	1571	9634	82	6308	1039	2686	3975	178	7932	86281	132443	1279	46355	17649	1184	1011
S58	7	1	22	12	9	0	0	0	0	1	1	116	0	3	15737	770	5523	19	674	1313	93
S59	34425	2374	11756	1812	1784	243	168	12	610	366	319	712	3641	5845	36292	10093	109	620	5973	88	115
S60	55224	4390	35364	12303	16746	3096	4351	119	5484	2197	3413	6428	6835	25795	348877	14250	8375	4864	84467	7653	7018
S61	2550	188	824	62	81	9	26	1	34	28	20	31	174	511	9176	1460	3	120	8480	43	88
S62	9233	575	5489	1559	2038	386	719	15	885	181	406	632	381	981	3008	368	14	49	1188	57	24
S63	5085	369	3111	978	1093	219	381	8	386	131	221	507	158	3116	35093	1402	18	94	6386	101	101
S64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	0
S65	4662	760	4049	2488	10150	768	9702	206	35471	457	8092	1017	819	327	7997	6004	216	643	43489	2399	2583
S66	237202	10015	77774	18985	22852	3561	8983	157	9027	2473	4541	12902	2083	15114	697286	50173	867	7610	585376	9272	5136
S67	38060	2436	33378	14394	19913	2658	6109	228	8953	1523	4156	10794	2053	26444	217114	39401	1473	8739	48916	2752	1359
S68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
S69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	728	0	461	1719
S70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7821	0	0	0
S71	2039	147	8708	3274	2842	1053	473	11	466	171	412	565	306	1278	723	218	9	554	1872	314	1250
S72	10100	1949	24972	11850	12177	583	10783	273	10927	1105	2862	2063	2906	8584	127795	2307	2046	5891	103906	2141	913
S73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
labour	88807	5110	66061	32997	25547	2733	15527	96	4160	2349	18887	27355	8043	6166	2666009	694079	19477	210362	848904	65479	25682
capital	545526	41344	154143	89214	69072	7388	41981	260	11248	6352	51065	25251	21745	19102	580696	108434	18023	142702	575865	44419	17421
RH1																					
RH2																					
RH3																					
RH4																					
RH5																					
UH1																					
UH2																					
UH3																					
UH4																					
Pvt. Corp.																					
Pub. Enter.																					
Govt																					
NIT	120287	5699	62659	25079	27866	5179	15559	215	17280	2377	8031	10007	1335	16250	324046	12896	179	4396	310327	1705	4465
Capital A/C																					
ROW		590174		810589	60873			105601	380774	156250	127859	1164988	39693	417673		0	4116				83285
Row Total	2242669	736602	1204070	1290826	548774	151403	239555	109304	641432	203371	307006	1396621	130010	726164	9337610	1309534	69257	587930	4016177	186463	182510

Table A4: Social Accounting Matrix for Andhra Pradesh, 2007-08

(in Rs. lakh)

