



# The Indian Informal Economy within a SAM Framework

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### I. Introduction

The term 'informal sector' gained international acceptance after the International Labour Organization (ILO) undertook a comprehensive employment mission to Kenya in 1972. The Missions found, amongst other things, that the central employment problem in Kenya was the existence of large number of 'working poor' whose activities were not recognized, recorded, protected or regulated by public authorities. These people were said to belong to the 'informal sector', which has now come to be recognised not only as an important employment-generating sector but also as an important source of production and income (Hussmanns and Mehran 1989).

The Fifteenth International Conference of Labour Statisticians (15<sup>th</sup> ICLS), held in January 1993, eventually adopted a resolution aimed at providing an internationally acceptable statistical definition of the informal sector. To make it fit into the framework of national accounts, it was defined in terms of the characteristics of the enterprises in which the activities take place (Hussmanns 2001). The criteria were:

- 1. They are private unincorporated enterprises, i.e., enterprises owned by individuals or households that are not constituted as separate legal entities independently of their owners.
- 2. No complete accounts are available.
- All or at least some of the goods or services produced are meant for sale or barter, with the possible inclusion in the informal sector of households which produce domestic or personal services in employing paid domestic employees.
- 4. Their size in terms of employment is below a certain threshold, which is to be determined according to national circumstances.
- 5. They are not registered under specific forms of national legislation. Their employees, if any, are also not registered.

6. They are engaged in non-agricultural activities, including secondary nonagricultural ones of enterprises in the agricultural sector.

In the Indian context, the 'unorganised' segment of the economy refers to all operating units whose activities are not regulated under any statutory Act or legal provision and/or those which do not maintain any regular accounts, including agriculture. The Central Statistical Organisation (CSO) defines the formal or registered sector as consisting of the establishments that employ 10 or more workers and use power, or employ 20 or more workers without using power. Such establishments come under the coverage of the Annual Survey of Industries (ASI). The unorganised or informal sector comprises all other manufacturing establishments, not covered by the above definition.

### II. Methodology

The objective of this study is to examine the impact of trade reforms on the informal sector and its workers. It defines the macro aspects of the sector and its size. To provide such a framework, in which the influence of policy changes, or any exogenous change, can be traced through different sectors and socio-economic classes, the study uses a multi-sectoral model. The model quantifies the magnitude of the impact of different policies and identifies sectors that respond more strongly through production, as compared to others (Sinha, Siddiqui, Sangeeta 2002). By constructing a social accounting matrix (SAM) with a formal-informal breakdown of the production sectors of the economy, we bring out the high degree of overlap that exists between informal households.

### III. Data Source

In order to understand the informal sector in terms of production and the people involved in it, we reconcile household surveys and national accounts data. We also trace the interrelationship of the informal sector with other sectors. On the production side, we use information from the National Accounts Statistics (NAS) to break up each production sector into its formal and informal parts. In terms of the people involved in the informal sector, we analyze published and raw data collected by the

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National Sample Survey Organization (NSSO) in the 55<sup>th</sup> Round survey conducted during 1999-00. The raw survey data numbers have been translated to national level estimates. This survey was important because, for the first time, certain additional questions were included to capture the characteristics of enterprises in which the members of the sample household were employed. This has helped in measuring the size and characteristics of the informal sector.

In the 55<sup>th</sup> Round, there were two household-level surveys aimed at obtaining employment details and consumption patterns. These surveys were called 'Employment-Unemployment' and 'Consumption Expenditure' and were conducted in rural as well as in urban areas. The schedules of these surveys were canvassed in separate sets of households. The sample for 'Employment-Unemployment' comprised of 97,986 rural and 67,258 urban households. All households gave information on the work status of each of its members. At an average of 4.9 members per household, the survey gave information of 819,013 persons - of which 62 percent were from rural and 38 percent from urban areas. All household members provided information about the nature of work and the industry to which they belonged (according to the National Industrial Classification, NIC-98 classification at the 5-digit level). Information on wages and the enterprises were also collected.

In the 'Consumer Expenditure' survey, 120,310 households were surveyed. Out of this 71,386 were from rural areas. In all, 600,017 persons were surveyed, of which 62 percent belonged to rural and 38 percent to urban areas. The consumption items were mapped with the sectors specified and average consumption expenditure of each type of household on these sectors was computed.

### **IV.** Production Sectors

We have aggregated 115 sectors of the CSO's input-output table for 1993-94 to 9 major production sectors on the basis of their usefulness in providing information about the informal part of sectors. In order to study the formal-informal part of these sectors, these have been expanded to 14 production sectors.

Using information from the NAS the gross value added is first divided into 14 major sectors. It is then further divided into the private and public parts. The operating surplus plus depreciation for the public sector has been taken from the NAS and distributed across sectors using output shares for sectors that are not directly available. Sectoral private value-added is taken as a residual. The division of gross value added into wage and non-wage income has been done for the 14 sectors for 1999-00. The source of data and methods used are given below by broad sectors of the economy. The sectors and aggregation scheme are listed in Table 1.

Sl. No.	Sectors	Input-Output 1993-94 Sectors
1	Agriculture (Informal)	Part of 1, 2-22
2	Agro-Processing (Formal)	33-30
3	Agro-Processing (Informal)	
4	Rice Milling (Formal)	Part of 1
5	Rice Milling (Informal)	
6	Readymade Garments (Formal)	48
7	Readymade Garments (Informal)	
8	Other Manufacturing Goods (Formal)	23-32, 41-47, 49-75, 77, 86-
9	Other Manufacturing Goods (Informal)	88, 90, 93-95, 97-98
10	Capital Goods (Formal)	76, 78-85, 89, 91, 92, 96
11	Construction (Informal)	99
12	Other Servises (Formal)	100-114
13	Other Servises (Informal)	
14	Government Services (Formal)	115

 Table IV.1. Aggregation Scheme for 14 Industrial Sectors

The GDP shares of formal and informal parts by each of the 14 sectors are provided below:

Major Sectors	Sl. No.	Proposed SAM Classification	Share (%)
Agriculture	1	Agriculture (Informal)	96.72
Manufacturing	2	Agro-Processing (Formal)	56.75
	3	Agro-Processing (Informal)	42.25
	4	Rice Milling (Formal)	38.49
	5	Rice Milling (Informal)	61.51
	6	Readymade Garments (Formal)	75.52
	7	Readymade Garments (Informal)	24.48
	8	Other Manufacturing Goods (Formal)	67.97
	9	Other Manufacturing Goods (Informal)	32.03
	10	Capital Goods (Formal)	66.35
Construction	11	Construction (Informal)	56.70
Services	12	Other Servises (Formal)	61.77
	13	Other Servises (Informal)	38.23
Government	14	Government Services (Formal)	100.00

 Table IV.2. Share of Formal and Informal Parts in Total GDP of each sector

On the basis of their high informal share in GDP, agriculture and construction are treated as fully informal. The capital goods sector, however, is considered completely formal because it involves largely formal activities and employment.

Government services are regarded as formal the whole sector is fully registered. The remaining five production sectors are divided into formal and informal parts because both segments play equally important roles, both in the generation of value added and in employment.

The value-added and output for the sectors are further adjusted into formal and informal parts using the Gross Domestic Product (GDP) and Net Domestic Product (NDP) information available for the year from NAS.

The sectoral level adjustments are explained below.

**Agriculture:** The NAS provides a breakdown of net value added (NVA) into two parts:

- 1. Compensation to employees (CE), and
- 2. Operating surplus/mixed income (OS) separately for the organised and the unorganised components of agriculture and animal husbandry.

The value of output is also available.

Although it is included in the paddy sector in the input-output table, we have studied rice milling (Sector 4 & 5) separately. Even at the NIC-98 5-digit level, it was not possible to capture paddy separately. We have therefore clubbed it with the "agriculture" sector. In order to disaggregate the paddy sector into paddy and rice milling, we have subtracted the value of output of paddy for 1993-94 (NAS) from that of paddy from the input-output table. This has given the value of the output for rice milling. The share of output of rice milling to paddy is 18.8 percent. We arrived at the rice-milling component by applying this proportion on the input and output flows of paddy sector in the input-output table.

**Agro-processing:** The gross value-added break-up of the registered and unregistered parts is taken from NAS and the value of output is estimated using the value added to output ratio of the 1993-94 input-output table.

**Readymade Garments:** The value-added and output information is not directly available in NAS. We therefore use the Enterprise Survey conducted by the 51<sup>st</sup> Round of National Sample Survey Organisation (NSSO). The data are available at a 3-digit level. We get the value-added for readymade garments for the unregistered part from the survey results. We have used the Annual Survey of Industries (ASI) for

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the registered part. Next, we obtain the total value added for readymade garments for 1994-95 by combining the two data sets. Next we apply the registered and unregistered shares of the total value-added obtained for 1994-95 on that of 1999-00. The value of output is estimated using the value-added to output ratio.

