## Chapter Six

# A FRAMEWORK FOR SOCIAL ACCOUNTS FOR 1948-49.

6.1. In chapter 5, the information at present available on the national income and other elements of the national accounts was presented in such a way as to throw light on a number of questions of interest in the formulation of policy. The purpose of this chapter is to supplement that information, where this can be done with reliability, in such a way as to illustrate as far as possible the conceptual structure described in previous chapters and at the same time to bring out clearly the structure of statistical data on which this report has been based and the principal items on which no information is available at present.

6.2. The numerical results given in this report are all derived from three basic kinds of information. The first is an estimate of the net domestic product at factor cost built up from estimates of the net value added in each branch of activity. These estimates were presented in Table 2 of chapter 5. The second is a detailed classification on economic lines of the transactions of public authorities, that is, of the central government, government enterprises, State governments and municipal and other local authorities. Much of this information was used in chapter 5 but it was not presented systematically or in detail. Since this information is for the most part highly reliable being based on actual accounting data (there are exceptions in the case of certain class B and C States but these are not numerically important) and of very considerable interest in itself, it is set out systematically in Tables 9, 10 and 11 of this chapter which show respectively a current account of government administration in 1948-49, a current account of government commercial enterprises in 1948-49, and an account of the capital transactions of government enterprises and general government administration in 1948-49. The third type of information relates to the transactions between the Indian Union and the rest of the world, and here again a large volume of information is available from the estimates of India's balance of payments published regularly by the Reserve Bank of India. Tables 13 and 14 which show the transactions between the Indian Union and all other countries on current and capital account respectively are based on this information.

6.3. With these three types of information it is possible to go a considerable way in filling in numerically the conceptual structure described briefly in previous chapters. This structure involves distinctions between (a) different types of economic activity, in particular the three basic

forms, production, consumption and adding to wealth; (b) different classes of transactor, in particular between government and the private sector of the economy, and within the latter between different forms of organization such as enterprises and households; and (c) different classes of transaction, in particular those which involve a transfer of commodities or services and those which do not but instead take the form simply of unilateral payments.

6.4. The first of these distinctions is important since it provides the basic classification needed for economic analysis. Without it there could be no distinction between costs and incomes nor between consumption and capital expenditure. The second is important partly because transactors are so often the source of statistical and accounting information and partly because they are the centres of economic decisions. The third criterion is important because it permits transactions directly involving an absorption of commodities and services to be distinguished from those which involve only a redistribution of purchasing power between the different sectors of the economy.

6.5. It is usual and convenient to distinguish between three main sectors of the economy: enterprises, households, and government; and in each case to group the transactions together into one of three accounts, one for each of the three basic forms of economic activity. This completes a simple accounting presentation of the domestic economy. The rest of the world may be represented indifferently in such a scheme either as an additional sector or as an additional type of account. It will be represented in the latter way in what follows.

6.6. The system just described contains three sectors of the economy each with four accounts, or twelve accounts in all. Some further simplification is needed if the structure of the Indian economy is to be represented with existing information and this may conveniently be done by consolidation as follows.

| | enterprises | households | government |
|---|---|---|---|
| production (operating account) | □ | □ | □ |
| consumption (appropriation account) | □ | □ | □ |
| adding to wealth (resting account) | □ | □ | □ |
| external account | □ | □ | □ |

In this diagram solid lines (——) indicate that the accounts over which they stretch are consolidated. Thus the original system of twelve accounts is reduced in the manner shown to one of five.

