REPORT OF THE COMMITTEE ON CURRENCY MANAGEMENT

RESERVE BANK OF INDIA
BOMBAY

REPORT OF THE COMMITTEE ON CURRENCY MANAGEMENT

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CHAPTER-1
INTRODUCTION

1.1 Note issue and the management of currency are the core central banking functions of the Reserve Bank of India (RBI). The RBI derives its monopoly right of note issue under Section 22 of the Reserve Bank of India Act, 1934. The RBI has to ensure that adequate quantities of coins and reasonably clean notes are made available to the people through as wide a network as possible. These functions are performed through its Issue Department. Because of the very nature of this responsibility and the interaction with the public, the image of the RBI largely depends on its performance of this core function.

1.2 In India where people have a marked preference for cash, the currency component of the total money supply continues to be high. This explains why India is one of the countries in the world having the highest number of notes in circulation. The fast growing volume of currency poses serious problems in regard to the servicing of notes. Not only the production and supply of fresh notes to the public but equally, if not more, the withdrawal of unserviceable notes from circulation assumes formidable proportions at high levels of currency circulation.

1.3 Although there has been a substantial increase, over the years, in the number of agencies involved, the number of persons employed and the infrastructural facilities provided by the RBI to cope with the continuous growth in note circulation, the systems, procedures and practices of the Issue Department have, by and large, continued to remain the same in the half century since the establishment of the RBI in 1935. The systems and procedures which were adequate to deal with the circulation of a little over 100 million pieces in 1935 are unable to bear the pressure of the present volume of notes in circulation which was of the order of 18,500 million pieces in March, 1989. The sheer volume has had an adverse impact on the available infrastructural facilities and on the employees in various categories, constituting about 40% of the the RBI's total number of employees, involved in discharging the function of currency management. Equally severe has been its effect on matters of co-ordination with the Railways, the State police departments and other agencies providing transport and security services for the movement of currency. Having regard to the rates of growth of currency in the last two decades and in particular, since 1975, it seems all too probable that the RBI's ability to discharge this primary central banking function will be increasingly in jeopardy.

1.4 Against this background, the Governor of the RBI desired that a high power Committee be constituted to go into the entire gamut of issues in the area of currency management. Accordingly, a Committee was appointed in December, 1988 under the Chairmanship of Shri P.R. Nayak, Deputy Governor, as in the order at Annexure-1 (page 62 and 63).

1.5 The terms of reference of the Committee are as follows :

(a) to examine the existing systems, procedures and technologies for the management of currency and suggest improvements to meet present and future requirements including modernising physical facilities for speeding up operations and strengthening security arrangements relating to the issue function of the Reserve Bank,

(b) to examine the environment, work practices and staff morale in the Issue Offices and to make recommendations for improving motivation, output and job satisfaction of personnel handling currency,

(c) to examine the relationship of Issue Offices with (i) the currency note presses and mints (ii) commercial banks with particular reference to currency chests and (iii) police departments of State Governments and suggest how these can be made more effective to enable the Reserve Bank to discharge its currency management functions effectively.

1.6 The Committee had its first meeting on 18th February 1989 and met nine times thereafter. During its deliberations, the Committee perused a summary of the reports of earlier Committees and Study Groups and the Award of the National Industrial Tribunal which had a bearing on currency management and invited a group of experienced Managers and Currency Officers of the RBI to ascertain their views on the systems in need of rationalisation and the areas requiring immediate attention. The Committee visited the Bank Note Press, Dewas, the Issue Department and a currency chest at Bangalore to familiarise itself with the operations, systems and procedures from the stage of printing of new notes at the Presses to the destruction of unserviceable notes in the RBI. Two members also visited a few foreign central banks for an on-the-spot study of the cash handling operations and to identify mechanical aids suitable for handling currency in India. The Member-Secretary held consultations with the officials of the Ministry of

Finance, the General Managers of the note presses and mints and the officials of the Railways in regard to the ways and means of removing bottlenecks in the distribution of fresh notes, the withdrawal of soiled notes and the provision of better customer service. Shri R. Srinivasan, who is also the Chairman of the Indian Banks' Association, continuously interacted with the Chairmen of the public sector banks on issues being considered by the Committee and in particular, on matters connected with the operations of the currency chests. The Committee conducted informal surveys, through its secretariat, amongst the staff of a few Issue Offices on matters concerning motivation and improvement in the work environment in the Cash Department.