Sector	S63	S64	S65	S66	S67	S68	S69	S70	S71	S72	S73	Labour	Capital	RH1	RH2	RH3	RH4	RH5	UH1
S1	0	0	0	0	0	0	298	0	0	0	0			0	0	0	0	0	0
S2	0	0	0	0	0	0	327	0	0	0	0			18823	41393	16002	29396	9982	17489
S3	0	0	0	0	0	0	0	0	0	0	0			325	715	276	508	172	302
S4	0	0	0	47656	0	0	168	765	0	9	0			41583	91447	35352	64943	22053	38638
S5	0	0	0	9374	0	0	0	0	0	32	0			301	663	256	471	160	280
S6	0	0	0	726	0	0	0	0	0	1	0			7884	17338	6703	12313	4181	7326
S7	0	0	0	1809	0	0	0	0	0	2	0			11911	26193	10126	18601	6316	11067
S8	0	0	0	33	0	0	0	0	0	0	0			0	0	0	0	0	0
S9	0	0	0	24	0	0	0	0	0	0	0			298	655	253	465	158	277
S10	0	0	0	53188	0	0	0	0	0	45	0			122707	269847	104321	191637	65075	114016
S11	0	0	0	41877	0	0	1507	3760	0	480	0			37240	81894	31660	58159	19749	34602
S12	0	0	0	270	0	0	0	0	0	0	0			0	0	0	0	0	0
S13	0	0	0	198311	0	0	434	1320	0	633	0			175702	386389	149375	274402	93180	163257
S14	0	0	0	6241	0	0	0	0	0	10	0			33542	73764	28517	52385	17789	31167
S15	0	0	0	4620	0	0	0	0	0	1	0			35814	78759	30448	55932	18993	33277
S16	0	0	0	1640	0	0	0	0	0	49	0			501	1103	426	783	266	466
S17	0	0	0	1248	0	0	0	0	0	6	0			0	0	0	0	0	0
S18	0	0	0	2050	0	0	0	0	0	0	0			0	0	0	0	0	0
S19	0	0	0	295	0	0	0	0	0	1	0			0	0	0	0	0	0
S20	0	0	0	1163	0	0	0	0	0	4	0			0	0	0	0	0	0
S21	0	0	0	28764	0	0	0	0	0	55	0			23463	51598	19947	36643	12443	21801
S22	0	0	0	47149	0	0	0	0	0	3	0			41587	91456	35356	64949	22055	38642
S23	0	0	0	13578	0	0	0	0	0	0	0			5960	13106	5067	9308	3161	5538
S24	0	14	0	128956	438	0	0	0	0	88	0			128541	282678	109281	200749	68169	119437
S25	0	0	0	54506	0	0	0	819	0	0	0			178708	393000	151931	279097	94774	166050
S26	0	0	0	23004	292	0	0	0	0	17	0			46074	101321	39170	71955	24434	42810
S27	0	0	0	56	0	0	0	0	0	0	0			21674	47663	18426	33849	11494	20139
S28	36	314	0	7682	210	0	0	0	1439	219	0			3	121022	46748	97906	34721	64572
S29	6	610	516	18814	1398	0	1829	6563	725	2488	0			49165	95813	37010	77511	27488	51121
S30	39	304	1157	17063	3291	0	3349	9196	0	8539	0			13279	25879	9996	20936	7424	13808
S31	7893	462	4961	63874	16229	0	4798	3332	2600	4739	0			23815	46409	17927	37545	13315	24762
S32	0	0	0	3680	0	0	0	0	0	3	0			10052	19588	7566	15847	5620	10451
S33	320	2	400	2614	762	0	64	70	0	19	0			1777	3463	1338	2802	994	1848
S34	1675	191	787	8334	0	0	0	0	0	43	0			10922	21286	8222	17220	6107	11357
S35	2639	257	8800	78020	7859	0	2398	3294	0	486	0			83135	162011	62581	131065	46480	86442
S36	0	0	0	166	0	0	0	0	0	0	0			0	0	0	0	0	0
S37	0	0	0	1348	0	0	0	0	0	34	0			0	0	0	0	0	0
S38	0	396	0	222	0	0	0	0	0	3	0			0	0	0	0	0	0
S39	610	119	0	20822	0	0	6314	132515	0	3438	0			37134	72365	27953	58543	20761	38611

Table A4: Social Accounting Matrix for Andhra Pradesh, 2007-08

(in Rs. lakh)