6.7. The first account, the Domestic Product Account in Table 7 below, is purely functional, that is to say it brings together in summary form all

TABLE 7: THE NATIONAL ACCOUNTS OF THE INDIAN UNION: 1948-49*

| (1) | (2) | (3) | (4) |
|---|---|---|---|
| **DOMESTIC PRODUCT ACCOUNT** | | | |
| *expenditure* | | *revenue* | |
| 1. indirect taxes | | 5. current expenditure on commodities and services | |
| 1.1 taxes (25.1) | 4.2 | 5.1 consumers (10) | E |
| 1.2 miscellaneous fees (25.2) | 0.7 | 5.2 government sector (20) | 6.3 |
| 2. provision for depreciation (33) | D | 6. gross domestic capital formation | |
| 3. domestic product accruing to | | 6.1 private sector (30.1) | I |
| 3.1 private sector (14) | 86.6 | 6.2 government sector (30.2) | 2.1 |
| 3.2 government sector (27) | 0.7 | 7. net exports of commodities and services (39) | (—)2.1 |
| | | 8. subsidies (21) | 0.3 |
| 4. total | D+92.2 | 9. total | E+I+6.6 |
| **PRIVATE APPROPRIATION ACCOUNT** | | | |
| *expenditure* | | *revenue* | |
| 10. consumer expenditure (5.1) | E | 14. income from domestic product (3.1) | 86.6 |
| 11. direct taxes (26) | 2.0 | 15. national debt interest (28) | 0.5 |
| 12. private saving (34.1) | S | 16. net earned income from abroad (40) | (—)0.2 |
| | | 17. transfer payments (22) | 0.3 |
| | | 18. net donations from abroad (36) | 0.1 |
| 13. total | E+S+2.0 | 19. total | 87.3 |
| **GOVERNMENT APPROPRIATION ACCOUNT** | | | |
| *expenditure* | | *revenue* | |
| 20. government expenditure on commodities and services (5.2) | 6.3 | 25. indirect taxes | |
| | | 25.1 taxes (1.1) | 4.2 |
| 21. subsidies (8) | 0.3 | 25.2 miscellaneous fees (1.2) | 0.7 |
| 22. transfer payments (17) | 0.3 | 26. direct taxes (11) | 2.0 |
| 23. government saving (34.2) | 0.2 | 27. income from domestic product (3.2) | 0.7 |
| | | 28. *less* national debt interest(15) | (—)0.5 |
| 24. total | 7.1 | 29. total | 7.1 |
| **CONSOLIDATED RESTING ACCOUNT** | | | |
| *expenditure* | | *revenue* | |
| 30. gross domestic capital formation | | 33. provision for depreciation (2) | D |
| 30.1 private sector (6.1) | I | 34. saving | |
| 30.2 government sector(6.2) | 2.1 | 34.1 private sector (12) | S |
| 31. net lending abroad (37) | (—)2.2 | 34.2 government sector (23) | 0.2 |
| 32. total | I+(—)0.1 | 35. total | D+S+0.2 |
| **REST OF THE WORLD ACCOUNT** | | | |
| *expenditure* | | *revenue* | |
| 36. net donations to India (18) | 0.1 | 39. net exports of commodities and services to India (7) | 2.1 |
| 37. net lending to India (31) | 2.2 | 40. net earned income from India (16) | 0.2 |
| 38. total | 2.3 | 41. total | 2.3 |

* in Rs. abja=£75 million pounds sterling=$210 million U.S. dollars.
abja=100 crores=1 milliard=1 U.S. billion=$10^9$.

the transactions relating to the domestic production of the Indian Union without any subdivision by sector. If more information were available it would be possible to subdivide the entries in this account by type of organization (private, government, etc.) and/or by branch of activity (agriculture, manufacturing, commerce, etc.). In fact the sum of entries 3.1 and 3.2 of this table are so subdivided in Table 2 of chapter 5 above.

6.8. The next two accounts, respectively the Private and the Government Appropriation Accounts in Table 7 represent a subdivision by sector of the second form of economic activity which above has been called consumption. The first shows on the revenue side the various elements of private income and on the expenditure side the appropriation of this income to consumers' current expenditure, current transfers (in this case direct taxes) and private saving. The second shows the same elements for public authorities. In their case the bulk of revenue comes from taxation and this revenue is laid out either on common services for the community (education, health, administration, defence, etc.) or transferred to another sector or saved. The items in this account are further subdivided in Table 9.