The Committee set about its task in the background of the existing procedures. In some areas it has suggested new approaches. The recommendations of the Committee appearing in this report are intended as guidelines to enable the RBI to formulate detailed administrative instructions or to evolve procedures to be incorporated in its Issue Department Manual.

The Committee was assisted by a Secretariat comprising the following officers and the staff of the Department of Currency Management :

Shri M. Sundaresan, Joint Chief Officer
Shri A. Qavi, Deputy Chief Officer
Shri P. Viswanathan, Assistant Accounts Officer
Smt. U. Dalal, Central Office Assistant
Smt. V. K. Vengsarkar, Clerk
Shri M. I. Koshy, Stenographer

Their assistance greatly facilitated the deliberations of the Committee and it wishes to express its appreciation of the help rendered by them.

CHAPTER-2
Dimensions of Currency Management

2.1 The secular increase in currency is explained by a number of factors. The demand for currency arises from the increase in real income, the persistent inflation and the commercialisation of the non-monetised sector. Currency expanded relentlessly in India over the last few decades. It grew from Rs. 172 crores in 1935 to over Rs. 38,600 crores in March 1989 and notes in circulation increased from 124 million pieces to over 18,500 million. Though the trend over the long period is for currency to decline as a proportion of the money supply, in more recent years this trend has been arrested. The increase in the value of currency notes since 1970 and the growth of volume are illustrated in Fig. 1 (page 5). A sharp break in the rates of growth is observed from 1975. In the decade of the 1980's, the value has grown by about 90% every five years and the volume, by more than 50%, indicating that the higher denomination notes were growing faster than the others.

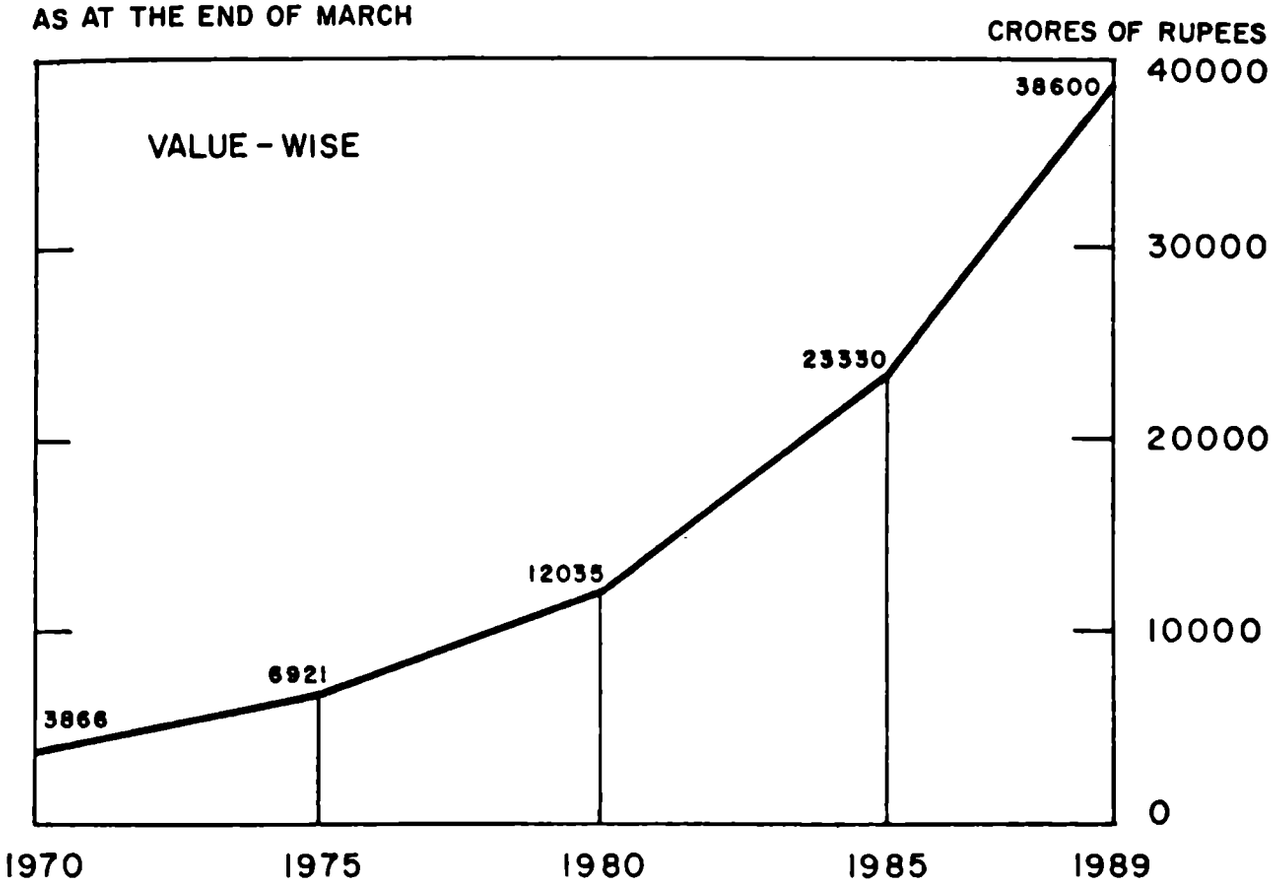
2.2 The very high rate of growth in currency requirement and the consequent stepping up of the production of fresh notes, though short of the needs, has increased the volume of notes passing through the Issue Offices to the currency chests. It has also led to a rising flood of notes offered for withdrawal from circulation, as being unfit for further use. Fig. 2 (page 6) shows a total average traffic of over 12,800 million pieces during the three years 1986-1989.