Sector	S63	S64	S65	S66	S67	S68	S69	S70	S71	S72	S73	Labour	Capital	RH1	RH2	RH3	RH4	RH5	UH1
S40	0	7	0	104	0	0	0	0	0	2	0			0	0	0	0	0	0
S41	0	0	0	1198	0	0	0	0	0	161	0			5989	11671	4508	9442	3348	6227
S42	4	36	0	25396	0	0	0	0	0	41	0			0	0	0	0	0	0
S43	0	0	0	6529	0	0	0	0	0	12	0			0	0	0	0	0	0
S44	1	38	412	58406	2450	0	41	429	0	1388	0			7980	15552	6007	12581	4462	8298
S45	5	749	1543	36366	1457	0	307	600	0	89	0			6782	13217	5105	10693	3792	7052
S46	0	0	0	1996	80	0	0	0	0	10	0			0	0	0	0	0	0
S47	0	0	835	523	0	0	0	0	0	1	0			0	0	0	0	0	0
S48	71	0	65	314	182	0	17	16	0	43	0			388	608	250	543	260	639
S49	0	1	114	2076	261	0	73	91	0	546	0			6850	10740	4412	9584	4587	11278
S50	0	0	93949	4578	2	0	0	0	3816	17420	0			24434	38307	15737	34183	16360	40227
S51	0	0	2843	9437	0	0	0	0	0	244	0			0	0	0	0	0	0
S52	1628	9	460	7068	9727	0	127	8492	18799	21518	0			7103	11136	4575	9937	4756	11694
S53	1453	269	1702	15543	8850	0	842	1295	13805	21208	0			43456	68129	27988	60794	29095	71544
S54	0	0	0	3209	0	0	0	0	0	8	0			9028	14154	5815	12630	6044	14863
S55	0	148	1209	22136	2114	0	1889	1636	7496	32320	0	0	0	9400	14737	6054	13150	6294	15475
S56	3220	991	6803	59276	19530	93820	19540	8035	47470	35768	0			1825	2861	1175	2553	1222	3004
S57	4718	4069	12197	57450	22220	0	1277	1708	45522	32063	0			33482	73630	28465	52290	17756	31110
S58	0	14	56	885	603	0	58	53	6084	2692	0			2187	3428	1408	3059	1464	3600
S59	985	125	1094	4671	8289	0	110	763	3099	2249	0			12795	20060	8241	17900	8567	21065
S60	22045	729	7516	287443	29862	0	53007	14573	9189	15498	0			164839	258432	106167	230607	110366	271384
S61	26	4	90	4033	101	0	32	43	15	70	0			6717	10531	4326	9397	4497	11058
S62	90	6	480	2837	4421	0	771	507	1446	2940	0			5549	8699	3574	7763	3715	9135
S63	407	32	182	8034	433	0	206	1318	224	432	0			7003	10980	4511	9797	4689	11530
S64	442	0	0	29045	0	0	0	0	0	0	0			0	0	0	0	0	0
S65	8474	0	5640	23675	49676	0	5237	7138	12536	23791	0			16990	26636	10942	23768	11375	27971
S66	21138	884	7625	330845	47514	0	26002	71901	33851	56582	0			297998	467197	191930	416894	199521	490612
S67	7202	826	2003	255181	76492	17623	36115	8203	45056	51646	0			36940	57914	23792	51679	24733	60817
S68	0	0	0	0	0	0	0	0	0	0	0			235655	369455	151777	329677	157780	387972
S69	0	0	6607	0	0	0	10446	3074	65630	29013	0			92025	144276	59270	128742	61614	151507
S70	0	0	922	0	3171	0	0	0	37912	16760	0			59621	93473	38400	83409	39919	98158
S71	435	332	532	9530	1851	11	284	401	53138	1278	0								
S72	6604	412	3460	53303	10551	0	4487	2808	23440	197774	0			91402	201004	77707	142747	48473	84928
S73	0	0	0	0	0	0	0	0	0	0	0								
labour	62631	10644	327901	2536631	745942	1105343	763450	234964	669576	674391	1151474								
capital	42487	7220	222436	2758603	811216	1202068	830256	255524	728168	733404	126828			0	0	0	0	0	0
RH1												1559323	1405323						
RH2												5138272	18163						
RH3												1861584	125314						
RH4												1878016	2968837						
RH5												540612	1679453						
UH1												1584489	1890682						
UH2												4712721	337607						
UH3												848135	133617						
UH4												210990	636615						
Pvt. Corp.													2805406						
Pub. Enter.													1004148						
Govt													808428	229941	0	0	297895	86359	214589
NIT	3288	-37	11699	56517	13449	2334	4580	15295	10413	27381	0			20596	38954	15453	31163	12671	27286
Capital A/C													3987562	699966	840575	225262	1751970	1089037	974574
ROW	20895	588									0								
Row Total	221470	30765	736998	7562011	1900924	2421199	1780641	800499	1841448	2020195	1278302	18334142	17801153	3298860	5445173	2045084	5680762	2620269	4237152

Table A4: Social Accounting Matrix for Andhra Pradesh, 2007-08

(in Rs. lakh)