6.9. The fourth account, the consolidated Resting Account in Table 7 brings together the capital transactions of the Indian Union and shows how domestic capital expenditure is financed by means of borrowing from abroad and from the saving and depreciation provisions of public authorities and private individuals and institutions.

6.10. The fifth and last account, the Rest of the World Account in Table 7 above, brings together the transactions of the Indian Union with other countries. The items in this account are further subdivided in Tables 13 and 14 below.

6.11. In all these accounts, we have used symbols wherever numerical data are not available against the respective activities. Thus, the following types of activities are represented by the symbols given against them:

| | | |
|---|---|---|
| Provision for depreciation | = | D |
| Consumers' current expenditure | = | E |
| Private capital formation | = | I |
| Private saving | = | S |

It may be added that the presentation is articulated, each entry appearing in one other place in the system. Each entry is numbered and the number after each item indicates the entry reciprocal to that item.

6.12. Four items, D, E, I and S, are connected by two independent relationships which may be written in the form

$$E+I-D = 85.6$$
$$E+S \quad = 85.3$$

6.13. Thus if certain pairs of items could be estimated, it would be possible to obtain a residual estimate of each of the remaining two. In fact if value could be obtained for I,S; E,I; D,S; D,I; D,E; then it would be possible to derive respectively D,E; D,S; E,I; E,S; I,S. A knowledge of E,S however would not permit D,I to be derived but only the difference I—D. If all four missing items could be directly and independently estimated then two constraints would be available with which to adjust all the entries in the table. The magnitude of such adjustments in any case would depend on the reliability of the estimates and the relationships, if any, between their errors.

6.14. In this way Table 7 brings out clearly the gaps in the present system of estimation. These gaps occur either in the elements of private final expenditure, E and I; or in the private sources of finance for capital expenditure, D and S. The existence of these gaps sets a new task in the field of data collection which must be completed before the economic structure of the Indian Union can be fully drawn up even in the simplified way indicated in Table 7.

6.15. There are a limited number of income and product totals which are found to be of recurring use in national income analysis. Many of these have in fact been already discussed. The following Table 8 shows how these other aggregates are related to the basic concept of the national income. The numbers in brackets after the entries in Table 8 refer to the entries in Table 7. It will be seen that various income and product totals commonly in use are readily obtained from the entries in the first two accounts of Table 7. It may be mentioned here that personal income before and after tax are other important aggregates. As no reliable information is available on undistributed profits of corporate enterprises, we may represent this by another symbol U. Personal income before tax can be then obtained by subtracting corporation tax and undistributed corporate profits from private income or $(87.30-0.65-U) = (86.65-U)$. Deducting 1.33 for other income taxes, personal income after tax is $(86.65-1.33-U)=(85.32-U)$.

TABLE 8: RELATIONSHIP BETWEEN THE NATIONAL INCOME AND THE OTHER MAIN AGGREGATES OF INCOME AND PRODUCT FOR THE INDIAN UNION: 1948-49

| (1) | (2) |
|---|---|
| | Rs. abja* |
| 1. net national product at factor cost =national income (3.1+3.2+16) | 87.1 |
| 2. indirect taxes including miscellaneous fees (1.1+1.2) | 4.9 |
| 3. *less* subsidies (−8) | (—) 0.3 |
| 4. net national product at market prices (4−2−8+16) | 91.7 |
| 5. provision for depreciation (2) | D |
| 6. gross national product at market prices (4−8+16) | D+ 91.7 |
| 7. net national product at factor cost=national income (3.1+3.2+16) | 87.1 |
| 8. *less* net earned income from abroad (−16) | 0.2 |
| 9. net domestic product at factor cost (3.1+3.2) | 87.3 |
| 10. *less* income from domestic product accruing to government (−3.2) | (—) 0.7 |
| 11. income from domestic product accruing to private sector (3.1) | 86.6 |
| 12. national debt interest (15) | 0.5 |
| 13. net earned income from abroad (16) | (—) 0.2 |
| 14. transfer payments (17) | 0.3 |
| 15. net donations from abroad (18) | 0.1 |
| 16. private income | 87.3 |

* Rs. abja=£75 million pounds sterling= $210 million U.S. dollars.
abja=100 crores=1 milliard=1 U.S. billion=$10^9$.

