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DEPARTMENT OF ARCHAEOLOGY

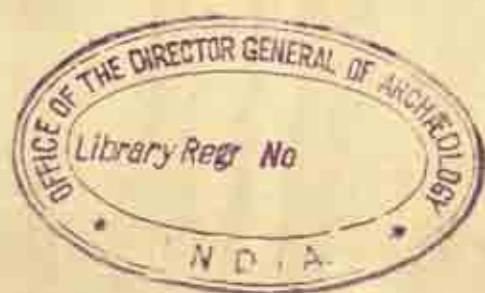
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APPENDIX

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TO THE

Appropriation Accounts of the
Central Government (Civil) for the
year 1928-29

CONTAINING

ACCOUNTS AND REVIEWS OF GOVERNMENT
COMMERCIAL CONCERNS.

COMPILED BY

A. C. BADENOCH, I.C.S.,
Director of Commercial Audit.



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APPENDIX

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ACCOUNTS AND REVIEWS OF GOVERNMENT
COMMERCIAL CONCERNS.

A. C. BALDWIN, F.R.S.
Director of Commercial Affairs



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APPENDIX

TO THE

Appropriation Accounts of the Central Government (Civil) for the year 1928-29 containing Accounts and Reviews of Government Commercial Concerns.

CHAPTER I—INTRODUCTORY.

1. This volume owes its existence to the expressed desire of the Hon'ble the Finance Member that more detailed information about the commercial or *quasi*-commercial concerns of Government should be placed before the Public Accounts Committee. There has been much discussion about the responsibility for its preparation, and it has been decided that in future the reviews on the working of the various concerns shall be contributed by the authorities actually responsible for the management of the concerns, and that the Commercial Audit Branch will merely check the review and add any necessary audit comment. This decision was reached too late to permit of the adoption of the accepted procedure in dealing with the accounts for 1928-29, and therefore the Director of Commercial Audit has undertaken the preparation of the first report under the new arrangement. It must be remembered that this volume is something in the nature of a makeshift arrangement, and that an audit agency cannot satisfactorily prepare a review of the kind the Finance Member desires, which should contain the information likely to be communicated to the shareholders of a concern in the report of the Directors and in the Chairman's speech when the latter intend to take the former fully into their confidence.

This appendix contains reviews only of those Central concerns with the audit of the accounts of which the Commercial Audit Branch is concerned. The concerns dealt with in the volume are few, but the number is likely to increase every year; a review of the Bengal Pilot Service would have been incorporated this year had the accounts been ready in time, and it will find a place here next year. The Commercial Audit Branch expects to take over the audit of no fewer than seven central concerns: ext financial year, and further increases may be anticipated.

2. The Commercial Audit Branch was constituted as a distinct unit in the organisation of the Indian Audit Department on the 1st March 1928 and was placed on a permanent footing on the 1st January 1929. The idea of having such an organisation took shape in 1919. Local Governments had previously to engage private firms of Accountants to advise them on the introduction of commercial systems of accounts where these were required, and the Auditor General also had to entrust the audit of such accounts to these private agencies. The Auditor General felt that he should have a

staff trained in commercial accounting and auditing to enable him to discharge his statutory responsibility regarding audit in respect of these concerns. In pursuance of this policy, representatives of Messrs. Price, Waterhouse & Company, Chartered Accountants, London, were brought out to India to investigate and report upon the systems of accounting in Government commercial and quasi-commercial concerns, and two officers of the Department toured with them for training. After training these officers were attached to the Auditor General's office and entrusted with the work of installing and auditing commercial systems of accounts, but the expansion of this kind of work made it necessary that an experienced Chartered Accountant should be recruited both for purposes of supervision and to train officers of the Indian Audit and Accounts Service and Subordinate Staff. The experimental period of the new organisation lasted from January 1925, when Mr. Campbell became Director of Commercial Audit, until January 1929. For most of the time the Branch functioned as a part of the Auditor General's office, but for the last ten months of this period the Director was given a status analogous with that of the other independent Audit Officers. There are now seven Circle Offices working under him with Headquarters at Nasik Road, Madras, Calcutta, Rangoon and New Delhi. The work has been sub-divided among the several circles on a territorial basis except in the case of the Army Factory Test Audit Circle with headquarters at Calcutta which deals with the test audit of all Army Factories. Altogether there are 115 concerns now under the audit of the Commercial Audit Branch.

3. As is well known, Government accounts differ from the accounts of a commercialised concern in several important aspects. The most important differences are that the Government account presents the cash book aspect only of all transactions, that it makes no attempt to distinguish between the actual income and expenditure of a period and the receipts pertaining to and the liabilities of the period, and that it does not generally incorporate results of inter-departmental settlements which are barred by rules of classification: in brief the Government account does not give on the face of it the financial results of the working of the period the account covers. Commercial accounts can be made up from Government accounts by picking out certain entries, by adding and subtracting certain amounts to get the figure relating to the accounting period, and by assuming receipts and payments between departments which actually have not occurred. It is obvious that such commercial accounts are based on certain assumptions and fictions and they are called *pro forma* accounts.

Originally all Government commercial accounts were *pro forma*; there is a very natural reluctance on the part of Government accountants to accept a double entry system and to agree to inter-departmental settlements because of the enormous increase of work involved and because of the necessary inflation of Government accounts which will result. Further there is no reason why an accurately prepared *pro forma* account should not give a true picture of the working of the Government commercial concern. This system still survives in many cases. Not infrequently commercial books are maintained in addition to the ordinary Government accounts to facilitate

the preparation of Profit and Loss Accounts and Balance Sheets. In such cases the Commercial Audit Branch generally audits the commercial accounts only.

There are however one or two very great disadvantages in managing a commercial concern under the ordinary system of Government accounts and finance. The first difficulty arises from the necessarily strict budget control which must be maintained over all spending officers, and the second from the rule that all receipts must at once be credited into the Government account at the Treasury and may not be utilised to finance expenditure. Other complications arise owing to the rather limited powers usually accorded to all but the highest spending officers. Clearly in running any concern where it is often necessary promptly to decide about spending money in order that an advantageous transaction may be completed, the restrictions of these rules would make successful management impossible.

Hence it comes about that a special system has been devised to give flexibility to financial arrangements for a Government commercial concern. This system, which had been considered before but took final shape in the discussions between Sir Frederic Ganttlett and the representatives of Price, Waterhouse & Co., who visited India in 1921, is generally known as the Chapter 2 system since the rules governing it are prescribed in Chapter 2 of the Account Code. It provides for the practically complete emancipation from budget control of the manager of a Government commercial concern to which the system is applied, for his being given working capital, and for his being allowed to recoup his working capital by utilising receipts. Parliamentary control is provided by certain linking entries between the accounts of the concern and Government accounts, so that the Legislature can always control (1) the investment of capital in the concern, and (2) the general working of the concern itself as the final profit or loss is brought to book in Government accounts, and due provision has to be made for the estimated figure in the budget. Clearly there must be safeguards in the application of such a system and these have not been omitted. The Chapter 2 arrangement is not applied to a Government commercial concern as a matter of course; it is sanctioned by the Auditor General only after careful enquiry and after he is satisfied that (1) Government has prescribed a schedule of powers which the manager must observe, and (2) a proper system of commercial accounts has been installed. In the case of all Chapter 2 concerns a careful local audit of transactions and of commercial accounts is carried out by the Commercial Audit Branch.

Thus Government commercial concerns come under two categories—(a) those for which *pro forma* accounts are prepared and (b) those coming under Chapter 2 of the Account Code. The Central concerns in Category (a) are:—

1. His Majesty's Mints, Bombay and Calcutta.
2. Government Research Creamery, Anand.
3. Imperial Cattle Breeding Farm, Karnal.
4. Imperial Institute of Animal Husbandry and Dairying, Bangalore.
5. Imperial Institute of Animal Husbandry and Dairying, Wellington.

6. Imperial Institute of Veterinary Research, Muktesar.
7. Agricultural Research Institute, Pusa.
8. Opium Factory, Ghazipur (Costing accounts).
9. Northern India Salt Revenue Department (Manufacturing Department).
10. Persian Gulf Lighting Service Fund.
11. Bengal Pilot Service.
12. Mathematical Instrument Office, Calcutta.

The following has been brought under Chapter 2-Category (b) :—

The Security Printing, India, including the Central Stamp Store.

4. The Balance sheets given in this volume have been prepared on the principles that are adopted in ordinary commercial accounting practice and obviously it is not necessary to explain to the members of the Public Accounts Committee in detail the nature of all the items to be found in them. It might however be useful to offer a few remarks on some of the important items special to the Balance sheets of Government Commercial concerns.

The item "Government Capital Account" may be taken up first. When it is decided to introduce commercial accounts in a Government concern the first step taken is to value all its assets and to ascertain all its liabilities on that date. The difference between the aggregate of the values of the assets and the aggregate of the liabilities is taken to the head "Government Capital Account". The commercial books are opened by debiting the several asset accounts and crediting the liability and "Government Capital" accounts. The procedure adopted thereafter with regard to receipts and payments of the concern varies according to whether the concern works under the rules in Chapter 2 or not.

If the concern is to work under the rules in Chapter 2 of the Account Code, it is provided with an adequate working capital and all the revenue receipts and revenue expenditure are paid into or drawn from its Personal Ledger Account at the treasury. The Government Capital Account is unaffected by these revenue transactions. Further Capital expenditure in the concern is paid by Government and the final result of the consequent account entries is that the "Government Capital Account" is credited with the further capital invested, with corresponding debit to the accounts of the assets created. Capital receipts are also immediately returned to Government, the Government Capital Account being debited with the return of capital. At the end of the year or half year a Profit and Loss Account is drawn up on the usual commercial lines and the result of the period of working is ascertained. As Government is entitled to the profits of the concern for having invested capital in it, just as any capitalist is entitled to his profits, the profit made is paid over by the concern to Government, and the Civil Accountant General reduces the Personal Ledger account by the amount of profit payable to Government. The Government Capital Account is not affected by payments made by the concern by way of profits. When losses occur, it is for Government to see whether the losses incurred were justified, and after satisfying itself on this score, to reimburse to the concern

the amount of the losses sustained or to authorise the writing down of the capital account of the concern. The Government Capital invested in a concern is not increased because Government has merely made good Revenue losses incurred.

Non Chapter 2 concerns prepare and present bills on the treasury for their expenditure like any Government office and they pay their receipts into the treasury. In the accounts of the concern, "Withdrawals from the treasury" and "Remittances into the treasury" are accounted for, and at the close of the year these accounts are closed by credit and debit to the "Government Capital Account"; for whatever Government pays to a concern increases the capital invested by Government in it and whatever money is returned by the concern decreases the capital invested by Government in the concern. Such concerns cannot be considered to have any specific working capital. When at the end of a year, the Profit and Loss Account is drawn up, the net profit is added to the Government Capital Account, and so also are any *pro forma* liabilities of the concern to Government for leave and pension contributions on account of permanent employees, for bonus for Provident Funds, Audit Fees, Interest and Depreciation Charges. The reason for such a procedure can be explained thus. If the direct charges incurred by the concern and withdrawn from the treasury are returned to Government, together with the indirect charges incurred by Government on its behalf and with the profits of the year which are due to be paid to Government, then the capital of the concern is intact and has not increased or decreased. If however the concern has remitted into the treasury less than the amount thus calculated, it has retained some portion of the amount that it should have remitted and thus the Government Capital invested in the concern has increased. Thus

If C be the Capital at the beginning of a year

D „ the withdrawals from the Treasury

P „ the Profits

R „ the Remittance during the year into the treasury.

The Capital at the end of the year will be—

$$C + D + P - R.$$

If $D + P = R$ the Capital is intact. Capital has decreased or increased according as $D + P$ is less or more than R .

5. 'Government Suspense Account'.—This occurs on the 'Liability side, of the Balance Sheets of Chapter 2 concerns. The amounts payable by a concern to Government on account of interest on capital, leave, pension and Provident Fund Contributions, audit fees, etc., are taken to this head by debit to the Profit and Loss Account. The concern either discharges this liability by issuing a cheque in favour of Government on its Personal Ledger Account or the Accountant-General, on receipt of a copy of the Balance Sheet, withdraws the amount from the Personal Ledger Account and intimates the fact of the withdrawal to the concern so that the necessary account entries in connection with the reduction in the balance of the Personal Ledger account may be made.

Depreciation Reserve.—In the Balance Sheets included in this Appendix the fixed assets are, as a general rule, shown at their original value or at their value at the time of the inauguration of the commercial accounts in the concerns. The depreciation provided for them is taken to the head "Depreciation Reserve."

The depreciation is usually written off on the "Straight line" method, and an inventory of all the assets, showing the details of the depreciation provided on each asset working up to the total of the reserve in the Balance Sheet, is maintained in the concern. The rate of depreciation has been fixed on the assumption that all ordinary maintenance and repair charges will be debited to revenue and the sanction of competent authority is taken before any amounts are debited to depreciation reserve on renewals and replacements.

Sundry Creditors and Sundry Debtors.—These heads accommodate liabilities and assets of exactly the same nature as are found in the balance sheets of commercial concerns. As all transactions are brought to account as they arise, the liabilities of a period not actually paid during the period of account and the income not actually received during the same period are shown under these heads. The auditor always examines whether these amounts are actually paid or realised during the next period.

Land.—The amounts shown under this head include only amounts actually paid by Government for land and do not include any value for lands for which Government itself had not to pay though such lands may now be worth a considerable amount. An enquiry into the policy here adopted has already been started by Sir Frederic Gauntlett.

Other Fixed Assets.—As in ordinary commercial practice, the value placed in the Balance Sheets on these assets is the amount ascertained actually to have been spent on them or, where the actual value is not available, an estimate of the amount spent. Where a different basis of valuation, e.g., cost of present replacement with due regard to the condition of the asset, has to be adopted for special reasons, the orders of competent authority are obtained. The market value of these assets at any time has no effect on the value at which these assets are shown in the Balance Sheet.

Live Stock.—This is generally valued by a competent technical expert who is not immediately in charge of the concern. Appreciation as well as depreciation is taken into account.

Floating Assets.—Floating Assets like consumable stores, stock in trade, work in progress, etc., are valued with reference to market price or cost price whichever is less. Stock-taking, as far possible by an agency independent of the concern, is insisted on and it is seen that orders of competent authority are obtained for writing off the value of unserviceable and lost stores. Audit sees that generally the value given in the Balance Sheet is effective and is not unduly high for the requirements of the concern.

Profit and Loss Accounts.—As many Government concerns have peculiar features not found in private commercial concerns the forms in which these accounts are drawn up also display peculiarities. Where the concerns have an educational and research side, as for example in the Farms, efforts have been made to show as far as possible the financial results of these activities

separately from the commercial activities. Ordinarily all charges direct and indirect are taken into account in the preparation of the Profit and Loss Account. The indirect charges include interest, leave and pension contributions and provident fund bonuses, audit fees, supervision and direction charges. In special cases and under orders of Government these charges have not been shown in the body of the accounts but in footnotes. Interest is charged in the Profit and Loss Account at 3.3252 per cent. on all Capital expenditure up to the end of 1916-17 and for subsequent capital expenditure at the average rate at which Government has borrowed money up to the year of account. The supervision and direction charges are calculated on the average estimated time spent on the concern by the supervising officers. For the purposes of calculating leave and pension contributions, the concern is treated as if it were foreign service. Miscellaneous receipts and extraordinary receipts and charges not relating to the period of working are also shown separately in the accounts so that the net result of the year's working may better be exhibited. The costs of production are wherever possible extracted and commented upon. Before, however, a conclusion can be reached as to the efficiency with which a Government concern is working, the results shown in the Profit and Loss Accounts have to be considered with reference to the policy of Government in the case of that particular concern.

5. An audit certificate in the usual form is ordinarily given by the Audit Officers of this Branch on the Balance Sheet of each concern the accounts of which are audited by them. The certificate is given below and to avoid repetition it has not been printed at the foot of each Balance Sheet in this volume.

"I certify that I have obtained all the information and explanations that I required and that, subject to the remarks in the Audit Report, the Balance Sheet exhibits, in my opinion, the true position of (name of concern)....., according to the best of my information and explanations given me and as shown by the books of ... (name of concern).

Sd.

Audit Officer."

Any remarks in the several audit reports which have qualified the position shown in the Balance Sheets or are of sufficient importance to be included in this Report have been given in the paragraphs relating to the various concerns.

CHAPTER II.

Government of India—Finance Department concerns.

SECURITY PRINTING, INDIA, NASIK ROAD.

7. BALANCE SHEET

AS AT 31ST MARCH 1929.

Liabilities.	Corresponding balances on 31st March 1928.		Assets.	Corresponding balances on 31st March 1928.	
	Rs.	Ra.		Rs.	Ra.
<i>Sundry Creditors</i>	4,20,038	3,02,773	<i>Land and Buildings</i>	29,37,307	19,85,092
<i>Government Suspense Account. . . .</i>	3,26,301	2,03,798	<i>Electrical Installation</i>	41,020	36,654
<i>Employees Security Deposits</i>	4,020	1,843	<i>Plant and Machinery</i>	8,50,301	8,11,903
<i>Depreciation Reserve</i>	3,19,161	2,08,227	<i>Minor Equipment</i>	76,535	1,36,431
<i>Lease Reserve, etc. . . .</i>	11,844	13,023*	<i>Furniture</i>	53,026	36,452
<i>Government Capital Account</i>	48,03,582	43,36,703	<i>Preliminary Expenses</i>	1,81,825	2,72,788
<i>Profit and Loss Account. . . .</i>	3,57,261	2,97,107	<i>Central Stamp Store Works, Preliminary Expenses. . . .</i>	20,752	29,827
			<i>Stocks and Stores</i>	11,02,908	10,46,207

SECURITY PRINTING, INDIA, NASIK ROAD.

8. TRADING AND PROFIT AND LOSS ACCOUNT FOR THE YEAR 1928-29.

	Rs.	Rs.	Corresponding figures for 1927-28.	Rs.	Rs.	Corresponding figures for 1927-28.
To Opening Balance of Stock	4,74,644	60,113		By Issues for Booklets	16,890	21,073
" Cost of Manufacture	21,42,324	21,06,218		" Sales	28,56,384	20,84,837
" Selling Expenses of the Central Stamp Store	1,11,215			" Ending Balance of Stock	6,76,963	4,74,644
" Returns from Closed Depots	1,49,370	130				
" Gross profit carried down	6,72,613	4,13,032				
	35,50,166	25,82,554			35,50,166	25,82,554
To Interest	2,83,942	2,23,909		By Gross Profit brought down	6,72,613	4,13,082
" Value of Store, etc. written off	37,912	152		" Rents Received	7,013	7,770
" Adjustment of charges relating to previous years.	5,171	1,113		" Miscellaneous Receipts and adjustments	4,055	11,428
" Net profit carried to Balance Sheet	3,67,261	2,07,107				
	6,84,286	4,32,280			6,84,286	4,32,280

SECURITY PRINTING, INDIA, NASIK ROAD.

9. STORES ACCOUNT FOR THE YEAR 1928-29.

Items.	Opening Balance on 1st April 1928.			Value of receipts during the year.			Value utilized during the year.			Results of stock verification or revaluation if any.	Agency employed for verification or revaluation.				
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.						
Paper	4,97,098	7	11	13,02,881	13	3	14,08,974	7	8	97	15	0	4,21,407	14	0
Inks	12,099	0	9	22,594	13	5	22,252	0	1	..	..	..	13,038	14	1
Miscellaneous stores	20,803	7	2	1,27,437	0	11	1,23,166	2	0	..	..	..	21,537	13	9
Packing Case	794	6	8	1,13,192	8	0	1,12,172	6	8	3,546	8	4	1,814	8	0
Total	5,32,095	6	6	16,56,103	3	7	17,28,505	0	5	3,644	7	4	4,57,989	2	4

The Deputy Master and an assistant deputed by the Master verified the stores during 1928-29.

No discrepancies were noticed.

SECURITY PRINTING, INDIA.

10. The Security Printing Press was established in order that Government might dispense with the services of contractors in London who used to supply India with all stamps and stamped paper. In this direction India is now self-supporting.

11. Expenditure on the Capital project began in December 1922, and normal production on the 1st April 1926.

Formerly the products of this press were issued to the various depots for distribution to treasuries. This practice was discontinued as from the 1st April 1928, and a Central depot was opened at Nasik Road under the name of the Central Stamp Store to which all the products of the Security Printing, India were transferred and from which the issues to Treasuries were made. This Central Stamp Store is an integral part of the Security Printing, India.

12. The printing in this press is done either by letter press or by offset. The former is the ordinary method; the plate contains the design in reverse which gives a direct print on the paper, whereas in offset the design is on the plate direct, an imprint is taken to a rubber blanket where it becomes reversed and from there it is transferred to paper where the design is once more direct.

13. The press is divided into the following main Departments each of which indicates the class of work undertaken:—

Offset.

Post Cards.

Embossed Envelopes.

Registration Envelopes.

Adhesive Stamps.

Booklets.

A certain amount of overprinting work is done by the Offset department for the others, and the machines in the Embossed Envelopes and Adhesive Stamp Departments are used occasionally for the work of other Departments. The Booklet Department is supplied with the necessary stamps for binding by the Adhesive Stamp Department. Credits and debits are afforded for these transactions.

14. The output is of two kinds, *viz.*, postal and non-postal. The former term needs no explanation, the latter includes court-fee and non-judicial stationery and entertainment tax stamps.

15. A separate control staff is maintained under a chief supervisor control for purposes of internal security and for the prevention of leakage of printed matter. This staff is responsible for the checking of paper as it passes from one process to another and it has to see that the quantity passed into one particular process is transferred to the next. Statistics of waste in manufacture are compiled; all waste is passed on to the control section where it is destroyed periodically by the Chief Supervisor Control on the authority of the Master and a certificate of destruction is forwarded to him. Half yearly returns of the sheets of water-marked paper issued to the printers and the resulting produce from the printing Departments are submitted to the Master. These are agreed by audit with the office records which are independent of

the Control Section returns, and as a further check audit visits the Departments and tests the entries in the Control records with a view to seeing that the system of control is being carried out.

16. Absolute agreement is impossible in the case of paper not water-marked which is used in the Embossed Envelopes, Registration Envelopes and Post Card departments. The paper is of common material which can be purchased readily from dealers: envelope paper is packed in commercial reams of varying number of sheets: post card paper is of slightly varying thicknesses sold by weight in reels which are therefore of varying lengths: blanks cut for envelopes result in large quantities of unavoidable waste. The work of Control begins when the blanks emerge from the cutting press. The same system as is employed in the case of water-marked paper is applied from this stage. A further check is employed by searching all employees as they leave the press.

17. All issues from the Central Stamp Stores to Treasuries are booked free on rail at Nasik Road. The selling rates were originally fixed at 40 per cent. below the loaded contract rates f.o.b. London of 1922 and have been modified from time to time as experience has proved alteration to be necessary. These rates are lower in every case than those which were charged by the London contractors. The ultimate object of the press, which is a service concern, is not to earn large profits but to make such charges as will cover the working costs. The Personal Ledger Account of the Press obtains credit for these sales from the Accountant General, Bombay, when the latter has received the accepted invoices from the various treasuries, etc., transmitted through the Controller of Stamps. The Master is notified by the Accountant General, Bombay, of his having placed funds to the credit of the Personal Ledger account. The debits are passed on to the Director General, Posts and Telegraphs, in the case of postal stationery supplies, and to the Provincial Governments in the case of non-postal stationery.

18. The cost of manufacture of the Security Printing, India, products in 1928-29 was Rs. 21,42,324. The details leading up to this total are given below; for purposes of comparison the costs of 1927-28 are also shown:—

1927-28.

1928-29.

Item.	1927-28.		1928-29.	
	Amount.	Percentage on outturn.	Amount.	Percentage on outturn.
	Rs.		Rs.	
Materials, (Paper, Ink etc.)	14,34,367	56.9	14,79,400	59.5
Operative Wages and Salaries	83,416	3.2	82,997	2.8
Control Wages	40,706	1.6	39,200	1.4
Packing	94,073	3.7	1,12,172	3.8
Indirect Charges	4,49,611	17.8	4,32,030	14.8
Total	21,02,173	83.3	21,45,899	73.3
Adhesive stamps transferred to booklet.	21,074	.8	16,900	.6
Add opening balance of work in progress.	23,440	.9	37,469	1.3
	21,46,687	85	22,00,258	75.2
Less closing balance of work in progress.	37,469	1.5	57,934	1.98
Cost of production	21,09,218	83.5	21,42,324	73.22
Value of outturn	25,22,439	..	29,26,152	..

The reduction in the cost of *Operative and Control Wages, and Indirect Charges* resulted naturally from the increased output. The packing costs should be and are about the same. The cost of materials has decreased; this decrease is not abnormal as the consumption is not of materials of uniform price but depends upon the kind of output and whether cheap or expensive paper has to be used in manufacture. The price of finished stock was increased slightly in 1928-29, and this has reacted to some extent on the percentages of costs through the higher value accorded to the outturn.

19. The selling rates, except in the case of adhesive stamps, were increased by 6½ per cent. on the 1st April 1928 in order to cover the anticipated extra cost of working the Central Stamp Store. The sales amounted to Rs. 28,56,283 in 1928-29 and to Rs. 20,86,837 in 1927-28. One of the reasons for the increase in the year under review was the enhancement of the selling rates mentioned above; but the main reason was traced to the change in the system of stamp storage and distribution on the 1st April 1928. Previous to that date the stamp Depots at Calcutta, Bombay, Madras, etc., were stocked by the Security Printing Press and the necessary issues to Treasuries were made from those depots; these depots were closed on the 31st March 1928 and issues were made thereafter from the Central Stamp Store at Nasik Road. Towards the close of 1927-28 the depots reduced their demands on the Press and endeavoured to clear their existing stocks the balances of which were to be returned on the 31st March 1928 to the Central Stamp Store. The issues from the press fell in consequence in 1927-28 from a normal Rs. 24 lakhs to Rs. 21 lakhs; the short deliveries of that year were, however, made good in the first half of 1928-29.

20. The cost of working the Central Stamp Store during the year amounted to Rs. 1,11,216. This charge was allocated to the Departments in proportion to the sales. The returns from the closed depots amounted to Rs. 1,49,370. In order to exhibit how the revision of the selling rates affected the Departments in 1928-29 the Gross Profit or Loss of each department for this and the previous year is set out below :—

Department.	1927-28.			1928-29.		
	Sales.	Gross Profit or Loss.	Percentage of Gross Profit or Loss.	Sales.	Gross Profit or Loss.	Percentage of Gross Profit or Loss.
	Rs.	Rs.		Rs.	Rs.	
Offset	3,79,122	36,910	9.7	6,31,994	1,26,440	20.0
Embossed Envelopes	4,40,259	1,57,000	35.7	6,03,373	2,62,433	43.5
Registration Envelopes	1,61,721	—16,184	—10.0	2,22,173	15,565	7.0
Post Cards	9,01,322	1,54,472	17.1	10,67,481	2,32,600	31.1
Adhesive Stamps	1,57,112	66,361	42.3	2,76,467	19,064	6.9
Booklets	51,301	14,622	28.3	55,803	16,610	29.6
Total	20,86,837	4,13,081		28,56,283	6,72,613	

The Gross Profit does not include the charge for interest. In the following statement the Profit for 1928-29 after charging interest is shown.

Interest has been allocated according to the fixed Capital invested in each Department and the allocation was based on the extent of the Press building occupied by, and the machinery employed in, each :—

Department.	Gross Profit.	Interest.	Adjusted profit or Loss.	Sales.	Percentage of adjusted profit or loss on turnover.
	Rs.	Rs.	Rs.	Rs.	
Offset	1,26,440	70,504	46,938	6,32,679	7.42
Embossed Envelopes	2,62,433	59,628	2,02,805	6,03,375	33.61
Registration Envelopes	15,666	14,197	1,369	2,22,174	.62
Post Cards	2,32,600	62,467	1,70,133	10,67,481	15.94
Adhesive Stamps	19,004	68,146	-49,082	2,74,772	-17.78
Booklets	16,510	..	16,510	55,803	29.58
Total	6,72,613	2,83,942	3,88,671	28,56,784	..

As it was not intended that the Security Printing, India, should make large profits the need for the revision of the 1928-29 selling rates was realised and revised rates were brought into force as from the 1st April 1929, which were roughly 10 per cent. lower except in the case of Adhesive Stamps, Registration Envelopes, and over-printed matter.

21. The larger output and the increase in the selling rates resulted eventually in an increased net profit for 1928-29 over that for 1927-28, the figures for the two years were Rs. 3,57,261 and Rs. 2,07,107 respectively.

22. The amount of waste in the production of 1928-29 is set out below. Figures for the previous year are not shown as reliable statistics were not available.

Departments.	Examined output.	Wastage Destroyed.	Percentage of Waste.
Offset—Sheets—			
1st Half year	167,73,533	2,00,244	1.27
2nd Half year	2,50,99,208	2,38,846	0.95
1928-29	4,08,72,741	4,39,090	1.07
Registration Envelopes—			
1st Half year	33,47,339	68,349	2.04
2nd Half year	37,57,075	93,430	2.49
1928-29	71,04,414	1,61,779	2.28
Adhesive Stamps Sheets—			
1st Half year	19,15,500	41,340	2.16
2nd Half year	26,72,743	54,523	2.04
1928-29	45,88,243	95,863	2.09
Booklets—			
1st Half year	21,81,024	19,199	0.88
2nd Half year	29,34,720	84,310	2.87
1928-29	51,15,744	1,03,509	2.02

The reason for the large increase in the Booklet waste was that during the half year under review, labour trouble was experienced in this Department,

and untrained men had to be entertained with the result that waste was heavy until they had become accustomed to the work. The increase in the Registration waste was attributed to the fact that the cutting dyes had become worn and were kept in use longer than would otherwise have been the case because the new dies ordered from Europe were late in arriving.

23. *Balance Sheet.*—In the following statement the net increases and decreases amongst the Fixed Assets can be traced readily :—

Item.	Balances on.		Increase	Decrease.
	31-3-28.	31-3-29.		
	Rs.	Rs.	Rs.	Rs.
Land and Building	19,85,092	29,27,397	9,42,305	..
Electric Installation	36,654	41,920	5,266	..
Plant and Machinery	8,11,963	8,20,301	8,338	..
Minor Equipment	1,36,431	76,535	..	59,896
Furniture	36,482	53,026	16,544	..
Total	30,06,622	39,19,179	9,72,453	59,896

24. The details of the additions and writes off during 1928-29 which led up to these net figures are set out below :—

Item.	Total Additions	Total writes off.	Net Increase.	Net Decrease.
	Rs.	Rs.	Rs.	Rs.
Land and Buildings	11,36,255	1,93,950	9,42,305	..
Electric Installation	5,266	..	5,266	..
Plant and Machinery	48,546	40,208	8,338	..
Minor Equipment	4,688	64,584	..	59,896
Furniture	16,544	..	16,544	..
Total	12,11,299	2,98,742	9,72,453	59,896

Of the total additions Rs. 8,68,178 represented the Capital cost of the Central Stamp Store project, and Rs. 3,18,655 was the value of the transfers from the Currency Note Press. In addition to these transactions certain items of Plant, Equipment and Furniture were purchased from the Personal Ledger Account of the Security Printing Press at a cost of Rs. 24,466.

25. The writes off include transfers to the Currency Note Press of Rs. 2,43,491, Depreciation on minor equipment to the extent of Rs. 2,640, and a write off of Rs. 52,611 from the minor equipment on account of engraved plates. The expenditure on these plates should have been borne by Revenue as it was incurred; it was capitalised, however, in the first place because of the heavy initial outlay which had to be incurred in order to stock the press at its inception and sanction to the write off of this extraordinary Revenue Expenditure in instalments over a period of five years was obtained. This sanction had retrospective effect and the amount mentioned above was heavy because it included the write off of previous instalments.

26. The details of the stocks and stores on hand at the beginning and end of 1928-29 are as follows :—

Item.	Balance of stock etc., on	
	1st April 1928.	31st March 1929.
	Rs.	Rs.
Paper, Ink, etc.	5,31,300	4,55,174
Packing Cases	704	1,814
Work in Progress	37,465	57,934
Finished Stocks	4,74,644	6,76,983
Total	10,44,207	11,92,905

27. It will be observed that the balance of finished stocks is increasing. The reserve of stocks to be maintained by the Central Stamp Store was prescribed in paragraph 6 of the Government of India rules for the supply and distribution of stamps, and the output of the Security Printing Press at present is in accordance not with the demands of the public, but with those of the Central Stamp Store which is building up its reserve. The stocks on the 31st March 1929 had not reached the limit prescribed in the rules and will go on increasing until this limit is reached.