2.3 A noticeable feature of note circulation has been the slow growth in the supply of fresh notes. The actual supplies of fresh notes made by the two Government Note Presses at Nasik and Dewas are shown in Annexure-2 (Page 64). As will be seen therefrom, while notes in circulation more than doubled between 1980 and 1989, fresh notes supplied rose only by 20%. It has, therefore, become necessary to salvage even poor quality notes from the soiled notes returning to the currency chests and the RBI and reissue them to the public, though Section 27 of the Reserve Bank of India Act places a duty on the RBI to ensure that only reasonably clean notes are maintained in circulation. Annexure 2 also shows a significant reissue of salvaged notes, being about one-sixth of the issue of fresh notes during the period 1980-89. This situation will ease when the two new note presses proposed to be set up are commissioned in the mid-nineties. The RBI's image, however, has suffered because of the excessively soiled notes presently in circulation which also give rise to a large number of mutilated notes returning to the currency chests and the RBI for being exchanged under the RBI (Note Refund) Rules.

FIG. : 1

GROWTH OF NOTES IN CIRCULATION (1970 - 1989)

AS AT THE END OF MARCH



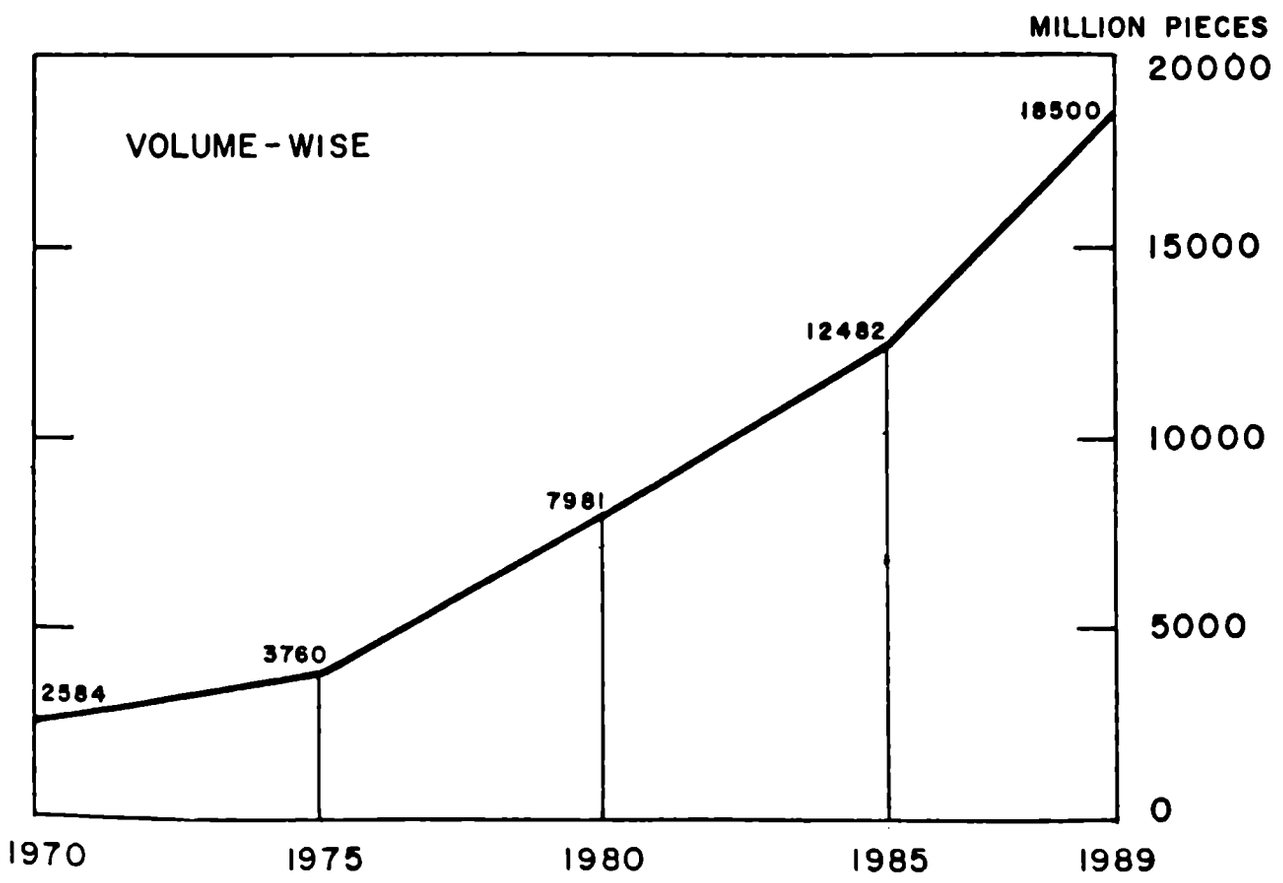
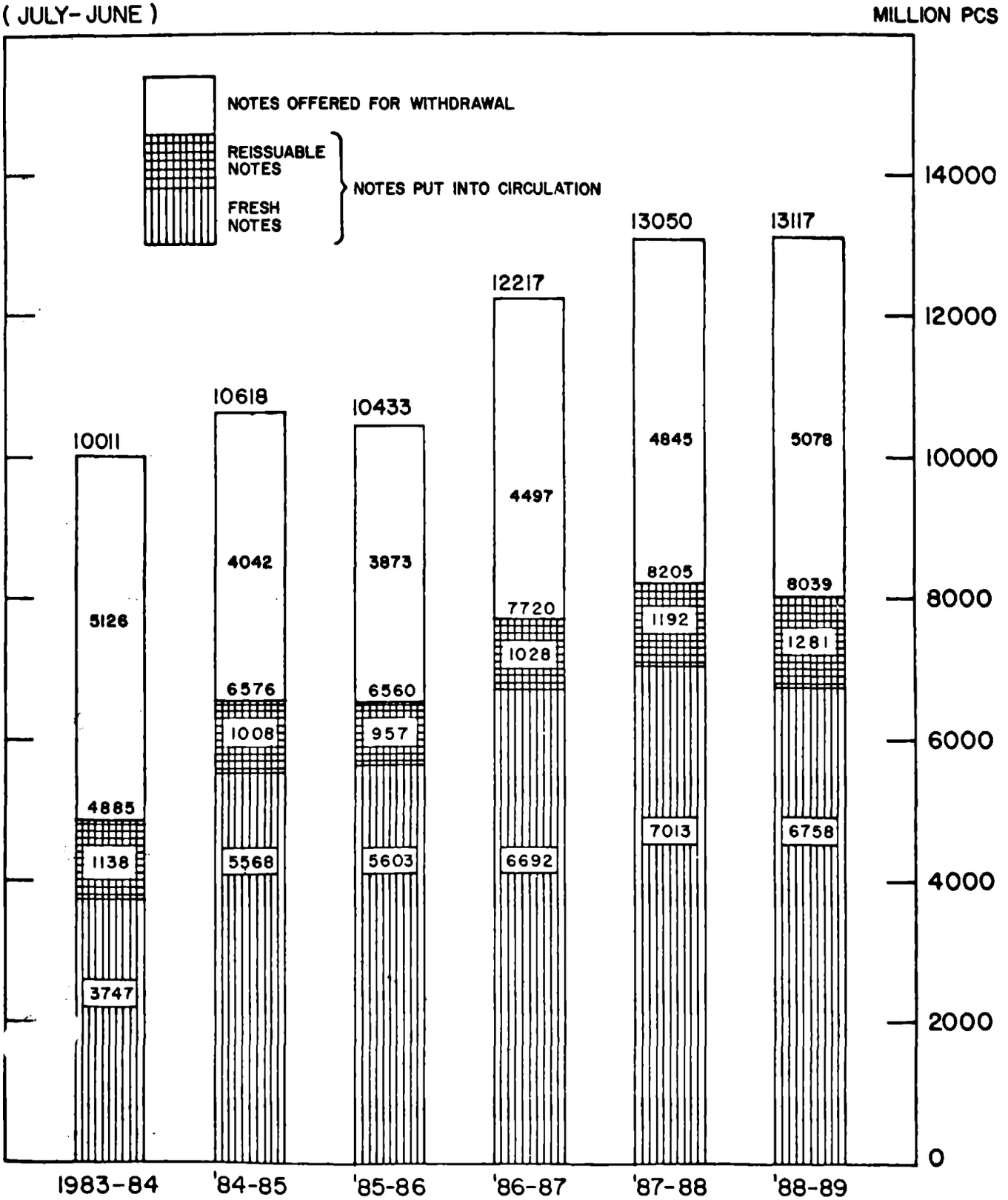