Sector	UH2	UH3	UH4	Pvt. Corp.	Pub. Enter.	GOVT.	Ind. Taxes	capital A/c	ROW	Total
S1	0	0	0			13986		0	43508	1587393
S2	23942	6843	3185			15267		0		299535
S3	413	118	55			0		0	238372	277899
S4	52894	15117	7036			4949		0		591249
S5	383	110	51			0		0		442823
S6	10028	2866	1334			0		0	254559	577630
S7	15150	4330	2015			0		0		265562
S8	0	0	0			0		0	255660	377039
S9	379	108	50			0		0	71776	103373
S10	156082	44609	20763			0		0		1455530
S11	47369	13538	6301			28464		0		1169439
S12	0	0	0			0		0		301805
S13	223492	63874	29730			17631		8725	664090	2669128
S14	42666	12194	5676			3		0		674300
S15	45555	13020	6060			0		0	545549	960628
S16	638	182	85			1108		0	151038	551650
S17	0	0	0			3526		0		216993
S18	0	0	0			0		0		1969227
S19	0	0	0			0		0	43406	113651
S20	0	0	0			0		0	799285	1066641
S21	29845	8530	3970			0		0	307128	623462
S22	52899	15119	7037			0		0		752558
S23	7581	2167	1008			0		0	7457	75614
S24	163504	46730	21750			27030		0	23015	1592703
S25	227316	64967	30238			0		0	594640	2359767
S26	58605	16749	7796			2181		0		447599
S27	27569	7879	3667			0		0	240229	491000
S28	82873	19545	10738			0		0	146819	866402
S29	65610	15473	8501			43588		16801		705428
S30	17721	4179	2296			19328		40428		407723
S31	31780	7495	4118			78486		0	105402	891948
S32	13414	3163	1738			0		0		122097
S33	2371	559	307			905		74510	3165	230612
S34	14576	3438	1889			1766		44568	47982	505711
S35	110942	26164	14375			61817		0	182166	2705667
S36	0	0	0			8		0		164055
S37	0	0	0			0		0		638248
S38	0	0	0			13		0	65528	129094
S39	49554	11687	6421			45874		0		2079508

Table A4: Social Accounting Matrix for Andhra Pradesh, 2007-08

(in Rs. lakh)

Sector	UH2	UH3	UH4	Pvt. Corp.	Pub. Enter.	GOVT.	Ind. Taxes	capital A/c	ROW	Total
S40	0	0	0			0		0	513371	964154
S41	7992	1885	1036			16		16910	486797	879638
S42	0	0	0			0		154137	265959	2242669
S43	0	0	0			0		135742		736602
S44	10649	2512	1380			4213		124818	431933	1204070
S45	9051	2135	1173			5429		735710		1290826
S46	0	0	0			0		244159	216150	548774
S47	0	0	0			0		46669		151403
S48	903	137	259			1524		3596	186364	239555
S49	15941	2417	4575			9802		16758		109304
S50	56858	8620	16318			20861		167651		641433
S51	0	0	0			0		31296		203371
S52	16529	2506	4744			32530		69223		307006
S53	101121	15331	29021			64371		509096		1396621
S54	21008	3185	6029			0		266		130010
S55	21873	3316	6277	0	0	5682	0	399010		726164
S56	4246	644	1219			95658		7481342	0	9337610
S57	42589	12172	5665			66486		0		1309534
S58	5089	771	1460			10398		0		69257
S59	29774	4514	8545			22167		20949	184811	587930
S60	383579	58156	110084			112745		109027	357596	4016177
S61	15630	2370	4486			3211		2222	63130	186463
S62	12912	1958	3706			24553		3609		182510
S63	16297	2471	4677			6183		17526		221470
S64	0	0	0			1023		0		30765
S65	39535	5994	11346			69101		0	176110	736998
S66	693440	105135	199012			92466		192997	93602	7562011
S67	85960	13033	24670			81371		0	94152	1900924
S68	548367	83140	157377			0		0		2421199
S69	214142	32467	61457			494021		0	216029	1780641
S70	138738	21035	39817			121345		0		800500
S71								0	1715590	1841448
S72	116263	33228	15466			290944		46303	52023	2020195
S73						1278302		0		1278302
labour									-17368	18334142
capital	0	0	0			0	0	0	-133230	17801154
RH1						293224			40990	3298860
RH2						233179			55558	5445173
RH3						55506			2680	2045084
RH4						800404			33506	5680762
RH5						251097			149107	2620269
UH1						386583			375397	4237152
UH2						581545			285325	5917199
UH3						35252			13487	1030492
UH4						93626			273502	1214733
Pvt. Corp.						1718436				4523842
Pub. Enter.										1004148
Govt	245359	0	37777	1718436			1914893			5553676
NIT	37871	7394	8907			28266		266753	273544	1914893
Capital A/C	1450330	173215	240061	2805406	1004148	-2203778			-2057532	10980795
ROW										9139357
Row Total	5917199	1030492	1214733	4523842	1004148	5553676	1914893	10980798	9139357	