The following is a summary of the departmental transactions in finished stocks in the Central Stamp Store :—

Department.	Opening balance on 1st April 1928.		Receipts during 1928-29.		Issues during 1928-29.		Closing balance on 31st March 1929.	
	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.
Offset	1,33,179	0 0	8,02,379	15 0	6,35,516	10 0	3,00,042	5 0
Post Cards	63,098	8 0	10,76,567	11 0	10,67,354	3 0	72,612	0 0
Embossed Envelopes	—	—	6,24,089	13 0	6,04,556	13 0	20,433	0 0
Registration Envelopes	—	—	2,90,262	15 0	2,20,511	13 0	69,741	2 0
Adhesive Stamps	80,100	6 0	4,05,724	7 0	2,76,683	2 0	2,09,741	3 0
Booklets	—	—	62,358	8 0	55,803	0 0	6,755	8 0
Total	3,36,877	8 0	32,62,373	5 0	28,59,525	9 0	7,39,325	4 0

The value of the closing balance, viz., Rs. 7,39,325 was calculated on the selling rates of 1928-29, and as this stock was affected by the revised selling rates which came into force on the 1st April 1929, the value was reduced to conform to the new rates. This revision which amounted to Rs. 41,991 reduced the closing balance to Rs. 6,97,334 at the new selling rates. If these stocks were valued at selling rates they would include profits not actually earned. In order therefore to exclude these unearned profits a further reduction of $\frac{1}{11}$ th was made and the value accorded to the closing balance for purposes of these accounts was Rs. 6,33,910. Finished stocks in the Security Printing Press awaiting transfer to the Central Stamp Store amounting to Rs. 43,043 are included in the figure of Rs. 6,76,983 appearing in the statement in paragraph 26.

28. The Sundry Debtors on the 31st March 1929 amounted to Rs. 3,96,617, and almost the whole of this sum was due from Treasuries. The increase of

these debts over those of the 31st March 1928 was due partly to the change in the procedure of issuing stamps which was brought into effect on the 1st April 1928. Previous to that date sales were made to a few main depots situated usually in the headquarters of provinces and the adjustments on account of these sales were passed through the Government books of account without much delay. In the year under review the sales were made direct to treasuries which meant that the customers of the Press had increased considerably and owing to the isolation of many of them, there were a greater number of outstandings at the end of 1928-29 than at the end of 1927-28. The percentages of outstandings on the sales in each of the last two years are set out below :—

Year.	Outstandings on sales.	Sales.	Percentage.
	Rs.	Rs.	
1927-28	2,11,292	20,85,837	10.1
1928-29	3,96,617	28,55,284	13.9

29. The amount of Rs. 43,326 shown as being due from the Currency Note Press was on account of supplies and services rendered by the Security Printing Press to that concern.

30. There were certain expenses incurred at its inception by the Security Printing Press and the Central Stamp Store which were not of a Capital nature but which could not be classed as normal Revenue expenditure, *e.g.*, expenditure incurred on experiments, etc.; these were classified temporarily under Capital and sanction was obtained to writing them off over a period of five years. These charges appear in the Balance Sheet under the head Preliminary expenses.

31. The Personal Ledger Account of the press was in funds to the extent of Rs. 4,76,740 on the 31st March 1929, whereas it amounted to Rs. 7,66,991 on the 31st March 1928. This reduction resulted directly from the surrender by the Master of Rs. 5 lakhs out of his Personal Ledger Account during 1928-29.

32. The Government Suspense account includes the amounts due by the Press to Government on account of interest, audit charges, etc. This account is cleared periodically by the Accountant General, Bombay, and the necessary amounts are withdrawn from the Personal Ledger Account of the Press.

33. The total depreciation reserved for up to the 31st March 1929 was Rs. 3,19,161. The details of this amount are :—

	Rs.
Buildings	96,911
Plant and Machinery	2,02,980
Minor Equipment	6,789
Furniture	12,490

34. A Leave reserve has been built up for the non-pensionable establishment and all outgoings on account of leave salaries of this establishment are met out of this reserve which amounted to Rs. 11,844 on the 31st March 1929. The annual contributions on account of the leave and pension of

the pensionable establishment are surrendered to Government and payments of leave and pension to that establishment is not made by the Press but by the Accountant General.

35. The Government Capital account stood at Rs. 43,36,753 on the 31st March 1928 and amounted to Rs. 48,03,582 on the 31st March 1929. The details working up to this amount are set forth below :—

	Rs.	
Balance on 1st April 1928		43,36,753
Add Capital Expenditure of the previous year adjusted by the Accountant General during 1928-29		23,487
.. Capital Expenditure on Central Stamp Store vide paragraph 24		8,68,175
.. Capital Cost of transfers from the Currency Note press vide paragraph 24		3,18,655
		<hr/> 55,47,073
	Rs.	
Less Surrender to Government out of the Personal Ledger Account during 1928-29	5,00,000	
.. Capital cost of transfers to the Currency Note press vide paragraph 25	2,43,491	7,43,491
		<hr/> 48,03,582

HIS MAJESTY'S MINTS, CALCUTTA AND BOMBAY.

GENERAL REMARKS INTRODUCTORY TO THE REVIEWS OF THE ACCOUNTS OF THE MINTS.

36. Indian Mints produce, for circulation in India, silver, bronze, and nickel coins. Besides, they undertake jobs for outside departments and private individuals, the manufacture of medals for the Army department, the manufacture and testing of scales and weights for treasuries and currency offices, etc., and occasionally coinage work for Indian States, foreign countries such as Straits Settlements. Coinage is undertaken under the orders of the Controller of the Currency and all issues of coin are made to the local Currency office from which they are distributed.

37. At the suggestion of Messrs. Price, Waterhouse & Co., the question of the introduction of a suitable system of commercial and costing accounts in the Mint was taken up and investigated by an officer of the Commercial Audit Branch. Commercial accounts were first introduced in both the Calcutta and Bombay Mints in 1926, and after trial of more than one system the present arrangement of maintaining commercial books in addition to the regular Government accounts has been adopted. The commercial accounts are of the *pro forma* type explained in the introductory paragraphs of this volume. The scheme is, however, still in an experimental stage and the question of the retention of the commercial accounts is still under the consideration of the Government of India.

38. Towards the end of 1928-29 there was a redistribution of work between the two Mints. Calcutta now carries out most of the coinage work while Bombay does all the refining of silver. A special electrolytic refinery was constructed in the Bombay Mint in 1928-29 to enable it to cope with this work. As a precautionary measure against possible heavy demands for coinage in future the minting plant of the Bombay Mint is maintained in readiness for work, and it is proposed that a small share of the coinage

should be turned out by this mint. By this means not only will the plant be kept in order but a trained staff will always be available to meet any coinage rush that may eventuate. Until the reorganisation in 1928-29 uncurrent coins withdrawn from circulation in the Bombay Presidency, in the southern part of the Madras Presidency, in the Central Provinces and in the Punjab and North West Frontier Provinces were remitted to the Bombay Mint. After the reorganisation Bombay deals with the uncurrent nickel and bronze coin collected in the Bombay Presidency only and with all uncurrent silver remittances except from Burma, Assam, and some parts of Bengal and Bihar and Orissa.

39. The following are the main departments in both Mints :—

- (1) *Coinage department*, in which coins are minted. This is subdivided into (a) laminating, (b) annealing, (c) stamping, (d) weighing and testing, etc.
- (2) *Workshop*, whose primary function is the maintenance of the Mint machinery.
- (3) *Medal and Die department*, in which medals and dies are manufactured.
- (4) *Electrical department*.
- (5) *Bullion office*, where uncurrent coin is examined and bullion is stored.
- (6) *Stores*.

The Bombay Mint has additional departments in the gold and silver refineries and the Assay Office. All Assay work has since 1st October 1923 been done at the Bombay Office, the Calcutta Assay Office having been abolished on that date. The Assay office is independent of the Mint and is in charge of an Assay Master. Bombay with its gold and silver refining work occupies most of the time of the Assay office but assays are done both for the Calcutta Mint and for the public.

40. The commercial accounts as now compiled are intended to bring out (1) the net financial result of the operations of the Mints as a whole in a commercial form, (2) the assets and liabilities of the Mints, the net capital invested by Government in the Mints and the nature and amount of the different forms of assets in which the capital is held, (3) the profit or loss on the various denominations of coins manufactured in the Mints, (4) the results of the working of the workshop, the Medal and Die departments; the production costs of the various coins as a whole and as analysed under the various processes such as laminating, annealing, stamping, weighing; the cost of generating electricity per unit, etc. All this information is not available in the Government accounts as compiled at present.

41. The following are the more important principles followed in the compilation of these accounts :—

- (a) The Workshop, and the Medal and Die departments are treated as service departments maintained for the Coinage department, and not as independent productive departments of the Mint.

The underlying idea is that, apart from certain miscellaneous items of work executed by the Mint, such as the manufacture of medals for the Army Department, etc., the operations connected with coinage including the examination and recoinage of uncurrent coins constitute the main activities of the Mint and that the workshop and the Medal and Die departments are maintained in the Mint merely for the purpose of serving the coinage department. The fact that during their spare time these departments are allowed to take up work for other departments and private individuals does not affect the operation of this principle. The net financial results of the activities of these two departments are therefore transferred to the account of coinage costs, as part of the general oncost.

- (b) *Melting Charges*.—Charges incurred in melting and converting silver, nickel, bronze, etc., into ingots, are compiled, separately for each class of metal melted, from the information contained in the departmental and other initial records kept up in the Mint. The average rate per lakh of tolas of each class of metal melted and cast into ingots is then worked out. The amount debitable to the Production Account of coinage is then calculated in accordance with this rate on the weight of ingots broken down, i.e., rolled by the laminator for the particular class of coinage. The residue of the unallocated melting charges is treated as the melting cost of the unused ingots in the store, and is shown as an asset in the accounts under "Work-in-progress" at the end of the year in the Melting department. The object of this procedure, at present confined to the Calcutta Mint where coinage is the more important function, is to debit a proper share of the melting charges to the coinage operations of a year.

- (c) *Oncost* is sub-divided into Factory and General oncost. Factory oncost includes all the indirect charges of a general nature, which can be allocated to a separate department of the Mint, such as salaries, gas, rent, rates and taxes, charges on account of electricity consumed, depreciation on Buildings, Plant and Machinery of the departments. Common charges are allocated to the departments concerned on a suitable basis and distributed amongst the work orders in those departments on the basis of the direct labour charges incurred therein. All other indirect charges which cannot be allocated to any particular department, are included under "General oncost." The net general oncost after deducting miscellaneous receipts, has been distributed between Government and the Mint in the ratio of 40 : 60 per cent. in the case of the Calcutta Mint in accordance with the orders issued by the Government of India. In the case of the Bombay Mint the basis of the allocation of charges to Government has been the proportion of idle days to possible working days.

- (d) *Standard silver*.—Silver bullion issued for coinage is valued at the rate of Re. 1 per standard tola, for the sake of convenience, as this unit is used in the bullion accounts and other records of the Mint. It is also the rate at which Government actually withdraws rupees from circulation for purposes of recoinage. As the face-value of the coin manufactured is also Re. 1 per tola, the commercial accounts must always show a loss on silver coinage operations; this loss really represents the cost of the coinage operation apart from the cost of material. Fine silver issued from Currency for the use of the Mint is adjusted in the Mint accounts by credit to the Currency department on the basis of the market price of silver on the date of transfer. Such silver issued by the Mint for the various jobs undertaken in the Medal and Die department is charged at the market rate on the date of issue *plus* 20 per cent. The difference between the rate at which the Mint purchases the silver from Currency and the rate at which it is sold is treated as a miscellaneous profit accruing to the Mint.
- (e) *Uncurrent coin*.—The Bullion office deals with the examination of uncurrent coins received from treasuries and currency offices. The loss on account of the withdrawal of uncurrent coins, being the difference between the metal and nominal value of coins withdrawn from circulation, and a proportionate share of the Bullion office charges on account of their examination, are included in the Profit and Loss Account under the kind of coinage concerned. This procedure which has been accepted by the Government of India, is based on the principle that all gains accruing to the country from exercising the national prerogative of having its own coinage should be brought together as accurately as possible in one set of accounts.
- (f) Interest on Capital is not included in the Mint accounts. Provision for pensionary liabilities has been included, with effect from the year 1928-29.

42. A comparison of coinage costs in Calcutta and Bombay might seem to be a necessary part of a review of the accounts of the Mints. It has not been possible to include such a comparison owing to lack of the time that would be necessary to make a thorough investigation into the causes of differences so as to give satisfactory explanations. The Controller of the Currency has always considered that such a comparison is difficult and would not be particularly educative, owing to the different conditions existing at the two Mints. It must be realised that the Mints are part of the currency system of the country, and currency exigencies may have to ignore commercial account considerations, commercialisation is not in all cases necessarily a golden rule.

HIS MAJESTY'S MINT, BOMBAY.

44. TRADING AND PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 1929.

Dr.	1928-29.	Corresponding figures for 1927-28.	1928-29.	Corresponding figures for 1927-28.	Cr.
	Rs.	Rs.	Rs.	Rs.	
To Opening Balance on 1st April .	4,48,200	8,70,000	By issue of coinage	34,55,000	19,98,688
„ Cost of Coinage	25,26,161	4,61,520	„ Gains on Counterfeits . . . .	....	2,040
„ Loss on withdrawal of uncurrent coin.	8,25,745	3,21,344	„ Excesses found in remittances . . . .	....	13
„ Bullion Office Costs	1,14,428	69,680	„ Closing balance of finished coins on 31st March . . . .	....	4,48,500
„ Gross Profit carried down . . . .	....	7,20,683	„ Gross Loss carried down	4,59,204	....
	30,14,864	24,49,827		30,14,864	24,49,827
To Gross Loss brought down	4,59,204	....	By Gross Profit brought down . . . .	....	7,20,683
„ Share of Assay Office Costs	83,885	80,606	„ Profit on gold melting and refining	38,011	31,536
„ Nickel Washing Costs	7,963	....	„ Receipts from sales of Grosses	4,524	....
„ Cost of recovery of silver drosses	7,416	14,108	„ Miscellaneous receipts and adjustments	7,535	13,400

" Silver refinery costs . . .	49,456	....	" Net Loss carried down . .	6,78,833	....
" Silver losses in melting . .	29,543	2,037			
" Standard melting costs . .	28,708	64,019			
" Die Department costs . .	14,697	13,303			
" Loss on Verification of Nickel .	13,138	....		
" " Sales of Nickel . .	28,057	2,414			
" " " Bronze . .	6,766	22,019			
" Adjustment of Prices Charges .	....	11,500			
" Net Profit carried down . .	....	5,55,502			
	7,28,923	7,65,618		7,28,923	7,65,618
			By Balance of Profit on 1st April. .	7,17,814	1,02,312
			Less Net Loss for the year brought down.	6,78,833	....
			Add Net Profit for the year brought down.	....	5,55,502
			By Balance Carried to the Balance Sheet.	38,981	7,17,814

HIS MAJESTY'S MINT, BOMBAY.

45. The accounts of the Bombay Mint for 1928-29 in a summarised form are prefixed to this review.

No coinage operations were carried out after October 1928, and the staff was employed in general cleaning and tidying up. Later on, experimental work in connection with the refining of silver was begun. Work was not interrupted in the Bullion Office, gold melting and Refining and Die Departments, and the Assay Office.

46. The cost of coinage amounted to Rs. 25,26,191; of this amount the silver coinage cost Rs. 22,82,587, the Nickel Coinage Rs. 1,04,184 and the Bronze Rs. 1,39,420.

47. *Silver Coinage*.—During this year 24,65,597 silver half rupees and 40,23,198 silver quarter rupees were minted. The detailed cost of manufacture per 1,000 pieces of each of these two coinages was:—

Item	Cost per 1000 pieces	
	½ Rupee	¼ Rupee
Labour	Rs. 1.43	Rs. 1.00
Consumable Stores	09	09
Departmental Charges	2.31	1.25
Dies	54	03
General Charges	5.16	2.14
	9.83	4.51
Cost of Bullion including melting charges	500.32	250.29
Total Cost	509.85	254.90

48. The comparatively higher cost of the half-rupee coinage was due to the fact that this coinage was carried out in the second half of the year when manufacture had been restricted and the departmental and general charges were heavy in consequence. No silver coinage was carried out in 1927-28, and although silver was minted in 1926-27 cost accounts for the whole of that year were not compiled and no statistics are available for purposes of comparison with the results of 1928-29.

49. In the following statement the cost of manufacture, value of outturn and the loss per 1,000 pieces of output are set out:—

Coinage	No. of pieces manufactured.	Cost of manufacture.	Value of outturn.	Loss in manufacture.	Cost per 1,000.	Value per 1,000.	Loss per 1,000.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
½ Rupee	24,65,597	12,57,073	12,32,798	24,277	509.85	500	9.85
¼ "	40,23,198	10,25,512	10,05,800	19,712	254.90	250	4.90
		22,82,587	22,38,598	43,989			

50. The bullion used in manufacture is debited to the Mint at the standard rate of Rs. 1 per tola, and not at the market value of silver. The reasons for this practice and its results have been explained in the introductory remarks to the reviews of the accounts of the Mints.

51. *Nickel Coinage*.—24,76,000 two-anna pieces and 48,31,600 one-anna pieces were manufactured during 1928-29, and the cost of manufacture amounted to Rs. 17.21 and Rs. 12.70 per thousand pieces respectively. The detailed cost of manufacture is given below, and the results of the previous year are also shown for purposes of comparison :—

	Cost per 1,000 pieces.			
	Two-anna.		One-anna.	
	1927-28.	1928-29.	1927-28.	1928-29.
Labour	1.44	1.06	1.29	.92
Consumable Stores	.17	.33	.26	.17
Departmental Charges	1.99	1.31	1.73	1.13
Dies	.41	.32	0.71	.62
General Charges	2.86	2.12	2.58	1.85
	6.87	5.14	6.57	4.71
Cost of Metal including melting charges	12.08	12.07	8.11	7.99
Total Cost	18.95	17.21	14.68	12.70

52. The credit taken into the Mint accounts for the issues was at the nominal value of the coins, and the profit resulting therefrom is set out below :—

Coinage.	No. of pieces manufactured.	Cost of manufacture.	Value of output.	Profit in manufacture.	Cost per 1,000.	Value per 1,000.	Profit per 1,000.
		Ra.	Ra.	Ra.	Ra.	Ra.	Ra.
2-anna	24,76,000	42,602	3,00,500	2,66,898	17.21	125	107.79
1-anna	48,31,600	61,582	3,01,975	2,40,393	12.70	62.50	49.80
		1,04,184	6,11,475	5,07,291			

53. *Bronze Coinage.*—During the year under review 80,08,640 pice and 61,35,360 pie pieces were coined at a cost of Rs. 12·42 and 6·52 per 1,000 pieces respectively, the detailed costs of which were :—

	Cost per 1,000 pieces.			
	Bronze Pice.		Bronze Pice.	
	1927-28.	1928-29.	1927-28.	1928-29.
Labour	1·43	·93	1·24	·80
Consumable Stores	·20	·12	·15	·07
Departmental Charges	1·97	1·14	1·63	1·00
Disc	·38	·33	·36	·38
General Charges	2·87	1·87	2·49	1·61
	6·85	4·39	5·87	3·86
Cost of Bronze including melting charges	7·92	6·03	7·81	5·66
	14·77	12·42	8·68	6·52

54. The issues from the Mint of the finished produce were made at the nominal value of the coins, the Profit and Loss resulting therefrom being :—

Coinage.	No. of pieces manufactured.	Cost of manufacture.	Value of output.	Profit in manufacture.	Cost per 1,000.	Value per 1,000.	Profit or loss per 1,000.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Pice	80,08,640	99,445	1,25,135	25,690	12·42	15·62	3·20
Pice	61,35,360	29,975	31,958	—8,020	6·52	5·21	—1·31
		1,29,420	1,57,093	17,670	...	...	...

55. The lower costs of manufacture of Nickel and Bronze Coins in 1928-29 are noticeable. Economy in labour and a reduction of the unproductive staff in view of the closing of the Mint to coinage is partly responsible

for the lower costs. The improvement in costs has been progressive as may be realised from the following figures :—

Item.	Cost per 1,000 pieces in the half years ended:—		
	30-9-27.	31-3-28.	30-9-28.
	Rs.	Rs.	Rs.
Nickel 2-Anna	—	18-95	17-21
“ 1-Anna	16-62	12-75	12-70
Bronze Pice	14-95	14-60	12-42
“ Pice Pieces.	9-97	7-29	6-62

There was no coinage of Nickel and Bronze in the half year ended 31st March 1929, nor were two-anna Nickel coins minted in the half year ended 30th September 1927; but the cost of the latter coinage in the half year ended 31st March 1927 amounted to Rs. 19-16 per 1,000 pieces.

56. *Percentage of good coins.*—The following percentages of good coins were obtained from the metal put into process :—

Silver 1 Rupee	69-49
“ ½ “	61-83
Nickel 2-Anna	64-20
“ 1 “	61-26
Bronze Pice	61-14
“ Pice	60-02

57. *Losses on withdrawal of uncurrent coin.*—These losses arise out of the difference between the nominal value of the uncurrent coins withdrawn from circulation and their bullion value to the Mint calculated on their weight. The details of these losses in 1928-29 were :—

	Rs.
Silver Coins	7,59,534
Nickel “	24,452
Bronze “	41,759
	Rs. 8,25,745

58. The costs of the Bullion Office and the remittance room both of which are engaged on the work of examining these uncurrent coins amounted to Rs. 1,14,428. The bulk of the coins examined were of silver, and this expenditure was distributed for purposes of costing in proportion to the number of coins of each metal examined. The distribution was as follows :—

	Rs.
Silver	99,561
Nickel	1,307
Bronze	13,560
	Rs. 1,14,428

59. There was a gross loss of Rs. 4,59,204 in the year under review, and a gross profit of Rs. 7,20,683 in 1927-28 which resulted from transactions on Silver, Nickel, and Bronze as follows :—

Item.	1927-28.	1928-29.
	Rs.	Rs.
Loss on Silver transactions	2,55,472	9,03,057
Loss on Bronze	1,08,936	37,649
	3,64,408	9,40,736
Profit on Nickel transactions	10,85,091	4,81,532
Profit	7,20,683	—
Loss	—	4,59,204

The reasons for this loss are summarised below :—

- While silver coins were minted in 1928-29, there was no such coinage in the previous year. As already pointed out in para. 41 (d) above the Mint accounts always show a loss on manufacture of silver coins.
- In accordance with the re-distribution of work between the two Mints the major portion of un-current silver coins were sent to the Bombay Mint, and the increase in these withdrawals resulted in an inflation of the loss under this head. The figure of loss against this transaction exceeds that of the previous year by over Rs. 5 lakhs.
- No Nickel coinage was undertaken in the second half of the year 1928-29. This coinage is the main source of profit to the Mints.

Reference is invited to the following figures of output in the two years and attention is drawn to the fact that the profit per 1,000 pieces is approximately Rs. 100 and Rs. 50 on two and one-anna coins respectively :—

Year.	Out-put.	
	2 Anna.	1 Anna.
1927-28	48,04,000	1,29,52,000
1928-29	24,76,000	48,31,600

60. Part of the general charges of the Mint were excluded from the Mint costs and transferred to the Currency Department, the reason for this arrangement and the basis on which it is made being set out in para. 41 (c) of the general remarks prefixed to this review. The proportion transferred to Currency was 40 per cent. in the first half of the year and 60 per cent. in the second. The reason for the increase was that the Mint was idle for a longer period in the second half. The average in previous periods was 40 per cent. to Currency and 60 per cent. to the Mint.

61. *Assay Office Costs.*—The receipts on account of Assays done for the public was Rs. 6,347 which left a balance of expenditure amounting to Rs. 93,206 for distribution between the two Mints. This distribution was made on an arbitrary basis of nine parts to Bombay and one to Calcutta ; the Bombay Mint was therefore debited with Rs. 83,885. The basis has been changed since and under the orders of the Government of India the share of each Mint in future will be in proportion to the assays carried out for each.

62. *Silver Refinery Costs.*—Operations in this Department began in March 1929, and there was no output in 1928-29. The whole of the costs are shown in the Profit and Loss Account.

63. *Standard Melting Costs.*—Part of these costs are debited to the coinage and the balance is transferred to the Profit and Loss Account. The allocation is based on the quantity of metal melted and that issued to coinage.

64. *Dies.*—The excess of the charges over receipts in the Medal and Die Department amounted to Rs. 14,697 in 1928-29 and to Rs. 13,303 in 1927-28. This Department is engaged on the manufacture of medals, tokens, etc., for sale and dies for coining purposes. The recoveries from sales of medals, etc., were examined with a view to seeing that the rates at which they were sold were adequate, and it was found that they were. The excess of expenditure over receipts is due mainly to the fact that the rate charged to the coinage for dies was inadequate. The issue rate was fixed empirically by the Mint Master at Rs. 5 per die. The reason why this rate has proved inadequate is that with the gradual reduction in coining the number of dies manufactured has also been reduced and their cost has risen in consequence.

65. Gold Melting and Refining.—There was a Profit on this account which amounted to Rs. 38,011 in 1928-29 and to Rs. 31,535 in 1927-28. The gold treated was from Indian mines and from merchants.

66. Dross Recoveries.—The cost of treating drosses and the recoveries therefrom during 1928-29 is set out below :—

Item	Cost.	Value of recoveries.		
		Gold.	Silver.	Total.
	Rs.	Rs.	Rs.	Rs.
Treatment of gold dross	7,578	7,121	5,906	13,026
“ “ silver “	7,416	..	20,732	20,732
Total	15,294	7,121	26,637	33,758

That it pays to treat drosses is evidenced by the surplus of the recoveries over the cost of treatment which amounted to Rs. 18,464.

67. Balance Sheet.—The following additions to the Fixed Assets were made during the year 1928-29 :—

Item.	Mint proper.	New Silver Refinery.	Assay Office.	Total.
	Rs.	Rs.	Rs.	Rs.
Buildings	158	1,95,865	..	1,97,023
Plant and Machinery	2,396	40,130	583	43,109
Furniture and Fixtures	646	42,816	..	43,462
Total	3,200	2,79,811	583	2,83,594

The additions to Buildings represent the cost of erecting Nickel Bins for the Mint, Rs. 158, and the cost of the electrolytic silver refinery including a new guard house, Rs. 1,95,865. The Mint plant was added to by the purchase of a Universal Cutter and Grinder at a cost of Rs. 2,396. The additions to the Silver Refinery plant included a lift, and a multi tubular boiler, and the amount of customs duty paid on imported machinery was also brought into the costs. A D. C. Motor Generator was purchased for the Assay Office at a cost of Rs. 583. The electric fittings and sundry articles of furniture in the silver refinery cost Rs. 42,816.

68. The stocks of consumable stores are being reduced gradually, and every endeavour is being made to dispose of surplus and unnecessary stocks. Stock taking is carried out annually by an Assistant deputed by the Mint Master. The Bullion Stocks were verified by the Examiner of Outside Audit in April 1929.

69. *Sundry Debtors, Rs. 3,066.*—The whole of the outstandings represented by this figure were settled before July 1929.

70. The Capital Account is debited with all outstandings transfers and adjustments from the Mint accounts and credited with the value of uncurrent remittances received, cheques drawn, and Mint charges met by the Currency Department. The balance of this account on the 31st March 1929 amounted to Rs. 24,34,273.

HIS MAJESTY'S

71. Balance Sheet as

Liabilities.	1927-28.	1928-29.
	Rs.	Rs.
Sundry Creditors	1,93,532	1,26,253
Northbrook Medal Fund	157	189
Currency Chest	4,21,70,675	1,54,86,785
Treasury Remittances under examination.	8,24,443	..
Silver for sale . . . . .	..	10,72,922
Depreciation Reserve	92,331	1,07,990
Reserve for Assay charges . . . . .	..	4,500
Profit and Loss A/c.	15,53,394	17,44,709
Government Capital A/c.	19,71,261	22,00,685
Total Rs.	4,68,14,792	2,07,53,033

(Sd.) W. J. BOLST,

Accountant,

His Majesty's Mint, Calcutta.

MINT, CALCUTTA.

at 31st March 1929.

Assets.		1927-28.	1928-29.
		Rs.	Rs.
Buildings		2,06,344	2,71,618
Plant and Machinery		2,82,572	2,99,327
Furniture and Fixtures		22,883	22,646
Bullion Stocks—			
Mint	{ Gold	17,001	18,024
	{ Silver	1,75,898	14,50,021
Currency	{ Gold	67,13,829	67,13,820
	{ Silver	3,31,92,976	87,72,965
Chest Co'n Silver		22,72,879	72
Silver for sale			10,72,922
Die Dept.	{ Gold	3,821	7,922
	{ Silver	3,740	4,807
Other Metal Stocks—			
	Bronze	7,45,641	4,10,887
	Nickel	0,22,431	4,12,530
Finished Coin Stock—			
	Bronze	1,08,100	35,400
	Nickel	9,53,500	1,59,500
Consumable stores		4,81,485	4,12,603
Stock of Medals		47,110	55,443
Treasury Remittances under examination		8,24,443	4,93,675
Sundry Debtors		14,025	6,440
Deposits (Security Deposits)		61,900	63,925
Realisation accounts		..	16,039
Work in progress		..	50,478
Imprest and Cash in hand		1,074	1,441
Total Rs.		4,68,14,793	2,07,53,033

(Sd.) A. RENGASWAMI IYER,
Asstt. Director of Commercial Audit,
Calcutta Circle.

(Sd.) M. STAGG,
Major, R. E.,
Mint Master, His Majesty's Mint,
Calcutta.

HIS MAJESTY'S MINT, CALCUTTA.

73. The accounts of the Calcutta Mint for 1928-29, in a summarised form are prefixed to this review.

74. The quantity and cost of coins manufactured during 1928-29 and 1927-28 were as follows :—

	1927-28.		1928-29.	
	Pieces.	Cost.	Pieces.	Cost.
		Rs.		Rs.
Silver coins	20,31,853	10,54,775	80,62,400	30,81,370
Nickel „	1,34,16,000	2,56,075	3,56,16,000	4,88,458
Bronze „	1,96,22,400	2,39,224	4,57,00,000	4,69,652

As compared with the year 1927-28 the value of coins manufactured during 1928-29, increased as follows :—

Silver	192 per cent.
Nickel	90 „
Bronze	96 „

75. *Silver coinage.*—During 1928-29, 40,49,500 pieces of silver, half-rupees and 40,12,900 pieces of silver, quarter-rupees, were minted against 20,31,853 of half-rupees only during 1927-28.

The detailed cost of manufacture per 1,000 pieces, during 1928-29 of these two coins was :—

Item.	Cost per 1,000 pieces.	
	† Rs.	‡ Rs.
Labour	74	55
Consumable stores	16	18
Departmental charges	2.19	1.78
Disc	49	72
General charges	2.51	1.86
Cost of Bullion	600.23	250.14
Melting charges	1.14	55
Total cost for 1928-29	607.46	256.78

The total cost of manufacture per 1000 pieces of silver, half-rupees, during 1927-28 was 519.12 against 507.46, during the year 1928-29. The reason why silver coinage must always show a loss has been explained in the introductory remarks to the Mint accounts.

In the following statement the cost of manufacture, value of outturn and the loss per 1000 pieces are set out:—

Coinage.	No. of pieces manu- factured.	Cost of manu- facture.	Nominal value of outturn.	Loss in manu- facture.	Cost per 1000 pieces.	Nominal value per 1,000 pieces.	Loss per 1000 pieces.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Half-rupees	40,49,500	20,54,969	20,24,750	30,219	507.46	500	7.46
Quarter-rupees	40,12,970	10,29,401	10,03,225	23,176 53,395	255.79	250	5.78

The loss on silver coinage, during 1928-29 was Rs. 53,395 against Rs. 38,848, during the year 1927-28. The proportion of the loss to the total outturn decreased in 1928-29, because of the larger outturn.

7d. *Nickel coinage.*—Of two anna pieces 60,48,000 and of one anna pieces 2,95,68,000 were manufactured, during the year 1928-29 against 1,10,672 pieces and 1,15,403 pieces respectively in 1927-28. The detailed cost of production is given below:—

Items.	Cost per 1000 pieces 1928-29.	
	Two anna pieces.	One anna pieces.
Labour	58	55
Consumable stores	33	16
Departmental charges	1.46	1.33
Dies	.63	.68
General charges	2.12	2.15
Cost of Bullion	9.64	6.27
Melting charges	3.17	1.74
Total cost 1928-29	17.43	12.85

Against the cost given above the cost of production during 1927-28 of the two coins was 19.76 and 18.33 per 1,000 pieces. The chief reason for the decrease in costs in 1928-29 was the larger production in that year.