**Other Manufacturing:** Data for gross value-added with the break-up of registered and unregistered parts are taken from NAS. The value of output is estimated using the value-added to output ratio of the 1993-94 input-output tables.

Capital Goods: The above procedure is adopted for the capital goods sector.

**Construction:** In the case of construction, the value of output, value-added and its distribution between CE and OS is taken from NAS.

**Services:** For the services sector, gross value-added with the break-up of registered and unregistered parts is taken from NAS with its further distribution between wage and capital incomes. Value of output is also compiled from NAS.

**Government Services:** For government services, gross value added with its break-up between wage and capital incomes and value of output is taken from NAS. The share of each sector in total GDP is given in Table 3 below.

Sectors		Share in GDP(%)
Agriculture	Ι	23.93
Agro Processing	F	1.21
Agro Processing	I	0.74
Rice Milling	F	0.24
Rice Milling	Ι	0.28
Readymade Garments	F	0.21
Readymade Garments	Ι	0.07
Other manufacturing goods	F	9.68
Other manufacturing goods	Ι	3.52
Capital Goods	F	1.73

 Table IV.3. Percentage share of each sector in Total GDP

Construction	Ι	5.32
Other Services	F	25.44
Other Services	I	14.20
Government Services	F	13.43
		100.00

### V. Factors of Production

The distribution of workers by each of the 14 sectors into different types of factors of production is computed by using data from the Employment-Unemployment Survey of the 55<sup>th</sup> Round of the NSSO. NSSO classifies the activity status of each person into detailed categories. These categories, listed under the broad activity status 'employed', are:

- 1. Worked in household enterprise as own account worker.
- 2. Worked in household enterprise as employer
- 3. Worked as helper in household enterprise
- 4. Worked as regular salaried/wage employee
- 5. Worked as casual wage labour in public works and in other types of work.

*Own-Account Workers* are self-employed persons who operate their enterprises on their own account or with one or a few partners and who, during the reference period, by and large, run their enterprise without hiring any labour.

*Employers* are those self-employed persons who work on their own account or with one or a few partners and, who, by and large, run their enterprise by hiring labour.

*Helpers* are mostly family members who work full time or part-time and do not receive any salary or wages in return.

*Regular salaried/wage employees* are those persons who work in others' farms or in non-farm enterprises (both household and non-household) and, in return, receive salary or wages on a regular basis. This category includes not only persons receiving

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time wages but also persons receiving piece wages or salary and paid apprentices, both full-time and part-time.

*Casual wage labourers* are those who are casually engaged in others' farms or in nonfarm enterprises (both household and non-household) and in return receive wages according to the terms of the daily or periodic work contract.

We classify the factor-owners as follows:

- 1. Casual Labour
- 2. Regular Labour
- 3. Own Account Workers
- 4. Employers

We distinguish between informal and formal labour corresponding to casual and regular workers respectively. Informal and formal capitalists correspond to own-account workers and employers respectively. For informal and formal capitalists we follow the CSO's definition of unregistered and registered enterprises. Thus formal capitalists or employers are those self-employed persons who are the owners of registered enterprises, i.e., they employ 10 or more workers and use power; or employ 20 or more workers without using power. The rest of the self-employed persons are informal capitalists or, in our classification, own-account workers.

While using NSSO data we have scrutinised the total number of workers employed as also if the enterprise runs with the aid of power or not. By satisfying the CSO's criterion of "registered" firms, the owners of such "registered" firms are termed as employers. Further we recognize employers as formal capitalists and own-account workers as informal capital owners.

We analyse the NSSO data in working out the number of workers employed in each production sector. Household member information is entered in 5-digit code following the NIC-98 industry classification. These industry codes are mapped with our set of sectors. We further assume that there are no formal workers and capital owners in the informal sectors.

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We also have the location of each household. Workers who reside in a rural or urban area may not necessarily be working in the same area. But this would be true in most cases. We assume that a person's workplace is in the same area (rural or urban) as his/her residence. Aware that industries behave differently in rural and urban sectors, a particular industry could have informal characteristics in rural areas and formal characteristics in urban areas. For example, the spinning and weaving of textiles would have formal characteristics in urban areas but informal ones in rural areas. Therefore each industry code is recoded by region-specific information having the following components:

- 1. Rural Formal
- 2. Rural Informal
- 3. Urban Formal
- 4. Urban Informal

For aggregated formal/informal part of a sector, we have combined rural formal/informal and urban formal/informal numbers. We thus obtain the formal informal breakup of each sector. The workers are mapped into the 14 sub-sectors according to the activity information of their industry code.

The table below gives the estimated number of workers obtained using NSSO data and the percentage distribution of all types of factor owners.

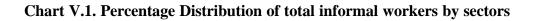
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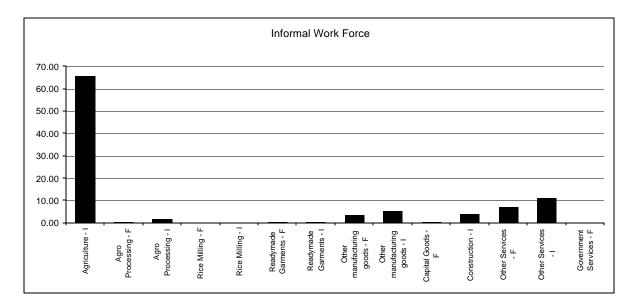
			Wage	Earners	Capital (	Owners
		Total Number of Workers	Casual Labour	Regular Labour	Own Account Workers	Employer
			Informal	Formal	Informal	Formal
Agriculture	Ι	200756295	68.65	0.00	31.35	0.00
Agro Processing	F	2910958	30.62	37.49	31.60	0.30
	Ι	5860035	55.53	0.00	44.47	0.00
Rice Milling	F	206810	72.58	0.00	18.53	8.89

	Ι	300978	79.66	0.00	20.34	0.00
Readymade Garments	F	1170459	25.67	38.93	34.18	1.22
	Ι	795852	38.08	0.00	61.92	0.00
Other manufacturing goods	F	18556278	39.21	40.69	19.81	0.29
	Ι	15559866	62.46	0.00	37.54	0.00
Capital Goods	F	1987152	15.23	71.93	12.41	0.43
Construction	Ι	12038433	79.11	0.00	18.43	2.46
Other Services	F	44977785	11.09	51.35	37.47	0.09
	Ι	33414143	65.85	0.00	34.15	0.00
Government Services	F	9009438	3.00	97.00	0.00	0.00
Overall			56.70	12.19	30.99	0.13

It is clear from the table above that the total estimated working population in 1999-00 was 347.5 million. We compared this with the Census numbers, which are available for 1991 and 2001. By interpolation, we got the total workforce for 1999 as 392 million. While arriving at our total number of workers we considered principal status working population only. However, the Census includes all types of workers (main and marginal combined). Using NSSO data we have also estimated principal status workers as being 92 percent of the total working population (including subsidiary workers). It is therefore reasonable to suppose that the difference between NSSO and census numbers is due to the exclusion of subsidiary workers by the NSSO.

We assume that there are no formal workers in the informal sectors. On the other hand, the proportion of informal workers (labour and capital owners combined) is higher than formal workers in the formal sectors. The exceptions are "other services - formal" and "capital goods" and "government services", both of which are assumed to be completely formal. In rice milling a very small proportion of workers is formal. This conforms to NCAER's case studies on rice milling. The above table shows that over 87 percent of the total workforce is classified as informal. The distribution of informal workers combined with own-account workers across the 14 sectors is given in the following chart (Chart V.1.).





As expected the highest share of informal workers are agriculture, followed by other services and other manufacturing goods.

# VI.2. Value Added Distribution

The NSSO survey collects information about average household wages. These are given in Table V.2.

Sectors		Casual Worker	Regular Worker
Agriculture	Ι	27.2	N.A.
Agro-processing	F	67.3	81.6
Agro-processing	Ι	22.8	N.A.
Rice Milling	F	85.6	N.A.
Rice Milling	Ι	41.1	N.A.
Readymade Garments	F	47.6	61.2
Readymade Garments	Ι	44.7	N.A.
Other Manufacturing Goods	F	65.6	78.3
Other Manufacturing Goods	Ι	28.3	N.A.
Capital Goods	F	61.9	100.8

Table V.2. Sectoral Average Daily Wage Rates (in Rs.)

Construction	Ι	52.6	N.A.
Other Services	F	119.1	148.3
Other Services	Ι	26.0	N.A.
Government Services	F	45.2	171.4

Using the employment and wages information, we derived private factor incomes for the various factors of production. The total income of a type of worker was computed using the wage rate and the number of workers by each type. But since capital earning rates are not available from NSSO data, we have assumed that capital income gets distributed proportionately to capital ownerships by sectors. Sectoral wage incomes and non-wage incomes are obtained from NAS with respect to a broad division of registered and unregistered parts of value added. Labour and capital earnings by sectors are distributed by different types of factors, such as casual labour, regular labour, own account workers and employers (Table V.3.).