FIG.: 2

NOTES PUT INTO CIRCULATION AND NOTES OFFERED FOR WITHDRAWAL

(JULY- JUNE)



NOTES PUT INTO CIRCULATION (FRESH & REISSUABLES REMITTED TO CURRENCY CHESTS + LOCAL ISSUES)

NOTES OFFERED FOR WITHDRAWAL (RECEIPT OF CHEST NOTES + LOCAL TENDERS + GUARANTEE)

2.4 Another difficulty arises from the fact that sorting of notes returning from circulation into notes fit for reissue to the public (re-issuables) and notes unfit for further circulation (non-issuables) is done manually by the employees of the public sector banks and the RBI. Visual judgement in manual sorting being subjective and the public sector banks being not too enthusiastic about the sorting of notes which they assume to be the function of the RBI, no serious attempt is made by the public sector banks to sort the notes properly. Consequently, a large percentage of re-issuable notes are remitted to the RBI by the currency chests along with soiled notes resulting in unproductive expenditure on the remittance of sorted notes back to the chests.

2.5 A facet of operations which places considerable strain on the RBI's manpower, vault capacity and other infrastructure is the acceptance of cash tenders, known as 'local' tenders, from the public sector banks having no currency chests, private banks, Government Departments, the Railways and other Government undertakings. These local tenders contain a large percentage of reissuables and the notes have not only to be counted but also sorted into reissuables and non-issuables. This procedure results in a substantial drain on the RBI's manpower and an avoidable expenditure on remittances.

2.6 The soiled notes returning from circulation as the total of those received at the RBI and those awaiting removal from the chests have been rising steadily in the last five years from about 6300 million in 1984-85 to about 7000 million in 1988-89. However, the notes examined at the RBI for destruction amounted to only about two-thirds of the above numbers and about 30% of the notes examined were under a procedure of summary disposal not involving the examination of each and every note in the lower denominations of Re. 1, Rs. 2 and Rs. 5. The accumulations of unexamined notes would have been much higher but for such summary disposal. They would have been even higher, if the RBI had not been constrained to leave in circulation notes of poor quality on account of the inability of the note presses to meet the full demand for fresh notes.