6.16. Accounts of public authorities summarising the activities of the central and State governments, municipalities, district boards and port trusts have been presented below in Tables 9, 10 and 11. These have been culled from budget accounts, and presented here after reclassification of government revenue and expenditure between current and the capital transactions on the one hand and administrative and commercial activities on the other. These adjustments are purported to bring out the current costs of administration and its finance by different channels of revenue, the distribution of the expenditures on administration, and on commercial activities, and finally the capital transactions of public authorities as distinct from current transactions. Expenditure on defence is, by hypothesis, taken as an item of current expenditure, as capital outlay on defence is not supposed to increase or to maintain the productive resources of the community.

TABLE 9: CURRENT ACCOUNT OF PUBLIC AUTHORITIES: ADMINISTRATION: 1948-49*

| (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|
| *expenditure* | | | *revenue* | | |
| *current expenditure on commodities and services* | | | *direct taxes on income* | | |
| 1. civil administration | 3.26 | | 10. corporation taxes | 0.65 | |
| 2. defence | 2.79 | | 11. other income taxes | 1.33 | |
| 3. miscellaneous | 0.25 | | 12. total direct taxes | | 1.98 |
| 4. total | | 6.30 | *indirect taxes* | | |
| 5. subsidies | | 0.34 | 13. customs | 1.39 | |
| 6. transfer payments to individuals | | 0.26 | 14. excise | 1.07 | |
| 7. total current expenditure | | 6.90 | 15. stamps | 0.20 | |
| | | | 16. land revenue | 0.42 | |
| | | | 17. other taxes and duties | 1.08 | |
| *saving* | | | 18. total indirect taxes | | 4.16 |
| 8. surplus on current account | | 0.20 | *fees and miscellaneous receipts* | | |
| | | | 19. civil administration | 0.38 | |
| | | | 20. miscellaneous | 0.32 | |
| | | | 21. total | | 0.70 |
| | | | 22. total tax revenue | | 6.84 |
| | | | *transfer of operating surplus from current accounts of commercial enterprises* | | |
| | | | 23. railways | 0.25 | |
| | | | 24. others | 0.25 | |
| | | | 25. total | | 0.50 |
| | | | *income from property* | | |
| | | | 26. interest receipts | 0.10 | |
| | | | 27. other receipts | 0.12 | |
| | | | 28. total income from property | | 0.22 |
| | | | 29. *less* national debt interest | | (—)0.46 |
| 9. total | | 7.10 | 30. total | | 7.10 |

* in Rs. abja = £75 million pounds sterling = $ 210 million U. S. dollars.
abja=100 crores=1 milliard=1 U.S. billion=$10^9$.

*N.B.*—Figures in Tables 9–14 are given correct to one crore (ten million) rupees, as these are based on reliable material.

TABLE 10: CURRENT ACCOUNT OF PUBLIC AUTHORITIES: ENTERPRISES: 1948-49*

| (1) | (2) | (3) | (4) | (5) | (6) |
|---|---|---|---|---|---|
| *expenditure* | | | *revenue* | | |
| *purchase of commodities and services from other enterprises* | | | *sale of commodities and services* | | |
| 1. railways | 0.42 | | 17. railways | 2.32 | |
| 2. others | 0.10 | | 18. others | 0.84 | |
| 3. total | | 0.52 | 19. total | | 3.16 |
| *wages and salaries* | | | | | |
| 4. railways | 1.19 | | | | |
| 5. others | 0.38 | | | | |
| 6. total | | 1.57 | | | |
| *interest payments to private sector through government (debt services)* | | | | | |
| 7. railways | 0.23 | | | | |
| 8. others | 0.05 | | | | |
| 9. total | | 0.28 | | | |
| *provision for maintenance and depreciation* | | | | | |
| 10. railways | 0.23 | | | | |
| 11. others | 0.06 | | | | |
| 12. total | | 0.29 | | | |
| *operating surplus* | | | | | |
| 13. railways | 0.25 | | | | |
| 14. others | 0.25 | | | | |
| 15. total | | 0.50 | | | |
| 16. total | | 3.16 | 20. total | | 3.16 |