The credit taken into the Mint accounts for issues was at the nominal value of the coins and the profit resulting therefrom is set out below :—

Coinage.	Number of pieces manufactured.	Cost of manufacture. Rs.	Nominal value of outturn.	Profit on manufacture.	Cost per 1,000 pieces.	Nominal value per 1,000 pieces.	Profit per 1,000 pieces. Rs.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Two anna pieces	6,048,000	1,08,424	7,56,000	6,47,576	17.93	125	107.07
One anna pieces	2,956,400	3,89,034	18,48,000	14,57,966	12.85	62.50	49.65
				21,15,541			

During the year 1928-29 the two factors of increased outturn and decreased costs contributed to a profit on Nickel coinage of Rs. 21,15,541 against Rs. 10,37,576 during 1927-28.

77. *Bronze coinage.*—The quantity of coins manufactured was :—

	1928-29	1927-28
	Pieces.	Pieces.
Pice	3,22,43,500	70,72,000
Half-pice	54,22,800	58,88,000
Pies.	80,64,000	66,62,400

The details of the cost are as follows :—

Cost per 1,000 pieces 1928-29.			
	Single pice.	Half pice.	Pice.
Labour	52	54	62
Consumable Stores	19	14	14
Departmental charges	1.24	1.29	1.18
Dies	37	96	56
General Charges	1.85	2.01	1.61
Cost of Bullion Melting charges	7.00	3.63	2.71
Total cost 1928-29	11.47	8.17	6.82

The corresponding costs in 1927-28 were 15.43, 10.51 and 10.24 respectively. In each case the increase in the outturn during 1928-29 chiefly

accounts for the decrease in costs. Credit being taken for issues at nominal values the resultant profit or loss works out as below :—

Coinage.	Number of pieces manufactured.	Cost of manufacture.	Nominal value of outturn.	Profit or Loss (-) on manufacture.	Cost per 1,000 pieces.	Nominal value per 1,000 pieces.	Profit per 1,000 pieces.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Single Pice . . .	3,22,43,200	3,70,131	5,03,800	1,33,669	11.47	15.62	4.15
Half pice . . .	54,52,800	44,533	42,600	-1,933	8.17	7.51	-0.66
Pies . . .	80,64,000	54,988	42,000	-12,988	6.82	5.21	-1.61
				1,18,748			

During 1928-29 profit on Bronze coinage amounted to Rs. 1,18,748 against a loss of Rs. 60,532 in the year 1927-28. Single pice, on the coinage of which only there is a profit, were minted in larger quantity during 1928-29 3,22,43,200 pieces against 70,72,000 in 1927-28. This fact together with the decrease in costs, due to larger outturn accounts for the better results during 1928-29.

78. *Profit and Loss Account.*—The net profit during 1928-29 amounted to Rs. 17,44,708 against Rs. 5,26,092 of the year 1927-28 as will be clear from the table below :—

Items.	1928-29.				1927-28.			
	Profit or Loss (—) Silver.	Profit or Loss (—) Nickel.	Profit or Loss (—) Bronze.	Profit or Loss (—) Total.	Profit or Loss (—) Silver.	Profit or Loss (—) Nickel.	Profit or Loss (—) Bronze.	Profit or Loss (—) Total.
Coinages	—63,305	21,15,541	1,15,748	21,80,584	—38,848	10,37,376	—69,532	9,38,196
Cost of uncurrent coin work	—34,879	—6,014	—28,523	—69,416	—91,645	—1,150	—1,185	—93,880
Loss on withdrawals of uncurrent coins and sale of metal	—2,78,278	—1,17,400	—1,18,057	—5,12,835	—1,63,452	—82,505	—81,676	—3,27,903
Add Miscellaneous Receipts	—3,66,652	19,92,127	—27,832	15,97,643	—2,29,915	9,53,021	—1,43,363	5,10,313
Net Profit for the year . . . . .	...	...	...	1,47,065	...	...	...	9,779
	...	...	...	Rs. 17,44,708	...	...	...	Rs. 5,26,092

BALANCE SHEET.

79. Government Capital Account.—The net capital debt due to the Government of India by the Calcutta Mint as at 31st March 1929 exclusive of the balance of the Currency department and the profit of Rs. 17,41,700 which accrued during the year, works out to Rs. 22,09,685. The corresponding figure at the end of 1927-28 was Rs. 19,71,261. The increase is partly due to the inclusion under the head "Government Account" in the accounts of the year 1928-29, of the balance of treasury remittances under examination, (which was exhibited as a separate item, on the liability side of the Balance Sheet in the year 1927-28); indirect charges due to Government and one or two similar items also explain the increase.

The amount due by the Mint to the Currency department for the currency reserve held in the Mint on 31st March 1929 was Rs. 1,54,86,785 as against Rs. 4,21,79,675 at the end of the preceding year. These balances fluctuate according to the operations of the Currency department. A further sum of Rs. 10,72,922 was also due to the Currency department on 31st March 1929 as the value of silver bullion set apart for sale.

80. Plant and Machinery.—The valuation of the Plant and Machinery at the end of the year 1928-29 amounts to Rs. 2,99,327. The additions during the year include the value of electric plant acquired for converting the alternating current purchased from the Calcutta Electric Supply Corporation into direct current suitable for use in the factory.

The disposals of Rs. 37,800 shown in 1928-29 represent mainly the book-value of electric generating plant which is no longer required in view of the decision to obtain the electric current in future from the Electric Supply Corporation, Calcutta.

81. The total value of the fixed assets at the close of the year 1928-29 representing buildings, plant and machinery, furniture and fixtures amounted to Rs. 5,93,591 while the accumulated depreciation reserve provided for the renewal of the buildings and plant and machinery amounted to Rs. 1,07,990.

82. Consumable General Stores.—At the end of the year 1928-29, the value of these stores was Rs. 4,12,603 as against the balance at the commencement of the year of Rs. 4,84,485. This represents the value of the balances of stores as they appear in the Priced Stores ledgers. The question of revising this valuation with reference to the market rates is under consideration.

83. Bullion stocks.—The value of Gold and Silver bullion at 31st March 1929 including the balance in the Die Department was Rs. 1,80,41,681 and the corresponding figure on 31st March 1928 was Rs. 4,23,60,225. The value of other metal stocks (viz., Bronze and Nickel) at the end of the year 1928-29 was Rs. 8,23,417, as against Rs. 13,68,062 at the end of the previous year.

The verification of the balances of coin stocks, Gold and Silver bullion, other medal and metal stocks at the end of the year 1928-29 has been carried out by the Examiner of Outside Audits, Bengal, in accordance with the rules prescribed by the Government of India.

CHAPTER III.

GOVT. OF INDIA— FINANCE DEPARTMENT.

Central Board of Revenue Concerns.

NORTHERN INDIA SALT

84. Balance Sheet

Liabilities,	1927-28		1928-29	
	Rs.	Rs.	Rs.	Rs.
Sundry Creditors		23,606		2,43,140
Depreciation Reserve		11,35,900	11,35,900	
Additions during the year			2,48,755	
				<u>13,84,635</u>
Government Account	96,76,480		1,02,56,980	
Add—Transactions during the year .	5,74,000		...	
Deduct—Transactions during the year	...		6,97,898	
		<u>1,02,56,980</u>		<u>95,53,082</u>
Profit and Loss Account—				
Profit for 1924-25	Rs. 9,79,289			
Less Loss for 1925-26	Rs. 3,34,032			
				<u>Rs. 6,45,257</u>
Less Loss for 1926-27	Rs. 3,50,841			
				<u>Rs. 2,94,416</u>
Balance of Profit to end of 1926-27				
Less Loss for 1927-28	Rs. 3,60,904			
				<u>Rs. 66,488</u>
Net Loss up to 31st March 1928				
Add Loss for 1928-29				<u>Rs. 3,58,009</u>
Balance Loss <i>per contra</i>				<u>Rs. 4,24,497</u>

Rs. 1,14,10,486

Rs. 1,11,80,877

REVENUE DEPARTMENT.

as at 31st March 1929.

Assets.	1927-28.		1928-29.	
	Rs.	Rs.	Rs.	Rs.
Land		1,05,798		1,05,798
Buildings	10,95,833		11,42,102	
Additions during the year	46,345		56,512	
	11,42,178		11,98,614	
Deduct—Sales and Transfers . . .	76		1,282	
		11,42,102		11,97,332
Roads and Bridges	56,339		56,819	
Additions during the year	480			56,819
Plant and Machinery	16,23,383		15,84,454	
Additions during the year	6,513		33,867	
	16,31,896		16,18,321	
Deduct—Sales and Transfers . . .	47,442		91,279	
		15,84,454		15,27,042
Other Works	51,66,741		53,59,529	
Additions during the year	1,95,252		1,55,180	
	53,61,993		55,14,709	
Deduct—Sales and Transfers . . .	2,464		1,843	
		53,59,529		53,12,866
Furniture and Fittings . . . . .	..	41,317	..	41,317
General Stores . . . . .	..	11,54,685	..	9,22,882
Depreciation Fund Investment Account.	..	11,35,900	..	13,84,655
Sundry Debtors . . . . .	..	7,63,394	..	7,669
Profit and Loss Account <i>per contra</i>	..	56,488	..	4,24,497

Rs. 1,14,10,486

Rs. 1,11,80,871

NORTHERN INDIA SALT

85. Comparative Special Abstract Trading and Profit and

Dr.

Particulars.	Sambhar.		Idwana.		Pachhadra.	
	1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
To Loss on Bags . . .	—1,071	..	..	..	21	..
.. Loss on Salt . . .	1,85,726	4,08,090	14,069	10,282	1,06,465	82,841
Total . . .	1,84,655	4,08,090	14,069	10,282	1,06,486	82,841

Particulars as above.]	Khewra.		Warcha.		Kalabagh.		Total.	
	1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
3,387 . . .	..	..	..	..	..	..	2,337	..
5,01,334 . . .	3,25,673	20,750	—1,878	16,428	12,090	8,44,772	8,37,098	
5,04,721 . . .	3,25,673	20,760	—1,878	16,428	12,090	8,47,109	8,37,098	

(A) These figures differ from the corresponding figures shown in the Consolidated Profit in the case of Sambhar which were included by the Audit Officer, Indian Stores Department, in Khewra and Warcha, the differences are due to Rs. 8,782-13-0 and Rs. 1,254-11-0 on account from Warcha to Khewra during the year. A further difference of Rs. 105-14-0 and Rs. 14-1-0 and dispatch respectively having been adjusted by the Audit Officer, Indian Stores Department.

(a) This figure differs from the corresponding figure shown in the Consolidated Trading and adjusted by the Audit Officer in his March 1928, Supplementary Statement.

(b) This figure differs from the corresponding figure shown in the Consolidated Trading and to old indents on account of price of Salt and dispatch charges respectively as intimated by

REVENUE DEPARTMENT.

Loss Account by Products for the year 1928-29.

Cr.

Particulars	Sambhar.		Didwana.		Pachbadra.	
	1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
By Profit on Dispatch	1,61,668	1,32,678	..	..	809	6,586
" Profit on Gypsum	..	..	..	..	..	..
" Profit on Bags	..	-962	..	..	..	-3
<i>By Miscellaneous Receipts.</i>						
Interest on balances of Depreciation Fund.	21,387	29,165	70	94	459	678
	(A)	(a)				
Other net miscellaneous receipts.	2,47,391	1,70,447	122	129	1,069	6,466
Net Loss	-2,45,791	76,762	13,877	10,059	1,04,149	69,114
Total	1,84,655	4,08,090	14,069	10,282	1,06,488	82,841

	Khewra.		Warcha.		Kalabagh.		Total.	
	1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
[Particulars as above.]	13,639	59,480	14,592	15,451	..	..	1,90,708	2,14,195
	1,369	3,256	..	..	..	..	1,269	3,206
	..	13,776	..	..	..	..	..	12,811
	12,266	18,048	1,477	1,998	216	293	35,875	80,276
	(A)	(b)	(A)				(A)	
	-1,328	19,913	10,442	645	667	952	2,58,353	1,98,562
	4,78,875	2,11,300	-5,761	-19,972	15,555	10,845	3,60,904	3,58,008
	<hr/>							
	5,04,721	3,25,673	20,750	-1,878	16,428	12,090	8,47,169	8,37,098

and Loss Account owing mainly to the adjustments of Rs. 8-5-9 relating to Dispatch charges the cash indents received but not in the receipt statement submitted by him. In the case of of price of salt and dispatch charges respectively, indents for which amounts were transferred in the case of Khewra is due to the above amounts on account of old indents relating to price in the opening balance of cash indents on 1st April 1927.

Profit and Loss Account on account of the adjustment of Rs. 2-5-2 relating to dispatch charges

Profit and Loss Account on account of the adjustment of Rs. 84-6-0 and Rs. 14-1-0 relating to the Audit Officer in his Cash Indent Account for Khewra.

NORTHERN INDIA SALT

86. Comparative Consolidated Trading and Profit and

Debits.

Particulars.	Sambhar.		Didwana.		Pachbadra.	
	1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.
	Rs. (A)	Rs. (a)	Rs. (B)	Rs. (b)	Rs. (C)	Rs. (c)
To Salt Stock at (commence- ment)	11,44,634	6,59,180	18,736	15,705	1,51,911	76,597
.. Manufacture	4,90,767	4,63,117	29,580	51,452	34,421	93,474
.. Weightment Charges	1,37,695	1,08,833	6,698	6,217	30,356	27,092
.. Share of Commissioner's Head Quarters Office Charges	37,807	41,606	2,667	2,336	6,719	8,588
.. Medical Charges	9,115	8,687	120	120	3,518	2,767
.. Royalties and Salt Compen- sation	5,15,836	9,75,715	11,040	11,469	13,610	25,706
.. Pensionary Charges	35,503	34,090	973	2,354	6,326	7,900
.. Leave Salary and Overseas pay paid in England	11,527	11,991	303	150	685	657
.. Interest on Capital outlay	2,60,160	5,44,428	570	1,830	6,504	11,490
.. Depreciation Charges	1,59,917	1,62,223	109	418	3,501	2,856
.. Cost of Accounts and Audit Establishment	19,115	22,894	1,212	1,558	2,932	4,792
.. Stationery and Printing	2,818	3,846	29	22	781	871
.. Contribution of Bonus to Provident Fund . . . . .	..	..	..	..	..	..
<i>Other Items.</i>						
To Refunds (Sale proceeds)	22,818	27,092	201	3,805	660	1,738
.. Refunds (Miscellaneous Revenue Receipts)	2,271	81	..	..	..	..
.. Salt Indents (at Commence- ment)	1,12,106	7,05,215	-234	-736	-1,412	-4,341
.. Salt Indents (at close) . . . . .	..	96,868	..	4,549	..	1,56,590
.. Taka Account—Loss	-1,071	..	..	..	21	..

Total 32,61,068 37,03,865 72,387 81,289 2,64,519 3,96,447

Rs.

(A)	Mds. 45,78,536 of Sambhar Salt valued at the selling price 0-4-0 per maund	11,44,634
(B)	.. 1,49,888 .. Didwana .. do. .. do. 0-2-0 .. do.	18,736
(C)	.. 8,05,395 .. Pachbadra .. do. .. do. 0-3-0 .. do.	1,51,911
(D)	.. 3,85,000 .. Khewra .. do. .. do. 0-3-0 .. do.	84,319
(E)	.. 70,000 .. Warcha .. do. .. do. 0-3-0 .. do.	16,313
(F)	.. 4,019 .. Kalabagh .. do. .. do. 0-3-0 .. do.	87 ⁹

REVENUE DEPARTMENT.

Loss Account for the year ended 31st March 1929.

Khewra.		Warcha.		Kalabagh.		Totals.	
1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.
Ra.	Ra.	Ra.	Ra.	Ra.	Ra.	Ra.	Ra.
(D)	(d)	(E)		(F)	(e)		
84,219	68,224	15,313	..	879	310	14,14,792	8,59,426
6,76,267	6,68,128	93,681	92,328	69,401	82,911	13,18,117	14,31,880
63,659	66,753	9,529	8,676	4,710	5,587	2,52,014	2,11,669
..
51,547	47,176	6,696	8,187	6,209	6,562	1,10,625	1,14,434
9,384	9,425	2,694	2,994	179	165	25,020	24,156
..	..	..	..	..	..	8,40,486	10,10,890
29,524	24,662	2,334	5,000	1,625	2,919	76,285	76,415
16,163	6,632	792	625	733	421	30,173	20,176
1,20,206	1,27,101	11,751	9,769	2,741	2,700	4,02,632	4,97,769
1,82,576	1,14,770	10,675	10,328	1,431	1,658	3,69,109	2,93,300
26,062	26,023	2,386	4,516	3,140	2,620	65,923	63,132
3,139	4,355	83	77	71	62	6,921	9,230
1,299	1,771	..	..	..	..	1,299	1,771
1,019	1,628	900	602	..	1,421	25,604	26,296
5	5	..	..	..	..	2,976	26
4,532	62,870	-63,509	-76,593	-5,672	-7,302	46,411	6,80,113
..	-1,84,122	..	54,398	..	47,075	..	1,55,358
3,587	..	..	..	..	..	2,337	..
12,71,928	10,34,412	94,385	1,21,268	86,267	1,48,109	20,51,124	24,85,620

Ra.

- (a) Mds. 26,92,265 of Sambhar Salt valued at the selling price 0-4-3 per maund 6,99,180
 (b) " 1,25,637 " Didwana do. do. do. 0-2-0 do. 15,705
 (c) " 3,73,697 " Pachbadra do. do. do. 0-3-3 do. 76,907
 (d) " 3,12,340 " Khewra do. do. do. 0-3-6 do. 68,324
 (e) " 1,420 " Kalabagh do. do. do. 0-2-0 do. 310

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NORTHERN INDIA SALT

86. Comparative Consolidated Trading and Profit and Loss

Credits.

Particulars.	Sambhar.		Didwana.		Pachbadra.	
	1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
By Sale proceeds of Salt.	16,60,577	27,12,527	43,349	55,011	86,466	2,72,903
" Salt indents (at close).	7,05,215	..	-736	..	-4,341	..
" Miscellaneous Revenue Receipts.	2,50,370	1,70,520	122	129	1,069	6,406
" Interest on Balance of Depreciation Fund.	21,387	29,165	70	95	459	677
" Stores and Workshops and Electric Power House Estt.	9,071	-11,945	..	..	..	..
" Profit on Dispatch Account.	1,61,659	1,32,687	..	..	810	6,586
" Profit on Gypsum . . .	..	..	..	..	..	..
" Profit on Bags . . .	..	-962	..	..	..	-3
	(G)	(f)	(H)	(g)	(I)	(h)
" Salt Stock (at close) .	6,99,180	5,95,111	15,705	15,995	75,907	40,805
" Net Loss . . .	-2,45,791	76,762	13,877	10,059	1,04,149	69,113
Total	32,61,668	37,03,865	72,387	81,289	2,64,519	3,96,447

Certified that the figures contained in this account have been reconciled with those furnished Supplementary and that the figures for March 1929 Supplementary will be incorporated in the

S. C. DASS,
Personal Assistant to Commissioner,
N. I. S. R.

KIRPA RAM,
Head Accountant,
(Books).

(G) Mds. 26,32,206 of Sambhar Salt valued at the selling price 0-4-3 per maund = Rs. 6,99,180
 (H) " 1,25,637 " Didwana " " " " " 0-2-0 " " = Rs. 15,705
 (I) " 3,73,697 " Pachbadra " " " " " 0-3-3 " " = Rs. 75,907
 (J) " 3,12,340 " Khewra " " " " " 0-3-6 " " = Rs. 68,324
 (K) " 1,420 " Kalabagh " " " " " 0-3-6 " " = Rs. 311

REVENUE DEPARTMENT.

Account for the year ended 31st March 1929—*contd.*

Khewa.		Warcha.		Kalabagh.		Total	
1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
5,37,842	5,52,963	1,56,836	1,21,967	76,831	1,34,808	25,61,901	38,50,079
62,870	..	-75,593	..	-7,302	..	6,80,113	..
8,834	20,016	405	645	657	952	2,61,457	1,98,728
12,266	18,048	1,477	1,998	215	293	35,874	50,276
89,277	92,906	1,174	1,307	..	..	99,522	82,268
12,371	59,466	15,847	15,450	..	..	1,90,687	2,14,189
1,269	3,256	..	..	..	..	1,269	3,256
..	13,776	..	..	..	..	..	12,811
(J)	(i)		(j)	(K)	(k)		
68,324	62,781	..	3	311	1,212	8,59,427	7,15,967
4,78,875	2,11,200	-5,761	-19,972	15,555	10,844	3,60,904	3,58,006
12,71,928	10,34,412	94,385	1,21,398	86,267	1,48,109	50,51,154	54,85,528

by the Audit Officer, Indian Stores Department for the year 1928-29 including March 1928 accounts for 1929-30.

S. C. SEN,
Assistant Audit Officer,
Northern India Circle (Commercial).

- | | | | | |
|-----|------|-----------|---|---------------------|
| (f) | Mds. | 22,40,418 | of Sambhar Salt valued at the selling price of Rs. 0-4-3 per md.=Rs. | 5,95,111 |
| (g) | " | 1,02,365 | " Didwana " " " " " " " " " " " " | 0-2-6 " =Rs. 15,995 |
| (h) | " | 2,00,885 | " Pachhadra " " " " " " " " " " " " | 0-3-3 " =Rs. 40,805 |
| (i) | " | 2,87,000 | " Khewra " " " " " " " " " " " " | 0-3-6 " =Rs. 62,781 |
| (j) | " | 16 | " Warcha " " average cost of production of Rs. 0-3-5-45 per md.
=Rs. | 3 |
| (k) | " | 5,540 | " Kalabagh " " selling price of Rs. 0-3-6 per md.=Rs. | 1,211 |

NORTHERN INDIA SALT

87. Comparative Cost Sheet of

	Sambhar.		Dilwara.		Pachmadra.	
	1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Opening Balance	11,33,426	7,33,453	50,353	28,000	2,04,959	1,97,223
<i>Charges for the year.</i>						
Manufacturing charges	4,90,767	4,63,217	29,780	31,422	39,622	93,674
Share of Commissioner's headquarters.	37,807	41,505	2,567	2,336	8,799	8,688
Royalties and Compensation.	8,15,836	9,73,715	11,040	11,469	13,610	23,706
Interest on capital	2,00,160	3,44,428	970	1,800	6,803	11,480
Depreciation charges	1,59,917	1,62,223	509	488	3,801	3,836
Weightment charges	1,37,695	1,08,833	6,093	8,218	30,356	27,093
Expenditure on—Medical, stores and workshops, pensionary charges, leave salaries, bonus to provident fund deposits, cost of audit and accounting and stationery and printing.	69,046	93,456	2,723	4,234	14,242	16,078
Total	31,04,554	29,30,830	1,04,037	85,967	4,19,192	3,83,778
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Manufactured during the year.	68,44,670	67,20,424	3,16,922	2,87,084	—11,108	5,22,796
Deduct—Deficits and write-off.	2,81,794	...	...	...	...	...
Add—Commencing balance	65,62,876	...	...	...	...	...
	45,79,536	26,32,266	1,49,888	1,25,636	8,05,395	3,73,897
Total Mds.	1,11,41,412	93,52,630	4,66,810	4,12,720	7,94,287	8,96,693
Average cost per md.	0-4-5-50	0-4-11-00	0-3-6-79	0-3-3-09	0-8-5-33	0-6-10-19
Issue rate	0-4-0	0-4-3	0-2-0	0-2-0	0-3-0	0-3-0
Cost of production per md. for the year.	0-4-7-29	0-5-2-49	0-2-8-32	0-3-2-76	...	0-6-8-51
Prime cost per md. for the year.	0-1-1-77	0-1-1-23	0-1-6-04	0-1-9-01	...	0-2-10-40
Difference (overhead charges).	0-3-5-52	0-4-1-26	0-1-2-48	0-1-5-75	...	0-3-10-11

REVENUE DEPARTMENT.

Salt for the year 1928-29.

Khowra.		Warcha.		Kalabagh.		Total.	
1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.	1927-28.	1928-29.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1,18,849	1,22,496	21,580	...	1,381	981	16,30,548	10,81,553
6,75,267	6,68,128	93,681	92,528	69,401	82,911	13,98,518	14,31,889
51,547	47,176	6,696	8,187	6,209	5,562	1,10,625	1,14,454
...	...	...	...	...	...	8,40,486	10,10,890
1,20,206	1,27,101	11,752	9,760	2,761	2,700	4,02,652	4,97,269
1,82,576	1,14,776	10,675	10,328	1,631	1,658	3,59,109	2,93,309
63,659	55,753	9,589	8,076	4,710	5,586	2,52,014	2,11,859
-3,765	-20,145	8,115	11,804	5,749	7,186	96,110	1,12,613
12,08,339	11,15,285	1,62,088	1,40,683	91,842	1,06,984	50,90,062	47,53,727
Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
26,95,776	30,56,478	5,47,463	6,51,716	3,38,436	4,32,062	1,07,32,139	1,16,70,560
...	...	...	...	...	...	-2,81,794	...
3,85,090	3,12,340	70,000	...	4,019	1,420	1,04,50,365	...
...	...	...	...	...	...	59,92,838	34,45,299
30,80,776	33,68,818	6,17,463	6,51,716	3,42,455	4,33,482	1,64,43,203	1,51,15,859
0-6-3-30	0-5-3-36	0-4-2-40	0-3-5-45	0-4-3-49	0-3-11-39	...	...
0-3-6	0-3-6	0-3-6	0-3-6	0-3-6	0-3-6	...	...
0-6-5-59	0-5-2-36	0-4-1-28	0-3-5-45	0-4-3-32	0-3-11-37	...	...
0-4-0-09	0-3-5-90	0-2-8-85	0-2-3-26	0-3-3-37	0-3-0-84	...	...
0-2-5-50	0-1-8-46	0-1-4-43	0-1-2-19	0-0-11-95	0-0-10-53	...	...

NORTHERN INDIA SALT REVENUE DEPARTMENT.

88. The Balance Sheet, Abstract Trading and Profit and Loss Account, Consolidated Trading and Profit and Loss account, and Cost sheet of the Northern India Salt Revenue Department for 1928-29 are prefixed.

These commercial accounts are prepared from the books maintained in the office of the Audit Officer, Indian Stores Department who is the audit and account officer for the Northern India Salt Revenue Department. These books are maintained in the ordinary form of Government accounts. The delay in the preparation of these accounts owing to the late closing of the Government books has always detracted to some extent from their usefulness and it was decided with effect from 1928-29 to base the commercial accounts on the March Final figures, i.e., the figures as on 1st August. The adjustments made after that date are not ordinarily of such importance as to invalidate conclusions reached on the basis of the accounts as then made up. The adequacy of the system of commercial accounts in the Northern India Salt Revenue Department is at present under discussion.

The general control of the Northern India Salt Revenue Department is exercised by the Commissioner with a headquarters office in Delhi. It has been decided that only nine-tenths of the receipts and charges relating to the Commissioner and his headquarters office can properly be allocated to the cost of salt. All overhead charges are allocated to the various sources on the basis of the total revenue expenditure at each source. Interest is charged in the cost accounts not only on the value of the fixed capital (buildings, plant and machinery, etc.) but also on the working capital (stores bags, etc.) including the value of salt stocks.

89. The salt sources fall into two geographical groups (1) the Rajputana sources and (2) the Salt Range sources; in the former salt is manufactured by the evaporation process, in the latter salt is extracted by mining or quarrying. The actual sources are Sambhar, Didwana and Pachbadra in the former case and Khewra, Warcha and Kalabagh in the latter.

90. The working results of the manufacturing branch for the year 1928-29 disclosed a net loss of Rs. 3,58,006 on the whole (*vide* Consolidated Trading and Profit and Loss Account) as against the loss of Rs. 3,60,904 in 1927-28. The results at the several sources during the two years are compared below :—

Sources.	1928-29.		1927-28.	
	Loss.	Profit.	Loss.	Profit.
Sambhar	76,702	..	..	2,45,791
Didwana	10,059	..	13,877	..
Pachbadra	69,113	..	1,04,149	..
Khewra	2,11,200	..	4,78,875	..
Warcha . . . . .	..	19,972	..	5,761
Kalabagh	10,844	..	10,555	..
Total Rs.	3,77,978	19,972	6,12,456	2,51,552
Net Loss Rs.	3,58,006	..	3,60,904	..

In the year 1926-27 there was a net loss of Rs. 3,50,841 made up of a profit of Rs. 1,06,807 in the Sambhar Lake Division (Sambhar and Didwana sources), and losses of Rs. 1,32,163 in the Pachbadra circle and of Rs. 3,25,485 in the Salt Range Division (Khewra, Warcha and Kalabagh sources).

91. If the credit under the heads 'Interest on the balance of depreciation fund' and 'other miscellaneous receipts' of Rs. 50,276 and Rs. 1,98,552 respectively for the year 1928-29, as well those of Rs. 35,875 and Rs. 2,58,353 for the year 1927-28 be excluded, the net loss increases to Rs. 6,06,836 during 1928-29 and Rs. 6,55,132 during 1927-28. The following table compares the figures of profit or loss at the individual sources for the two years after excluding the items referred to above :—

Sources.	1928-29.		1927-28.
	Profit.	Loss.	Loss.
Sambhar	..	2,76,374	22,987
Didwana	..	10,282	14,069
Pachbadra	..	76,238	1,06,677
Khewra	..	2,49,161	4,89,813
Warcha	17,329	..	6,158
Kalabagh	..	12,090	16,428
Total Rs.	17,329	6,24,165	6,55,132
Net Loss Rs.	..	6,06,836	6,55,132

92. The results of the activities of the years 1928-29 and 1927-28 analysed under manufacturing and other operations, after excluding the net credits under the heads 'Interest on the balance of depreciation fund' and 'Other miscellaneous receipts', are as below :—

	1928-29.		1927-28.
Salt—Net Loss	8,37,098	Net Loss	8,44,772
Bags—Net Profit	12,811	" "	2,337
Despatch—Net Profit	2,14,195	Net Profit	1,90,708
Gypsum—Net Profit	3,356	" "	1,269

The details of these results by sources are furnished in the following tables :—

SALT.

Sources.	1928-29.		1927-28.
	Profit.	Loss.	Loss.
Sambhar	..	4,08,090	1,53,726
Didwana	..	10,282	14,069
Pachbadra	..	82,841	1,06,465
Khewra	..	3,25,673	5,01,334
Warcha	1,878	..	20,750
Kalabagh	..	12,090	16,428
Total Rs.	1,878	8,38,976	8,44,772
Net Loss Rs.	..	8,37,098	8,44,772

Sources.	BAGS.			
	1928-29.		1927-28.	
	Profit.	Loss.	Profit.	Loss.
Sambhar	..	962	1,071	..
Pachhadra	..	5	..	21
Khewra	13,776	..	..	3,387
	13,776	965	1,071	3,408
Net Profit or Loss	12,811	..	..	2,337
Sources.	DESPATCH-PROFIT.		GYPSUM-PROFIT.	
	1928-29.	1927-28.	1928-29.	1927-28.
Sambhar	1,32,678	1,61,668	..	..
Pachhadra	6,586	809	..	..
Khewra	59,480	13,639	3,256	1,269
Warcha	15,451	14,592	..	..
Net Profit Rs.	2,14,195	1,90,708	3,256	1,269

93. Sanctioned selling rates are compared with the corresponding average and actual costs of production of salt per maund at each source during the years 1928-29 and 1927-28 in the table given below :—

Sources.	1928-29.					
	Sanctioned selling price of salt per maund.		Average cost of salt per maund including opening balance.		Actual cost of production of salt per maund.	
Sambhar	Rs. 0 4 3	0 4 11-96	0 5 2-49	-0 0 8-96	-0 0 11-49	
Didwana	(a) 0 2 0	0 3 2-99	0 3 2-76	-0 1 3-99	-0 1 2-76	
Pachhadra	0 3 3	0 6 16-19	0 5 8-51	-0 3 7-19	-0 2 5-21	
Khewra	0 3 6	0 5 3-56	0 5 2-36	-0 1 9-56	-0 1 8-36	
Warcha	0 3 6	0 3 5-45	0 3 3-45	+0 0 0-55	+0 0 0-55	
Kalabagh	0 3 6	0 3 11-39	0 3 11-57	-0 0 5-39	-0 0 5-37	

(a) Selling price raised to Rs. 0-2-6 with effect from 27th May 1928.