		Wage Income		Non - Wage Income	
		Casual Labour	Regular Labour	Own Account	Employer
				Workers	
Agriculture	Ι	100.0000	0.0000	100.0000	0.0000
Agro Processing	F	40.2578	59.7422	87.4047	12.5953
Agro Processing	Ι	100.0000	0.0000	100.0000	0.0000
Rice Milling	F	100.0000	0.0000	88.2413	11.7587
Rice Milling	Ι	100.0000	0.0000	100.0000	0.0000
Readymade Garments	F	33.8942	66.1058	85.1948	14.8052
Readymade Garments	Ι	100.0000	0.0000	100.0000	0.0000
Other manufacturing goods	F	44.6847	55.3153	86.9636	13.0364
Other manufacturing goods	Ι	100.0000	0.0000	100.0000	0.0000
Capital Goods	F	11.4956	88.5044	85.2465	14.7535
Construction	Ι	100.0000	0.0000	86.3707	13.6293
Other Services	F	14.7716	85.2284	88.0173	11.9827
Other Services	Ι	100.0000	0.0000	100.0000	0.0000
Government Services	F	20.2632	79.7368	0.0000	0.0000

# Table V.3. Percentage distribution of factor income within Wage and Non-wage income

Using these shares we get the income distribution across various factors of production by all sectors (see Table V.4.).

		Wage Income		Non - Wa	ge Income
		Casual Labour	Regular Labour	Own Account	Employer
				Workers	
Agriculture	Ι	228511	0	228511	0
Agro Processing	F	2374	3523	11124	1603
Agro Processing	Ι	4487	0	9679	0
Rice Milling	F	1353	0	2574	343
Rice Milling	Ι	1719	0	3708	0
Readymade Garments	F	423	825	2296	399
Readymade Garments	Ι	405	0	875	0
Other manufacturing goods	F	20231	25044	84966	12737
Other manufacturing goods	Ι	21306	0	45978	0
Capital Goods	F	1103	8492	17652	3055
Construction	Ι	76501	0	21730	3429
Other Services	F	20935	120790	261450	35594
Other Services	Ι	87602	0	183610	0
Government Services	F	51967	204493	0	0

**Table V.4. Factor Income Across Sectors** 

### VI. Household Characteristics

Households can be involved in any kind of economic activity. Members play a major role in production by either operating their own informal enterprises or by supplying labour to other informal or corporate enterprises.

The classification of households depends on composite household information and on the nature of household income. The NSSO survey assigns a 'type' code to each household. The 'type' codes are different for rural and urban areas. A household is given a certain type code based on the economic activity that generates the major portion of the income of the household during the 365 days preceding the date of the survey.

NSSO Household Type Code Description						
For Rural Areas	For Urban Areas					
1. Self employed in non-agriculture	6. Self Employed					
2. Agricultural Labour	7. Regular Wage/Salary Earner					
3. Other labour	8. Casual Labour					
4. Self Employed in Agriculture	9. Others					
5. Others						

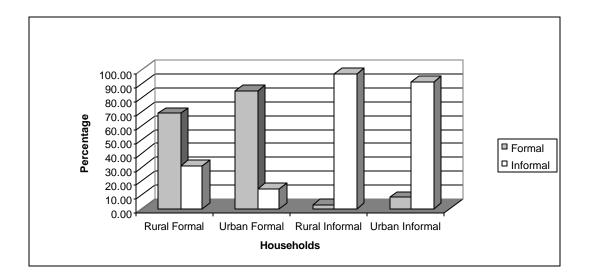
Using these type codes and the status codes, we assigned our own codes to each household. Our classification of households for rural and urban areas is as follows.

Our Household Type Code Description						
For Rural Areas	For Urban Areas					
1. Rural - Casual Labour	5. Urban - Casual Labour					
2. Rural - Regular Wage Earner	6. Urban - Regular Wage Earner					
3. Rural - Own Account Worker	7. Urban - Own Account Worker					
4. Rural – Employer	8. Urban - Employer					

Rural casual labour households, which mainly consist of casual workers, are characterised as informal households. Similarly, rural regular wage earner households are formal households. Rural own-account worker households are informal and rural employer households are formal. The same holds true for urban types of households. The following chart gives the distribution of factor owners by formal informal type in the broad household categories.

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# Chart VI.1. Percentage distribution of factor owners



by broad household categories

For a more transparent policy transmission mechanism for building the base data set for the Computable General Equilibrium Model (see Sinha and Adam, 2004) we assumed that the households are of "pure" types. This means that casual labour households would only comprise of casual workers and so on. The income distribution by different households under this assumption is as follows:

	Casual Labour	Regular Labour	Own Account	Employer
			Workers	
Rural - Casual Labour	62.54	0.00	0.00	0.00
Rural - Regular Wage Earner	0.00	50.00	0.00	0.00
Rural - Own Account Worker	0.00	0.00	26.14	0.00
Rural – Employer	0.00	0.00	0.00	3.00
Urban - Casual Labour	37.46	0.00	0.00	0.00
Urban - Regular Wage Earner	0.00	50.00	0.00	0.00
Urban - Own Account Worker	0.00	0.00	73.86	0.00
Urban – Employer	0.00	0.00	0.00	97.00
TOTAL HOUSEHOLDS	100.00	100.00	100.00	100.00

Table VI.1. Income distribution across households

This shows that 62.5 per cent of the income generated by informal or casual workers gets distributed amongst the casual labour type of households in rural areas and the

rest in urban areas. Regular workers households in both the regions get 50 percent each of the income generated by total number of regular wage earners. 97 percent of the income generated by employers goes to urban type of households.

Table VI.2. gives the total number of households, the workers and their distribution across each type of household. It also gives household member information. Using it, we have worked out the member-to-worker ratio. This is called the dependency ratio. It also shows that 85.5 percent households belong to the informal category. This means that the major income for these households comes from informal activities and 90 percent of the working members' nature of work is informal.

Household Type	Households	Workers	Members	Member per Worker	Member per HH
Rural - Casual Labour	59.64	65.79	61.11	2.3	5.1
Rural - Regular Wage Earner	1.25	1.05	1.06	2.5	4.2
Rural – Own Account Worker	10.91	10.53	11.32	2.6	5.2
Rural – Employer	0.01	0.01	0.00	1.0	1.6
Urban - Casual Labour	4.39	3.84	3.99	2.5	4.6
Urban - Regular Wage Earner	13.18	9.33	11.50	3.0	4.4
Urban – Own Account Worker	10.59	9.41	11.00	2.8	5.2
Urban – Employer	0.04	0.04	0.02	1.0	2.3
Total ('000 numbers)	123778	255091	619661	2.4	5.0
Total Informal Households (% of total)	85.52	89.57	87.42		
Total Formal Households (% of total)	14.48	10.43	12.58		

# Table VI.2. Percentage Distribution of workers and members across Household Types

Over 83 percent of the total rural households belong to "Rural-Casual Labour" type. 15 percent belong to 'Rural – own-account worker' type and the rest form the formal households. While in urban areas, 47 percent belongs to "Urban -- regular wage earner" household type, over 37 percent are of type 'Urban -- own account worker' type. In most urban households incomes are generated in formal employment, with over 41 percent of total urban workforce belonging to the 'Urban -- regular wage

earner' type of household. The members' information suggests that of the total household members, over 87 percent belong to the informal type of households. The member-per-worker ratio, i.e., the dependency ratio, is the lowest for the formal self-employed type of households, both in rural and urban areas with a very low member-per-household ratio. For the rest of the household types, urban households have higher dependency ratio compared to rural households. This means that in rural households most of the members are involved in some activity or the other.

Table VI.3. shows the distribution of persons belonging to formal informal households within the 14 sectors.