TABLE 11: CAPITAL ACCOUNT OF PUBLIC AUTHORITIES: ADMINISTRATION AND ENTERPRISES COMBINED: 1948-49*

| (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|
| *expenditure* | | | *revenue* | |
| *commercial enterprises* | | | | |
| 1. maintenance | 0.23 | | 8. surplus on current account | 0.20 |
| 2. capital outlay | 0.97 | | 9. maintenance provision: commercial enterprises | 0.29 |
| 3. total | | 1.20 | 10. net borrowing | 1.59 |
| *administrative departments* | | | | |
| 4. maintenance<br>5. capital outlay | | 0.81 | | |
| 6. net purchase of assets | | 0.07 | | |
| 7. total | | 2.08 | 11. total | 2.08 |

*in Rs. abja=£75 million pounds sterling=$210 million U.S. dollars.
abja=100 crores=1 milliard=1 U.S. billion= $10^9$.

6.17. Table 12 given below brings together the different types of outflows of money (factor payments and other payments) of all government activities.

TABLE 12. NATIONAL INCOME GENERATED IN THE PUBLIC AUTHORITIES SECTOR: 1948-49*

| (1) | factor payments: wages & salaries (2) | factor payments: interest (3) | factor payments: surplus (4) | factor payments: total contribution to national product at factor cost (5) | other payments: purchase of commodities & services from other enterprises (6) | other payments: maintenance provision (7) | other payments: transfer payments (8) | other payments: purchase of assets (9) | total (10) |
|---|---|---|---|---|---|---|---|---|---|
| *current account of public authorities: administration* | | | | | | | | | |
| 1. civil administration & miscellaneous | 2.81 | | | 2.81 | 0.70 | | — | | 3.51 |
| 2. defence | 1.17 | | | 1.17 | 1.62 | | — | | 2.79 |
| 3. subsidies | — | | | — | — | | 0.34 | | 0.34 |
| 4. transfer to individuals | — | | | — | — | | 0.26 | | 0.26 |
| 5. total | 3.98 | | | 3.98 | 2.32 | | 0.60 | | 6.90 |
| *current account of public authorities: enterprises* | | | | | | | | | |
| 6. railways | 1.19 | 0.23 | 0.25 | 1.67 | 0.42 | 0.23 | | | 2.32 |
| 7. post and telegraph | 0.24 | 0.01 | 0.02 | 0.27 | 0.05 | 0.02 | | | 0.34 |
| 8. forest | 0.04 | — | 0.10 | 0.14 | 0.01 | 0.01 | | | 0.16 |
| 9. road transport | 0.02 | — | 0.01 | 0.03 | 0.01 | 0.01 | | | 0.05 |
| 10. industries | 0.03 | 0.02 | 0.04 | 0.09 | 0.02 | 0.01 | | | 0.12 |
| 11. irrigation | 0.04 | 0.02 | 0.08 | 0.14 | 0.01 | 0.01 | | | 0.16 |
| 12. others | 0.01 | — | — | 0.01 | — | — | | | 0.01 |
| 13. total | 1.57 | 0.28 | 0.50 | 2.35 | 0.52 | 0.29 | | | 3.16 |
| *capital account of public authorities* | | | | | | | | | |
| 14. administration | 0.61 | | | 0.61 | 0.20 | | | — | 0.81 |
| 15. enterprises | 0.64 | | | 0.64 | 0.56 | | | 0.07 | 1.27 |
| 16. total | 1.25 | | | 1.25 | 0.76 | | | 0.07 | 2.08 |
| 17. grand total | 6.80 | 0.28 | 0.50 | 7.58 | 3.60 | 0.29 | 0.60 | 0.07 | 12.14 |

* in Rs. abja = £75 million pounds sterling = $210 million U.S. dollars.
abja = 100 crores = 1 milliard = 1 U.S. billion = $10^9$.