Sources.	1927-28.					
	Sanctioned selling price of salt per maund.		Average cost of salt per maund including opening balance.		Actual cost of production of salt per maund.	
Sambhar	Rs. 0 4 0	(5) 0 4 5-30	0 4 7-29	-0 0 5-30	-0 0 7-29	
Didwana	0 4 3	0 3 6-79	0 2 8-52	-0 0 2-50	-0 0 4-29	
Pachhadra	0 2 0	0 3 6-79	0 2 8-52	-0 1 6-79	-0 0 8-52	
Khewra	0 3 0	(b) 0 8 5-33 (no manufacture).	0 6 5-59	-0 5 5-33	..	
Warcha	0 3 3	0 6 3-30	0 6 5-59	-0 5 2-33	..	
Kalabagh	0 3 6	0 4 2-40	0 4 1-28	-0 2 9-30	-0 2 11-39	
	0 3 6	0 4 3-49	0 4 3-32	-0 0 8-40	-0 0 7-28	

(b) Selling price raised with effect from 7th June 1927.

It is apparent that except in the case of Warcha both the average cost and the actual cost of production of salt during the year 1928-29 were considerably higher than the sanctioned selling rates fixed for all the sources.

The Government of India have however further raised the selling prices per maund of salt exclusive of Dispatch charges as below with effect from 1st July 1929 :—

	From	To
Salt Range	0 3 6	0 4 6
Sambhar	0 4 3	0 5 0
Pachbadra	0 3 3	0 4 0
Didwana	0 2 6	0 3 3

The new prices fixed take into account not only the cost of production at each source but also the need for maintaining more or less constant zones of consumption. With the new rates Government expect to recover the cost of production taking the Northern India sources and Khargoda together.

94. Except in the cases of Sambhar and Didwana, however, the manufacturing costs at all sources showed a tendency to fall during 1928-29. The figures of output of salt together with the prime cost, overhead cost and total cost per maund at the various salt sources for the year 1927-28 and 1928-29 are furnished in the table below :—

Sources.	Output maunds.	1928-29.		
		Prime cost per maund. Rs.	Overhead cost per maund. Rs.	Cost of production per maund. Rs.
Sambhar	67,20,424	0 1 1-23	0 4 1-26	0 5 2-49
Didwana	2,87,084	0 1 9-01	0 1 5-75	0 3 2-76
Pachbadra	8,22,790	0 3 10-40	0 2 10-11	0 5 8-51
Khewra	30,56,478	0 3 5-90	0 1 8-46	0 5 2-36
Warcha	6,81,716	0 2 3-26	0 1 2-19	0 3 5-45
Kalabagh	4,32,062	0 3 0-84	0 6 10-53	0 3 11-37

1927-28.				
Sambhar	68,44,670	0 1 1-77	0 3 5-52	0 4 7-29
Didwana	3,16,922	0 1 6-04	0 1 2-48	0 2 8-52
Pachbadra	—11,168	..	..	..
Khewra	26,95,776	0 4 0-09	0 2 5-50	0 6 5-59
Warcha	5,47,463	0 2 8-85	0 1 4-43	0 4 1-28
Kalabagh	3,38,436	0 3 3-27	0 6 11-05	0 4 3-32

The increase in the cost of production at Sambhar occurred mainly under the heads—royalties and compensation, interest on capital and net expenditure on stores and workshop establishment. At Didwana there was only a small reduction in manufacturing charges despite a considerable fall in the amount of salt produced. There was no manufacture at Pachbadra during 1927-28 and no comparison of the costs is possible. The output of salt at Khewra, Warcha and Kalabagh increased by 3,60,702, 1,04,253 and 93,626 maunds respectively during the year 1928-29 while the charges incurred under most of the sub-heads of expenditure were actually lower than those of the previous year.

95. As a result of the excess of costs over selling price the manufacture of salt during 1928-29, apart altogether from bag and despatch operations

resulted in a total loss of Rs. 8,37,098 as against a loss of Rs. 8,44,772 in 1927-28. Of this loss of Rs. 8,37,098 the share of the Rajputana Salt Sources Division was Rs. 5,01,213 and that of the Salt Range Division was Rs. 3,35,885. During 1927-28 the losses of the two ranges amounted to Rs. 3,06,260 and Rs. 5,38,512 respectively. The following table compares the losses at the several sources during the years 1928-29 and 1927-28 :—

	1928-29.	1927-28.
	Rs.	Rs.
Sambhar	4,08,000	1,85,726
Didwana	10,232	14,069
Pachhadra	82,841	1,00,465
Khewra	3,25,673	5,01,334
Warcha (Profit)	-1,878	20,750
Kalabagh	1,000	16,428
Total Salt Range Division	3,35,885	5,38,512
Grand Total	8,37,098	8,44,772

96. The value of the stock of salt on 31st March 1929 amounted to Rs. 7,15,907. Except at Warcha the quantities of salt in stock at the several sources have been valued at the selling prices ruling at the sources as the average cost of production is higher than the selling price in each case. Since the average cost price at Warcha during 1928-29 was below the selling price ruling there, the stock of salt at that source has been valued at the average cost of production. During the year 1928-29 no deficit in the stock of salt is reported to have been discovered. A shortage of about 2,81,794 maunds of salt was reported during 1927-28 but the Commissioner informed the Central Board of Revenue that the figure of 2,81,794 as given by the Audit Officer was not based on the result of actual clearances, because all the old stock in respect of which there was no separate account had not been cleared by the end of 1927-28 and that the real deficit amounted to about 1,50,582 maunds only. Sanction to writing off this amount was accorded by the Central Board of Revenue.

97. A comparative statement showing the cost prices and the issue rates of bags and the profit or loss thereon at the sources concerned during the years 1927-28 and 1928-29 is set out below :—

Sources.	1928-29.		
	Selling price per bag.	Average cost per bag.	Profit or Loss.
	Rs.	Rs.	Rs.
Sambhar	Varying between Rs. 41 to 44-8 per 100 bags.	0 6 9-62	-0-62
Pachhadra	0 8 6	0 8 9-91	-3
Khewra	0 10 0	0 8 7-77	13,776
	0 8 6		
1927-28.			
Sambhar	0 9 6	0 7 6-43	1,071
Pachhadra	0 8 6	0 8 8-60	-21
Khewra	0 9 3	0 9 7-68	-3,387
	0 10 0		

There were no transactions in bags at the three sources—Didwana, Warcha and Kalabagh. The profit of Rs. 13,776 at Khewra was due to the bags having been sold at Re. 0-10-0 each for about eight months of the year against the average cost price of Re. 0-8-7-77. At Sambhar the sale price per bag works out to a fraction less than the average cost resulting in a small loss. The selling price of bags at Khewra was reduced from 10 annas to 8 annas 6 pies per bag with effect from 20th November 1928.

98. The despatch charges account disclosed a profit of Rs. 2,14,195 during 1928-29 as against Rs. 1,90,708 during the previous year. A comparative table showing the sanctioned rate of recovery and the actual rate worked out on the basis of the figures incorporated in the accounts for the years 1927-28 and 1928-29 is furnished below :—

Sources.	1928-29.		1927-28.	
	Sanctioned rate of recovery per maund of salt.	Actual cost per maund of salt.	Sanctioned rate of recovery per maund of salt.	Actual cost per maund of salt.
	Rs.	Rs.	Rs.	Rs.
Sambhar	0 0 6	0 0 2-44	0 0 6	0 0 2-31
Pachbadra	0 0 9	0 0 6-19	0 0 9	0 0 8-19
Khewra	0 0 6	0 0 2-31	0 0 6	0 0 5-05
Warcha	0 0 6	0 0 1-40	0 0 6	0 0 1-14

The profit shown under this account is more apparent than real in view of the fact that the indirect charges relating to "Dispatch" are not charged to this account, but to the relevant heads of accounts under "Manufacture". The necessity for a change of classification in this respect has been brought to the notice of the Audit Officer, Indian Stores Department, and he is taking action on the suggestion.

99. The total quantity of gypsum excavated during the year 1928-29 amounted to 7,425 tons 16 cwts. The total charges both direct or indirect incurred on excavation amounted to Rs. 12,664. The quantity cleared during the year 1928-29 was 7,277 tons 9 cwts. The department does not hold any stock of gypsum and the difference between the quantities excavated and cleared amounting to 148 tons 7 cwts. was shown as loss. Against this loss the value of 76 tons 17 cwts. has been recovered from a contractor in 1929-30 and the balance of 71 tons 10 cwts. valued at Rs. 98 has been treated as a final loss to Government. The sale of gypsum during the year 1928-29 realized Rs. 17,187 including Rs. 1,312 relating to the previous year. The debtors at the end of the year owed Rs. 44 and the net profit on this account was Rs. 3,256 as against Rs. 1,269 in 1927-28.

100. The stock of general stores at Khewra, Warcha and Sambhar is verified by the departmental authorities at the end of the year and valued at the average cost. A discrepancy list is submitted by the departmental authorities to the Audit Officer, Indian Stores Department, so that the necessary adjustments may be carried out under the sanction of competent authority. It was noticed that there was a credit balance of Rs. 5,984 under general stores at Warcha. This has been explained as due to a transfer of stores to Warcha the value of which had not been taken on to the books. The position is now being regularised. The Auditor General recom-

mended that general stores should be verified by actual count or weighment and valued at cost or market price whichever is the lower on the last day of the trading period. The Central Board of Revenue, after some discussion, have finally come to the conclusion that the present method of fixing the issue rate on the average cost which includes incidental expenses may stand. They have further remarked that as the issue rate is so regulated that there is no eventual loss or gain there does not appear to be any need to put divisional officers to the trouble of ascertaining market rates at the close of a trading period to work out the values of stores.

101. A net profit of Rs. 82,268 is shown on Stores, Workshops and Electric Power House establishment and is composed of the following :—

		Ra.
Khewra	Profit	92,906
Warcha	Do.	1,397
		<hr/>
		94,213
Less—Sambhar	Loss	11,945
		<hr/>
		82,268

The loss at Sambhar is due to the fact that the recoveries for electric energy supplied to private parties have been credited to miscellaneous receipts instead of being accounted for as deductions from charges as was done in the past. While this allocation follows the rules of classification in Government accounts it probably vitiates to some slight extent the accuracy of the cost accounts and is being further considered. In Khewra the total expenditure during 1928-29 under general workshops amounted to Rs. 59,420 while the value of outturn debitable to other branches and parties and credited to General Workshops Account amounted to Rs. 69,125 and there was thus a net credit of Rs. 9,705. The corresponding profit for 1927-28 was Rs. 1,005.

102. The net sum credited during 1928-29 on account of miscellaneous receipts amounted to Rs. 1,98,552 the corresponding figures for the years 1927-28 and 1926-27 being Rs. 2,58,353 and 50,365, respectively. The most important individual item is the sum of Rs. 1,23,757 received from the B. B. & C. I. Railway as terminal charges for the use of the departmental sidings at Sambhar, Gudha, etc. The corresponding figure for last year was Rs. 2,18,987.

Dr.

Cr.

OPIUM DEPARTMENT.

104. Profit and Loss Account for the Costing year ended 30th September 1928*.

	30-9-1927.	30-9-1928.		30-9-1927.	30-9-1928.
To Opening Balance —			By Sales —		
	Rs.	Pcs.		Rs.	Pcs.
Provision Opium	1,59,34,545		Provision Opium		2,90,72,000
Excise Opium, Benares (in progress)	13,74,758		Excise Opium, Benares	2,68,94,000	
" " Blended	32,12,880		Excise Opium, Blended	6,71,426	
" " (Finished stock)	42,155		Special Medical Opium, British	78,16,680	
Special Medical Opium, British (in progress)	4,69,578		Indian Medical Opium, Powder	8,48,379	
" " (Finished)	2,44,182		" " Cake	22,276	
Indian Medical Opium, Powder (in progress)			Alkaloids	11,187	
" " (Finished)			Issues to other departments in Factory	1,57,383	
Indian Medical Opium, Cake (in progress)	640			5,29,188	
" " (Finished)	9,397				1,18,937
Indian Medical Opium, Cake (in progress)					
" " (Finished)	1,943				
Alkaloids	1,27,551				
Manufacturing Charges —					
Provision Opium	52,07,913		Provision Opium	1,71,41,317	
Excise Opium, Benares	5,807		Excise Opium, Benares (unfinished)	4,77,478*	
" " Blended	41,27,105		" " (Finished)	1,21,802	
Special Medical Opium, British	7,35,867		" " Blended (unfinished)	1,51,375	
Indian Medical Opium, Powder	16,389		" " (Finished)	42,160	
" " Cake	15,041		Special Medical Opium (unfinished)	17,942	
Alkaloids	95,357		Indian Medical Opium (unfinished)	1,49,639	
General Charges	2,77,688		" " (Finished)	3,32,657	
Cost of audit and accounts	21,914		Indian Medical Opium, Powder (unfinished)	1,092	
Interest	25,02,880		" " (Finished)	3,069	
Loss on sale of Buildings			" " Cake (Finished)	1,412	
Net Profit	1,09,93,719		Alkaloids	5,035	
			Miscellaneous Receipts	76,704	
Total	5,51,39,682	5,11,35,403	Total	5,53,39,682	5,11,35,403

* The accounts of this year include the transactions of a complete year of twelve months, while the accounts of the previous costing year ended 30th September 1927 included the transactions of eleven months only owing to the change in the date of the commencement of the costing year.

+ Differs from the closing balance of the previous year due to corrections subsequently made.

OPIUM DEPARTMENT.

106. Stock account for the Opium Year 1927-28.

EXCISE OPIUM.

Particulars	Raw opium.			Provision opium.			Pure Benares.			Benares-Malwa. Blended.			Allahabad.		
	Quantity.	Value.	Mds.	Quantity.	Value.	Ra.	Q. Mds.	Value.	Ra.	Q. Mds.	Value.	Ra.	Quantity.	Value.	Ra.
Opening balance	32,497	1,90,14,396	5	12,320	1,71,41,316	12	517	4,70,577	15	1,532	12,53,220	12	..	48,764	2
Receipts from all sources	10,403	59,57,853	5	3,530	53,70,328	4	100	1,20,201	3	5,973	33,58,124	3	..	58,440	11
Total	42,900	2,46,72,249	10	15,850	2,25,11,645	0	617	5,90,779	4	7,525	66,41,344	15	..	1,07,204	13
Issue of all kinds	14,049	80,62,030	3	7,268	2,90,72,000	0	330	3,23,720	0	7,427	70,54,311	0	..	97,462	12
Wastage written off	273	1,58,935	12	..	..	..	..	..	..	..	..	..	..	..	..
Total	14,322	82,21,565	15	7,268	2,90,72,000	0	330	3,23,720	0	7,427	70,54,311	0	..	97,462	12
Closing balance	28,578	1,64,50,683	11	8,582	1,23,78,901	12	287	2,73,336	14	98	81,107	6	..	38,016	10

OPIUM DEPARTMENT—contd.

106. Stock account for the Opium Year 1927-28—contd.

Particulars.	Medical opium U. K.				MEDICAL OPIUM FOR INDIA.				(a)				REMARKS.
	Quantity.		Value.		Quantity.		Value.		Quantity.		Value.		
	Lbs.	Rs.	Lbs.	Rs.	Lbs.	Rs.	Lbs.	Rs.	Lbs.	Rs.	Lbs.	Rs.	
Opening balance . . .	45,729	4,82,275	6	815	275	4,151	7	8,28,240	6				
Receipts from all sources . . .	91,037	7,76,703	11	938	1,745	25,864	0	4,08,670	7				
Total . . .	1,37,666	12,57,979	1	1,753	2,020	30,015	7	12,36,918	13				
Issue of all kinds . . .	1,48,036	14,75,226	1	1,482	1,323	25,515	9	7,12,733	2				
Wastage written off . . .	...	...	...	...	...	...	...	3,592	10				
Total . . .	1,48,036	14,75,226	1	1,482	1,323	25,515	9	7,16,325	12				
Closing balance . . .	29,030	2,83,628	10	271	2,093	10,015	12	5,20,594	1				

W. GASKELL,
Opium Agent.A. RENGASWAMI IYER,
Assistant Director of Commercial Audit,
Calcutta Circle.

(a) Includes following classes of stores :—

Inferior opium, contraband opium, dhoi, lewa, leed, trash, cups, chests and compartments.

107. Opium Department.—The main operations of the Opium Department and the Opium Factory, Ghazipur, are the examination and collection of raw "Benares opium" from cultivators in the United Provinces, and the examination and receipt of "Malwa" opium from the Indian States of Gwalior, Rajputana and Central India; the manufacture of Provision and Abkari opium; and the manufacture of special Medical opium for the United Kingdom, and Indian Medical opium in the form of cake and powder. In the laboratory attached to the Factory, which is mainly engaged in testing the samples of raw and manufactured opium, the several alkaloids of opium such as the morphine derivatives codeine, narcotine, cotarnine, etc., are also manufactured, from time to time according to requirements, out of contraband and inferior opium received in the Factory. The manufacture of crude morphine has been stopped since March 1928. For the purpose of packing opium in its various forms the department undertakes also certain subsidiary operations such as the collection of leaf and trash, the manufacture of lewa, dhoi and chests, and the purchase of cups, etc.

108. The opium thus manufactured in the Factory is disposed of by Government in the following ways :—

- (a) *Provision opium.*—By direct sales to Foreign and Colonial Governments (*viz.*, the Straits Settlements, Hongkong, the Netherlands Indies, Siam, British North Borneo, Sarawak, French Indo-China and Ceylon), with which agreements have been entered into for supply at certain fixed rates.
- (b) *Excise opium (Pure Benares and Blended).*—By issue to the Excise Department in India and Burma, for local consumption under revenue regulations.
- (c) *Special Medical opium.*—By export to the United Kingdom for sale to chemists.
- (d) *Indian Medical opium, cake and powder.*—By supply to Army and Railway departments, Indian States and private chemical firms in India.

109. Provision opium.—Provision opium is manufactured from Pure Benares opium and is exported to foreign and colonial Governments under special contracts. It is understood that the manufacture and export of this class of opium will cease by the end of 1935. The profits accruing from the sale of this opium are credited to the Central Revenues.

110. Excise opium.—This consists of two classes :—

- 1. Pure Benares Excise opium manufactured from Benares Raw opium.
- 2. Blended Excise opium manufactured by blending in certain definite proportions Benares Raw opium with Malwa opium, which contains a mixture of oil.

Pure Benares Excise opium is supplied to the Burma Government and Blended Excise opium to all other Governments in India and to Indian States. Excise opium is sold by the various Governments for consumption by the public, subject to the revenue regulations of each province. Under the existing financial arrangements, between the Government of India and the local Governments, the Government of India are under an obligation to sell the

Excise opium to local Governments at its cost price. The profits arising from the sale of Excise opium to consumers in India form part of the Excise revenue of Provincial Governments. The Government of India have ordered that the issue rate to be charged to local Governments for Excise opium during a financial year should be fixed and communicated to them by the Opium Agent not later than December of the previous year, the issue rate to be calculated on the basis of the actual cost of production for the previous opium year ending 30th September.

111. *Special Medical opium.*—Special Medical opium is manufactured for medical purposes in the United Kingdom from fresh Raw Benares opium of high morphine content. This medical opium is sold at the prevailing market rates in England and the profit accrues to the Central Government.

112. *Indian Medical opium, cake and powder.*—These products are manufactured from Benares raw opium for local use by doctors in India. The Government of India have recently decided that Indian Medical opium should be sold to medical firms in India at its cost price, the rates being fixed with reference to the average cost of production over a term of years.

113. To enable the Opium Agent to fix the issue price of Excise opium to local Governments annually on the basis of its actual cost price, to regulate the selling prices of the other products, and to secure the exercise of adequate financial control on production efficiency generally, a costing scheme approved by the Government of India has been introduced into the Opium Department with effect from 1st November 1925. Balance Sheet and Profit and Loss accounts are also compiled on the basis of the costing records. These accounts bring out the financial results of the working of the Opium Department as a whole, the production cost of the important products manufactured in the factory, and the profit or loss accruing on the sales of different classes of opium and alkaloids.

114. The following summarised accounts are prefixed :—

- (a) Consolidated Profit and Loss account showing the comparative figures of two costing years, viz., those ending 30th September 1927 and 30th September 1928.
- (b) The Balance Sheet showing the balances as at 30th September 1927 and 30th September 1928.
- (c) Statement showing the output and production costs of important products for 3 years.
- (d) Stores account for the opium year 1927-28.

115. The following are the more important special features in connection with these accounts :—

- (a) The accounts are compiled for the cost year from 1st October to 30th September which is the same as the opium year. The cost year comprised the period from 1st November to 31st October until 1926, when it was changed to 1st October to 30th September; and consequently the accounts of the transitional year 1926-27 included the transactions of 11 months only. As opium is initially a natural product, the production processes depend on seasons and cannot be made to fit into an official financial year. The opium year just

described has been found by experience to be the most suitable accounting period for purposes of cost accounts.

(b) *Benares Raw opium*.—Benares Raw opium is collected by District opium officers. Therefore, the District charges are included in the cost of the Benares Raw opium, a certain proportion being allocated between leaf and trash wherever this is necessary.

(c) The amount payable to the Indian States for crude Malwa opium received in the factory during the costing year as worked out in the Factory challans, has been included in the cost accounts and no liabilities on this account have been shown in the Balance Sheet. Arrangements have been made for the payment of the cost of Malwa opium due to Indian States direct by the Central Pay and Accounts Officer, Allahabad, with effect from 1928-29, and the transactions will be automatically included in the accounts in future.

(d) All the receipts and charges relating to opium in India are adjusted in the books of the Central Pay and Accounts Officer, Allahabad. Payments in England for leave salary and deputation and overseas allowances and stores are however adjusted in the books of the High Commissioner. These accounts include the transactions occurring both in England and India.

(e) *Malwa Opium*.—There are four different classes of Malwa Opium A to D which contain varying percentages of oil and are consequently paid for at different rates. By means of suitable factors, the different classes A to D are reduced and expressed in terms of the Opium equivalent of A at a consistency of 70° in these accounts.

(f) *Alkaloids*.—The manufacture of alkaloids is undertaken in the Laboratory during spare time only, incidentally and not on a regular commercial scale. Contraband or Inferior opium is used for the purpose. It has been decided that no separate costing statistics need be compiled in the case of these products. The profit or loss accruing on the sale of alkaloids as a whole is however brought out in these accounts.

(g) *General Charges*.—Ordinarily, general charges are allocated to the various products on the basis of the weight of outturn, and in the case of alkaloids, the weight of opium which is consumed in their manufacture.

(h) *Interest Charges*.—Interest charges are calculated on the opening balance of the capital debt due to the Government of India by the department as shown in the Balance Sheets, at the rates of interest prescribed for commercial undertakings generally. The allocation to the various products and departments in the Factory is made, as far as possible, with reference to the purpose of which the various classes of assets are maintained, in accordance with the procedure sanctioned by the Government of India.

(i) In the case of Crude and Manufactured opium and other products, the valuation of the closing balances as worked out in the cost sheets has been taken in the Balance Sheets, while in the case of alkaloids for which no detailed costing accounts are maintained, the valuation has been made at 50% of the sanctioned selling prices in accordance with the orders of the Government of India.

118. *Balance Sheet*.—The capital invested by the Government of India in the Opium Department, as at 30th September 1928, amounted to

Rs. 1,24,49,121-4-0. This includes a sum of Rs. 24,33,873 on account of charges for interest, cost of audit and accounts, pensionary liabilities, etc., due to Government during the year under review. The net profit realised during the year amounted to Rs. 1,98,79,248. Including this profit, the aggregate sum due to the Government of India by the Opium Department on 30th September 1928 amounted to Rs. 3,23,28,369-4-0 against the corresponding figure of Rs. 4,56,03,662-12-5 outstanding at the end of the last year. The fixed assets amounted to Rs. 16,54,329-4-0. The decrease of Rs. 1,55,388 under this head, as compared with the corresponding figure shown in the accounts of the last year, represents mainly the allowances for depreciation written-off, and the value of the assets disposed of during the year. The floating assets amounted to Rs. 3,01,48,355-12-0. The decrease of Rs. 90,79,343 under this head as compared with the corresponding amount of last year, occurred mainly under Provision opium, and Raw opium, Benares and Malwa, classes which account for a reduction of about Rs. 16 lakhs and Rs. 19 lakhs respectively. The bulk of the floating assets consisted of Provision opium valued at about Rs. 123 lakhs, and Crude opium, Benares and Malwa, valued at about Rs. 164 lakhs taken together.

117. Under "Lands", the sum of Rs. 13,091 shown as deduction during the year, represents the value of the land occupied by the buildings disposed of during the year by sale or by transfer to other Government departments because of the abolition of certain districts and sub-divisions consequent on the curtailment of the export of opium. The net book-value of lands and buildings disposed of during the year amounted to Rs. 1,42,752. The sale-proceeds realised including the value of buildings, etc., transferred to the Income-tax Department amounted to Rs. 1,07,554-14-0, resulting in a capital loss of Rs. 35,197-2-0.

118. The value of sundry stores on hand as at 30th September 1928, has been taken as Rs. 1,06,677-5-0. The issue rates of the several articles were adjusted and revised, wherever necessary, during April to June 1928, with reference as far as possible to the then market rates. The valuation taken in the Balance Sheet has been arrived at on the basis of the issue rates so fixed in the case of the balances on hand in April 1928, and on the figures available in the Store Control accounts as regards subsequent transactions. The following table will show the progressive reduction made in the value of sundry stores held in the Factory since the introduction of the cost accounts:—

Balance of stores on	Amount	
	Rs.	a. p.
1st November 1926	2,14,341	0 0
1st October 1927	1,35,752	0 0
1st October 1928	1,06,677	0 0

It was noticed that a thorough over-hauling of sundry stores was undertaken under the orders of the Opium Agent, and that action was taken to write-off all surplus and unserviceable stores.

119. The Balance Sheet as at 30th September 1927 showed heavy outstandings under "Sundry Debtors", e. g., Rs. 29,04,000, in respect of the sale of Provision opium and Rs. 15,54,294 in respect of the issues of

Excise opium—Blended. These amounts were shown as outstanding as information regarding their adjustment by the Pay and Accounts Officer, Allahabad, was not received before the date of closing the accounts. Necessary information has now been received and the amounts adjusted. There were no such outstandings shown in the Balance Sheet as at 30th September 1928, except small amounts relating to sales of Indian Medical Opium, cake and powder, and alkaloids.

120. Sundry Creditors.—The sum of Rs. 12,505 shown in the Balance Sheet represents a portion of the proceeds relating to the sale of Provision opium, and has since been adjusted.

121. Profit and Loss Account.—The net profit of the year amounts to Rs. 1,98,79,248 as against the sum of Rs. 1,69,93,718-8 of the previous year. Out of this, Provision opium accounts for Rs. 1,89,39,056-12, while Blended Excise opium and Special Medical opium contributed Rs. 4,94,074 and Rs. 4,44,127-2 respectively. The increase in the profit is mainly due to the larger number of Provision opium chests sold during the year, 7,268 as against 6,651.

The following statement shows the profit or loss of the year under review for each class of opium, as compared with the corresponding figures of the previous years :—

Particulars.	Year ended 31-10-26.		Year ended 30-9-27.		Year ended 30-9-28.	
	Profit.	Loss.	Profit.	Loss.	Profit.	Loss.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Provision Opium	1,96,96,712	..	1,67,88,154	..	1,89,39,057	..
Excise Opium—Pure . . . . .	..	..	..	..	178	..
Benares . . . . .	..	..	..	..	..	..
Excise Opium—Blended	15,833	..	1,28,843	..	4,94,074	..
Special Medical Opium— . . . . .	..	2,45,416	89,131	..	4,44,127	..
British . . . . .	..	..	..	..	..	..
Indian Medical Opium— . . . . .	..	1,556	..	723	5,516	..
Powder . . . . .	..	..	..	..	..	..
Indian Medical Opium— . . . . .	..	1,162	1,213	..	2,504	..
Cake . . . . .	..	..	..	..	..	..
Alkaloids	1,65,579	..	762	..	28,875	..

122. Provision Opium.—(a) The following statement compares the production cost and the selling prices obtained during the year, with those of the previous years :—

Season.	Production cost per chest.		Selling prices.
	Rs.	A. P.	
1924	1,502	1 5	Rs. 4,005-13 per chest on an average.
1925	1,475	13 5	
1926	1,382	8 1	
1927 (Eleven months)	1,418	2 0	
1928	1,515	11 7	Rs. 4,000 per chest.

The increase in the production cost is mainly due to smaller output, to an increase in the issue rate of Benares Raw opium, and interest charges.

(b) The output of this class of opium for the year under review and the previous years, is given in the following table. The progressive decrease in the output is due to the policy of Government to close the manufacture of this opium by 1935.

Year.	Output of Provision opium.	
	Cakes.	Chestr.
1925-26	279,996	10,749
1926-27	200,000	7,000
1927-28	140,000	4,750

123. *Pure Benares Excise opium.*—(a) The cost of production during the year amounted to Rs. 25-3-8 per seer, as against Rs. 25-4-2 in the previous year.

(b) The output of this class of opium for the year under review, and the previous years, is given in the following table :—

Year.	Quantity.
	Mds.
1925-26	488
1926-27	596
1927-28	384

Manufacture was carried from opening balances of the unfinished products already in the department. There has, therefore, been no material change in the production rates of the two years. The surplus stocks of unfinished stuff in this department were worked off during the year, with the result that there was a substantial decrease of Rs. 4,24,798-13 in the value of the closing balance of stock. The closing balance now consists of 137 mds. valued at Rs. 1,21,861-14, which is not in excess of the normal reserve necessary for this class of opium.

124. *Blended Excise Opium.*—(a) The cost of production during the year worked out to Rs. 22-6-10 per seer as against Rs. 23-5-1 per seer of the previous year. In working out these the Raw Malwa opium issued for manufacture has been priced, with the approval of the Opium Agent, at the average issue rate of the opium year ended 30th September 1927, viz., of Rs. 565-7-3 per maund at a consistence of 70°, as worked out in the accounts of that year, instead of at Rs. 541-6-7 per maund, which is the average rate at the end of the year under review, since crude Malwa opium received during the season of 1928 was not drawn upon for the manufacture of the year under review. The decrease of Rs. 0-14-3 per seer, notwithstanding the inclusion of 12 months' charges in this year as against the 11 months' charges of the preceding year, is due mainly to the progressive depletion of the old stocks purchased at the higher rates of Rs. 15 and Rs. 13 in the previous years, and to the consequent drop in the valuation of the opening unfinished stocks at the commencement of the year. There has been a considerable decrease (amounting to about Rs. 11 lakhs) in the balances of unfinished stuff held in this department during the year. This indicates careful control by the management to secure that manufacture is not in excess of requirements. The profit shown in this class of opium is due to the issue rates for a

financial year being fixed on the basis of the actual production cost of the preceding costing year, and to the rounding-off of pies.

(b) The output of this class of opium for the year under review and for previous years is shown in the following table :—

Year.	Quantity.
	Mds.
1925-26	7,384
1926-27	7,430
1927-28	7,253

125. *Special Medical Opium*.—The output, production cost and the average selling prices per chest of Special Medical opium are given below for the last three years including the year under review :—

Year ended	No. of chests produced.	Production cost per chest.			Average selling price per chest.
		Rs.	A.	P.	Rs.
31st October 1926	538	2,385	5	4	1,951
30th September 1927	443	1,922	12	1	2,293
30th September 1928	480	1,682	11	6	2,694

The decrease in the production cost is due mainly to the decrease in the average value of the opening stocks, owing to the progressive depletion of earlier stocks purchased at higher rates and to the closer control over the charges involved and their allocation in the accounts in respect of this class of opium.

126. *Indian Medical Opium, Cake and Powder*.—The following statement compares the output and production rates of the year under review with those worked out for the preceding years, and the present sanctioned selling prices :—

Indian Medical Opium.

Year.	Output.	Production rates.	Present sanctioned selling prices.
		<i>Powder.</i>	
	Lbs.	Rs. A. P.	
1925-26	1,424	20 0 11	Rs. 20 per lb. for private firms.
1926-27	906	18 6 10	Rs. 12-8 per lb. for Medical storekeepers.
1927-28	1,772	14 10 3	Rs. 15-8 per lb. for Indian States and Railways.
		<i>Cake.</i>	
1925-26	418	15 2 7	Rs. 19 per lb. for private firms.
1926-27	790	11 13 10	Rs. 11-8 per lb. for Medical Storekeepers.
1927-28	802	11 0 9	Rs. 13-12 per lb. for Indian States and Railways.