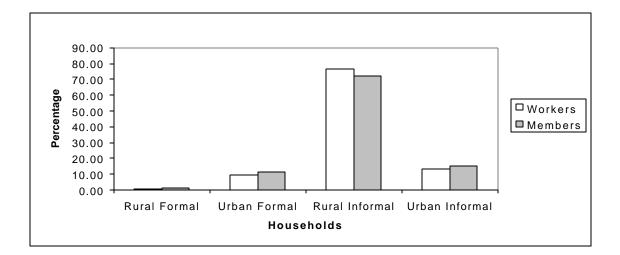
		R	ural	U	rban	Formal	Informal	Grand
		Formal	Informal	Formal	Informal	Total	Total	Total
Agriculture	Ι	0.64	99.36	14.92	85.08	1.45	98.55	100.00
Agroprocessing	F	13.73	86.27	30.61	69.39	28.32	71.68	100.00
Agroprocessing	Ι	2.86	97.14	27.01	72.99	7.53	92.47	100.00
Rice Milling	F	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rice Milling	Ι	2.80	97.20	39.58	60.42	15.12	84.88	100.00
Readymade garments	F	0.00	100.00	35.08	64.92	34.97	65.03	100.00
Readymade garments	Ι	3.00	97.00	33.33	66.67	3.49	96.51	100.00
Other Manufacturing	F	8.45	91.55	44.72	55.28	38.29	61.71	100.00
Other Manufacturing	Ι	2.99	97.01	29.89	70.11	11.12	88.88	100.00
Capital Goods	F	13.72	86.28	71.25	28.75	60.74	39.26	100.00
Construction	Ι	2.08	97.92	17.18	82.82	10.24	89.76	100.00
Other Services	F	5.52	94.48	40.90	59.10	35.21	64.79	100.00
Other Services	Ι	1.30	98.70	11.20	88.80	2.99	97.01	100.00
Public Admn	F	24.76	75.24	95.57	4.43	88.51	11.49	100.00
All India		1.43	98.57	41.38	58.62	15.46	84.54	100.00

 Table VI.3. Percentage distribution of workers in each sector belonging to

 broad category of households

A very high proportion of persons living in rural areas belong to informal households. Overall, more than 98 percent of the rural households belong to informal type of households. In urban areas 59 percent of households belong to informal type of households. The household composition of different types of workers is described in the Chart VI.2.

Chart VI.2. Distribution of workers and members by households



## VI.2. Other Income

The table below shows the distribution of factor income to the two types of factor owners.

# **Table VI.4: Percentage Distribution of Workers and Income**

		Wor	kers	Inc	ome
		Informal	Formal	Informal	Formal
Agriculture	Ι	100.00	0.00	100.00	0.00
Agro Processing	F	62.22	37.78	72.48	27.52
	Ι	100.00	0.00	100.00	0.00
Rice Milling	F	91.11	8.89	91.97	8.03
	Ι	100.00	0.00	100.00	0.00
Readymade Garments	F	59.85	40.15	68.96	31.04
	Ι	100.00	0.00	100.00	0.00
Other manufacturing goods	F	59.02	40.98	73.58	26.42
	Ι	100.00	0.00	100.00	0.00
Capital Goods	F	27.63	72.37	61.89	38.11
Construction	Ι	97.54	2.46	96.63	3.37
Other Services	F	48.56	51.44	64.36	35.64
	Ι	100.00	0.00	100.00	0.00
Government Services	F	3.00	97.00	20.26	79.74

Apart from factor income, households also receive income from other sources, i.e., government transfers and remittances from abroad. These are available in the NAS at the aggregate level. The distribution of the total income to different types of households depends on making informed assumptions on the nature of the households. Another component of income, i.e., the rental income is generated from quantitative restrictions (QRs) accrue to capital owning households who hold licences of these quotas.

### VI.2. Household Consumption Expenditure by Sectors

The consumption pattern of each type of household has been obtained by using the data from the Consumer Expenditure Survey conducted. The survey data provide per household expenditure on various consumption items during the reference period of one month. These are mapped and aggregated to correspond with the production sectors (see Appendix). The consumption pattern of the households by item produced from the 14 production sectors is given in Table 15.

Table VI.5.	Percentage Distribution of Households' Consumption Expenditure
	by their broad categories

		House	eholds	
	Casual Labour	Regular Wage Earner	Own Account Worker	Employer
	Informal	Formal	Informal	Formal
Agriculture	24.30	14.16	36.05	8.15
Agroprocessing	6.75	8.59	13.92	8.07
Rice Milling	0.49	0.32	0.45	0.42
Readymade Garments	0.39	0.44	0.49	0.47
Other manufacturing goods	16.45	22.16	10.38	18.54
Capital Goods	0.00	0.00	0.00	0.00
Construction	0.00	0.00	0.00	0.00
Other Services	51.62	54.33	38.71	64.35
Government Services	0.00	0.00	0.00	0.00
Total	100	100	100	100

The table above shows that all households undertake the highest share of expenditure on the 'other services' sector. This is because this sector includes some of the major items of household consumption such as electricity, gas and water supply, transport, communication, trade, education, medical and health services. Casual labour households have the second highest consumption on products of the agricultural sector. This is followed by other manufacturing and then by agro-processing. For formal households, both labour and employer, the second highest expenditure is on other manufacturing followed by agro-processing.

#### VII. Taxes (Direct and Indirect)

Though indirect taxes are part of government activities, we have made it a separate account in order to simplify the presentation of the detailed structure of taxes. The indirect taxes reported in the SAM are net of subsidies, i.e. they are net indirect taxes. We obtained total subsidies from the National Accounts and broke them up into three components – the food subsidy given to households; the fertilizer subsidy given to farmers as well as fertiliser manufacturers; and the export promotion subsidy. The subsidy breakup at the national level is not available in published sources. But the breakup of central subsidies is available. The proportions in these components are applied on the total national level subsidy to get total food, fertiliser and export subsidies.

Net indirect taxes on household consumption and government consumption are inclusive of sales taxes and excise. We get data for excise and customs tax from the Customs and Excise Revenue Collections of the Indian Union, 1999-00, DGCI&S. Sales tax is calculated as the residual. There is no sales tax for farm produce. Similar taxes on government expenditures are based on the input-output table. Production activities pay indirect taxes on account of inputs consumed. The disaggregation of net indirect taxes across production sectors is done with the help of the input-output table.

Total direct taxes are distributed among different categories of households. Land revenue is paid by "rural-employers". Since no direct taxes are paid by casual labour and own-account workers, other direct taxes are distributed among different categories of households.

#### VIII. Capital Account

This account represents the macro balancing of savings and investments. Net savings include those by the households, the government and the rest of the world. Net saving along with depreciation equals gross domestic capital formation. Private and public savings are taken from the Government of India's Economic Survey for the year 1999-00. Foreign savings meet the difference between gross domestic capital formation and gross domestic saving.

This data has been arranged in a social accounting matrix (SAM) framework which spells out the inter-linkages in the economy. It also forms the basic data set of the CGE model developed in the course of this research (see Sinha and Adam, 2004).

### IX. The Social Accounting Matrix

The Social Accounting Matrix (SAM) is based and built on the basis of all the data sets noted in the previous sections. A SAM is a particular representation of the macro and meso economic accounts of a socio-economic system. It captures transactions and transfers between all economic agents in the system (Pyatt and Round, 1985; Reinert and Roland-Holst, 1997). It also provides a classification and organisational scheme for the data useful to analysts and policymakers (Thorbecke, 2001).

The main features of a social accounting matrix are threefold (Round, 2003). In a SAM, the accounts are represented as a square matrix where the incoming and outgoing flows for each account are shown as a corresponding row and column of the matrix. The SAM is constructed to represent a comprehensive accounting of the economy and as such portrays all the economic activities of the system.

A SAM needs to be flexible, both in the degree of disaggregation and in the emphasis placed on different parts of the economic system. A standard social accounting matrix lists payments (expenditures) in columns and the receipts (incomes) in rows. These row and columns represent the different productive activities, economic agents, institutions, and policy instruments of an economy at a chosen level of disaggregation.

In other words, a SAM is a national balance sheet that shows how, in a particular year, commodities and services are produced and disbursed and how the agents of the economy generate income and expend it. One can consider entries in the rows as "deliveries" of income flows to different recipients and the entries in the columns as income "claims".

There are six types of accounts in a SAM:

- 1. Production activities
- 2. Commodity consumption
- 3. Factors (labour and capital)
- 4. The current accounts of the institutions (divided into households, firms and government)
- 5. The capital account and the rest of the world account.
- 6. The receipts of production account are from intermediate demand and final demand consisting of expenditures of households and government, investment and net exports (exports minus imports). The cost of production includes input costs, gross value added and net indirect taxes.

The underlying principle of double-entry accounting requires that row totals equal column totals for each account in the SAM. In practice, a SAM is the natural extension of the input-output accounting system devised by Leontief more than 50 years ago. The "extension of the input-output table to a social accounting matrix framework is made by partitioning the accounts into endogenous and exogenous accounts and assuming that the column coefficients of all the exogenous accounts are constant" (Vargas, Schreiner, Tembo, Marcouille, 1999). According to Sadoulet and de Janvry, 1995, "endogenous accounts are those for which changes in the level of expenditure directly follow any change in income, while exogenous accounts are those for which we assume that the expenditures are set independently of income". The schematic structure of the Indian SAM is given in following flowchart.

~ .