2.7 An important aspect of the present system is the unproductive and repetitive nature of processing the soiled note pieces and packets. Notwithstanding such repetitive processes and the numerous checks and counter-checks prescribed, the system cannot be said to be fool-proof, as human error and wanton negligence which is often the cause of fraudulent acts cannot be eliminated. On the contrary, it

has been observed that the system gives ample scope for the non-performance of some of the necessary functions, such as, the counting of notes in the Note Examination Sections and the audit of note packets in the Verification Sections. These shortcomings will accentuate the difficulties in the system, as the currency expands in the next few years. They should not only be not allowed to multiply as the volume of soiled notes grows but should rather be minimised, if not eliminated altogether.

2.8 There are other factors, not always within the control of the RBI, which compound its problems and render the task of currency management even more complex. The delays in the supply of railway wagons for the remittance of notes and coins, the reluctance of the police guards escorting remittances to cross State borders, the security hazards on account of the deterioration in the law and order situation in the various parts of the country and the inability of the public sector banks to expand their storage capacities and to freely accept soiled notes from other banks' branches resulting in the cross-movement of soiled notes over long distances to their own chests are the major causes adding to the problems of currency management. Further, the exacting anti-pollution regulations of some State Governments have severely constrained the RBI's note-destruction capacity.

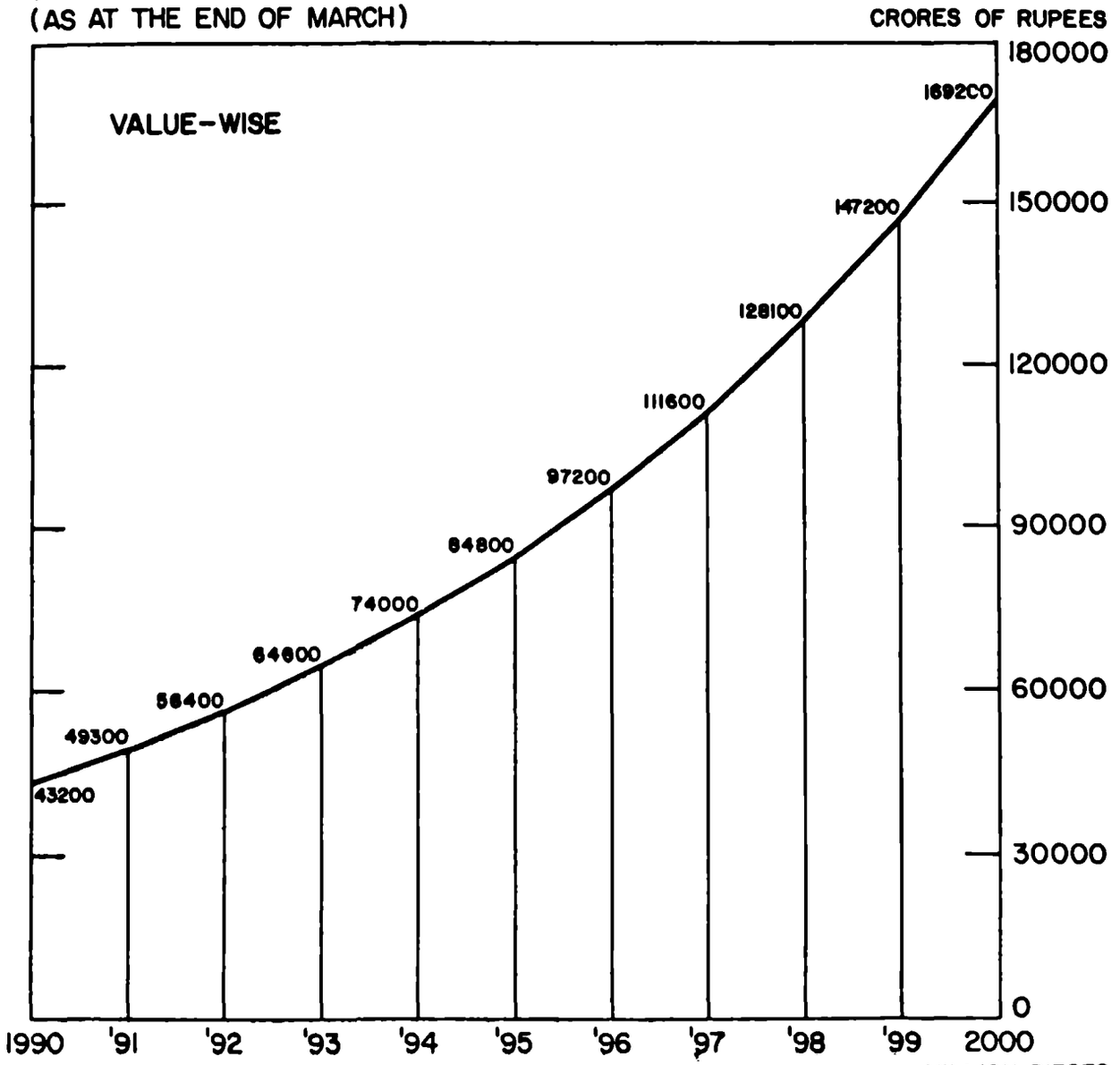
2.9 These factors and bottlenecks have cumulatively rendered a seemingly simple function of currency management so complex that it now faces the threat of break-down. The future seems to hold the prospect of even greater strain on the system. Going by the rate of growth in currency over the last ten years, the volume of notes in circulation by 2000 AD is expected to expand to about 61,000 million pieces with a value of about Rs. 169,000 crores as can be seen from Fig. 3 (page 9) which projects the growth in currency value and note circulation from 1990 to 2000 AD. These figures represent a vast increase in workload requiring the present capacities for transportation, storage, processing and other infrastructure to be nearly quadrupled in the short span of 10 years.