The average selling prices were thus higher than the production rates and this accounts for the profit of Rs. 5,518 in the case of powder, and Rs. 2,504 in the case of cake.

127. Alkaloids.—A profit of Rs. 28,874-10 has accrued during the year, as against Rs. 761-12 in the preceding year. No valuation has been assigned to the manufacture in progress or to the large stock of marc (by-product of morphine) in the laboratory, as it is said to be extremely difficult to assign any reliable values to these items. The increase in the profit is mainly due to the revision in the method of valuing the impure, deteriorated, confiscated and burnt opium, etc., out of which alkaloids are manufactured. The opening and closing balances have been valued at 50% of the sanctioned selling prices in accordance with the orders of the Government of India on the subject.

128. Raw Benares Opium.—The production rate of Benares Raw opium for the year under review amounts to Rs. 510-2-10 per maund of 70^o as against Rs. 493-4-8 of last year. 6,961 mds., were purchased during the year under review, as against 10,747 mds. during the last year. The increase in the rate is due mainly to the increase in the district charges per maund, owing to the inclusion of 12 months' charges as against 11 months' of the preceding year, and also to the considerable decrease in the quantity of opium purchased during the season of 1928. The closing balance of Raw Benares opium at the end of the year amounted to 16,382 mds., as against 17,673 mds., at the beginning of the year.

129. Raw Opium Malwa.—The production rate of this class of opium per unit (one maund of class A at a consistence of 70^o) works out to Rs. 437-4-1 per maund, as against Rs. 426-14-3 per maund in the preceding year; 3,422 maunds only were purchased during the year, as against 7,658 maunds of the preceding year. The slight increase in the production rate of the year is due to the fact that purchases of hard Malwa opium at lower rates were made during the previous year and that no such purchases were made during the year under review. The closing balance of Raw Malwa opium at the end of the year amounted to 12,196 maunds, as against the opening balance of 14,824 maunds at the beginning of the year.

130. General Charges.—The General charges of the year amounted to Rs. 3,32,395-8 as against Rs. 2,99,602-5 (for 11 months) included in the accounts of the last year.

131. Interest Charges.—The total Interest charges during the year under review amounted to Rs. 23,10,130 as against Rs. 23,52,880 included in the accounts of last year. If the fact that the figures of the preceding year include interest for 11 months only, as against 12 months of this year be taken into account the decrease in the interest charges this year is really more than that indicated by the figures, and is due mainly to the decrease in the value of opium stocks held and to the lower interest rate applicable this year, namely, 5·38% as against 5·43% of the previous year.

132. Production rates for other important articles will be found in the statement prefixed.

133. Opium Stocks.—The shortage of opium as disclosed during stock-taking amounted roughly to about 101 maunds of Raw Benares opium and 130 maunds of crude Malwa opium. The value of these shortages priced at the average issue rates will amount to about Rs. 1,34,114. These losses are due generally to the very great viscosity of opium which adheres to all the receptacles in which it is contained. A loss of Rs. 5,770 occurred on account of rejections of Leaf and Chur, the book-value of which amounted to Rs. 5,942 while the sales fetched only Rs. 172. Leaf is liable to destruction by maggots, and some loss is an inevitable consequence of storing this commodity. The write-off of these losses has been sanctioned by the Government of India.

134. Sundry Store Accounts.—During the year under review, surplus and unserviceable articles to the value of Rs. 23,305 were written off. There was a balance of unserviceable stores brought forward from the previous year valued at Rs. 23,471. In addition to the above, unserviceable stores to the value of about Rs. 6,575 were received from the District Opium Officers for disposal. The aggregate value of the unserviceable stores thus amounted to Rs. 53,351. Out of this, stores valued at Rs. 49,169 in the books were sold during the year, and realised only Rs. 6,007, leaving a loss of Rs. 43,162. The write-off of this loss has been sanctioned by the Government of India.

CHAPTER IV

GOVERNMENT OF INDIA

EDUCATION, HEALTH AND LANDS DEPARTMENT CONCERNS.

MATHEMATICAL INSTRUMENT OFFICE, CALCUTTA

135. Balance Sheet as at 31st March 1929.

LIABILITIES.				ASSETS.			
As at 31-3-28.		As at 31-3-29.		As at 31-3-28.		As at 31-3-29.	
Details.	Total.	Details.	Total.	Details.	Total.	Details.	Total.
Rs.	Pas.	Rs.	Pas.	Rs.	Pas.	Rs.	Pas.
Sundry Creditors	—	789	—	—	—	27,454	—
Wages accrued and undischarged.	—	19,756	—	—	—	740	—
Government Account :-				—	—	28,174	—
Opening Balance on 1st April 1927 and 1928.	6,39,352	—	6,03,167	—	—	12,483	15,091
Add receipts during the year.	7,41,678	—	7,86,392	—	—	4,800	—
Less payments during the year.	13,51,030	—	14,49,559	—	—	1,999	5,807
Profit for the year	—	1,903	—	—	—	—	—
Total	—	6,83,742	—	—	—	—	—
SARAT CHANDRA SIRCAR, Accountant, Mathematical Instrument Office, Calcutta.							
Sundry Creditors	—	—	—	—	—	3,00,749	6,214,828
Wages accrued and undischarged.	—	—	—	—	—	2,02,796	35,989
Government Account :-						96,490	5,085
Opening Balance on 1st April 1927 and 1928.	6,03,167	—	7,90,091	—	—	21,023	—
Add receipts during the year.	7,86,392	—	—	—	—	—	—
Less payments during the year.	14,49,559	—	—	—	—	—	—
Profit for the year	—	1,903	—	—	—	—	—
Total	—	6,83,742	—	—	—	—	—
A. RENGASWAMI IYER, Assistant Director of Commercial Audit, Calcutta Circle.							
Sundry Creditors	—	—	—	—	—	3,160	4,941
Wages accrued and undischarged.	—	—	—	—	—	1,582	1,505
Government Account :-						—	—
Opening Balance on 1st April 1927 and 1928.	6,03,167	—	7,90,091	—	—	—	—
Add receipts during the year.	7,86,392	—	—	—	—	—	—
Less payments during the year.	14,49,559	—	—	—	—	—	—
Profit for the year	—	1,903	—	—	—	—	—
Total	—	6,83,742	—	—	—	—	—
R. C. MALCOLM, Superintendent, Mathematical Instrument Office, Calcutta.							

MATHEMATICAL INSTRUMENT OFFICE, CALCUTTA

136. Consolidated Trading and Profit and Loss Account for the year 1928-29.

Dr.

Cr.

	31st March 1928.	31st March 1929.		31st March 1928.	31st March 1929.
	Rs.	Rs.		Rs.	Rs.
T. Work-in-Progress			By Manufacture		
“ Repairable Instruments in works			“ Instruments sold		
“ Book-value of Instruments sold			“ Repair charges recovered		
“ Wages (Works and General)			“ Sale proceeds of condemned stores		
“ Repairable Stores, W. T. compounds, etc.			“ Profit on revaluation of stock		
“ Interest on Capital			“ “ stock-taking		
“ Depreciation			“ Refund of Customs Duty		
“ Pensionary Charges			“ Miscellaneous		
“ Rents, Rates and Taxes			“ Work-in-progress		
“ Audit Fees			“ Repairable Instruments in works		
“ Police Charges					
“ Sundry Other Expenses :-					
“ Stationery and Printing	8,114				
“ Freight Charges	2,771	5,029			
“ Postage	4,399	4,416			
“ Miscellaneous	8,701	7,943			
	21,985	22,387			
“ Rent of House	370	870			
“ Value of stores written-off	1,431	1,685			
“ Profit	1,003	12,429			
Total	11,60,821	11,67,878	Total	11,60,821	11,67,878

137. Stock Account of the Mathematical Instrument Office, Calcutta, for the year 1923-29.

Dr.

	1927-28. Rs.	1928-29. Rs.	Dr.
1. To value of stock on 1st April—			
(i) Articles ready for issue for ordinary purposes	2,10,237	2,08,084	
(ii) Mobilisation stock held for military purposes	33,433	19,755	
(iii) Materials in stock for the manufacture of instruments	1,94,132	2,01,072	
(iv) Instruments returned as no longer required	80,559	97,799	
2. Adjustment due to revaluation—			
Not increase	1,092	188	
Receipts—			
(i) Imported articles	2,47,023	2,80,107	
(ii) Articles locally purchased	93,064	90,197	
(iii) "Manufactured at workshop"	2,92,781	2,53,912	
(iv) Articles returned by Government departments as no longer required	63,790	32,856	
(v) Articles taken from repairable stores and made serviceable after repairs	1,02,347	76,254	
3. Stock-taking surplus	9,905	2,061	
4. Miscellaneous receipt	893	101	
Total	13,36,039	13,31,480	

Drops and condensed, etc., Store.

Opening Balance	32,468	31,310	
Transfers (as in above account)	903	903	
Total	33,371	32,303	
Amount realised by sale or otherwise	621	658	
Loss representing difference between book value (as above) and value realised	1,440	835	
Closing Balance	31,310	30,810	
Total	33,371	32,303	

* Difference Rs. 74—less than the corresponding figure in the Balance Sheet under investigation in the Mathematical Instrument Office.
 Difference Rs. 95—in excess of the corresponding figure in the Balance Sheet under investigation in the Mathematical Instrument Office.

MATHEMATICAL INSTRUMENT OFFICE, CALCUTTA.

138. The Mathematical Instrument Office in Calcutta is administered by the Surveyor-General of India as part of the Survey Department. Its functions are to manufacture or to import mathematical and other instruments required by Government Departments and to repair such instruments. Thus the activities of the office are organised in two directions, Workshops and Stores. The Workshops carry out manufacture, repairs to instruments, and reconditioning of second hand instruments returned by Government Departments which have no further use for them. In the Stores are stocked not only new imported instrument and those manufactured in the office, but also second hand instruments reconditioned in the Workshops.

139. The accounts of the Mathematical Instrument Office have been maintained on commercial lines with effect from 1st April 1927. In the original scheme of commercialisation it was suggested that the results of working of the two sections, viz., Stores and Workshops should be exhibited separately. The final decision reached, however, was that this elaboration was not necessary as the present system is sufficiently detailed for all administrative purposes. The importance of introducing a proper costing system has often been urged upon the Survey Department which is responsible for this office, and Government have decided that the matter should be taken up on the return from leave of the Superintendent, Mathematical Instrument Office. Doubtless the introduction of a costing system will give some difficulty. Although a considerable number of instruments are made for stock or on order in the case of which work may be considered as standard, there is besides a very large number of jobs of the utmost variety and also often of the greatest intricacy. A visit to the workshops is a revelation of the delicate work on optical instruments which can be done in India. The only way of judging at present of the general adequacy of the prices charged for repair work, etc., is the final result of working for the year, and the profit of Rs. 12,429 is evidence that prices are fairly correctly gauged. It is believed however that a proper costing system would give the Superintendent increased facilities for control: the system might first be applied to standard work and thereafter extended to repair jobs.

140. As mentioned above the Mathematical Instrument Office manufactures to a standard pattern for stock, and also does a large amount of repair work. Instruments sent for repairs are repaired and returned to the sender. Instruments returned to this office as no longer required are taken on stock on valuation statement to be reconditioned and issued later or condemned if found unserviceable. The head "repairable instruments in work" shows the value of those instruments on which repair work is being done at the opening and closing of the accounting period, while works in progress refers mainly to manufacture. The head "repairable stores, work transfer components, etc." on the debit side of the Trading and Profit and Loss account represents the value of the articles issued from stock, including the repairable instruments to be retained in stock, which are to be worked up in the shops. The entry "value of Instruments sold" on the credit side of the account represents the sale proceeds realised from the sale of Instruments, the book value of which is found on the debit side. The balance of the two represents the gross profit or loss on the sales.

141. The net financial result of the working of the Depot, taking the Workshops and Store sections together was for the year under review a profit of Rs. 12,429 against Rs. 1,603 for the year 1927-28. A summary of the working results below will explain the difference in the results of the two years :—

Year 1927-28.	Particulars.	Year 1928-29.
Rs.		Rs.
2,97,862	Gross profit on repairs and manufacture of Instruments	3,31,422
60,104	Gross profit on sales of Instruments	57,729
2,278	Miscellaneous Receipts	3,576
3,60,244	Total	3,92,727
<i>Deduct—</i>		
3,58,641	Wages and general expenses	3,80,298
1,603	Net Profit	12,429

The percentage of expenses on gross profits and receipts, etc., during 1928-29 is 96·8 against 99·5 in 1927-28.

Indirect charges have shown certain increases during the year under review as compared with the previous year :—

	1927-28.	1928-29.
	Rs.	Rs.
Interest on Capital	35,011	35,518
Pensionary charges	26,746	27,572
Sundry expenses	21,984	22,387
Telephone rent	370	870
Stores written off	1,431	1,685
<i>Deduct—</i>	85,542	88,032
Profit on revaluation and stock taking	1,377	783
	84,165	87,249

It will be seen from this statement that the increase in general expenses is 3·6 per cent. over those of the previous year.

142. *Balance Sheet.*—The value of land and building is not included in the list of assets of the Mathematical Instrument Office, as the concern is at present being charged in the *proforma* account for rent for the occupation of the buildings. A valuation of the buildings and land has already been carried out by Government and the suggestion to transfer these assets to the concern is at present under the consideration of Government. There is however no appreciable difference in the charge for rent as compared with the expenditure which the concern would bear by way of depreciation, repairs, etc., if the assets were transferred to the concern.

143. Other Balance Sheet items are not worthy of notice except, perhaps, the increase of Rs. 21,898 in stocks and stores over the balance on 31st March 1928 due to an increase in the purchases of serviceable stores.

144. The Balance Sheet shows *Dump Stores* at present at their original book value, without any allowance for depreciation. The principle underlying the formation of a dump store was that the Mathematical Office should not be debited with interest on stock for which there was a very small demand and which had ordinarily no market value and was retained only for possible use or sale when favourable opportunity occurred. Government have accepted this principle and also the audit suggestion that the value of these stocks should not be taken as an asset in the commercial accounts of the Mathematical Instrument Office and that interest and depreciation should not be charged on them, but that they should be revalued at a nominal value of Rs. 100 and the difference between this amount and the present book value should be written off to Capital account. The necessary adjustments, in accordance with Government orders will be carried out in the accounts of the year 1929-30.

145. The valuation of Stores has been made on the basis of the book values contained in the Priced Stores Ledgers kept up in the Office. The balances of certain items of Stores, e.g., stencil plates, etc., have been valued at rates in excess of the issue rates marked against them. It is explained that these articles have existed in Stock for a number of years at the old values and that the difference between the original and the revised rates would be written off gradually as and when the issues are made. This procedure does not seem to be correct. It has now been suggested in accordance with Paragraph 208 of the report of the Public Accounts Committee on the accounts of 1926-27, Volume I, that the difference between the book values and market values should be adjusted as soon as possible under proper sanction as otherwise the valuation assigned to stocks in the Balance Sheet will not represent correct figures.

146. When *proforma* commercial accounts are maintained in addition to the Government accounts the ordinary methods of disbursing, receiving and accounting for money are applied just as in the case of a non-commercial department. The link with the Government account is seen in the Balance Sheet entry of Government account as explained in paragraph 3 above. In the present case both receipts and payments have gone up owing to the general increase in activity in the concern, but on the balance there is a slight drop in Government capital account excluding profit for the year. As however profit for the year is not withdrawn from the concern it is adjusted to Government Capital account and in actual fact Government Capital account has at the end of the year risen above the 1927-28 figure.

GENERAL REMARKS INTRODUCTORY TO THE ACCOUNTS OF THE FARMS & CREAMERY.

147. Bangalore, Wellington and Karnal Farms and Anand Creamery form a group of *quasi-commercial* concerns under the control of the Imperial Dairy Expert; their primary function is research and education and they were acquired, and are worked by the Government of India for the purpose of providing facilities for education and research in connection with the closely allied and important problems of animal husbandry and dairying. All of these four institutions have a specific part in the system of education, diploma and postgraduate, given by the Imperial Agricultural Department. Students are trained at these four centres, and each centre gives the particular class of teaching and experience for which it is particularly fitted and for which purpose it is maintained. Each institution does produce, however, marketable products, and the commercial side has been developed as a support to the educational side so that the best possible use may be made of revenue producing assets and the final cost of education and research may be as low as possible. The accounts of the Farms and the Creamery are divided into two sections 'Education and Research' and 'Commercial' activities to exhibit on the one hand the cost to Government of the training of students and of research into problems of animal husbandry, and on the other of the trading in the produce of the Farms and Creamery. This division of accounts cannot isolate the effects of experiments on the commercial activities of the farm for not infrequently experiments tend to incapacitate permanently or temporarily the best stock from functioning in a manner most profitable to the commercial side.

148. The reviews in this section deal with these institutions as entirely separate commercial units. The Dairy Expert claims that as these institutions form part of one educational and research scheme they should be judged by the combined results. Further, the financial results of farms are very largely affected by climatic conditions which vary from year to year, and by outbreaks of epizootic diseases which in some years may be prevalent, and in others non-existent, and it is therefore necessary to study results not of one year, but over a series of years. In deference to this view the group results of these institutions for the past three years are given below:—

Year.	Cost of Education and Research.	Commercial activities. Profit and Loss.(—)
	Rs.	Rs.
1926-27 . . .	1,40,360	37,098
1927-28 . . .	1,36,310	27,712
1928-29 . . .	1,65,950	30,250
Total . . .	4,42,620	95,060

The average yearly profit for the three years on the commercial side is Rs. 31,687 and the result may be regarded as reasonably satisfactory.

149. It may be mentioned that in the commercial accounts of Government Farms indirect charges such as Audit fees, Direction charges, Interest, etc.,

have not been included. These are given in a footnote to the accounts and the final results inclusive of these charges can be worked out if desired. The decision not to include these charges was taken by the Government of India and acquiesced in by the Auditor General for special reasons (among them those mentioned in para. 147) affecting Government Farms.

159. In dealing with the accounts of these institutions certain questions of general interest to the tax-payer were put to the authorities responsible for the control of these farms, and it might save the time of the Committee if the results of the enquiries were recorded here. It may be stated that the reasons given are the explanations of administrative authorities and not of the Commercial Audit Branch, but that the latter has no desire to impugn them.

To the question why milk production cannot be restricted to the demand and the available market the reply was that this is impossible because of the variability in the yield of the cow, her periods of calving, and of the available market. Yield is affected by weather conditions and the health of the animals; demand is affected by the health of the buying public. Supply and demand in milk is difficult to reconcile in any part of the world, and the usual policy followed by milk producers of supplementing their own supply by outside purchase cannot safely be followed by Government farms because of possible contamination of outside sources.

It was suggested that money might be made by the sale to the public of the improved young stock which it is the Farms' business to produce. The difficulty here urged is that there is no market yet in which such young stock will fetch economic prices because of the lack of appreciation of the advantages of improved stock. To create this appreciation is one of the functions of the whole organisation.

It will be noticed in the reviews of the Bangalore and Wellington Farms that selling prices were reduced to rates which do not cover the cost of production and of delivery. These reductions were made in sympathy with a fall in prices of dairy produce all over the world, and were imperative in order to retain the existing custom.

It is noticeable that Farm milk cannot be used for the production of butter at competitive prices. The reason is that the dairies produce cows' milk which contains 4 to 4½ per cent of fat against the 7½ to 8 per cent of fat in buffaloes milk. Hence it is impossible for butter made from cows' milk to sell at competitive prices in the open market. Further, milk produced on Government farms from expensive stock must be more expensive than that produced by animals grazing on common lands where there are no labour or overhead charges.

The essential reason for Government Farms not yielding greater profits is that the commercial activities are always influenced by requirements in connection with the primary purpose of education and research. If it were to be laid down that these institutions must pay their way even on the commercial side all research, experimental and educational work would have to cease.

IMPERIAL INSTITUTE OF ANIMAL HUSBANDRY AND DAIRYING, WELLINGTON.

151. Summarised Balance Sheet as at 31st March 1929.

1927-28	Capital and Liabilities.		1928-29		1927-28		Property and Assets.		1928-29
	Rs.		Rs.		Rs.		Fixed Assets.	Rs.	
8,115	Sundry Creditors		10,240		9,828		Land at cost	10,069	
1,03,868	Government of India Capital Account		1,78,767		60,121		Buildings (Depreciated value)	85,022	
					14,900		Plant and Machinery (Depreciated value)	13,519	
							Floating Assets.		
					50,995		Livestock at valuation	54,125	
					9,418		Plantations	8,918	
					15,954		Consumable Stores, spare parts, Dairy produce, etc.	10,678	
					2,657		Sundry Debtors	4,440	
					1,004		Cash	142	
	Total		1,80,013		1,73,973		Total	1,80,013	

E. G. WHITTICK,

Superintendent,

Imperial Institute of Animal Husbandry and Dairying,
Wellington.

C. F. GEORGE, F.S.A.A.,

Asstt. Director of Commercial Audit,
Madras.

153. STORE ACCOUNTS for the ANIMALS belonging to the IMPERIAL INSTITUTE of ANIMAL HUSBANDRY and DAIRYING, Wellington for 1928-29.

STATEMENT I BALANCES :—

	Rs.	A.	P.
To Balance on 1-4-1929	50,995	0	0
Add receipts (Statement II)	20,975	4	0
	71,920	4	0
Deduct issues (Statement III)	17,795	4	0
Total Rs.	54,125	0	0

STATEMENT II RECEIPTS :—

By Cash purchase	17,560	4	0
„ increase in value through revaluation	3,365	0	0
Total Rs.	20,925	4	0

STATEMENT III ISSUES :—

To Sales (value of Animals condemned and sold)	2,595	0	0
„ deaths	10,485	0	0
„ decrease due to revaluation	4,715	0	0
„ elimination of fraction of a Rupee	0	4	0
Total Rs.	17,795	4	0

Name of the agency employed for the verification and revaluation.

D. CLOUSTON, C.I.E.,
M.A., D.Sc.

C. L. V. NAIDU
Accountant.

E. G. WHITTICK,
Superintendent,
Imperial Institute of Animal Husbandry and Dairying,
Wellington.

Examined and found correct.

C. F. GEORGE, F.R.S.A.,
Assistant Director of Commercial Audit,
Madras.

IMPERIAL INSTITUTE ANIMAL HUSBANDRY AND DAIRYING, WELLINGTON.

154. The trading of the year shows a net loss of Rs. 19,150 against a net profit in the previous year of Rs. 7,827. This loss is chiefly due to outbreaks of foot and mouth disease and rinderpest in the Wellington Farm. The effect of this outbreak has been cumulative as explained below; it has been responsible for—

- (i) Decrease in milk yield.
- (ii) Casualties.
- (iii) Increase in expenditure under grain and fodder charges.
- (iv) Increase in medical charges.

The following other causes have added to the loss in the working of the farm :—

- (v) Loss in cultivation due to failure of the monsoon.
- (vi) Increase in expenditure under Plant and Machinery.
- (vii) Increase in expenditure under Fuel, Light and Water.
- (viii) Reduction in selling prices of farm products.

155. The loss in milk yield is apparent from the following figures :—

	1928-29.	1927-28.
No. of animals milked	17,115	17,168
Milk yield in lbs.	215,710	234,532
Milk purchases in lbs.	39,954	29,541

156. The loss arising from casualties was Rs. 10,485-0-0 of which Rs. 9,900-0-0 is reported to be due to the outbreaks. The loss in 1927-28 due to casualties was Rs. 2,700-0-0. The total net loss due to casualties, condemnations and valuation was Rs. 13,093-0-0 in 1928-29 against Rs. 4,106-0-0 in the preceding year. The loss has to be sanctioned by the Government of India.

157. The following increases occur under :—

	Rs.
Grain and Fodder	4,214
Cultivation	2,318
Repairs to Plant and Machinery	1,384
Medical Stores	2,703
Fuel, Light and Water, etc.	2,904
	<hr/>
	13,583

The increase under grain and fodder is attributable to the increase in the price of hay supplied by the Military Grass Farm from Rs. 1-8-0 to Rs. 2-11-6 per 100 lbs. for one month and to Rs. 1-14-0 per 100 lbs. for the rest of the

year. The net loss under cultivation was due to a failure of crops for want of rain. Extensive repairs to an old boiler are responsible for the increase under Repairs to Plant and Machinery and the higher charges for medicines are due to the outbreaks of cattle disease. Purchases of milk cans and ploughs and the valuation of a Bluegum plantation which is considered as a fuel reserve account for the increase under fuel, light, water and other stores.

158. The loss on the working of this farm has been calculated only after charging 20% of the expenditure on the feed and keep, etc., to "Education and Research" and without taking into consideration the following charges:—

	Share to				
	Total.	Education and Research.		Commercial activities.	
	Rs.	%	Rs.	%	Rs.
Leave and Pensionary charges	1,565	20	313	30	1,252
Share of Direction charges	900	50	450	59	450
Audit Fee	600	20	120	30	480
Interest charges	12,078	50	6,039	50	6,039
	15,143	..	6,922	..	8,221

159. These charges have, however, been included in working out the all-in-costs of Dairy products and in the following table the all-in-costs are compared with the selling prices:—

1927-28.			1928-29.		
Average selling price per lb.	All-in-costs per lb.		All-in-costs per lb.	Average selling price per lb.	
Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.	
0 3 3-6 {	0 3 5-68	Milk	0 5 8-025 {	0 3 2-5	
	0 0 1-53	Delivery charges	0 0 1-54 {		
1 8 7-2 {	1 3 11-66	Butter	1 4 4-52 {	1 8 2-2	
	0 0 1-46	Delivery charges	0 0 1-51 {		
1 12 0 {	2 6 3-9	Cream	3 15 1-1 {	1 12 0	
	0 0 1-25	Delivery charges including cost of cups.	0 0 1-31 {		

The increase in the cost of production is explained in paragraphs 154 to 157 above. As already explained it never pays to convert farm milk into cream, but a certain quantity has to be converted to meet the demand of regular

customers as an incident of trading in Dairy produce, and a loss has to be faced on this account. The drop in the average prices is due to the following reduction in selling rates:—from 1st August 1928 the rate for supply of milk to Hospitals was reduced from Rs. 0-4-0 to Rs. 0-3-3, and from 1st November 1928 the rates for all customers were reduced from Rs. 0-4-0, Rs. 0-3-3 and Rs. 0-2-6 to Rs. 0-3-3 and Rs. 0-2-6. Butter prices were reduced from the same dates from Rs. 1-10-0, Rs. 1-8-0 and Rs. 1-6-0 to Rs. 1-8-0 and Rs. 1-6-0 per lb. The reductions in rates were sanctioned by the Government of India and the rates of Rs. 0-2-6 per lb. for milk and Rs. 1-0-0 per lb. for butter are privilege rates for married families.

160. The following herd and milk statistics are of interest:—

	No.	1928-29.	1927-28.
Closing stock of milking herd on 31st March	No.	64	73
No. of cows milked during period	"	17,115	17,168
No. of cows dry	"	5,384	5,388
Yield of milk during year	lb.	218,710	224,322
Average yield per animal	"	12·6	13·06
Total quantity available for sale including local purchases of milk	lb.	248,145·8 oz.	242,125·13 oz.
Quantity sold	"	234,230·0 "	227,901·13 "
Issues to cream and butter	"	13,933	12,688

The variations in the milking herd are as follows:—

	Cows.
Sale of cattle	9
Deaths	9
	18

Total vacancies which have been filled up by:—

Purchases	3
Transfers from young stock	6
	9

161. *Balance Sheet.—Property and Assets.*—The increase under lands is due to the capitalisation of expenditure on improvements. Under buildings the additions comprise:—

	Ra.
New model cattle shed	14,015
Milk recording room	1,100
Calf shed	1,400
Bull pen	980
Additions to Supervisor's quarters	1,204
Extensions to segregation shed	176
	18,869

Depreciation has been written off at rates approved of by the Government of India.

162. The capital addition under Plant and Machinery is Rs. 555-0-0 representing the value of a Bamford grinding machine. Depreciation has been written off at rates approved by the Government of India.

163. The livestock was valued on 17th March 1929 by Dr. Clouston, the Agricultural Adviser to the Government of India, and his valuations have been adopted. The following English stock was added during the year:—

	Rs.
7 heifers Rs. 1,800 each	12,600
1 pedigree bull	2,000
	<hr/> 14,600

The following is summary of the value of livestock carried in the Balance Sheet:—

	Rs.
Cows—pure-bred	20,800
Cows—half-bred	15,960
Young stock—Female	8,770
Do. —Male	305
Bulls	5,000
Total milking herd	<hr/> 50,835

Draught cattle.

Bullocks	2,820
Horses	460
Other items—goats	10
	<hr/> 54,125

164. The Bluegum plantation is considered as a fuel reserve, and will only be exploited when fuel is not available locally at reasonable prices. Under consumable stores there has been a substantial reduction. The Sundry Debtors are all good.

165. *Capital and Liabilities.*—In this section of the Balance Sheet there are no items calling for remarks. The amount added to or deducted from the Government of India Capital Account represents figures according to the books of the Farm duly reconciled with those in the books of the Pay and Accounts Officer, Survey of India, Calcutta, who is the primary audit officer.

167. Stores account for the animals belonging to the Imperial Dairy Institute, Bangalore, for 1928-29.

Statement I—Balances.

	Rs.	A.	P.
Balance on 1st April 1928	63,461	0	0
Receipts (Statement II)	28,272	4	0
Total	93,733	4	0
Issues (Statement III)	14,237	4	0
Balance on 31st March 1929	79,496	0	0

Statement II—Receipts.

To cash purchase	14,427	14	0
To book transfer	1,383	0	0
To increase in value through revaluation	12,461	6	0
Total	28,272	4	0

Statement III—Issues.

By sales	5,876	0	0
By deaths	1,585	0	0
By decrease in value through revaluation	6,776	4	0
Total	14,237	4	0

Name of agency employed for the verification and revaluation :—

The Agricultural Adviser to the Government of India.

(Sd.) A. LAMB,

Superintendent,

Imperial Institute of Animal Husbandry
and Dairying, Bangalore.

(Sd.) SURYANARAYANARAU,

Accountant.

Examined and found correct.

(Sd.) C. F. GEORGE,

Asstt. Director of Commercial Audit,
Madras.

IMPERIAL INSTITUTE OF ANIMAL HUSBANDRY AND DAIRYING, BANGALORE.

168. Summarised Trading and Profit and Loss Account for the year ending 31st March 1929.

1927-28.	Particulars of Expenditure.	Net Expenditure.		Analysis.		1927-28.	Particulars of Receipts.	Net Receipts.		Analysis.	
		Rs.	%	Rs.	%			Rs.	%	Rs.	%
60,448	Feed of cattle, Rent of land and cultivation, Ice, Salt, Fuel, Light, Contingencies, etc.	78,177		14,036		1,02,195	Sale of Dairy produce	1,03,237		1,03,237	
8,225	Pay of Officers	8,290		4,988		938	Sale of Grain and Fodder	181		726	
25,379	Pay of Establishment	27,808		11,123		7,717	Miscellaneous Receipts	1,461		5,841	
2,363	T. A. and other allowances	2,945		1,767		2,930	Fees from Students	3,619		..	
3,982	Rent and Repairs to Buildings	4,584		2,262		2,321	Sale and Transfer of Dairy cattle	1,770		1,416	
2,544	Repairs to Plant and Machinery	2,512		1,768		57	Sale and Transfer of Draught cattle	107		107	
6,800	Buildings	8,006		4,003		1,256	Sale of machinery	..		..
13,692	Cattle including casualties	14,237		2,847		8,495	Appreciation on cattle	12,461		9,969	
6,184	Plant and Machinery including condemnations, etc.	4,305		3,077		..	Loss as detailed below—	..		..
25,843	transfers, sales, etc.	25,386		..		34,504	Net charges to Education and Research	41,921		38,304	
	Purchase of Dairy produce including freight	..		..		1,098	Loss unsatisfied	..		..
1,61,620	Total	1,71,824		46,471		1,61,620	Total	1,71,824		46,471	
	Overhead and Indirect charges, Simplified.										
	Total	Rs.	%	Rs.	%						
2,008	Audit Fee	1,008	20	200	80						
1,500	Direct charges	1,500	20	300	80						
2,004	Less and Pensionary charges	1,077	60	1,184	40						
3,280	Other Establishment	1,421	40	639	80						
15,926	Interest	10,175	40	6,070	80						
21,202		30,578		10,545							

IMPERIAL INSTITUTE OF ANIMAL HUSBANDRY AND DAIRYING, BANGALORE.