Receipt			Exp	enditure			
	Production Account	Factors of Production	Households	Indirect Taxes	Govern- ment Account	Capital Account	Rest of the World
Production Account (14 Production Sectors)	Input Output Table <b>A11</b>		Private Consumption A13		Government Consumptio n A15		Exports A17
Factors of Production	Value Added A21						Net Factor Income A27
Households (8 Categories)		Value Added Income A32			Government Transfers, Interest on Debt <b>A35</b>		Net Current Transfers A37
Indirect Taxes	Indirect Taxes on Purchases A41		Consumption Taxes <b>A43</b>		Indirect Taxes on Purchases A45	Indirect Taxes on Purchases A46	
Government		Income form Entrepreneur- ship <b>A52</b>	Income form Wealth Tax A53	Total Indirect Tax <b>A54</b>			
Capital Account			Household Savings A63		Government Savings A65		Foreign Savings A67
Rest of the World	Imports A71				Government Transfers to ROW <b>A75</b>		

Block A11 is the inter-industry matrix. The factor incomes generated through production process (A21) are transferred to institutions, i.e. households, according to the ownership of their factor of production (A32, A52). To permit the study of distributional impact of various policies on different types of workers and households, it is necessary to account for such disaggregation. As noted above, apart from factor incomes, a household also gets income from current transfers from the government, interest on public debt (A35) and current transfers from the rest of the world (A37). Households' expenditures consist of consumption on goods and services(A13), and indirect taxes (A43 and A53), with residual savings transferred to the capital account (A63).

The government account is distinct from administrative public activities included in the production activities' account. The receipts of this account consist of income from entrepreneurship (A52), direct taxes (A53) and indirect taxes (A54). On the other hand, its outlay includes its final consumption expenditure on goods and services (A15), transfers and interest payments to households (A35) and current transfers to rest of the world (A75), rest is savings of public sector (A65).

The receipts of capital account are from the net savings of the different institutions (A63 and A65) and foreign savings (A67). The expenditure is equal to gross capital formation (A16), and indirect taxes paid on purchase of the investment goods (A46).

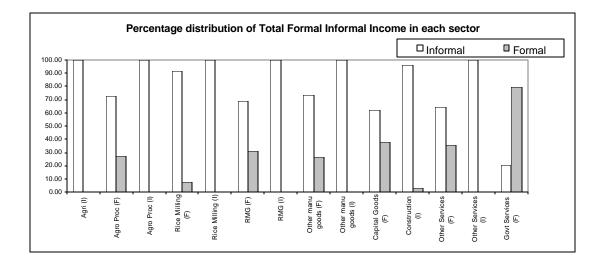
Rest of the world (ROW) represents the equality between foreign exchange expenditures (imports A71 and government transfers A75) on the one hand and foreign exchange earnings (exports A17, net factor income from abroad A27, net current transfers A37 and foreign savings A67) on the other.

### X. Summary and conclusions

In building a SAM, the aggregation of sectors and institutions is of great importance. The purpose of this study is to examine the contribution of the informal sector to the economy. We therefore identified the informal sector from the nation-wide data set both in terms of production and in terms of workers involved in informal activities. This was then placed in a macro framework.

For the production side we used data from the Central Statistical Organisation (CSO). As defined by the CSO the formal sector or organised sector comprises establishments employing 10 or more workers as well as using electricity -- or employing 20 or more workers without electricity. Registration in accordance with the Factories Act is necessary. These establishments come under the Annual Survey of Industries (ASI). The rest of the manufacturing establishments comprise the unorganised sector. In order to disaggregate the 115 sectors of the CSO's input-output table on the organised and unorganised sectors, we took data from the ASI and the Enterprise Follow-up Surveys These sectors are aggregated into 14 sectors on the basis of their usefulness in providing information about the informal economy. This was then updated to the 1999-00 value. The coefficients are updated using relative price information to arrive at the 1999-00 value.

The SAM analysis as described above has explained how we obtained sectoral wage income and non-wage income. The total factor income is distinguished in the formal and informal types to examine the share of informal to formal value added by each sector. This is depicted in the chart below:



Percentage Distribution of Factor Incomes in each production sector

The SAM analysis has shown that in the formal part of readymade garments, informal workers form 59.9 percent of total workforce and receives 68.9 percent of total factor income. In the formal part of the 'other' manufacturing goods sector, 59.0 percent of workers which are informal get 73.6 percent of total factor income. In capital goods, although informal workers form only 27.6 percent of the total workforce, their income share is 61.9 percent. Regular workers form a very high proportion of the workforce and informal capitalists are on the higher side among capitalists. 85.2 percent of total capital income in this sector goes to own account workers or informal capitalists. The study has revealed that a major part of workers. They form about 52 percent of the labour force working for the formal sector. The share of total informal workers in the economy is as high as 88 percent.

The SAM for the year 1999-2000 forms the basic data set for the CGE model developed incorporating the informal sector. The characteristics of the informality captured in the model are already spelled in the SAM. Therefore, the relationship each

sector has with factors of production and the distribution of value added to the different types of households is designed in the SAM itself.

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**A**1

# APPENDIX A: Aggregation Scheme For 14 Industrial Sectors with NIC 5-Digit Codes

	Sectors		NIC 5-digit Codes	Description
No.			01111 05005	
1	Agriculture	1	01111-05005	Growing of crops; market gardening; horticulture
				Farming of animals
				Growing of crops combined with farming of animals (mixed farming)
				Agricultural and animal husbandry service activities, except veterinary activities.
				Hunting, trapping and game propagation
				Forestry, logging and related services activites.
				Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing.
2	Agro-processing	F	15111-15311, 15313-16009	Production, processing and preservation of meat, fish, fruit vegetables, oils and fats.
3	Agro-processing	1		Manufacture of dairy product
				Manufacture of grain mill products except rice milling, starches and starch products, and prepared mill products.
				Manufacture of other food products
				Manufacture of beverages
				Manufacture of tobacco products
4	Rice Milling	F	15312	Rice Milling
5	Rice Milling	Ι		
6	Readymade Garments	F	17301-17309, 18101	Manufacture of knitted and crocheted fabrics and articles.
7	Readymade Garments	Ι		Manufacture of all types of textile garments and clothing accessories.
8	Other Manufacturing Goods	F	10101-14299, 17111-17299, 18102-18209, 19111- 28999, 29301-29309, 31401-31404, 32101-33309, 34103, 34105, 35911-37200, 50200, 50404, 52601-52609	Mining and agglomeration of hard coal.
9	Other Manufacturing Goods	Ι		Mining and agglomeration of lignite.
				Extraction and agglomeration of peat.

	Extraction of crude petroleum and natural gas
	Service activities incidental to oil and gas extraction excluding surveying.
	Mining of uranium and thorium ores, including concentrating of such ores.
	Mining of iron ores
	Mining of non-ferrous metal ores, except uranium and thorium ores.
	Quarrying of stone, sand and clay.
	Mining and quarrying.
	Spinning, weaving and finishing of textiles.
	Manufacture of other textiles
	Manufacture of rain coats of waterproof textile fabrics or plastic sheetings.
	Manufacture of hats and caps from waterproofs.
	Manufacture of wearing apparel of leather and substitute of leather.
	Manufacture of wearing apparel
	Dressing and dyeing of fur, manufacture of articles of fur.
	Manufacture of footwear
	Saw milling and planing of wood.
	Manufacture of products of wood, cork, straw and plaiting materials.
	Manufacture of paper and paper products.
	Publishing.
	Printing and service activities related to printing.
	Reproduction of recorded media.
	Manufacture of coke oven products.
	Manufacture of refined petroleum products.
	Processing of nuclear fuel.
	Manufacture of basic chemicals.

	M	lanufacture of other chemical products.
	M	lanufacture of man-made fibres.
	M	anufacture of rubber products.
	M	anufacture of plastic products.
	m	anufacture of glass and glass products.
	М	anufacture of non-structural non-refractory ceramic ware.
	M	anufacture of basic iron and steel.
	М	anufacture of basic precious and non-ferrous metals.
	Ci	asting of metals.
	M	anufacture of structural metal products, tanks, reservoirs and steam generators.
	М	anufacture of other fabricated metal products; metal working service activities.
	M	anufacture of domestic appliances.
	M	anufacture of accumulators, primarycells and primary batteries.
	M	anufacture of electronic valves and tubes and other electronic components.
	M	anufactureof television and radio transmitters and apparatus for line telephony and line telegraphy.
		lanufacture of television and radio receivers, sound or video recording or reproducing apparatus and ssociated goods.
		lanufacture of medical appliances and instruments and appliances for measuring, checking, testing, avigatingand other purposes except optical instruments.
	М	anufacture of optical instruments and photographic equipment.
	М	anufacture of watches and clocks.
	М	lanufacture of motor cars.
	М	anufacture of special purpose motor cars such as racing cars, golfcars etc.
	М	lanufacture of transport equipment.
	Μ	lanufacture of furniture.