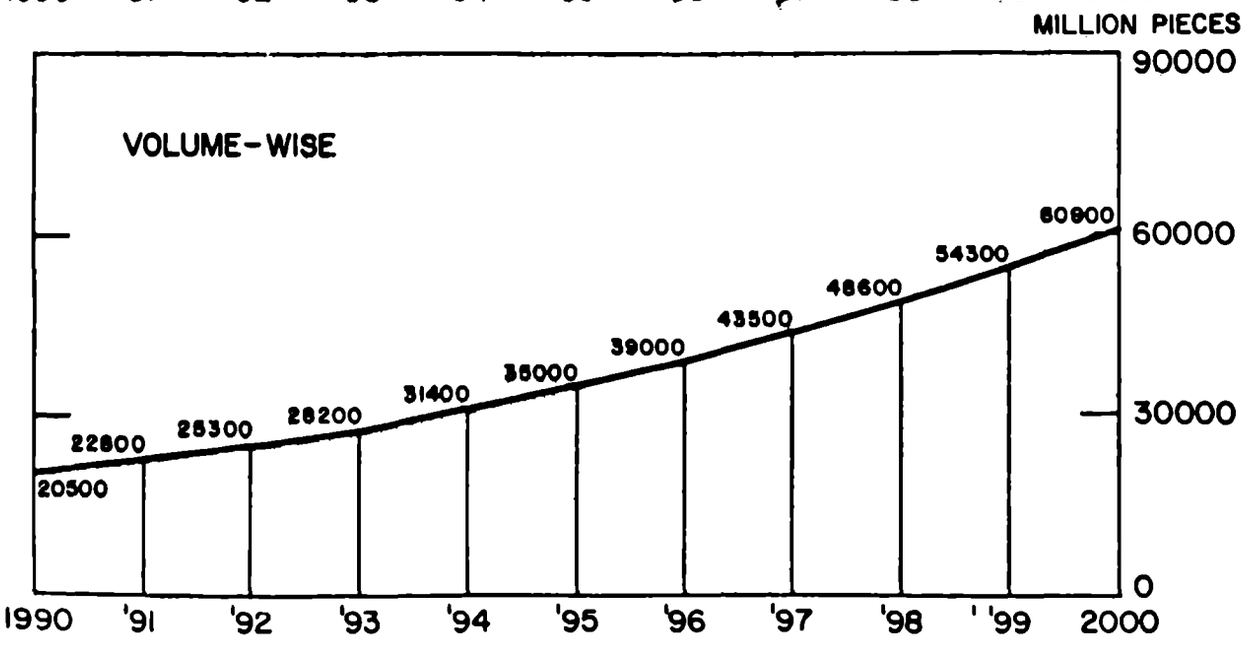
2.10 The manpower and infrastructure available at present at the 15 Issue Offices and 2 Sub-Offices of the RBI, such as, vault space, note examination halls, verification halls, stitching/punching machines and incinerators are barely adequate to handle the tasks of dealing with the present volume of notes in circulation. The RBI has, no doubt, resorted to unconventional procedures to clear the arrears in certain crucial areas, such as, the examination of soiled notes for putting them out of circulation. But such expedients will cease to have any meaningful impact on currency