169. The working of the year showed a net loss of Rs. 3,557 under Commercial activities as against a loss of Rs. 1,098 in 1927-28. The loss is due to various factors, viz.:—

- (i) increase in the milking herd ;
- (ii) increase in the number of young stock carried ;
- (iii) the increases under (i) and (ii) resulted in an increase under cost of feed and keep ;
- (iv) reduction in the quantity of milk sold compared with that sold during the previous year ;
- (v) increase compared with the previous year's quantities in issues of milk for conversion into cream and butter ;
- (vi) a Capital loss of Rs. 1,029 in connection with the rebuilding of a cattle shed.

170. The quantity of milk obtained was greater than that saleable as milk and the surplus was converted into butter, etc. The cost of producing farm milk is so great that it pays only to sell it as milk ; its high quality ensures it a good market. It cannot be used for the manufacture of cream or butter at competitive prices and it is generally issued for that purpose only when there is an unsaleable surplus or this course is indicated by other trading exigencies. It is argued that causes (i) to (v) always operate in the running of a Dairy Farm, as it is not possible to fix the strength of the herd on any particular formula owing to the vagaries of milking cows. The number of animals milked daily and the average yield per animal are the important factors in meeting the demand for milk and the following figures are of interest in this connection :—

	1928-29.	1927-28.	1926-27.	1925-26.
	Cows.			
	No. (a)	No. (b)	No.	No.
Strength of milking herd at close of year.	168	138	110	135
Number of animals milked during the year.	36,243	32,016	32,625	38,666
Milk yield for the year . . . lb.	4,90,123	4,23,065	4,35,851	5,57,729
Average yield per animal per day. "	13.5	13.2	13.4	14.4

(a) Includes 8 purchased in March 1929.

(b) Includes 10 purchased in March 1928.

171. The quantity of milk available for sale, the quantity sold, and quantities issued for conversion are given in the table below :—

	1928-29.	1927-28.
	lbs.	lbs.
Net quantity available for sale	4,63,827	4,27,071
Quantity sold	3,50,140	3,37,104
Percentage sold to that available for sale	75.49%	78.99%
Issues to cream and butter	1,01,032	73,794
Percentage to that available for sale	21.78%	17.26%
Issues to cheese manufacture	12,000	15,500
Percentage to that available for sale	2.59%	3.63%

As a Dairy farm should aim at selling its total output of milk as milk the decrease in the percentage of milk sold and the increase in the percentage of milk issued to conversion for cream and butter indicate how the loss has occurred. It was contended that the increase in the issues to conversions to cream was justified by the increase in the number of young stock for which a milk ration is prescribed, consisting of one part of new milk and 5 to 6 parts of separated milk, and the following figures were furnished in support of this contention :—

	Number of calves fed with milk.	Quantity of separated milk required as rations.	Actual quantity issued for separation (Cream only).
	No.	lbs.	lbs.
For six months ending 30th September 1928	182	26,388	30,952
Monthly average	30	4,400	5,160
For six months ending 31st March 1929	345	51,128	70,080
Monthly average	57	8,521	11,680

172. The increase in the milking herd and in the young stock carried have contributed to the loss by increasing the expenditure on feed and keep. The increase in expenditure on feed and keep is Rs. 5,465 and in addition the issues of farm milk for feeding of young stock increased by 16,147 lbs. These increases are supported by the following figures :—

	Cows.		Buffaloes.	
	1928-29.	1927-28.	1928-29.	1927-28.
	No.	No.	No.	No.
Number of animals milked during the year.	36,243	32,016	1,912	2,378
Number of animals dry during the year.	18,908	13,589	2,053	1,648
Total	55,151	45,605	3,965	4,026

Young stock—cows only.

	Female.	Male.
Opening balance	101	59
Closing stock	128	70

173. If the vacancies that occur during a year in the home herd be considered, the number of young stock carried appears to be out of proportion to the requirements of the farm as the following figures show :—

Additions to milking herd.

	No.
Purchases from outside	24
Transferred from young stock	24
Total	48
Condemnations and casualties	18
Net increase to the herd	30

The Imperial Dairy Expert has put forward a proposal to make the farms under his control self supporting in the matter of young stock. His idea is that young stock in one farm may be utilised to fill vacancies either in the home farm or in outside farms. This would mean that the young stock at Bangalore could be utilised to fill vacancies in either the Wellington or Karnal farms. The effect of the transfers would be carried out in the commercial accounts, and if the budget grants for the three farms were amalgamated the grant would be unaffected. *Prima-facie* there appears to be no objection to the proposal.

174. The following are details of the condemnations and casualties referred to above :—

	Condemnations and sales.		Casualties.	
	No.	Value.	No.	Value.
		Rs.		Rs.
Cows	14	4,406	4	1,460
Buffaloes	2	800	..	..
Cattle young stock—				
Bulls	8	545	15	..
Females	2	..	27	80
Buffaloes young stock—				
Bulls . . . . .	..	..	1	..
Females . . . . .	..	..	1	..
Bullocks	2	50	1	45
Ponies	2	75	..	..
		5,876		1,585

175. Of the causes which contributed to the loss, one remains to be explained, viz., the capital loss of Rs. 1,029 in connection with the rebuilding of a cattle shed. A cattle shed, which was carried on the books at Rs. 1,029 was dismantled, to make room for one of a new and modern type. The Superintendent agreed to take this loss on to his Profit and Loss account, as he was utilising the dismantled materials in repairs to existing buildings. He has been asked to keep a numerical account of all the materials he receives and of their disposal.

176. The increases under expenditure on " Pay of Establishment " (Rs. 2,429) and Rent and Repairs to Buildings (Rs. 603) are due to in the first case chiefly to the employment of an extra supervisor and charges in connection with leave which he took, and in the second case to the replacement of fencing costing over Rs. 1,000 from Revenue.

177. The details of the total of Rs. 14,237 appearing in the Trading and Profit and Loss account as Depreciation of cattle are given below :—

	Rs.	A.	S.
(i) Depreciation on revaluation	9,776	4	0
(ii) Casualties	1,385	0	0
(iii) Condemnations	5,876	0	0
Total	14,237	4	0

Particulars of items (ii) and (iii) above are given in para. 174 *ante*. The decrease under item (i) is offset by appreciation due to revaluation. The appreciation is chiefly in respect of 24 heifers transferred to the milking herd and is also due to an increase in value of young stock carried. The increase under young stock is given below :—

	Female.		Male.	
	No.	Value.	No.	Value.
		Rs.		Rs.
Opening stock	101	5,975	59	2,780
Closing stock	128	8,135	70	3,495

178. The loss of Rs. 3,557 does not take into account the following charges :—

Allocated to

	Total.		Education and Research.		Commercial activities.	
	Rs.	%	Rs.	%	Rs.	
Audit fee	1,000	20	200	80	800	
Direction charges . .	1,800	20	360	80	1,440	
Leave and Pensionary charges.						
Officers	1,977	60	1,186	40	791	
Establishment . . .	1,321	40	529	60	792	
Interest	20,175	40	8,070	60	12,105	
Total	26,273		10,345		15,928	

179. Allowance has, however, been made for these charges in working out the all-in-costs of the dairy products, and the following table shows the costs and selling prices for the current and previous years :—

1927-28.						1928-29.					
Selling price per lb.			Cost per lb.			Selling price per lb.			Cost per lb.		
Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
0	3	1-2	{	0	3	Farm Milk			0	3	2-06
		}	{	0	0	Delivery charges	.	.	0	0	3-50
1	8	8-2	{	1	11	Butter	.	.	1	13	0-2
		}	{	0	0	Delivery charges	.	.	0	0	2-5
1	12	0	{	2	6	Cream	.	.	2	7	2-5
		}	{	1-6	3	Delivery charges	.	.	0	3	4-2
Including cost of cups.											
1	4	6-1	3	2	5-3	Cheese	.	.	3	5	9-9
									1	4	10-9

Cheese is manufactured only for instructional purposes, and it is an incident of trading in dairy produce that a loss has to be faced on cream manufactured for sale to regular customers. The increase in the cost of butter is due to the large quantity manufactured from farm cream owing to a larger quantity of milk having been issued for conversion, *vide para.* 172 *ante*. The lower price received for milk is due to the reduction in rates sanctioned in the course of the year, a reduction from As. 3 Pies 6 to As. 3 per lb. being made for milk supplied to Military Officers, Hospital and Institutions from 1st August 1928, and from 1st April 1928 this reduction was made applicable to the general public.

180. The following milk and herd statistics are of interest :—

	Year ending 31-3-1929.		Year ending 31-3-1928.	
	Cows.	Buffaloes.	Cows.	Buffaloes.
Closing stock of milking herd	No. 168	9	138	11
Number of animals milked during the year.	No. 36,243	1,912	32,016	2,378
Yield of milk during the year	lb. 490,123	230,265	423,056	34,383
Average yield per animal per day	13.5	11.5	13.2	14.4
Issues to farm stock	65,674	..	49,537	..
Loss in handling pasteurisation and distribution.	lb. 3,491.5	..	10,059	..
Percentage of loss in handling, etc., to total opening balance receipts and purchases.	% 1.58	..	2.07	..
Quantity available for sale Farm—				
Milk and purchases	lb. 4,63,827	..	4,27,071	..
Quantity sold	3,50,140	..	3,37,104	..
Issue to cream, butter and cheese	1,13,302	..	89,294	..

The statistics relating to cows and milk production and sales have been dealt with in the preceding paragraphs. The drop in the yield of buffaloes is the only noteworthy item to be explained. The drop has been continuous, from 20 lbs. per animal per day in 1925-26 to 19 in 1926-27 to 14.4 in 1927-28 and to 11.5 in 1928-29. The drop to 14.4 and 11.5 is attributed to the feeding experiments which are being carried on at the farm and to the increased age of the buffaloes, which have passed their best milking age.

181. *The following is a review of the Balance Sheet. Property and Assets.*—The increase under Buildings is due to the building of a new cattle shed. The increase under Plant and Machinery is chiefly due to the purchase of a motor lorry and addition of a Pasteurising Vat. Depreciation has been written-off at rates approved by the Government of India.

182. The Livestock is carried at the valuation made by Dr. Clouston, Agricultural Adviser on 14th March 1929. There was a net increase of 30 head to the milking herd of cows, and the depreciation and appreciation due to revaluation and the loss from casualties and condemnations are given in paragraph 10 *ante*.

183. Consumable stores, etc., show a reduction and the following surplus stores are awaiting disposal :—

	Quantity.	Value.
	No.	Rs.
Collapsible cases for Ice bricks—		
No. 1	5,000	310
No. 2	5,000	350

184. *Sundry Debtors.*—Government of India have sanctioned the writing down of one bad debt to a nominal figure pending the closing of the liquidation of the Dairy Company owing the amount. It has since been ascertained that the whole amount is irrecoverable and an application is being submitted for sanction to write-off the amount. Pending such sanction the amount is being carried forward. Under liabilities there are no items calling for explanation. The amount added to and deducted from Government of India Capital Account, represents the figures according to the books of the Farm, which have been reconciled with those in the books of the Pay and Accounts Officer, Survey of India, Calcutta, who is the primary Audit Officer. The Capital account has been increased by the following assets received by the concern the value of which have been adjusted to other grant heads :—

	Rs.
(i) Cost of Frieslad Bull obtained through the High Commissioner	1,338
(ii) Part costs of a Pasteurising Vatment from the grant for experiments of the Agricultural Adviser	1,000

Regarding (i) the amount has been finally adjusted as expenditure in England and therefore no adjustment has passed through the books of the Pay and Accounts Officer. To show the true position of the concern however it is necessary to include this expenditure in the Commercial accounts. For the same reason the sum of Rs. 1,000, paid from the Agricultural Adviser's grant for experiments towards the cost of the Pasteurising vat, has been included.

Appendix to the Appropriation Accounts of the Central Government (Civil) for 1928-29.

IMPERIAL CATTLE BREE-

185. BALANCE SHEET AS

Liabilities.	1927-28.		1928-29.	
Sundries Creditors—	Rs.	Rs.	Rs.	Rs.
For salaries, wages, etc. . . .	5,137		3,441	
“ Purchases of stores	10,001		4,443	
“ “ Livestock . . . .	..		49	
“ Advance payments, etc. . . .	..		7	
“ Sales Ledger credit balances . .	68		..	
		15,206		7,940
Reserve for Bad and doubtful debts . . . .	..	908	..	908
Permanent Advance	2,000
Government Capital	4,24,449	..	5,05,885

Total Rs	4,40,503	..	5,16,733
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(Sd.) S. COX,
Superintendent,
Imperial Cattle Breeding Farm, Karnal.

(Sd.) ANUP CHAND,
Accountant,
Imperial Cattle Breeding Farm, Karnal.

DING FARM, KARNAL.

AT 31ST MARCH 1929.

Assets.	1927-28	1928-29	
	Rs.	Rs.	Rs.
Land . . . . .	..	89,359	89,359
Buildings	71,909		77,333
Additions during the year	6,300		19,935
	78,209		97,268
Less—Depreciation written-off	920		970
		77,333	
Plant and Machinery	58,312		53,502
Additions during the year	13,635		3,925
	71,947		57,427
Deduct—depreciation written off and sales, etc.	18,440		6,875
		53,501	50,553
Livestock . . . . .	..	81,955	82,640
Milk Cans	13,371		9,515
Less—Depreciation written-off	3,856		3,856
		9,515	5,659
Sundry stores . . . . .	..	15,968	22,568
Standing Crops . . . . .	..	27,114	50,333
Sundry Debtors . . . . .	..	10,166	10,629
Cash in hand . . . . .	..		122
Balance cash in hand—Imprest . . . . .	..		1,504
Add—Expenditure to be recouped . . . . .	..		495
Profit and Loss Account—			
Net accumulated deficiency to 31st March 1927 and 31st March 1928	24,392		75,622
Cost of Education and Research	68,454		82,127
Deduct—Profit on Commercial	—17,224		—51,402
Add—Adjustment for 1927-28 . . . . .	..		225
		75,622	1,06,572
Total Rs. . . . .	..	4,40,563	5,16,733

(Sd.) S. C. SEN,
Assistant Audit Officer,
Commercial Audit Branch.

THE IMPERIAL CATTLE

186. COMPARATIVE DEPARTMENTAL TRADING AND PROFIT

Dr.

Particulars.	Cattle breeding and dairying.		Cultivation.	
	Education and research.		Commercial.	
	1927-28.	1928-29.	1927-28.	1928-29.
	Rs.	Rs.	Rs.	Rs.
To Commencing stock	7,818	8,985	7,140	7,033
.. Value of standing crops . . . . .	..	..	22,344	27,114
.. Purchases of :—				
Grain and fodder . . . . .	..	..	30,704	31,632
Dairy produce	27	..	..	..
Ice, salt, etc.	1,586	1,023	..	..
.. Cultivation charges . . . . .	..	..	14,670	15,250
.. Feed and upkeep of cattle	44,624	68,546	6,583	11,655
	54,055	78,534	81,441	92,714
.. Gross profit carried down . . . . .	..	..	31,709	77,468
	54,055	78,534	1,13,150	1,70,180
.. Cost of education and research brought down	25,155	36,929	..	..
.. Salaries and Wages, etc.	16,078	16,966	14,372	19,813
.. Repairs to Buildings 8:1	6,839	4,971	855	621
.. .. Plant and machinery 6:1	4,643	5,558	774	926
.. Heating and lighting 8:1	2,489	6,285	319	698
.. Medical stores 9:1	1,050	766	125	85
.. Travelling allowances	780	3,034	210	409
.. Freight	2,827	1,835	473	188
.. Sundry expenses 5:4	1,137	1,174	909	939
.. Reserve for bad and doubtful debts	908	..	..	..
.. Casualties of live-stock (actual)	1,290	2,176	..	717
.. Condemnation of live-stock (actual)	5,981	7,635	35	245
.. Depreciation on buildings 8:1	823	863	103	108
.. .. plant and machinery 6:1	5,285	5,700	881	950
.. Depreciation on milk condenser	323	..	..	..
.. .. milk cans (actual)	3,856	3,856	..	..
	Rs.			
.. Decrease in revaluation of draught animals	1,223	..	..	563
Less appreciation in revaluation	10	..	1,213	..
	80,364	97,878	20,289	26,262
.. Net profit on Commercial . . . . .	..	..	17,223	51,402
	80,364	97,878	37,492	77,664
Indirect charges not included in the accounts are :—				
Leave and pensionary charges	2,339	2,193	1,950	2,372
Supervision charges	900	900	..	..
Audit fees 1:1	600	600	600	600
Interest on Capital 3:2	14,107	14,226	9,405	9,484
	17,946	17,919	11,955	12,456

BREEDING FARM, KARNAL.

AND LOSS ACCOUNT for the year ended 31st March 1929.

Cr.

Particulars.	Cattle breeding and dairying.		Cultivation.	
	Education and research.		Commercial.	
	1927-28.	1928-29.	1927-28.	1928-29.
	Rs.	Rs.	Rs.	Rs.
By Sales	10,828	14,113	37,108	44,571
.. Issue for feed and upkeep of cattle	9,309	15,551	41,897	64,649
.. Ending stocks	8,965	11,941	7,033	10,827
.. Value of standing crops . . . . .	..	..	27,114	50,333
	28,900	41,605	1,13,150	1,70,180
.. Cost of education and research carried down	25,155	36,929	..	..
	54,055	78,534	1,13,150	1,70,180
.. Gross profit on cultivation brought down . . . . .	..	..	31,709	77,406
.. Miscellaneous receipts	4,044	3,305	5,773	198
.. Depreciation recovered from Anand Creamery	969	..	..	..
.. Appreciation of live stock in—				
	1927-28.	1928-29.		
	Rs.	Rs.		
Less decrease in re-valuation	11,960	9,332		
	6,153	1,503	5,807	7,829
		
By Profit on sale of young stock	1,090	4,617	..	..
	11,910	15,751	37,492	77,664
.. Net cost of education and research during the year	68,454	82,127	..	..
	80,364	97,878	37,492	77,664

IMPERIAL CATTLE

187. COMPARATIVE TRADING AND PROFIT

Dr.

			1927-28.	1928-29.
			Rs.	Rs.
To Commencing Stocks			14,958	13,998
" Value of standing crops			22,344	27,114
" Purchases of—				
Grain and fodder			30,704	31,632
Dairy produce			27	..
Ice, salt, etc.			1,586	1,023
" Cultivation charges			14,670	15,280
" Gross profit c/d			6,555	40,538
			90,844	1,31,586
To Salaries, Wages, etc.			31,350	36,809
" Repairs to Buildings			7,694	7,592
" " Plant and machinery			5,417	6,484
" Heating and lighting			2,808	6,984
" Medical Stores			1,175	831
" Travelling allowances.			900	3,443
" Freight			3,300	2,123
" Sundry Expenses			2,046	2,113
" Reserve for bad and doubtful debts			908	..
" Casualties of livestock			1,290	2,893
" Condemnation of livestock			..	..
Book value		1927-28	Rs.	1928-29
Less Sale proceeds		Rs.	7,496	10,154
			1,480	2,278
" Depreciation on Buildings			926	970
" " Plant and machinery			6,166	6,650
" " Milk condenser at Anand creamery			323	..
" " Milk cans			3,856	3,856
			74,265	86,648
Indirect charges not included in accounts are—				
Supervision charges			900	900
Leave and pensionary charges			4,289	4,566
Audit fees			1,200	1,200
Interest on Capital			23,511	23,710
			29,900	30,376

BREEDING FARM, KARNAL.

AND LOSS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 1929.

	Cr.	
	1927-28.	1928-29.
By Sales of:—		
Grain and fodder	Rs. 37,106	Rs. 44,571
Dairy Produce	10,685	14,033
Skins	41	80
„ Ending Stocks	15,908	12,568
„ Value of standing crops	27,114	50,333
	<hr/> 90,844	<hr/> 1,31,585
By gross profit b/d	6,555	40,538
„ Miscellaneous receipts	9,827	3,502
Add—Depreciation on milk condenser from Anand creamery	909	..
„ Net Appreciation of live-stock	4,594	7,266
„ Profit on Sales of young stock	1,090	4,617
	<hr/> 1927-28	<hr/> 1928-29
	Rs.	Rs.
Sale proceeds	2,510	10,197
Less book value	1,420	5,580
	<hr/> 1,090	<hr/> 4,617
„ Net deficiency for the year carried to B/S	51,230	30,725
	<hr/> TOTAL Rs.	<hr/> 86,648

188. Summary of Store Account of the Animals belonging to the Imperial Cattle Breeding Farm, Karnal, for the period 1st April 1928 to 31st March 1929.

Item No.	Particulars.	Amount.		
		Ra.	A.	P.
1.	Balance on 1st April 1928	81,955	1	0
2.	Add—receipts as per statement No. II.	21,383	0	0
3.	Total Ra.	1,03,338	1	0
4.	Deduct—disposed off as per statement No. III	20,696	14	9
5.	Balance on 1st April 1929	82,641	2	3
Statement No. II.				
6.	To purchases	12,051	4	0
7.	„ „ from Government Farms (Book transfer)			
8.	„ „ increase in value through revaluation	9,331	12	0
9.	Total Ra.	21,383	0	0
Statement No. III.				
10.	By sales	15,738	0	5
11.	„ Deaths	2,892	13	7
12.	„ Decrease in value through revaluation	2,066	0	9
	Total Ra.	20,696	14	9

Name of Agency employed for the verification and revaluation. "Imperial Agriculturist to the Government of India, Poona".

S. Cox,
Superintendent,

Anup Chand,
Accountant,
Imperial Cattle Breeding Farm, Karnal.

Examined and found correct.

S. C. Sax,
Assistant Audit Officer,
Commercial Audit Branch.

IMPERIAL CATTLE BREEDING FARM, KARNAL.

189. The accounts maintained at this farm are not in commercial form and the government system of accounting which was in force prior to the taking over of the farm by the civil department still continues to exist. The figures appearing in the books of the farm have been duly reconciled with those appearing in the books of the Pay and Accounts Officer, Survey of India, Calcutta.

190. The activities of the farm are two-fold, viz. (1) Cattle Breeding and Dairying and (2) Cultivation. All activities relating to Cattle Breeding and Dairying are "Educational and Research" while those relating to cultivation are wholly "Commercial". In the compilation of the accounts of the two activities, actual expenses have been shown under the corresponding heads of activities and other expenses which cannot be directly allocated have been distributed generally in the proportion of "Feed" charges of the two branches.

191. The gross and net profits relating to the commercial side (cultivation) for the year 1928-29 compare with those for 1927-28 as shown below:—

	1928-29.	1927-28.	Percentage of Increase.
	Rs.	Rs.	
Gross Profit	77,406	31,709	145
Net Profit	51,402	17,223	197

The substantial increase both under gross and net profits in 1928-29 as compared with the figures for 1927-28 is attributable to the following causes:—

1. Increase in the sale of grain and fodder in 1928-29 . . . 203
2. Increase in the value of standing crops on 31st March 1929 . . 88½
3. Increase in the outturn of grain and fodder issued for Cattle Breeding and Dairying including ending stock on 31st March 1929 less increase on direct charges. . . 40½

Increase on gross profit 145½

The percentage of total indirect charges on gross profit on the cultivation side for 1928-29 was 33 against 45 in 1927-28.

192. Sales of grain and fodder during 1928-29 and 1927-28 and the value of standing crops at the end of each year were as below:—

	1928-29.	1927-28.
	Rs.	Rs.
Sales	44,571	37,100
Value of standing crops	50,333	27,114

The increases under these heads during 1928-29 as compared with 1927-28 were due both to a better outturn of crops in 1928-29 and to the extension of cultivation by the farm over a larger area.

193. Grain and fodder produced by the cultivation side and milk yielded by the Dairy are both used for feeding cattle, whether draught or dairy cattle. Credit has been afforded in the Departmental Trading and Profit and Loss Account to the respective sides for the total of these commodities supplied for feed purposes and the actual consumption has been charged off against the activities concerned. The credits and debits to the respective sides during the years 1928-29 and 1927-28 in connection with feed and upkeep of cattle are set out in the following table:—

	1928-29.		1927-28.	
	Commercial.	Education and Research.	Commercial.	Education and Research.
	Rs.	Rs.	Rs.	Rs.
<i>Credits (Receipts).</i>				
Grain and Fodder	64,649	..	41,897	..
Milk, etc. . . . .	..	15,551	..	9,309
	64,649	15,551	41,897	9,309
<i>Debits (Consumption).</i>				
Grain and Fodder	11,655	52,995	6,583	35,315
Milk . . . . .	..	15,551	..	9,309
	11,655	68,546	6,583	44,624

194. The ratio of the feed on the Dairy side to feed on the cultivation side during 1928-29 and 1927-28 was 6 : 1 and 7 : 1 respectively. The cost of feeding under cattle breeding and dairying during 1928-29 was Rs. 68,546 as against Rs. 44,624 in 1927-28. The substantial increase in the cost of feeding was mainly due to—

- (1) increase in the number of animals.
- (2) want of grazing grass which compelled the animals to be stall-fed.

195. The ratio of feed charges referred to in paragraph 190 above remained at 9 : 1 approximately ; the working out of this ratio is given below :—

	Cattle Breeding and Dairying.					Cultiva- tion.	
	Cows.	Young stock.	Calves.	Bulls.	Sheep and goats.	Sheep dog.	Draught animals.
On 31st March 1928	171	239	112	8	2	..	56
" " 1929	190	191	163	6	163	1	73
	361	430	275	14	165	1	129
Mean	180	215	138	7	82	1	65
	...	...	...	623	..	...	65

196. The selling rates of the dairy produce during the year 1928-29 were as follows :—

Milk from Rs. 0-1-3 to Rs. 0-1-6 per lb.

Butter and Cheese from Rs. 1-4-0 to Rs. 1-6-0 per lb.

Cream from Rs. 0-14-0 to Rs. 1-0-0 per lb.

Ghee from Rs. 0-14-0 per lb.

197. During the half year ended 31st March 1929 the total yield of milk from cows and buffaloes amounted to 186,322 lbs. The average yield per cow per day was lbs. 5 while that per buffalo was lbs. 8 oz. 4. The percentage of sales of fresh milk to the total yield was about 12.14 and as the sale of fresh milk is the most profitable method of disposing of the products of the dairy, the departmental authorities have been asked to consider whether a market for the sale of fresh milk as such cannot be found, due regard being paid to the exigencies of Research and Education. A very substantial portion of the total yield of milk, i.e., about 54.57 per cent. was separated for cream making.

The ratio of milk to cream was about 11 : 1.

198. Sales of surplus and condemned animals during the two years 1928-29 and 1927-28 were as follows :—

	Year ended 31st March 1929.		Year ended 31st March 1928.	
	Condemned.	Surplus.	Condemned.	Surplus.
	Rs.	Rs.	Rs.	Rs.
Book value of condemned and surplus animals.	10,158	5,580	7,496	1,420
Value realized for animals sold	2,278	10,197	1,480	2,510
Difference being profit or loss	-7,880	4,617	-6,016	1,090

Balance Sheet.

199. *Buildings.* The value of the buildings on 1st April 1928 was Rs. 77,333. Additions during the year 1928-29 amounted to Rs. 19,335 and depreciation written off the asset account amounting to Rs. 970 has been credited to the asset account and charged to the Profit and Loss Account.

200. Plant and Machinery. The value of plant and machinery on 1st April 1928 was Rs. 53,502. The following items were added :—

	Rs.
(1) Dairy cream separator	312
(2) Eclipse thrasher	400
(3) Chaff cutter	316
(4) Weighbridge	2,058
(5) Electric fittings	244
(6) Lister hand sheep shearing machine	210
(7) Horse mowder fitted with bullock draft	388
	<hr/> 3,926

The total depreciation for the year, including an adjustment of Rs. 225 in respect of the milk condenser sold to the Anand Creamery in 1927-28, amounted to Rs. 6,875. The value of the plant and machinery on the farm on 31st March 1929 after deducting the amount of depreciation therefore amounted to Rs. 50,553.

201. Livestock.—The value of the livestock on the farms on 1st April 1928 was Rs. 75,566. Purchases during the year 1928-29 amounted to Rs. 12,051. Five cows valued at Rs. 1,768, two bullocks valued at Rs. 526, three young animals 27 calves valued at Rs. 225, one sheep valued at Rs. 23 died of natural causes. One cow valued at Rs. 160 was destroyed as it was a suspected case of John's disease, and one bull valued at Rs. 191 died from the effects of snake bite. The total loss due to casualties amounted to Rs. 2,893. Sales of condemned livestock worth Rs. 10,158 realized Rs. 2,278 resulting in a loss of Rs. 7,880, while the sales of young stock worth Rs. 5,580 realized Rs. 10,197 giving a profit of Rs. 4,617. The livestock was revalued towards the end of February 1929 by the Imperial Agriculturalist to the Government of India, and this revaluation resulted in a net appreciation of Rs. 7,829 in respect of dairy cattle and a depreciation of Rs. 563 in respect of draught cattle.

202. Sundry Stores.—The details of the closing stock on 31st March 1929 relating to (a) Cattle Breeding and Dairying and (b) Cultivation were as below :—

Particulars.	Total.	Cattle Breeding and Dairying.		Cultivation.
		Rs.	Rs.	Rs.
Grain and Fodder	9,387	..	..	9,387
Dairy produce	556	556	..	..
Ice, Salt, etc.	2,131	2,131	..	..
Cultivation stores	212	..	..	212
Miscellaneous	10,282	9,254	1,028	1,028
Total	22,568	11,941	10,637	

The surpluses and deficits revealed during the course of verification of stores, carried out by the Assistant to the Agricultural Adviser to the Government of India, were duly brought to account during the year 1928-29, under the orders of the Imperial Dairy Expert. Stock as on 31st March 1929 was not verified by the farm authorities but it is understood that the Assistant to the Agricultural Adviser was to take the stock when he next visited the farm. The book values, as certified by the Superintendent of the farm, have been incorporated in the accounts.

203. Standing Crops.—The value of *rabī* crops standing on 31st March 1929 was calculated on the basis of actual realisations when the crops were harvested in May and June 1929; necessary deductions were made to get at their value on 31st March 1929.

204. Sundry Debtors.—The balance outstanding against a certain Company on 31st March 1928 was Rs. 1,916-7. During the year 1928-29 Rs. 1,000 were paid towards liquidation of this debt leaving a balance of Rs. 916-7 on 31st March 1929 still payable by the Company. A sum of Rs. 907-9-9 has long been due from another debtor Company and the debt has been fully provided for by way of reserve. It has since been ascertained that it is impossible to recover any portion of this debt and the matter is under the consideration of the Agricultural Adviser to the Government of India. The rest of the debtors are considered good.

205. Government Capital Account—

This account is built up as follows :—

	Rs.	A.	P.
(a) Balance on 1st April 1928	4,24,449	0	0
(b) Cash receipts from Government during 1928-29	1,44,184	0	0
(c) Book transfers and credit adjustments during 1928-29	11,269	0	0
	<hr/>		
	5,79,902	0	0
	Rs.	A.	P.
Less—			
(d) Remittances to Treasury during the year	64,332	0	0
(e) Book transfers and debit adjustments	9,685	0	0
	<hr/>		
	74,017	0	0
	<hr/>		
Balance on 31st March 1929	5,05,885	0	0

The amount of capital invested in the concern has therefore risen by Rs. 81,436. This increased capital has been employed mainly in increasing the value of buildings (Rs. 18,965) and of standing crops (Rs. 13,219), and in financing the deficit on the whole working of the farm including the non-commercial side (Rs. 30,725).

GOVERNMENT RESEARCH

206. BALANCE SHEET

Liabilities.	1928-29.	Corresponding balances on 31st March 1928
	Rs.	Rs.
Sundry Creditors and Credit Balances	2,673	4,398
Accountant-General, Central Revenues . . . . .	..	6,879
Government Capital Account	1,79,143	1,40,496
	<u>1,81,816</u>	<u>1,51,773</u>

(Sd.) M. C. RANGASWAMI,

Superintendent, Govt. Research Creamery,
Anand.

(Sd.) MAHARAJ KISHEN,

Accountant, Govt. Research
Creamery, Anand.

CREAMERY, ANAND.

AS AT 31ST MARCH 1929.