				Manufacturing of jewellery and related articles.
				Manufacture of musical instruments.
				Manufacture of sports goods.
				Manufacture of games and toys.
				Other manufacturing.
				Recycling.
				Maintenance and repair of motor vehicles.
				Maintenance and repair of motorcycles, scooters and three wheelers. vehicles.
				Repair of personal and household goods.
10	Capital Goods	F	29111-29299, 30001-31300, 31501-31909, 34101- 34102, 34104, 34106, 34107, 34201-35303	Manufacture of General purpose Machinery.
				Manufacture of Special purpose Machinery.
				Manufacture of office, accounting and computing machinery
				Manufacture of Electric motors, Generators and Transformers.
				Manufacture of Electricity distribution and control panel apparatus.
				Manufacture of insulated wire and cables.
				Manufacture of Electric Lamps and lighting Equipment.
				Manufacture of Other Electrical equipments.
				Manufacture of Heavy motor vehicles.buses and vans principally designed for transport of persons.
				Manufacture of motor vehicles for the transport of goods: ordinary lorries, trucks and goods vans, lorries with automatic discharging devices, tankers drop frame lorries, refuse collectors, etc.; special purpose motor lorries and trucks e.g. motor breakdown lorries, armoured cars, street sweepers, mobile medical/dental clinics, travelling libraries etc., also included over the road tractors for semi-trailers.
				Manufacture of Jeep & Station wagon.
				Manufacture of chassis fitted with engines for the motor vehicles.
				Manufacture of compression ignition or spark ignition reciprocating or rotary internal combustion engines used to power motor vehicles.

			Manufacture of bodies (coach work) for motor vehicles; Manufacture of trailers and semi trailers.
			Manufacture of of part and accesssories for motor vehicles and their engines.
			Building and repair of Ships and Boats.
			Manufacture of railway and tramway locomotives and rolling stocks.
			Manufacture of Aircraft and Space crafts.
Construction	I	45101-45500	Site Preparation.
			Building of complete constructions or parts thereof; civil engineering.
			Installation of heating and air conditioning systems, antennas, elevators & escalators; insulation work (water, heat, sound); and sound proofing system.
			Other building installation n.e.c.(includes industrial process piping work,installation of illumination & signalling systems for roads, railways, airports, harboursetc., and installation of certain plants such as electric power and transformer plants, telecommunication plants and radar plants etc.
Other Services	F	40101-41000, 50101-50103, 50300-50403, 50500, 51101-52599, 55101-74999, 80101-99000	Production, collection and distribution of Electricity.
Other Services	I		Manufacture of Gas, distribution of Gaseous Fuels through mains.
			Steam & Hot water supply.
			Collection, purification and distribution of Water.
			Sale of motor vehicles.
			Sale of motor vehicle parts and accessories.
			Sale of new Motor cycles, Scooters and Threewheelers.
			Activities of commission agents involved in the sale of Motor cycles, Scooters and Threewheelers.
			Activities of the Dealers involved in used Motor cycles, Scooters and Threewheelers.
			Retail sale of automotive fuel.
			Wholesale on a fee or contract basis (includes commission agents, commodity brokers & auctioneers and all other wholesalers who trade on behalf and account of others.
			Wholesale of agricultural raw materials, live animals, food, beverages and tobacco.
			Wholesale og household goods.
	Construction Construction Other Services Other Services	Other Services F	Other Services         F         40101-41000, 50101-50103, 50300-50403, 50500, 51101-52599, 55101-74999, 80101-99000

Wholesale of non-agricultural intermediate products, waste and scrap.
Wholesale of Machinery, equipments and supplies.
Other Wholesale (includes specialized Wholesale not covered in any one of the previous categories and Wholesale in a variety of goods without any particular specialization).
Non-specialised retail trade in stores
Retail sale of food, beverages and tobacco in specialised stores
Other retail trade of new goods in specialised stores
Retail sale of second-hand goods in stores
Retail trade not in stores.
Hotels;Camping sites and other Provision of short-stay accomodation (restaurant facilities operated in connection with the provision of lodging remain classified in this group. Also Included in the operation of sleeping cars when carried on by separate units).
Restaurants, Bars and Canteens
Transport via Railways (includes passenger and freights by inter urban railways, also related activities such as shunting and switching).
Other land transport
Transport via Pipelines.(includes transport of gases, liquids, slurry and other commodities via pipelines. Included are incidental activities like operaion of pump stations & maintenance of pipeline).
Sea & Coastal Water Transport.
Inland Water Transport.
Scheduled Air Transport
Non-scheduled Air Transport.
Supporting and auxiliary transport activities; activities of travel agencies.
Post and Courier activities.
Telecommunication
Monetary Intermediation (This group Includes the obtaining of funds in the form of deposits.)

T	Others Financial Internet distinct (This ensure lashed as financial internet distinct these that some dust a
	Other Financial Intermediation (This group Includes financial intermediation other than that conducted by Monetary Institutions).
	Insurance and Pension Funding, except compulsory social security.
	Activities auxillary to Financial Intermediation, except Insurance and Pension Funding. This group Includes activities involved in or closely related to Financial Intermediation other than Insurance and Pension Funding, but not themselves involving Financial Intermediation).
	Activities auxillary to insurance and Pension Funding. (This group Includes activities involved in or closely related to Management of Insurance and Pension Funding other than Financial Intermediation and Includes activities of insurance agents, average & loss adjusters, actuaries and salvage administrator.)
	Real estate activities with own or leased property.(This group Includes buying, selling, renting, and operating with own or leased real estate such as apartment building & dwelling, non residential buildings,development & sale of land,cemetry lots,operating of apartment hotels and residential home sites).
	Real estate acivities on a fee or contract basis.
	Renting of Transport equipments.
	Renting of other machinery and equipment.
	Renting of personal and household goods.
	Hardware consultancy.
	Software consultancy and supply.
	Data processing.
	Database activities
	Maintenance and repair of office, accounting and computing machinery.
	Other computer related activities.
	Research and Development
	Legal, accounting, book-keeping and auditing activities; tax consultancvy; market research and public opinion polling; business and management consultancy.
	Architectural, engineering and other technical activities.
	Advertising.

				Education
				Health and Social Work.
				Sewage and refuse disposal, sanitation and similar activities.
				Activities of membership organisations.
				Recreational, cultural and sporting activities.
				Other service activities.
				Private Households with employed persons.
				Extra territorial Organisations and bodies.
14	Government Services	F	75111-75302	Public Administration and defence; compulsory social security.

RURAL	Percentage Distribution			
	Formal	Informal	Total	
Labour	2.05	97.95	100.00	
Capitalist	0.09	99.91	100.00	
TOTAL	1.76	98.24	100.00	
URBAN				
Labour	75.04	24.96	100.00	
Capitalist	0.36	99.64	100.00	
TOTAL	46.90	53.10	100.00	
ALL HOUSEHOLDS				
Labour	18.40	81.60	100.00	
Capitalist	0.23	99.77	100.00	
TOTAL	14.48	85.52	100.00	

## **APPENDIX B: Types of Households by Formal and Informal Categories**

## **APPENDIX C: Distribution of Households in Rural and Urban Sectors**

			(in percent)
	Rural	Urban	Overall
Informal - Casual Labour	83.05	15.56	64.02
Formal - Regular Wage Earner	1.74	46.76	14.43
Informal Capitalist	15.19	37.55	21.50
Formal Capitalist	0.01	0.14	0.05
Total	100.00	100.00	100.00

CODE	CONSUMPTION ITEM	SECTOR
101	Rice - P.D.S.	Rice Milling
102	Rice - Other Sources	Rice Milling
103	Chira	Agroprocessing
104	Khoi, Lawa	Agroprocessing
105	Muri	Agroprocessing
106	Other Rice Products	Agroprocessing
107	Wheat/Atta - P.D.S.	Agriculture
108	Wheat/Atta - Other Sources	Agriculture
110	Maida	Agroprocessing
111	Suji, Rawa	Agroprocessing
112	Sewai, Noodles	Agroprocessing
113	Bread (Bakery)	Agroprocessing
114	Other Wheat Products	Agroprocessing
115	Jowar & Products	Agroprocessing
116	Bajra & Products	Agroprocessing
117	Maize & Products	Agroprocessing
118	Barley & Products	Agroprocessing
120	Small Millets & Products	Agroprocessing
121	Ragi & Products	Agroprocessing
122	Other Cereals	Agriculture
139	Cereal Substitutes (Tapioca, Jackfruit Seed Etc.)	Rice Milling
140	Arhar (Tur)	Agriculture
141	Gram (Split)	Agriculture
142	Gram (Whole)	Agriculture
143	Moong	Agriculture
144	Masur	Agriculture
145	Urd	Agriculture
146	Peas	Agriculture
147	Soyabean	Agriculture
148	Khesari	Agriculture
150	Other Pulses	Agriculture
151	Gram Products	Agroprocessing
152	Besan	Agroprocessing
153	Other Pulse Products	Agroprocessing
160	Milk: Liquid (Litre)	Agroprocessing
161	Baby Food	Agroprocessing
162	Milk : Condensed/ Powder	Agroprocessing
163	Curd	Agroprocessing
164	Ghee	Agroprocessing
165	Butter	Agroprocessing
166	Ice-Cream	Agroprocessing
167	Other Milk Products	Agroprocessing