All the totals given in this table have already appeared in Tables 9, 10 and 11. The purpose of this table is the delineation of the components of the totals given earlier. Also, this table shows the details of government expenditure on capital account into wages and salaries and other payments. These do not occur anywhere else in the report. The net contribution of government administration to national income may thus be derived from this table as the sum of wages and salaries in government administration's current and capital expenditures. For capital account of government administration, 75 per cent of total expenditure is taken to be made up of wages and salaries, on the basis of percentages for civil works expenditure.

6.18. Details of expenditure of government commercial enterprises are also shown in Table 12. Mining and trading concerns have been lumped up under item 12 as they are not important enough individually. Breakdowns of capital expenditure between wages and salaries and other payments are not always available in the budget accounts of government, and hence arbitrary allocations are necessary on the basis of available ratios for railways, post and telegraph, etc., derived from analysis of railway and postal accounts. On this basis, wages and salaries have been taken at 50 per cent of total expenditure for railways, post and telegraph, road transport, electricity schemes, and iron and steel and industrial works. For forest, irrigation, industrial development and multi-purpose river valley schemes, wages and salaries have been taken at 60 per cent of total expenditure arbitrarily. Since detailed information is available in respect of current expenditure under all these heads, the order of magnitude of arbitrary allocations is not significant in relation to the total, as will be clear from Table 12.

6.19. The last set of tables outlines India's balance of payments position with the rest of the world. Current transactions have been shown in Table 13 which gives the broad constituents of India's visible and invisible foreign trade. Table 14 gives a summary of the capital movements during the year, and outlines the finance of India's current deficit on trading account with the rest of the world. Errors and omissions have been shown under balancing short term capital movements.

TABLE 13: INDIA'S BALANCE OF INTERNATIONAL TRANSACTIONS ON CURRENT ACCOUNT: 1948-49*

| (1) | (2) | (3) | (4) |
|---|---|---|---|
| *expenditure* | | *revenue* | |
| 1. merchandise imports (c.i.f.) | 5.66 | 7. merchandise exports (f.o.b.) | 3.90 |
| 2. government (not included elsewhere) | 1.01 | 8. government (not included elsewhere) | 0.26 |
| 3. investment income | 0.32 | 9. investment income | 0.13 |
| 4. donations | 0.06 | 10. donations | 0.16 |
| 5. other current payments for commodities and services | 0.41 | 11. other current receipts for commodities and services | 0.73 |
| | | 12. adverse balance met by capital incomings | 2.22 |
| 6. total | 7.46 | 13. total | 7.46 |

TABLE 14: INDIA'S BALANCE OF INTERNATIONAL TRANSACTIONS ON CAPITAL ACCOUNT: 1948-49*

| (1) | (2) | (3) | (4) |
|---|---|---|---|
| *expenditure* | | *revenue* | |
| 1. private long term capital (excl. banking institutions) | 0.35 | 6. private long term capital (excl. banking institutions) | 0.16 |
| 2. other long term capital (official and banking institutions) | 2.11 | 7. other long term capital (official and banking institutions) | — |
| 3. balancing short term capital movements (incl. errors and omissions) | 0.08 | 8. balancing short term capital movements (incl. errors and omissions) | 4.60 |
| 4. finance of current adverse balance by net capital incomings | 2.22 | | |
| 5. total | 4.76 | 9. total | 4.76 |

* in Rs. abja=£75 million pounds sterling=$210 million U.S. dollars.
abja=100 crores=1 milliard=1 U.S. billion=$10^9$.

6.20. There are some gaps in the above tables. There are other gaps which made it impossible for us to study many important breakdowns of the national income to which we have referred in chapter 5. The statistical position is not satisfactory, and yet it is not too bad. The future outlook is promising and is considered in the next chapter.