Assets.	1928-29.		Corresponding balances on 31st March 1928.
	Rs.		Rs.
Land	24,000		24,000
Buildings	28,368		28,165
Plant and Machinery	49,012		46,407
Office Equipment	837		539
Stores and Stocks	19,769		28,267
Sundry Debtors	27,996		3,171
Cash and stamps	1,487		2,008
	1928-29	1927-28	
Cost of Education and Research	31,705	24,388	
Deduct—			
Net profit on Commercial	1,554	5,172	
Net loss	30,150	19,216	
	1,81,816		1,61,773

(84.) E PRICE,

Assistant Director of Commercial Audit, Bombay Commercial Audit Circle.

GOVERNMENT RESEARCH CREAMERY, ANAND.

207. TRADING AND PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 1929.

Dr.

1928-29.	Rs.	Rs.	Corresponding figures for 1927-28.	1928-29.	Rs.	Corresponding figures for 1927-28.
To Commencing Stocks	22,482	1,169	By Sales	83,188	36,850	
" Cost of Production	72,022	35,609	" Ending Stocks	11,002	22,482	
" Advertisement . . . . .	..	350	" Net receipts for packing, etc.	406	1,261
" Gross Profit carried down . . . . .	..	5,465	" Gross Loss	225	..
	95,004	60,593		95,004	60,593	
To Gross Loss brought down	225	..	By Gross Profit brought down . . . . .	..	5,465
" Expenditure on Research	31,081	22,976	" Miscellaneous Receipts	550	160	
" Depreciation on Milk Condenser and Chose Boiler	624	1,412	" Institute Fees	1,290	..	
" Provision for doubtful debts . . . . .	..	1,028	" Miscellaneous Adjustments . . . . .	..	575
	31,930	25,416	" Net Loss to Balance Sheet	90,150	90,216	
	1,724	1,728		31,930	25,916	
Excluded Charges— Leave and Pension Contribution			1928-29 1927-28 Rs. Rs.			
Interest	10,088	4,606	By Cost of Education and Research	31,705	24,388	
Audit Fees	1,000	1,000	Provided— Net profit on Commercial	1,553	5,172	
Director Charges	900	..		30,150*	19,216*	

GOVERNMENT RESEARCH CREAMERY, ANAND.

208. The functions of this Creamery are two-fold as it has a commercial as well as a research and instructional side. Its commercial activities include the manufacture of cream, butter and ghee from milk. Cheese is not manufactured. The Dairy produce is sold to local and outstation customers, and there is a good local market for the by-products, viz., separated milk and Casein. Indian Dairy Diploma students are trained at the Creamery, where they are given practical demonstrations. A certain amount of research work is also carried out.

209. The manufacturing account is compiled in two sections one for "Commercial" and the other for "Research". The manufacturing expenses are apportioned in the ratio of 7 and 3 between Commercial and Research respectively. This ratio was suggested by the Imperial Dairy Expert and was based on past experience; it has been approved by the Government of India.

210. The creamery belonged to the Military Department and was managed by the Agricultural Department up to 30th September 1927. It was acquired by the latter Department on the 1st October 1927 and the assets were re-valued for purposes of accounts. A system of commercial accounts was introduced from the 1st April 1928, and is working satisfactorily under an Accountant who received his training in the Commercial Audit Branch.

211. Summarised forms of the Balance Sheet and Trading and Profit and Loss Account are prefixed to this review. The outturn of butter during the year under review amounted to 66,456·4 lbs. as against 51,933·6 during 1927-28. The cost of production per pound of butter in these two periods was as follows :—

Item.	Commercial cost per lb. of butter.			
	1927-28.		1928-29.	
	Rs.	A. P.	Rs.	A. P.
<i>Direct Charges—</i>				
Dairy Produce	0	11 0	0	11 1
Stores and Chemicals	0	0 11	0	1 1
Coal	0	0 11	0	1 4
Labour	0	0 6	0	0 6
Depreciation of plant	0	0 8	0	0 9
Repairs	0	0 2	0	0 1
Direct cost	0	14 2	0	14 10

<i>Indirect Charges—</i>		Ra. a. p.	Ra. a. p.
Salaries, etc.		0 2 2	0 2 3
Sundry Expenses		0 0 2	0 0 4
Depreciation of Buildings, etc.		0 0 2	0 0 1
Indirect cost		0 2 6	0 2 8
Cost of Production		1 0 8	1 1 6

212. The increase in the direct cost in the year under review arose out of the larger expenditure under the heads *Stores and Chemicals* and *Coal* and was due to the extra cost involved in running the refrigerating plant for an abnormally long period during the year in order to preserve the large stocks of butter in cold store. These stocks were the result of the surplus output of 1927-28. The indirect cost has also increased. This was due to the increase in travelling expenses which was incurred in order to advertise the products of the creamery. A further reason was the increase in the amount of the sundry expenses which arose from the inclusion in the accounts for the first time of the charge for Municipal tax.

213. The following statement of the yield from milk of cream and butter was compiled from statistics available at the Creamery; although there was a poorer yield in 1928-29 the increase in the cost of milk utilised to yield a pound of butter was negligible.

	1927-28		1928-29	
	lbs.	oz.	lbs.	oz.
Quantity of milk utilised to yield one lb. of cream	8	5	8	6
Quantity of cream used to yield one lb. of butter	1	10.4	1	11.5
Quantity of milk used to yield one lb. of butter	13	10.9	14	6.2
Cost of milk used to yield one lb. of butter	Ra. 0-11-0		Ra. 0-11-1	

214. The following sales were effected during the years 1927-28 and 1928-29 :—

	1927-28.		1928-29.	
	lbs.	ozs.	lbs.	ozs.
Cream	13	7	273	10
Butter	28,820	4	71,878	5
Ghee	1,289	10	3,176	13
Milk	1,139	8	415	0
Casein	7,582	8	15,746	4
Separated Milk	124,683	0	337,796	0
Value realised	Ra. 36,850		Ra. 83,188	

The tendency of the sales to increase is a satisfactory feature of the activities of the creamery.

215. There was a *gross loss* on the trading of 1928-29 which amounted to Rs. 225 whereas in the year 1927-28 there was a *gross profit* of Rs. 5,465. The conditions of the two years under which these results were achieved were very different. In 1927-28 the output of butter, the main product, was not limited to the demand but was nearly twice as much as the demand. The result was that costs were reduced and the profits inflated. The excessive stocks of butter on hand with which the year 1928-29 started could not be disposed of readily, and had to be kept in cold store for purposes of preservation. The extra costs incurred did not, however, tend to increase the value of butter which, on the other hand, began to deteriorate. Instead of realising a fair price this "cold store" butter had to be disposed of at an average rate of about Rs. 0-13-6 a lb. while fresh butter realised between Re. 1-0-0 and Rs. 1-2-0 a lb. The inadequate receipts from this "cold store" butter is the main reason for the loss in 1928-29. The stocks of butter on hand on the 31st March 1929 were valued at Rs. 0-13-6 a lb. which is below cost. The whole of the "cold store" butter was not disposed of until early in 1929-30.

216. If miscellaneous receipts and fees be allocated to the commercial side the net profit on the commercial activity during 1927-28 and 1928-29 was Rs. 5,172 and Rs. 1,555 respectively and the cost of Education and Research in the two years was Rs. 24,388 and Rs. 31,705 respectively. These results were obtained without taking Interest, Audit charges, etc., into consideration; these excluded charges are shown as a foot note to the Profit and Loss Account.

Balance Sheet.

217. The following additions were made to the assets during the year 1928-29:—

	Rs.
Buildings	635
Plant and Machinery	8,169
Office Equipment	356
	<hr/> 9,160

Of this sum Rs. 658 represented the value accorded to existing assets which stood in the books at a "nil" value. The details of these additions are:—

Buildings—

	Rs.
Asbestos roofing over ammonia condensing plant	170
Compound wall, carpenters shop, Drain and Latrine	*465
	<hr/> 635

Plant and Machinery—

	Rs.
K. E. K. Mill for grinding casein	1,955
4 Champion butter churns	586
4 Butter workers	403
Wooden stand for chloride accumulator	133
Refrigerating plant	896
Centrifugal Pump	299
Weigh Bridge	1,391
Astra combined butter worker and churn	1,515
Oil Engine, 3 H. P.	391
Separator, 90 gallons size	456
Miscellaneous items	*143
	<hr/> 8,169

Office Equipment—

5 Chairs	24
8 Tables	76
1 Cup board	*80
Benches, etc.	15
27 Cots for students	191
	<hr/> 356

The items marked thus* were already in existence but bore no value, they were brought on to the books at the above values during 1928-29.

218. *Reduction of Assets.* The reductions were brought about by Depreciation and by disposal as indicated below:—

	Rs.
Depreciation on Buildings	232
„ „ Plant and Machinery	4,879
„ „ Office Equipment	58
	<hr/> 5,169

Sold, Plant and Machinery—

	Rs.	
6 Cream separators	578	Book value,
Motor well open shaw	96	Do,
Ghee Boiler	51	
	<hr/> 685	

The realisation from the sale of these items amounted to Rs. 507 and the loss of Rs. 178 was written off in the Profit and loss Account of the year.

219. The Stores and Stocks on hand on the 31st March 1928. and 1929 were as follows :—

Item.	31st March 1928.	31st March 1929.
	Ra.	Ra.
Consumable Stores	4,828	7,358
Chemicals	608	477
Coal	299	839
	5,785	8,674
Dairy Produce	22,482	11,062
	28,267	19,766

The increase in the consumable stores was caused by the purchase of butter containers and machinery spare parts, and also by bringing unpriced items on to the ledgers at a value. The increase in the coal stock was due to the purchase of three wagon loads towards the close of the year. The stores were verified by the audit inspector of the Agricultural Adviser to the Government of India, during December 1928. The closing balance of dairy produce was verified by the Superintendent of the Creamery. The butter stock which is the largest item of this group was valued at Re. 0-13-6 which was below cost, and was the then market value of "cold store" butter.

220. The Sundry debtors have increased considerably. The figures appearing in the summarised Balance Sheet for the two years are net after allowing for a reserve of Rs. 1,028 for a doubtful debt. Attention is invited to the following figures :—

Date.	Sales.	Outstanding debtors (gross).	Percentage on sales.
	Ra.	Ra.	
31st March 1928	19,462	4,190	21.58
31st March 1929	48,657	29,024	59.65

With the exception of the doubtful debt mentioned above, which has been reserved for, the other outstandings are considered "good". Since the debtors appear to be out of all proportion to the sales the attention of the Imperial Dairy Expert has been drawn specially to the outstandings and a closer check on the credit allowed has been suggested.

221. The Government Capital Account has increased from Rs. 1,40,496 to Rs. 1,79,143. The main reasons for the increase in the amount of money Government has had to put into this concern are (1) the increased cost of Education and Research and (2) the large outstandings under Sundry Debtors owing to the amount of credit allowed.

THE AGRICULTURAL RESEARCH INSTITUTE, PUSA.
222. BALANCE SHEET OF THE AGRICULTURAL SECTION—CULTIVATION EXPERIMENTS AS AT 31ST MARCH 1929.

LIABILITIES.		Rs.	Rs.	Assets.	Rs.	Rs.
Expenditure from Imperial awarding recognition.				Land at cost		1,12,125
Sundry Creditors				Add additions		1,300
						1,13,325
Government of India Capital Account.				Buildings at cost on 1st April 1928		54,652
Balance at credit on 1st April 1928		2,80,076		Add additions		2,841
Add—receipts from Treasury (Central Office) and adjustments.		1,17,233				57,493
Deduct—payments into Treasury (Central Office) and adjustments.		5,87,909		Less depreciation		1,409
		73,113		Plant and Machinery at cost less depreciation on 1st April 1928.		57,888
Indirect charges due to Government		23,466		Add additions		10,547
Total debit due to Government		3,45,285		Less transferred to Tools and Implements register		88,585
				Less depreciation		500
						4,331
						64,094
				Total of Fixed Assets		2,33,303
				Tools and Implements as per valuation		7,143
				Furniture and Fittings		2,650
				Livestock as per valuation on 1st April 1928		8,355
				Add additions		175
						8,530
				Deduct casualities		330
				" depreciation		895
				As per valuation on 31st March 1929		
				Stores		7,305
				Standing crops at valuation		32,882
				Sundry Debtors (considered good)		27,108
				Sale proceeds on hand		1,410
				Loss during the year		11
						37,830
Total		3,49,732		Total		3,49,732
(Sd.) S. C. SEN,				(Sd.) A. RENGASWAMI IYER,		
Head Assistant, Accounts Branch,				Assistant Director of Commercial Audit,		
Agricultural Research Institute, Pusa.				Calcutta Circle.		

THE AGRICULTURAL RESEARCH INSTITUTE, PUSA.

Agricultural Section—Cultivation Experiments.

223. Production and profit and loss account for the year ended 31st March 1929.

Dr.		Cr.	
	Rs. A. P.		Rs. A. P.
To Feed of Cattle . . .	13,509 0 0	<i>Direct Transactions.</i>	
„ Other stores consumed . . .	22,117 0 0	By Oats produced . . .	10,594 0 0
„ Wages	17,076 0 0	„ Sugar cane	5,662 0 0
„ Manure	6,132 0 0	„ Maize	11,947 0 0
„ Pay of officers	11,391 0 0	„ Arhar	2,564 0 0
„ „ establishment . . .	28,131 0 0	„ Other produce . . .	19,399 0 0
„ Overseas pay, etc. . . .	1,800 0 0	„ Grazing	10,733 0 0
„ Allowances and honoraria .	1,832 0 0	„ Miscellaneous receipts .	10,459 0 0
„ Repairs to buildings . .	309 0 0	„ Standing crops . . .	27,168 0 0
„ Sundry expenses	8,310 0 0	„ Loss carried forward .	14,384 0 0
„ Depreciation on buildings .	1,459 0 0		
„ Plant and machinery . .	4,331 0 0	Total	1,19,021 0 0
„ Livestock	1,225 0 0		
„ Tools and implements . .	1,399 0 0		
Total	1,19,021 0 0		
To Loss brought forward . .	14,384 0 0	By total loss	27,850 0 0
„ Pensionary charges . . .	6,018 0 0		
„ Direction charges	1,200 0 0		
„ Audit fees	1,850 0 0		
„ Interest on capital	14,398 0 0		
Total	37,850 0 0	Total	37,850 0 0

THE AGRICULTURAL RESEARCH

224. BALANCE SHEET OF THE AGRICULTURAL SECTION—

Liabilities.

	Rs. L. P.
Expenditure from Imprest awaiting clearance	27 0 0
Transport charges outstanding	23 0 0
Government of India Capital Account.	
Balance at credit on 1st April 1928	1,08,595
Add receipts from Treasury (Central Office) and adjustments.	86,583
	<hr/>
Deduct—payments into Treasury (Central Office) and adjustments.	195,478 40,486
	<hr/>
Capital debt due	1,54,992
Indirect charges due to Government	11,409
Total debt due to Government	1,66,401 0 0
	<hr/>
Total	<hr/> 1,66,451 0 0 <hr/>

(Sd.) S. C. SSB.

Head Assistant, Accounts Branch,
Agricultural Research
Institute, Pusa.

(Sd.) W. McRae, Offg. Director,
Agricultural Research
Institute, Pusa.

INSTITUTE, PUSA.

CATTLE BREEDING EXPERIMENTS, AS AT 31ST MARCH 1929.

Assets.

Rs. & P.

Buildings at cost, less depreciation on 1st April 1928	55,258		
Less depreciation during the year	1,928		
		53,330	0 0
Plant and Machinery at cost less depreciation on 1st April 1928	5,686		
Add—additions during the year	300		
	5,986		
Less transferred to Farm	520		
	5,466		
Less depreciation	1,104		
		4,362	0 0
Tools and Implements as per valuation		1,382	0 0
Livestock as per valuation on 1st April 1928	42,330		
Less casualties	467		
“ sold	6,153		
	35,710		
Add—appreciation	8,783		
		44,493	0 0
Furniture and Fittings		818	0 0
Dairy produce		75	0 0
Sundry Debtors (considered good)		6,653	0 0
Sale proceeds on hand		75	0 0
Loss during the year		55,233	0 0
Total		1,66,451	0 0

(Sd.) A. RENGANWAMI IYER,

Assistant Director of Commercial Audit, Calcutta Circle.

THE AGRICULTURAL RESEARCH INSTITUTE, PUSA.

Agricultural Section—Cattle Breeding Experiments.

225. Production and profit and loss account for the year ended 31st March 1929.

Dr.				Cr.			
Rs. A. P.				Rs. A. P.			
To Grain and Fodder	37,024	0	0	<i>Direct Transactions—</i>			
„ Stores consumed	1,639	0	0	<i>By sale proceeds of milk and its by-products:—</i>			
„ Wages	6,110	0	0				
„ Grazing	10,733	0	0	(a) Local	14,190	0	0
„ Pay of officers	11,918	0	0	(b) Muzaffarpur	14,406	0	0
„ Establishment	9,942	0	0	(c) Samastipur	571	0	0
„ Overseas pay and passage	1,800	0	0	(d) Laherisera	1,825	0	0
„ Allowances and honoraria	455	0	0	„ Miscellaneous Receipts	4,064	0	0
„ Repairs to buildings	1,173	0	0	„ Appreciation on live stock	8,783	0	0
„ Other expenses	2,193	0	0	„ Profit on sales of cattle	3,419	0	0
„ Depreciation on buildings	1,928	0	0	„ Stock of cream and ghee	75	0	0
„ Plant and Machinery	432	0	0	„ Loss carried down	43,824	0	0
„ Tools and Implements	346	0	0				
„ Cost of transport of milk, etc., to Muzaffarpur:—							
by (a) Rail	660	0	0				
„ (b) Motor	3,582	0	0				
„ Selling and other expenses	791	0	0				
„ Cost of transport of milk to—							
Samastipur	125	0	0	Total	91,166	0	0
Laherisera	320	0	0				
TOTAL	91,166	0	0				
To Loss brought forward	43,824	0	0	By $\frac{1}{2}$ Total loss	55,233	0	0
„ Pensionary liabilities	3,525	0	0				
„ Direction charges	1,200	0	0				
„ Audit fees	950	0	0				
„ Interest on Capital	5,734	0	0	Total	55,233	0	0
TOTAL	55,233	0	0				

THE AGRICULTURAL RESEARCH INSTITUTE, PUSA.

226. The Institute consists of the following sections :—

1. The Central office, under the immediate supervision of the Joint Director and the Agricultural Adviser,
2. The Estate Office,
3. The Power House,
- 4 & 5. The Farm and the Dairy,
6. The Economic Botanist's section,
7. The Imperial Bacteriologist's section,
8. The Imperial Mycologist's section,
9. The Imperial Chemist's section,
10. The Imperial Entomologist's section, and
11. The Sugar Bureau (including the Sugar Cable Service).

Every section maintains some account books and stores ledgers, but the Central Office is the channel of communication with the Treasury and the Pay and Accounts Office, and the sections hold their imprest from and render their detailed accounts to the Central office.

A quasi-commercial system of accounts has been introduced with effect from 1st April 1928 in the case of the Farm and the Dairy and a simpler system in the Sugar Cable Service and the Kitchen Garden. In commercialising the accounts of the Sugar Cable Service the reservation was made that no charge should be debited for the present to this Service for the work done by the Secretary and the Superintendent of the office of Sugar Bureau or on account of their leave and pension charges. It has been decided further that no commercial or quasi-commercial accounts require to be introduced in the case of the other sections of the Institute, including the Estate office, the Power House, and the Hospital. The acceptance of the principle of keeping the accounts of the Institute on a commercial basis wherever possible is subject to the condition that the fulfilment of the specific objects for which the Institute is established is not thereby impeded. It has been specifically laid down by the Government of India that the introduction of these accounts does not necessarily imply that the concerns should be run as profit-earning or business ones. No attempt has yet been made to separate expenditure relating to "Experimental research" and "Educational work" as the Agricultural Adviser desired to see the actual financial results of a year, before formulating any proposals on the subject.

227. The Balance Sheets and Profit and Loss accounts for the year 1928-29 are prefixed. As the commercial system of accounts has been introduced with effect from 1st April 1928 only, the figures of the previous years have not been given.

228. The financial results of the working of the various sections are reviewed briefly in the following paragraphs.

The agricultural section is the largest section in the Institute involving the highest expenditure. It consists of two main departments, the Farm and the Dairy, which at the instance of the Agricultural Adviser are now described as "Agricultural Section—Cultivation Experiments" and "Agricultural Section—Cattle Breeding Experiments", respectively.

229. *Agricultural Section—Cultivation Experiments.*—The Farm consists of about 800 acres and Experimental work connected with the cultivation of crops is conducted in an area of about 70 acres, while in the land outside this area, farming on a large scale involving the use of modern implements, power machinery, and a system of rotation is being carried on. Green fodder is grown on a part of the land and sugar cane is also cultivated. The other chief crops are maize, oats, arhar and gram, dry beans, cow peas, meth and some wheat. The fodder may be divided into dry bhusa, green fodder and silage. Almost all the gram and fodder produce of the farm is utilized to feed the farm cattle and the dairy herd. Outside sales are not ordinarily made.

The net financial result of the operations of this concern during the year is a loss of Rs. 14,385 excluding indirect charges, and Rs. 37,851, including such charges. As already explained above, the expenditure booked in the accounts includes the portion incurred on experimental research and educational work also. The loss may therefore be taken roughly to represent the net cost to Government of such work. The capital due to the Government of India by this concern as at 31st March 1929 is Rs. 3,48,263 of which fixed assets, namely, land, buildings, plant and machinery amounted to Rs. 2,33,363 and sundry stores including crops to Rs. 60,050. As these accounts have now been prepared for the first time, no useful comments can be offered on the abnormality or otherwise of these losses.

Balance Sheet.

230. (a) *Land*—The valuation of Rs. 1,13,325 shown in the Balance Sheet represents mainly the capital cost of the new area purchased by Government. This valuation has been fixed after making due allowance for several different factors. The land in the old area occupied by the Institute has not been valued and taken into these accounts. It is stated that no money was actually paid by Government for the purchase of the old area occupied by the Institute.

(b) *Plant and Machinery, Additions Rs. 10,447.*—The details of the additions during the year are shown below :—

	Rs.	A.	P.
1. Ransom's Vicker's Tractor, 1	6,306	15	0
2. Ransom's Threshing and Straw chopping machine with frame top work, 1	3,820	1	0
3. 36 Ideal Mower, 1, transferred from dairy at book-value.	520	0	0
	10,647	0	0

Deduct—

1. Big trolly transferred to the Tools and Implement register	200 0 0
	<hr/>
	19,447 0 0
	<hr/>

(c) *Live Stock*.—The opening valuation of live-stock with additions during the year was Rs. 8,530, while the closing valuation was Rs. 7,305.

The difference of Rs. 1,225 is accounted for by the death of two bullocks valued at Rs. 330 and by depreciation amounting to Rs. 895.

(d) *Stores*.—Priced store ledgers are not maintained and the figures of Rs. 32,882 represents the valuation as at 31st March 1929 of the various articles of stores, including machinery spare parts, as shown in the Farm Stores ledgers, the valuation being made at current issue rates. A similar valuation of the balances as at the first of April 1928 was made and included in the accounts as the opening balance of stores (Rs. 37,087-3-9). The stores transactions for the year are detailed below :—

	Rs.	A.	P.
Opening Balance as at 1st April 1928	37,087	3	9
Add—receipts during the year	85,757	2	11
	<hr/>		
	1,22,844	6	8
Less issues	97,168	12	5
	<hr/>		
Balance as per accounts	25,675	10	3
Balance as per valuation	32,882	0	0
	<hr/>		
Profit on stores transactions	7,206	5	9

This apparent profit is due to the inclusion of freight on stores under "Sundry Expenses" in the accounts. The percentages on account of overhead charges (10%) recovered from Sundry customers and other departments in respect of issues of stores also account to a certain extent for the profit.

231. *Agricultural Section—Cattle Breeding Experiments*.—The net financial result of the operations of this branch during the year 1928-29 is a loss of Rs. 43,824, excluding indirect charges such as pensionary liabilities, direction charges, audit fees and interest on capital, and Rs. 55,233 including such charges. As already stated, the expenditure booked in the accounts includes also the portion relating to experimental research and educational work, and the loss may be taken roughly to represent the net cost to Government of such work. The loss may be analysed as follows :—

<i>Milk sold at—</i>	Rs.	a.	p.	Rs.	a.	p.
Pusa	28,452	6	2			
Muzaffarpur	14,882	11	0			
Samastipur	461	5	11			
Laheriasarai	1,589	9	4	45,386	1	2
Cream and Ghee				9,347	0	0

As no detailed cost accounts are maintained, these figures are only approximate. Most of the Dairy produce is sold as milk to customers in the places mentioned in the list above and there is a branch milk depot in Muzzaffarpur. Cream and ghee are manufactured from any surplus milk. The capital due to the Government of India from this concern as at 31st March 1929, was Rs. 1,66,401. This capital is mainly accounted for by fixed assets, Rs. 59,074 and Livestock Rs. 44,493 leaving out of accounts the loss of Rs. 55,233 at the end of the year.

232. *Balance Sheet.—Livestock*, on 31st March 1929 was valued at Rs. 44,493 showing an appreciation in value of Rs. 8,783 as explained below :—

Opening Balance on 1st April 1928 as per valuation	Ra.	42,330
	Ra.	
Less casualties	467	
„ Sales	6,153	
		6,620
		35,710
Appreciation		8,783
As per Balance Sheet		44,493

The sum of Rs. 6,153 shown under "Sales" represents only the book-value of the cattle which were sold by auction for Rs. 9,572 thereby realising a profit of Rs. 3,419.

233. The following milk and herd statistics may be of interest :—

I—Strength of the herd on 31st March 1929.

No. of cows in milk	71
„ „ dry	41
„ „ Bulls	9
„ „ Bullocks	8
„ „ Bull calves	89
„ „ Heifers	136
„ „ Sheep	99

II—Milk Statistics.

No. of animals milked during the year	25,710
„ „ dry „ „ „	16,530
Total milk yield for the year	467,269 lbs.
Average yield per animal per day	18.17 lbs.

III—Statement showing yield and disposal of milk.

	lbs.
Total yield for the year 1928-29	467,269
<i>Deduct—</i>	
	lbs.
Handling loss	149
Spoiled	2,650½
<i>Loss in distribution—</i>	
at Pusa	1,301½
" Muzaffargarh depot	372
Issued to animals for medicine	78
Issued for analysis	925½
Fed to calves	83,366
Total deductions	88,945½
Net quantity to be accounted for	378,323½
Sold at Pusa	190,343½
" outside Pusa	131,706
Issued for manufacture of cream	56,274
Total	378,323½

The quantity of spoiled milk represents 1·2 per cent. approximately of the total quantity accounted for by sales and manufacture. The quantity fed to calves represents 17·8 per cent. of the total quantity produced.

234. The cost of milk taking into account the direct charges less direct receipts as per Production and Profit and Loss Account, is Rs. 68,731. The net quantity of milk available for issue is 378,323 lbs. The cost per lb. is 0·2-10·9 pies taking into account the net direct charges only.

The total of the indirect charges is Rs. 11,498-10-0, which works out to 0-0-5·8 pies per lb.

The total cost of milk per lb. works out therefore to 0-3-4·7 pies taking both the direct and the indirect charges into account.

The selling rates which are apparently based on local market rates, are as below :—

	Rs. a. p.
At Pusa	0 1 0 per lb.
Outside Pusa	0 2 0 "

As already stated, the production costs include expenditure relating to cattle breeding experiments also. As there is no separation of Commercial activities from Education and Research, it is impossible to lay great stress on the results given above, and until this separation is achieved, Government will not be able to ascertain with any accuracy either costs of production or results of working. Further it will not be possible to compare the working of the farm, etc., in Pusa with that of other Government Farms.

235. Sugar Cable Service.—The function of the Sugar Cable Service attached to the Sugar Bureau of the Agricultural Research Institute is to obtain regular and up-to-date information regarding the Sugar crops of the world from the chief centres of the Sugar trade and to classify and circulate the information to the principal sugar firms in India. The receipts consist of subscriptions realised from sugar firms in India and amounts received from foreign merchants on account of the cost of cablegrams and other services rendered to them. The expenditure consists of the pay of temporary establishments specially engaged for the work, cost of telegrams to members and Indian Agents, cost of cables to and from foreign countries, stationery and other ordinary contingent expenditure.

The receipts of this service during the year 1928-29 amounted to Rs. 24,183 according to the books maintained in the Sugar Bureau of the Institute, and the expenditure, including the decrease in the opening balance of stamps, amounted to Rs. 22,493. The result is a surplus of Rs. 1,690.

233. Kitchen Garden.—In the Kitchen garden, vegetables, fruits and other consumable produce are grown and sold to the employees of the Estate. Certain additional temporary establishments are engaged for the purpose and some contingent charges are also incurred. It has been decided that this garden should be run, as far as possible, on a self-supporting basis, as it is maintained mainly for the benefit of the employees, and not for the requirements of the Institute. The prices of the produce are regulated with reference to market rates.

The expenditure on the Garden for the year 1928-29 amounted to Rs. 1,269, while the receipts amounted to Rs. 1,242, resulting in a small deficit of Rs. 27.

Financial irregularities.

237. Appropriation of departmental receipts direct for expenditure.—A sum of Rs. 10,383 which was the compensation paid to the Imperial Agriculturist for utilising certain areas of land in the Agricultural Institute Estate, Pusa, for the purpose of carrying out experiments conducted by the Secretary, Sugar Bureau, on behalf of and at the expense of Messrs. Begg Sutherland & Co., and the Bihar Planters' Association, was directly appropriated by the Imperial Agriculturist for expenditure in contravention of Treasury Order (7) and Article (1) of the Civil Account Code, Volume 1. The money realised was utilised for the purchase of Berseem seed, an Ayrshire bull and other sundry items of votable expenditure. Expenditure was thus incurred on a voted subject without any vote of the Legislature. Incidentally, the sanction of the Accountant General, Central Revenues, for opening an

account in the Imperial Bank of India, in the name of the Imperial Agriculturist, for these receipts, appears to have been obtained without the full facts of the case being disclosed to that officer. The Government of India agreed that serious financial irregularities were committed in this case, principally by a certain officer, and partly also by another officer, by incurring expenditure to the extent of Rs. 10,383 on a voted subject without any vote of the Legislature, and by utilising receipts directly for expenditure, in contravention of Treasury Order No. 7 and Article 1 of Civil Account Code, Volume 1. In view, however, mainly of the fact that the irregularities reported occurred some six years ago, the Government of India decided to condone them. The officers concerned were informed that their action in this case was seriously irregular.

238. No regular accounts were kept by a certain officer for the yield and disposal of the crops in a section of the Agricultural Institute, prior to 1924. The orders of the Government of India on this case are summarised below :—

"The officer concerned took away the records of the crop yield in order to write up certain books which have now been completed. The original records are being forwarded to the head of the department and will be available for inspection by Audit Officers.

Whilst the Government of India were unable to regard the officer's explanation for the delay in returning records as entirely satisfactory, they did not consider it necessary to take any farther action".

DAIRY ATTACHED TO THE IMPERIAL INSTITUTE OF

239. Balance sheet

Liabilities.				9 months ended 31st March 1928.	1928-29.
				Rs.	Rs.
Sundry Creditors for:—					
Wages and Salaries	..	..	..	80	..
Lighting charges	..	..	..	6	..
Reserve for doubtful debts	..	..	..	8	20
Reserve for Indirect charges due to Government	..	..	..	218	268
Government Capital account	..	..	..	2,996	2,486
Net Profit as per P. & L. account	..	..	..	1,054	1,301
Total Rs.				4,364	4,075

(Sd.) RAM NARAIN,

Head Accountant,

Imperial Inst. of Veterinary Research Institute,
Muktesar.

(Sd.) HUGH COOPER,

for Director,

Imperial Inst. of Veterinary Research
Institute, Muktesar.

VETERINARY RESEARCH INSTITUTE, MUKTESAR.

as at 31st March 1929.

Assets.				9 months ended 31st March 1928.	1928-1929.
				Rs.	Rs.
Buildings	..	..	..	1,400	1,409
Additions	..	..	..	69	..
				<hr/> 1,469	
Deduct—Depreciation and Transfers	..	..	..	579	596
				<hr/> 890	<hr/> 773
Plant and Machinery	..	..	..	875	875
Deduct—Depreciation and Transfers	..	..	..	498	856
				<hr/> 377	<hr/> 19
Furniture and Utensils	..	..	..	188	97
Additions	..	..	..	12	43
				<hr/> 200	<hr/> 140
Less transfers and writes off	..	..	..	103	27
				<hr/> 97	<hr/> 113
Live stock at valuation	..	..	..	2,369	2,726
Sundry Debtors	..	..	..	631	445
Total Rs.				<hr/> 4,364	<hr/> 4,075

(Sd.) A. RENGASWAMI IYER.