## **APPENDIX D:** Consumption Items Mapped With Sectors

CODE	CONSUMPTION ITEM	SECTOR
170	Vanaspati, Margarine	Agroprocessing
171	Mustard Oil	Agroprocessing
172	Groundnut Oil	Agroprocessing
173	Coconut Oil	Agroprocessing
174	Edible Oil (Others)	Agroprocessing
180	Eggs (No.)	Agriculture
181	Fish, Prawn	Agriculture
182	Goat Meat/Mutton	Agriculture
183	Beef/ Buffalo Meat	Agriculture
184	Pork	Agriculture
185	Chicken	Agriculture
186	Others (Birds, Crab, Oyster, Tortoise Etc.)	Agriculture
190	Potato	Agriculture
191	Onion	Agriculture
192	Radish	Agriculture
193	Carrot	Agriculture
194	Turnip	Agriculture
195	Beet	Agriculture
196	Sweet Potato	Agriculture
197	Arum	Agriculture
198	Pumpkin	Agriculture
200	Gourd	Agriculture
201	Bitter Gourd	Agriculture
202	Cucumber	Agriculture
203	Parwal / Patal	Agriculture
204	Jhinga / Torai	Agriculture
205	Snake Gourd	Agriculture
206	Papaya (Green)	Agriculture
207	Cauliflower	Agriculture
208	Cabbage	Agriculture
210	Brinjal	Agriculture
211	Lady's Finger	Agriculture
212	Palak/Other Leafy Vegetables	Agriculture
213	French Beans And Barbati	Agriculture
214	Tomato	Agriculture
215	Peas	Agriculture
216	Chillis (Green)	Agriculture
217	Capsicum	Agriculture
218	Plantain (Green)	Agriculture
220	Jackfruit (Green)	Agriculture

CODE	CONSUMPTION ITEM	SECTOR
221	Lemon (No.)	Agriculture
222	Other Vegetables	Agriculture
230	Banana (No.)	Agriculture
231	Jackfruit	Agriculture
232	Watermelon	Agriculture
233	Pineapple (No.)	Agriculture
234	Coconut (No.)	Agriculture
235	Guava	Agriculture
236	Singara	Agriculture
237	Orange,Mausami (No.)	Agriculture
238	Рарауа	Agriculture
240	Mango	Agriculture
241	Kharbooza	Agriculture
242	Pears (Naspati)	Agriculture
243	Berries	Agriculture
244	Leechi	Agriculture
245	Apple	Agriculture
246	Grapes	Agriculture
247	Other Fresh Fruits	Agriculture
250	Coconut (Copra)	Agriculture
251	Groundnut	Agriculture
252	Dates	Agriculture
253	Cashewnut	Agriculture
254	Walnut	Agriculture
255	Other Nuts	Agriculture
256	Raisin (Kishmish, Monacca Etc.)	Agriculture
257	Other Dry Fruits	Agriculture
260	Sugar - P.D.S.	Agroprocessing
261	Sugar - Other Sources	Agroprocessing
262	Gur	Agroprocessing
263	Candy (Misri)	Agroprocessing
264	Honey	Agroprocessing
269	Sugar : S.T. (260-264)	Agroprocessing
279	Salt	Agroprocessing
280	Turmeric (Gm)	Agriculture
281	Black Pepper (Gm)	Agriculture
282	Dry Chillies (Gm)	Agriculture
283	Garlic (Gm)	Agriculture
284	Tamarind (Gm)	Agriculture
285	Ginger (Gm)	Agriculture
286	Curry Powder (Gm)	Agroprocessing
287	Oilseeds (Gm)	Agriculture
288	Other Spices (Gm)	Agriculture

CODE	CONSUMPTION ITEM	SECTOR
290	Tea : Cups (No.)	Agroprocessing
291	Tea : Leaf (Gm)	Agroprocessing
292	Coffee : Cups (No.)	Agroprocessing
293	Coffee: Powder (Gm)	Agroprocessing
294	Ice	Agroprocessing
295	Cold Beverages: Bottled/Canned (No.)	Agroprocessing
296	Fruit Juice And Shake (Glass)	Agroprocessing
297	Coconut: Green (No.)	Agriculture
298	Other Beverages (Cocoa, Chocolate Etc.)	Agroprocessing
300	Biscuits	Agroprocessing
301	Salted Refreshments	Agroprocessing
302	Prepared Sweets	Agroprocessing
303	Cooked Meals (No.)	Agroprocessing
304	Cake, Pastry	Agroprocessing
305	Pickles (Gm)	Agroprocessing
306	Sauce (Gm)	Agroprocessing
307	Jam, Jelly (Gm)	Agroprocessing
308	Other Processed Food	Agroprocessing
310	Pan : Leaf (No.)	Agriculture
311	Pan : Finished (No.)	Agroprocessing
312	Supari (Gm)	Agroprocessing
313	Lime (Gm)	Agroprocessing
314	Katha (Gm)	Agroprocessing
315	Other Ingredients For Pan (Gm)	Agroprocessing
320	Bidi (No.)	Other Manufacturing Goods
321	Cigarettes (No.)	Other Manufacturing Goods
322	Leaf Tobacco	Other Manufacturing Goods
323	Snuff (Gm)	Other Manufacturing Goods
324	Hookah Tobacco	Other Manufacturing Goods
325	Cheroot (No.)	Other Manufacturing Goods
326	Zarda, Kimam, Surti (Gm)	Other Manufacturing Goods
327	Other Tobacco Products (Gm)	Other Manufacturing Goods
330	Ganja (Gm)	Other Manufacturing Goods
331	Toddy (Litre)	Other Manufacturing Goods
332	Country Liquor (Litre)	Agroprocessing
333	Beer (Litre)	Agroprocessing
334	Foreign Liquor Or Refined Liquor (Litre)	Agroprocessing
335	Other Intoxicants	Agroprocessing
340	Coke	Other Manufacturing Goods
340	Firewood And Chips	Other Manufacturing Goods
342	Electricity (Std. Unit)	Other Manufacturing Goods

CODE	CONSUMPTION ITEM	SECTOR
343	Dung Cake	Other Manufacturing Goods
344	Kerosene - P.D.S. (Litre)	Other Manufacturing Goods
345	Kerosene - Other Sources (Litre)	Other Manufacturing Goods
346	Matches (Box)	Other Manufacturing Goods
347	Coal	Other Manufacturing Goods
348	L.P.G.	Other Manufacturing Goods
350	Charcoal	Other Manufacturing Goods
351	Candle (No.)	Other Manufacturing Goods
352	Gobar Gas	Other Manufacturing Goods
353	Other Fuel	Other Manufacturing Goods
360	Dhoti (M)	Readymade Garments
361	Sari (M)	Readymade Garments
362	Cloth For Shirt, Pyjama, Salwar Etc.(M)	Other Manufacturing Goods
363	Cloth For Coat, Trousers, Overcoat Etc. (M)	Other Manufacturing Goods
364	Chaddar, Dupatta, Shawl Etc.(No.)	Other Manufacturing Goods
365	Lungi (No.)	Readymade Garments
366	Gamchha, Towel, Handkerchief (No.)	Other Manufacturing Goods
367	Hosiery Articles, Stockings, Under-Garments Etc.(No.)	Other Manufacturing Goods
368	Ready-Made Garments (No.)	Readymade Garments
370	Headwear (No.)	Readymade Garments
371	Knitted Garments, Swea- Ter, Pullover, Cardigan, Muffler, Scarf Etc.(No.)	Readymade Garments
372	Knitting Wool, Cotton Yarn (Gm)	Other Manufacturing Goods
373	Clothing: Others	Other Manufacturing Goods
374	Second-Hand Clothing	Other Manufacturing Goods
380	Bed Sheet, Bed Cover (No.)	Other Manufacturing Goods
381	Rug, Blanket (No.)	Other Manufacturing Goods
382	Pillow, Quilt, Mattress (No.)	Other Manufacturing Goods
383	Cloth For Upholstery, Curtain, Table-Cloth Etc. (M)	Other Manufacturing Goods
384	Mosquito Net (No.)	Other Manufacturing Goods
385	Mats And Matting (No.)	Other Manufacturing Goods
386	Cotton (Gm)	Other Manufacturing Goods
387	Bedding: Others	Other Manufacturing Goods
390	Leather Boots, Shoes (Pair)	Other Manufacturing Goods
391	Leather Sandals, Chappals Etc. (Pair)	Other Manufacturing Goods
392	Other Leather Footwear (Pair)	Other Manufacturing Goods
393	Rubber / PVC Footwear (Pair)	Other Manufacturing Goods
394	Other Footwear (Pair)	Other Manufacturing Goods
400	Books, Journals	Other Manufacturing Goods
401	Newspapers, Periodicals	Other Manufacturing Goods
402	Library Charges	Other Services