Asst. Director of Commercial Audit.

Calcutta Circle.

240. PRODUCTION AND PROFIT AND LOSS ACCOUNT OF THE DAIRY ATTACHED TO THE IMPERIAL INSTITUTE OF VETERINARY RESEARCH, MUKTESAR, FOR THE YEAR ENDED 31ST MARCH 1929.

Dr.

Cr.

	For nine months ended 31st March 1928.	For the year ended 31st March 1929.		For nine months ended 31st March 1928.	For the year ended 31st March 1929.
	Rs.	Rs.		Rs.	Rs.
To Feeding Charges—Grain and fodder .	2,014	2,603	By Sale of Milk .		3,983
" Wages and salary of staff .	769	1,007			5,035
" Lighting and Heating .	75	84			
" Repairs to Buildings .	13				
" Sundry Expenses .	45	138	Value of milk fed to calves .	150	187
" Value of furniture and utensils written off.	..	15			
Overheads :-			Value of manure issued to Farm	150	200
Audit Fee .	69	50			
Leave and Pensionary Contributions	23	63			
Interest on Capital	148	155			
Depreciation :-			Appreciation of livestock .	..	63
Buildings	26	33			
Plant and Machinery .	60	9			
Furniture and Utensils .	7	12			
Reserve for Doubtful Debts	8	15			
Net profit .	1,056	1,301			
			Total	4,238	5,485
Total	4,238	5,485			

IMPERIAL INSTITUTE OF VETERINARY RESEARCH, MUKTESAR.

241. The Imperial Institute of Veterinary Research, is situated at Muktesar, Nainital District, United Provinces, 24½ miles from the nearest Railway Station (Kathgodam, R. & K. Railway) in the Himalayan hills. The original object of this Institute was to investigate the diseases of domesticated animals in all provinces and to ascertain, as far as possible, by biological research, both in the Laboratory and when necessary at the places of outbreak, the means of preventing and curing such diseases. It has since developed into an extensive institution in which sera and vaccines are manufactured more or less on a large scale for supplies to Local Governments and to Indian States. There is a Branch Institute at Izatnagar near Bareilly where sera for combating rinderpest and haemorrhagic septicaemia are produced in bulk in a crude state, and sent up to Muktesar for testing, bottling and storing until required for issue.

In addition to the production of sera and vaccines, the activities of this Institute consist of research in devising suitable remedies for diseases of animals which still require investigation, in standardisation of doses and experiments, and in new methods of inoculation, etc. The educational activities of the Institute consist in imparting post-graduate instruction and practical training to veterinary officers and subordinates deputed by the Army department, Provincial Governments and Indian States. The cost of sera and vaccines supplied to Local Governments, etc., is recovered from them at the selling rates sanctioned by the Government of India from time to time.

242. In addition to those sections connected with Research, the Institute at Muktesar has the following branches :—

1. *Serum Department* where sera and vaccines are manufactured, tested, bottled and stored.
2. *Veterinary Branch* in which the animals required for experiment and manufacture of sera, etc., are maintained.
3. *Farm* which controls the labour and maintains the land and the Reserved Forest of the Institute, and conducts the miscellaneous estate and cultivation work.
4. *Engineering* under the charge of an Engineer who looks after the water supply, electricity, gas, steam, workshop, etc., required for the institute.
5. *Hospital* in charge of an Assistant Surgeon who looks after the medical and sanitary arrangements of the Institute.
6. *Miscellaneous Department* to look after the transport arrangements, packing of sera and vaccines that are sent out, etc.

There is also a small dairy attached to the Institute which is maintained for the supply of milk to the staff of the Institute. As Muktesar is an isolated place, it is necessary for Government to make arrangements for the transport of bottles, packing cases, etc., as well as for the supply of transport to meet the private requirements of the staff, and of officers visiting the Institute on duty.

243. The main expenditure of the Institute is on the pay of officers and staff, the purchase, feed, and upkeep of animals required for experiment and for the manufacture of sera and vaccines, the cost of chemicals and apparatus,

and other miscellaneous incidental expenses. The receipts consist mainly of the sale proceeds of sera and vaccines and other products of the Institute issued to Local Governments and Indian States, and miscellaneous receipts such as sale of garden and forest produce, etc.

244. In 1923, the Inchcape Committee recommended that steps should be taken to place the Institute on a self-supporting basis. This policy implied that the selling prices of the products of the Institute should be so regulated as to cover the entire cost of the upkeep of the Institute, including the expenditure on research and education, and as a corollary, the maintenance of a commercial system of accounts, to ensure that the policy is being actually carried out in practice. It was therefore decided that a proper system of commercial and cost accounts should be introduced in the Institute with effect from 1st April 1926 and that the audit be entrusted to the Commercial Audit Branch instead of as previously to the Examiner of Local Fund Accounts, United Provinces. Proposals were made to the Agricultural Adviser by the Commercial Audit Branch in 1927, for the reorganisation of the accounts system of the Institute. The Royal Commission on Agriculture also recommended that the Government of India should lay down a suitable financial policy for permanent adoption in regard to the administration of the Institute. They suggested that an effort should be made to distinguish as fully as possible between expenditure on research and that on manufacture operations, and that Muktesar on its factory side should be regarded as an All-India Institution maintained to supply the Provincial Governments and the Indian States with sera, vaccines, etc., at cost price. They also suggested that the profits accruing from the manufacturing side of the Institute should be reviewed periodically and that a suitable bonus fixed in proportion to the purchases made by Local Governments be declared at intervals of two or three years. The Government of India have decided that it is not desirable to pass any orders on the re-organisation of the accounts system of the Institute and the formulation of a suitable financial policy until certain questions connected with the higher administrative arrangements of the Institute have been settled. The matter rests there at present. Except in the case of the small dairy attached to the Institute no commercial and costing accounts have yet been introduced in this Institute, pending the final orders of the Government of India. The Government of India have recently decided to appoint an administrative financial officer to the Institute and have selected an officer of the Indian Audit and Accounts Service for the post.

245. *Financial Results.*—For the reasons stated in the preceding para. it has not been possible to present accounts in a commercial form as yet. The receipts and expenditure of the Institute, as far as could be ascertained from the records of the Institute, at the time of audit, for three years, are furnished below, to give an idea of the transactions involved :—

<i>Receipts.</i>	1925-26. Rs.	1927-28. Rs.	1926-27. Rs.
Sale of sera	14,22,482	11,98,358	10,88,347
Sale of animals	25,022	15,612	10,323
Sale of Forest Produce	136	184	350
Miscellaneous including Dairy receipts	20,781	11,396	7,164
	14,68,421	12,25,550	11,06,193

<i>Expenditure.</i>	1928-29.	1927-28.	1926-27.
	Rs.	Rs.	Rs.
Salaries and Travelling allowance	2,30,327	2,11,635	2,04,589
Purchase of animals	1,07,195	1,09,473	89,755
Feed and upkeep of animals	2,23,698	2,10,183	2,18,029
Cost of chemicals	37,858	34,955	33,954
Other supplies and services and contingencies	1,39,818	1,26,070	1,12,583
	7,38,796	6,92,316	6,59,490
Net excess of receipts over expenditure.	7,39,625	5,33,234	4,46,703
Percentage of expenditure to receipts.	49.63	56.5	59.62

The figures indicate a steady increase in expenditure as well as in receipts, as well as a progressive increase in the annual surplus, representing the increase of total receipts over total expenditure. The surplus of receipts over the expenditure during the year 1928-29 amounted to over 7 lakhs of Rupees and this is over 2 lakhs in excess of the surplus for the preceding year. The percentage of expenditure to receipts has also fallen steadily. This surplus cannot be regarded as representing the true profit of the concern in a commercial sense, which can only be ascertained if the accounts are placed on a commercial basis, and a proper trading and profit and loss account compiled. In arriving at the surplus, no distinction has been made between expenditure of a capital nature and that on working expenses, and the figures do not also include the true value of stores consumed, and provision for indirect charges, e.g., interest on capital, depreciation on wasting assets, direction charges, pensionary contribution, audit fee, etc. The accounts at present rendered do not also differentiate between research, education and production, and unless a suitable scheme of commercial accounts is introduced, it is not possible to work out the true financial results. It is however fairly apparent from the annual cash surpluses given above, that the prices at which sera and vaccines, etc., are being sold to Local Governments are probably considerably in excess of their actual production costs. It seems desirable that an early decision should be arrived at on the question of the formulation of a suitable financial policy and the introduction of costing and commercial accounts in the Institute.

246. Since the transfer of the local audit of the Institute to the Commercial Audit Branch, various suggestions in regard to the procedure, system of accounts, etc., have been made by audit with a view to improving the state of accounts and financial control. As a result, substantial steps have been taken in the direction of improving the state of accounts and control generally.

Financial Irregularities.

247. In item (3) on Page 292 of the Accountant-General's (Central Revenues) Appropriation Accounts for 1927-28, attention was drawn to the

practice of engaging temporary clerks and dressers without competent sanction and entering them as Jamadars, mates, etc., in the muster rolls. This practice has been examined and certain steps have been taken to discontinue it. In the budget for 1929-30, provision has been made under "Temporary Establishment and Contingencies—Pay of menials" for several classes of establishment, such as hospital cook, bhistie, chokidars, cleaners, sanitary jamadar, dhobi, mali, etc., whose salaries were hitherto charged to the muster rolls without higher sanction. There are still certain other classes of establishments whose pay should properly be included in the establishment pay bills but is drawn at present in muster rolls. The whole question of the nature and classes of establishments which may be treated as cooly establishment and included in the muster rolls, has to be considered, and suitable rules should be drawn up on the subject. The limits upto which the director can sanction such establishments and the conditions regulating their entertainment, etc., should also be clearly defined.

248. The following irregularity was noticed in the course of the audit of the accounts of the Izatnagar branch. The ration schedules for animals were fixed in English lbs., by the Director, and it was expressly laid down that any excesses over the provision made in the schedules should not be made without the Director's sanction. A maund of Indian weight is equivalent to 82.4 lbs. of English weight. Owing to the adoption of the incorrect ratio of 80 lbs. of English weight as being equivalent to 1 maund of Indian weight, it was found that rations had been drawn in excess of the sanctioned scale for many years, since the inception of the Institute upto 11th September 1937. It is stated that the excess drawn has been fed to the animals. This fact was not detected either by the executive subordinates or by the accounting staff of the Izatnagar branch or the Mukhtesar Institute. The amount involved may be estimated roughly as Rs. 1,000 per annum.

It was considered by Government whether any overpayment to the Contractor had occurred. The late Agricultural Adviser explained that although the ration indents were prepared in pounds the contractors actually delivered grain in seers and submitted their bills prepared in Indian weights. It was shown that no overpayment had been made to the Contractors and it was affirmed that the cattle were the sole recipients of benefit by the mistake.

The Director, Imperial Institute of Veterinary Research, Mukhtesar has taken the necessary disciplinary action in regard to failure to note that an incorrect ratio of conversion was being adopted, and has also taken steps to improve the existing arrangements for taking delivery of grain. The action taken in the matter has been considered to be satisfactory and Government have decided to close the case.

249. *Losses.*—

- (a) A deficiency amounting to Rs. 56,759 was disclosed as a result of stock-taking. Out of this, a sum of Rs. 55,492 relates to the shortages in the Serum Branch. The sanction of the Government of India to the write-off of this loss is awaited.

(b) Losses of somewhat substantial quantities of crude stocks of sera and vaccines between Izatnagar and Muktesar were also noticed. Losses of crude stocks may be divided into three kinds :—

- (1) Losses due to leakage while in transit,
- (2) Losses due to leakage, etc., in the course of bottling,
- (3) Losses due to rejections after tests.

It appears desirable that steps should be taken to minimise these losses as far as possible. The matter is still under consideration.

- (c) A Loss of Rs. 2,466 occurred owing to the failure to recover rent from a certain officer who is not entitled to rent-free quarters.
- (d) In the previous years, sera and other products of the Institute were issued free of cost, by the Director, for experimental, educational and other purposes. The Government of India sanctioned the write-off of a sum of Rs. 4,917 being the cost of such products issued during the previous years and directed that such free issues should not be made, in future, without proper sanction.

Dairy.

250. This is a very small concern and is intended solely for the supply of milk to the staff of the Institute in view of the scarcity of milk at Muktesar. Raw milk only is sold, no cream or butter being made. The Dairy was run purely as a private concern until the year 1919 when the Government of India sanctioned its purchase, and directed that it should be maintained as a Government concern subject to the condition that it should be closed down unless it is self-supporting. Proper accounts bringing out the true commercial results of the concern were not maintained until 1st July 1926 when a suitable system prescribed by the Commercial Audit Branch was brought into effect. In addition to the herd of this dairy another herd of cows is being maintained in the institute for the purpose of breeding calves for experimental purposes. The surplus milk from this herd is also available for sale in addition to the dairy milk.

251. The dairy herd originally purchased by the Government of India in the year 1919 consisted of 12 cows and 31 calves. Since then several purchases have been made for the experimental herd which have been transferred to the dairy herd when required. On 1st July 1926, the strength of the original dairy herd consisted of four cows only, of which two were dry and two in milk. The Director on that date arranged that the experimental herd should be run in conjunction with the dairy herd in the following manner. The dairy herd was to contain only animals in milk. The animals in this herd were valued by the Director once a year, and as each became dry, it was to be transferred to the experimental herd, its value being credited to the dairy. The cows were to remain in the experimental herd until they calved. These calves would be treated as the property of the experimental herd. Cows in milk would be taken back to the dairy if and when required, their

value being debited to the dairy accounts. These arrangements continued to be in force until the end of the year 1928-29. The Government of India have now decided that the existing dairy and the experimental herds should be amalgamated under the designation of "Dairy herd", and that 30 per cent. of the total expenditure on the combined herd should be debited to Research and Experiment while the balance of 70 per cent. should represent the running costs of the dairy portion which should be covered by the income of the Dairy. It is understood that these orders have been given effect to from 1st April 1929.

252. *A balance sheet* showing the financial position of the Dairy as at 31st March 1929, and the Production and Profit and Loss accounts for the year 1928-29 and the accounts for the preceding accounting period which consisted of 9 months only to the end of 31st March 1928, are prefixed.

253. *Financial results.*—The working of the year showed a profit of Rs. 1,301 as against a profit of Rs. 1,056 during the nine months ended 31st March 1928, and a loss of Rs. 1,023 during the year ended 30th June 1927. In working out this profit, provision has been made for the depreciation of furniture, plant and machinery, for leave and pensionary contribution, interest on capital and audit fee; credit has also been taken for the value of the milk fed to the calves which are the property of the experimental herd, and the estimated value of the manure issued to the Farm from the Dairy.

254. The following tables show the number of animals in the Dairy, the average yield per animal, the average cost of milk per seer, the quantity of milk available for sale, the quantity sold, etc :—

STRENGTH OF MILKING HERD.

	No. at commencement.	Additions during the year.	Transfers to experiments.	Casualties.
1st July 1926 . . .	15 cows	15 cows	18 cows	1 died
1st July 1927 . . .	11 ..	21 ..	21 ..	..
1st April 1928 . . .	11 ..	23 ..	21 ..	1 sold
<hr/>				
			1928-29.	1927-28.
Strength of milking herd at close of year	. .	. .	12 cows	11 cows
No. of animals milked during the year	. .	. .	4,416 ..	3,600 ..
Milk yield	. . . . .	. . . . .	16,648½ seers	13,223½ seers
Average yield per day per cow	. . . . .	. . . . .	3 seers 12½ ch.	3 seers, 10½ ch.

QUANTITY OF MILK PRODUCED, QUANTITY AVAILABLE FOR SALE AND SURPLUS.

	1928-1929.	1927-1928.
Total milk yield	16,048½ seers	13,223½ seers
Loss in handling	371 „	267½ „
Percentage to total yield	2.23 %	2.02 %
Quantity available for sale	16,277½ seers	12,956 seers
Quantity sold	16,778½ „	12,555½ „
Percentage to quantity available for sale	96.93 %	96.91 %
Surplus fed to calves	409 seers.	400½ seers.
Percentage to that available for sale	3.07 %	3.09 %

255. *Production cost.*—The average cost of production per seer for 3 years is given below :—

1928-29	Rs. 0 3 10.25 per seer.
1927-28	„ 0 3 9.7 „
1926-27	„ 0 5 9 „

256. The selling rate up to end of July 1927 was 4 as. 6 ps. per seer. With effect from 1st August 1927, the Government of India revised the selling rates of milk in accordance with the following graduated scale according to the pay of the purchasers :—

Residents drawing Rs. 150 and less	Rs. 0 4 6 per seer.
Residents drawing between Rs. 151 and Rs. 600	„ 0 6 0 „
Residents drawing above Rs. 600	„ 0 8 0 „
Milk purchased by Government for the Institute	„ 0 8 0 „

These rates were followed to the end of 1928-29. The rates have since been revised by the Government of India as below :—

Residents drawing Rs. 200 and below	Rs. 0 4 6 per seer.
Residents drawing above Rs. 200	„ 0 6 0 „
Milk supplied to the Institute and outsiders	„ 0 6 0 „

It is understood that these rates have been brought into effect from 1st April 1929. It will be seen that the average cost of production is now less than the selling rates and that this fact accounts for the profit shown in the accounts.

BALANCE SHEET.

257. *Plant and Machinery.*—The reduction in the value of Plant and Machinery is due to some machinery having been transferred from the Dairy to the Power House.

258. *Livestock*.—At beginning of the year 1928-29 there were 11 cows valued at Rs. 2,369. During the year 23 fresh cows were transferred to the dairy herd at a valuation of Rs. 4,870. 21 animals were re-transferred to the experimental herd at a valuation of Rs. 4,512 and one animal was sold for Rs. 2. Thus at the end of the year there were 12 animals valued at Rs. 2,725; the valuation of the animals in the dairy at the close of the year and those transferred from and to the experimental side was made by two officers attached to the Institute on the basis of their present condition and the prevailing market rates, while in the previous year the valuation was based on a certain fixed formula irrespective of the market fluctuations and the condition of the individual animals. It is noticed that in some cases the valuation fixed by the officers exhibited striking fluctuations, and it is therefore considered desirable that the valuation assigned to the animals by the Local Officers should in future be scrutinised and approved by some independent expert authority. Further, some of the animals transferred from the dairy to the experimental side were sold within a few months of their transfer for prices considerably less than the amounts at which they were assessed on transfer, indicating that the valuation on which the financial results of the dairy are based, was excessive.

It has been suggested in audit that in case of livestock, the approval of Agricultural Adviser or other independent cattle expert should be obtained to the valuation.

CHAPTER V.

GOVERNMENT OF INDIA COMMERCE DEPARTMENT CONCERNS.

BENGAL PILOT SERVICE.

259. In order to determine whether the Bengal Pilot Service is a self-supporting institution, i.e., whether the receipts from the Pilotage fees over a fixed period are sufficient to cover all the charges, it has been decided by the Government of India that *pro forma* accounts shall be prepared in a commercial form, so as to present a clearer picture of the activities of the Pilot Service than has been possible in the past. A *quasi*-commercial system of accounts has accordingly been introduced with effect from 1st April 1928. Detailed rules have been prepared prescribing the procedure to be followed in the preparation of the accounts in a commercial form. The accounts are maintained in the office of the Pay and Accounts Officer, Miscellaneous Central Departments, Calcutta. It was not possible for the Pay and Accounts Officer to close the accounts for the year 1928-29 owing to the fact that a number of important accounting questions were under the consideration of the Government of India, and orders on them were not issued until about the end of the year 1929. The delay in the compilation of the accounts necessarily meant the postponement of the audit by the Commercial Audit Branch, and accounts have not therefore been included in this printed appendix.

PERSIAN GULF LIGHTING SERVICE FUND.

260. BALANCE SHEET AS AT

31st MARCH 1929.

LIABILITIES.		ASSETS.	
	Ra.		Ra.
Capital	7,12,267	Buildings	1,90,840
		Light Vessels	1,06,667
Depreciation Reserve	59,136	Lights	2,32,293
		Buoys	23,334
Additions and Replacement Reserve	45,001	Towers	1,15,505
		Paths and Landing	43,628
Funds (Additions and Replacement) Investment Interest	1,420	Sundry Debtors—	
		Port Director, Basra	Ra. 44,687
		Port Director, Basra Suspense Account	227
Sundry Creditors—Port Director, Basra	941		44,914
		Surplus Revenue Investments at Cost	8,02,106
Profit and Loss Account	10,57,394	Depreciation Fund Investment at Cost	59,078
		Additions and Replacement Fund Investment at Cost	45,000
		Interest Suspense Account	30
		C. D. India Suspense	4
		Cash at Bank	1,12,576
		Works in Progress—	
		New Light at Ras Alazr	Ra. 13,396
		New Buoy for relief of Task and Bunder Abbas buoys	3,968
		Conversion of one carbide buoy to Gas buoy	3,414
			20,778
		Stores on hand	13,815
		Fuel	1,702
		Provisions on hand	3,907
	18,76,849		18,76,849

True copy.

Sd. E. PRICE,

Assistant Director of Commercial Audit,
Bombay Circle.

Sd. V. D. DANTYAGI,

Assistant Accountant General, Commercial
Audit Branch.

PERSIAN GULF LIGHTING SERVICE FUND.

261. PROFIT AND LOSS ACCOUNT FOR THE YEAR 1928-29.

	Rs.		Rs.
To Salaries and allowances	31,426	By Light dues	4,10,907
„ Clothing	902	„ Miscellaneous Receipts	7,039
„ Provisions	21,160	„ Contribution from Home Government	1,33,333
„ Repairs	16,947	„ Interest	26,318
„ Miscellaneous Charges	24,554	„ Stores	2,984
„ Medical and Sanitation	611		
„ Wharfage and freight	1,473		
„ Cost of services rendered by the Lighthouse Tender	1,04,037		
„ Passages including Travelling allowance and Daily allowance	2,439		
„ Fuel	7,548		
„ Depreciation	17,308		
„ Additions and Replacement Reserve	13,373		
„ Postage and Telegrams	470		
„ Printing and Stationery	175		
„ Collection Charges	743		
„ Pensionary Charges	7,302		
„ Administration and Accounts including Audit	22,012		
„ Net Profit	5,18,121		

5,90,001

5,90,001

PERSIAN GULF LIGHTING

262. PROFIT AND LOSS ACCOUNT

	1925-26.	1926-27.	1927-28.	1928-29.
	Rs.	Rs.	Rs.	Rs.
To Salaries and allowances	7,608	33,233	31,972	31,426
„ Clothing	1,071	..	..	902
„ Provisions	7,024	21,675	26,632	21,160
„ Repairs	1,349	25,277	5,813	16,947
„ Miscellaneous Charges	9,192	22,331	32,567	24,554
„ Medical and Sanitation	26	453	154	611
„ Wharfage and freight	23	265	759	1,473
„ Cost of services rendered by the Lighthouse Tender.	60,779	3,96,858	90,510	1,04,037
„ Passages including travelling allowance and daily allowance.	79	1,059	1,109	2,439
„ Stores	1,908	16,736	27,325	..
„ Fuel	277	2,690	3,746	7,548
„ Depreciation	7,212	17,308	17,308	17,308
„ Additions and Replacement Reserve.	5,372	13,373	13,373	13,373
„ Postage and Telegrams . . . . .	..	119	389	470
„ Printing and Stationery . . . . .	..	228	456	175
„ Collection Charges . . . . .	..	1,839	1,242	743
„ Pensionary Charges . . . . .	..	6,878	4,155	7,302
„ Administration and accounts including audit.	..	24,202	19,949	22,012
Total Expenditure	1,02,180	5,83,524	2,77,273	2,72,480
Balance being profit for the year	1,28,136	1,66,614	4,44,522	3,18,121
	2,30,316	7,50,138	7,21,795	5,90,601
Add previous profit . . . . .	..	1,28,136	2,94,730	7,39,272
Total Profit to date	1,28,136	3,94,730	7,39,272	10,57,393

263. The expenditure connected with the lighting and buoying of the Persian Gulf was until 31st October 1925 borne in equal shares by His Majesty's Government and the Government of India. With effect from 1st November 1925 it was decided that the cost of the services rendered should be recovered by dues levied on ships using the lights, and for this purpose the "Persian Gulf Lighting Service Fund" came into existence from 1st November 1925. The Fund is devoted solely to the maintenance and development of the Persian Gulf Lighting and Buoying Service. It is intended that the Fund should be self-supporting and that the accounts should be self-contained and distinct from the Government accounts.

The Government of India in the Department of Commerce are responsible for the administration and financial control of the Persian Gulf Lighting and Buoying Service while the Flag officer commanding and Director, Royal Indian Marine is responsible for the maintenance of the service. There is an Advisory Committee consisting of persons representing the interests affected or having special knowledge of the subject to consider all questions connected with the Service. The officer mentioned above is the Chairman of the Committee. The Committee is consulted freely on all matters pertaining to the Service including annual estimates of receipts and expenditure, the Government of India reserving to themselves the power to take action without previously consulting the Committee in cases of real and sudden emergency. The dues are collected, and other help is given by the Port Director, Basra in accordance with a special arrangement made with the Iraq Government.

The accounts of the Fund are maintained by the Controller of Marine Accounts, Bombay in the manner laid down in the Account Rules drawn up by the Commercial Audit Branch and approved by the Government of India, Commerce Department.

His Majesty's Government have agreed to pay an annual contribution of £5,000 towards the Fund during the first five years after its inception and this contribution is utilised towards the cost of the Service.

264. These accounts of the Persian Gulf Lighting Service Fund are the first accounts of this concern audited by the Branch. The Director of Army Audit carried out an audit of these accounts up to July 1927. In accordance with Government orders the accounts from 1st November 1925 were re-cast in the form prescribed by the new rules and the Commercial Audit Branch test checked the accounts so drawn up from 1st November 1925 to July 1927 and also carried out regular audit of the accounts for the period July 1927 to 31st March 1929.

265. A profit and loss account for the year 1928-29 together with the comparative profit and loss accounts for the four years ended 31st March 1929 and a Balance Sheet as at 31st March 1929 are prefixed to this review.

In the accounts under review it has not been possible fully to comply with the requirements of some of the accounting rules. Instances in which the accounts are still defective are given below :—

1. Outstanding liabilities and assets have not been included in the accounts: these could not be worked out owing to the inaccuracies of the system of stores accounts in force.

2. The actual purchases of stores, fuel and provisions were charged to the accounts irrespective of the consumption.

The new stores accounting rules came into force from 1st April 1929, and with their introduction increased accuracy in the commercial accounts should be achieved.

265. Profit and Loss Account for the year 1928-29.—The rate of recovery which was reduced with effect from 1st April 1927 from 3 annas per net registered ton to 2 annas was further reduced to Re. 0-1-6 with effect from 1st April 1928 and in consequence of this latter reduction refunds amounting to Rs. 10,603-12-0 were made by the Port Director, Basra.

The profit and loss account for the year includes a credit of Rs. 1,33,333-5-4 being contribution for two years (1927-28 and 1928-29) paid by His Majesty's Government at £1,250 per quarter. Miscellaneous Receipts during the year are mostly due to the sale proceeds of unserviceable stores (Rs. 7,043.)

Miscellaneous charges Rs. 24,554.—This represent payments made for hire of the Royal Indian Marine Trawler "Salsette" at Rs. 22,000 per year.

267. Comparative trading and profit and loss account.—It is not possible to make a true comparison of the working of the several years as not only have the periods of the receipts and expenditure included in the accounts varied in each case, but several adjustments for receipts and expenditure have been accounted for in a financial year other than that to which they pertained. Some of the items are, however, explained below:—

1. The increase under the head "Miscellaneous Charges" in 1927-28 is mainly due to:—

	Rs.	A.	P.
Charges in connection with Mr. Stevenson's visit	2,465	8	0
Towage, etc., of Shatal-Arab Light Vessel and unattended lightships	5,392	8	0
	7,858	0	0

2. The decrease in the "cost of the services rendered by the Light House Tender" is due to the replacement of the "Lawrence" by the "Nearchus". Up to January 1927 three quarters of the total charges of the Royal Indian Marine Ship "Lawrence" used to be charged to the Fund, but Rs. 750 per day only is paid to the "Nearchus" when it is actually working for the Fund.

3. The fluctuations under the heads Stores and Repairs are being further investigated. The year 1926-27 apparently had a heavy repair programme but owing to the defects in stores and other accounting it is not known whether the figures can be accepted as reliable.

268. Balance Sheet.—The assets as on the date of the opening of the Fund were valued by Mr. Stevenson at Rs. 7,12,267 and this has been taken to be the Capital invested. In accordance with Government orders no interest has been charged on the Government Capital.



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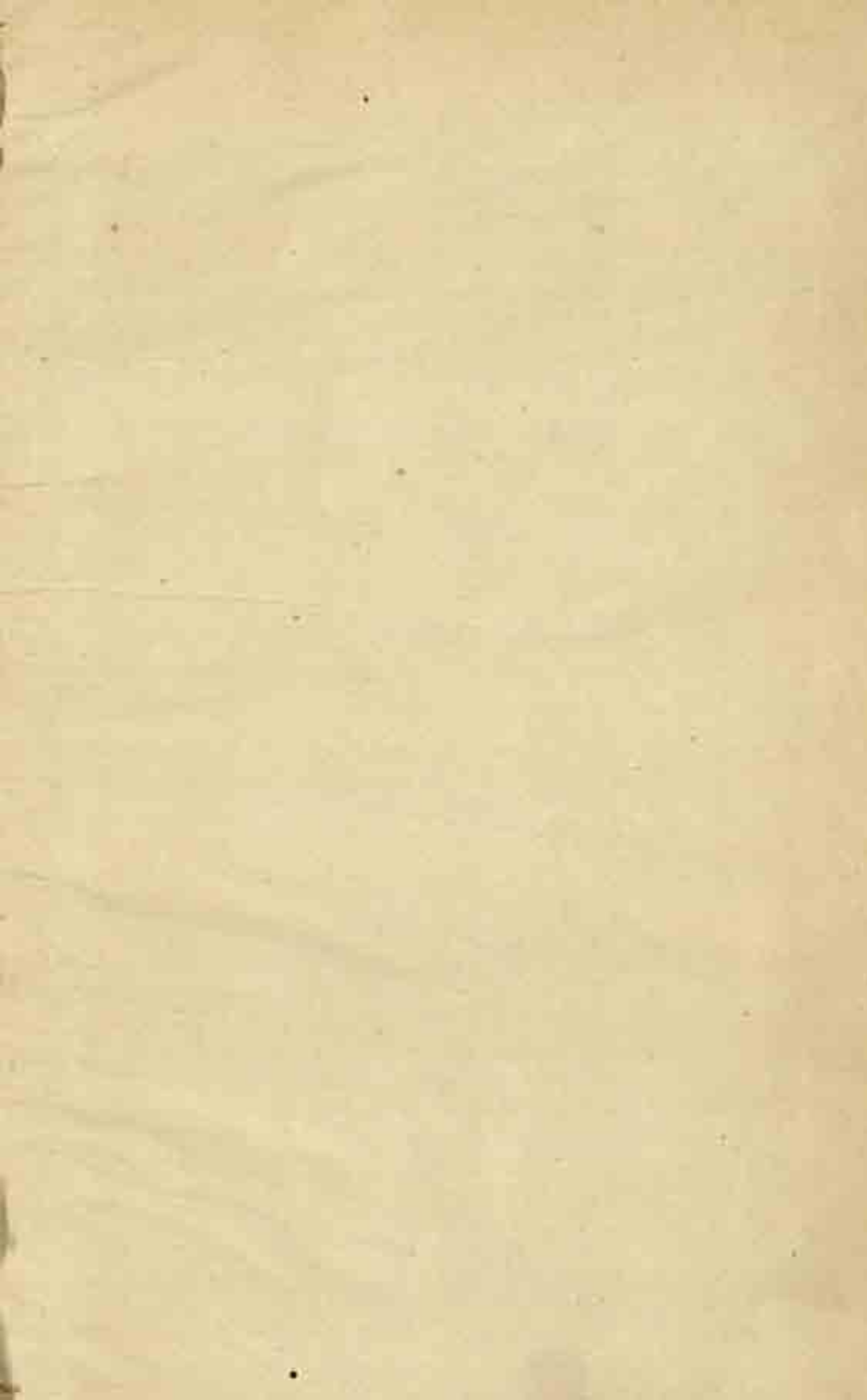
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