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CODE	CONSUMPTION ITEM	SECTOR
403	Stationery	Other Manufacturing Goods
404	Tuition And Other Fees (School, College, Etc.)	Other Services
405	Private Tutor/Coaching Centre	Other Services
406	Other Educational Expenses	Other Services
410	Medicine	Other Manufacturing Goods
411	X-Ray, ECG, Pathological Test Etc.	Other Services
412	Doctor's/Surgeon's Fee	Other Services
413	Hospital & Nursing Home Charges	Other Services
414	Other Medical Expenses	Other Services
420	Medicine	Other Manufacturing Goods
421	X-Ray, ECG, Pathological Test Etc.	Other Services
422	Doctor's/Surgeon's Fee	Other Services
423	Family Planning Appliances	Other Services
424	Other Medical Expenses	Other Services
430	Cinema, Theatre	Other Services
431	Mela, Fair, Picnic	Other Services
432	Sports Goods, Toys Etc.	Other Manufacturing Goods
*433	Club Fees	Other Services
434	Goods For Recreation And Hobbies	Other Manufacturing Goods
435	Photography	Other Services
436	Video Cassette / V.C.R. / V.C.P.(Hire)	Other Manufacturing Goods
437	Other Entertainment	Other Services
440	Spectacles	Other Manufacturing Goods
441	Torch	Other Manufacturing Goods
442	Pen	Other Manufacturing Goods
443	Lock	Other Manufacturing Goods
444	Umbrella, Raincoat	Other Manufacturing Goods
445	Lighter (Bidi/Cigarette/Gas Stove)	Other Manufacturing Goods
446	Other Goods For Personal Care And Effects	Other Manufacturing Goods
450	Toilet Soap	Other Manufacturing Goods
451	Toothbrush, Toothpaste Etc.	Other Manufacturing Goods
452	Powder, Snow, Cream	Other Manufacturing Goods
453	Hair Oil, Lotion, Shampoo, Hair Cream	Other Manufacturing Goods
454	Comb	Other Manufacturing Goods
455	Shaving Blades, Shaving Stick, Razor	Other Manufacturing Goods
456	Shaving Cream	Other Manufacturing Goods
457	Sanitary Napkins	Other Manufacturing Goods
458	Other Toilet Articles	Other Manufacturing Goods
460	Electric Bulb, Tubelight	Other Manufacturing Goods
461	Electric Batteries	Other Manufacturing Goods

CODE	CONSUMPTION ITEM	SECTOR
462	Other Non-Durable Electric Goods	Other Manufacturing Goods
463	Earthenware	Other Manufacturing Goods
464	Glassware	Other Manufacturing Goods
465	Bucket, Water Bottle/Feeding Bottle & Other Plastic Goods	Other Manufacturing Goods
466	Coir, Rope Etc.	Other Manufacturing Goods
467	Washing Soap/Soda	Other Manufacturing Goods
468	Other Washing Requisites	Other Manufacturing Goods
470	Agarbati	Other Manufacturing Goods
471	Flower(Fresh) : All Purposes	Agriculture
472	Insecticide, Acid Etc.	Other Manufacturing Goods
473	Other Petty Articles	Other Manufacturing Goods
480	Domestic Servant/Cook	Other Services
481	Sweeper	Other Services
482	Barber, Beautician Etc.	Other Services
483	Washerman, Laundry, Ironing	Other Services
484	Tailor	Other Services
485	Priest	Other Services
486	Legal Expenses	Other Services
487	Postage & Telegram	Other Services
*488	Telephone Charges	Other Services
490	Repair Charges For Non-Durables	Other ServicesOther Services
491	Grinding Charges	Other Services
492	Miscellaneous Expenses	Other Services
493	Pet Animals (Incl. Birds, Fish)	Other Services
494	Other Consumer Services Excluding Conveyance	Other Services
500	Airway Fare	Other Services
501	Railway Fare	Other Services
502	Bus/Tram Fare	Other Services
503	Taxi, Auto-Rickshaw Fare	Other Services
504	Steamer, Boat Fare	Other Services
505	Rickshaw (Hand Drawn & Cycle) Fare	Other Services
506	Horse Cart Fare	Other Services
507	Porter Charges	Other Services
508	Petrol	Other Services
510	Diesel	Other Services
511	Lubricating Oil	Other Services
512	School Bus/Van	Other Services
513	Other Hired Conveyance	Other Services
*520	House Rent, Garage Rent (Actual)	Other Services
*521	Residential Land Rent	Other Services

CODE	CONSUMPTION ITEM	SECTOR
522	Consumer Rent (Other Goods)	Other Services
539	House Rent, Garage Rent (Imputed- Urban Only)	Other Services
*540	Water Charges	Other Services
*541	Other Consumer Taxes & Cesses	Other Services
550	Bedstead	Other Manufacturing Goods
551	Almirah, Dressing Table	Other Manufacturing Goods
552	Chair, Stool, Bench, Table	Other Manufacturing Goods
553	Suitcase, Trunk, Box, Handbag And Other Travel Goods	Other Manufacturing Goods
554	Foam, Rubber Cushion (Dunlopillo Type)	Other Manufacturing Goods
555	Carpet, Daree & Other Floor Mattings	Other Manufacturing Goods
556	Paintings, Drawings, Engravings Etc.	Other Manufacturing Goods
557	Other Furniture & Fixtures (Couch, Sofa Etc.)	Other Manufacturing Goods
560	Gramophone & Record Player	Other Manufacturing Goods
561	Radio	Other Manufacturing Goods
562	Television	Other Manufacturing Goods
563	Vcr/Vcp	Other Manufacturing Goods
564	Camera & Photographic Equipment	Other Manufacturing Goods
565	Tape Recorder, CD Player	Other Manufacturing Goods
566	Gramophone Record, Audio/Video Cassette	Other Manufacturing Goods
567	Musical Instruments	Other Manufacturing Goods
568	Other Goods For Recreation	Other Manufacturing Goods
570	Gold Ornaments	Other Manufacturing Goods
571	Silver Ornaments	Other Manufacturing Goods
572	Jewels, Pearls	Other Manufacturing Goods
573	Other Ornaments	Other Manufacturing Goods
580	Stainless Steel Utensils	Other Manufacturing Goods
581	Other Metal Utensils	Other Manufacturing Goods
582	Casseroles, Thermos, Thermoware	Other Manufacturing Goods
583	Other Crockery & Utensils	Other Manufacturing Goods
590	Electric Fan	Other Manufacturing Goods
591	Air Conditioner, Air Cooler	Other Manufacturing Goods
592	Lantern, Lamp, Electric Lampshade	Other Manufacturing Goods
593	Sewing Machine	Other Manufacturing Goods
594	Washing Machine	Other Manufacturing Goods
595	Stove	Other Manufacturing Goods
596	Pressure Cooker/Pressure Pan	Other Manufacturing Goods
597	Refrigerator	Other Manufacturing Goods
598	Electric Iron, Heater, Toaster, Oven & Other Electric Heating Appliances	Other Manufacturing Goods
600	Other Cooking/Household Appliances	Other Manufacturing Goods
610	Bicycle	Other Manufacturing Goods

CODE	CONSUMPTION ITEM	SECTOR
611	Motor Cycle, Scooter	Other Manufacturing Goods
612	Motor Car, Jeep	Other Manufacturing Goods
613	Tyres & Tubes	Other Manufacturing Goods
614	Other Transport Equipment	Other Manufacturing Goods
620	Glass Eyes, Hearing Aids & Orthopaedic Equipment	Other Manufacturing Goods
621	Other Medical Equipment	Other Manufacturing Goods
630	Clock, Watch	Other Manufacturing Goods
631	Other Machines For Household Work	Other Manufacturing Goods
632	Any Other Personal Goods	Other Manufacturing Goods
640	Bathroom And Sanitary Equipment	Other Manufacturing Goods
641	Plugs, Switches & Other Electrical Fittings	Other Manufacturing Goods
642	Residential Building & Land (Cost Of Repairs Only)	Other Manufacturing Goods
643	Other Durables (Specify)	Other Manufacturing Goods

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