FIG. : 3

PROJECTED GROWTH OF NOTES IN CIRCULATION (1990-2000 AD)

(AS AT THE END OF MARCH)





INCLUSIVE OF Re 1, Re.2, AND Re.5 NOTES.

management in the next decade. Moreover, the matter cannot be treated merely as an exercise in multiplying the manpower and infrastructure to provide for the higher volume.

2.11 There is one factor contributing to overall decline in efficiency which the RBI has, over the years, allowed to remain largely unattended. Since 1972, highly qualified persons are recruited by the RBI at the base level of clerk/coin-note examiner Gr.II. They are usually posted initially to the Cash Department to work along with matriculates recruited before 1972 and those promoted from the Class IV employees. In the larger offices of the RBI such qualified fresh recruits are required to work in the Cash Department for 6 to 10 years before they get a chance to work in other Departments. The nature of the work in the Cash Department being routine and monotonous and the work environment being uninspiring, the new recruits derive no job satisfaction and develop a sense of frustration. They have little attachment to the department which inducted them into the RBI. The absence of high morale has militated against efforts to improve the efficiency of the department.

2.12 The Committee is of the view that an appropriate strategy has to be adopted by the RBI to deal with the situation thus described. The strategy should seek, first and foremost, to contain the number of notes in circulation during the next decade at a level not very much higher than at present and which is commensurate with the capacity of note presses and an acceptable quality of notes; secondly, to rationalise the distribution and collection of currency with a view to minimising avoidable cross-movements of currency notes across the country and to reduce the return flow to the RBI of notes which are still good enough to circulate; thirdly, to streamline the handling and processing of fresh and soiled notes by eliminating unproductive and repetitive procedures and fourthly, to provide a work atmosphere for the employee which seeks to motivate them in doing their work. Each component of this strategy is described in greater detail in the succeeding chapters.

CHAPTER-3

Containment of Currency Volume - Coinisation

3.1 The task of currency management in the next century will be of such great magnitude that it has to be tackled on several fronts. In the next few years, however, effort is required to be focussed on those elements of it which have the potential for controlling currency growth in the long term. In that direction a priority area for examination is whether the quantity of notes, expected to multiply a little over three times by the year 2000 A.D., can be contained within limits which are not too far above the current levels of circulation. An obvious first question that needs to be addressed concerns the validity of retaining in circulation certain denominations of notes which have become due for coinisation.

3.2 One of the measures adopted by some countries like the U.K. to reduce the burden on their Central Banks in handling notes was to coinise their notes in the lower denominations. The rationale of such a measure is that, with inflation, the lower donomination notes have a greater velocity of circulation and come back to the Central Bank as soiled notes much faster than the higher denomination notes. Although the initial cost of minting coins is higher than that of printing notes, coins are cheaper in the long run because they last for more than 20 years. In India, with the marked preference of the people for cash, its low level of literacy, climatic variations and the poor handling habits of the masses in rural areas, the average life of a one rupee note is not more that 6 to 7 months. While the Rs. 2 note may, at the most, last for a year, the Rs. 5 note may not be in reasonably good condition after 2 years.

3.3 In the context of the projected huge volume of notes in circulation by the turn of the century, serious thought needs to be given to the coinisation of the lower three denominations of notes. The respective shares of all the denominations of notes in March, 1988, were as in the Table below :

Table of Denomination-wise distribution of currency notes (31-3-1988)

Denomination	Volume		Value	
	In millions of pieces	Percentage to total	In crores of Rupees	Percentage to total
Re. 1/-	3,525	21.10	352	1.06
Rs. 2/-	3,217	19.25	643	1.93
Rs. 5/-	2,844	17.02	1,422	4.27
Rs. 10/-	2,709	16.21	2,709	8.14
Rs. 20/-	1,150	6.88	2,299	6.91
Rs. 50/-	1,379	8.25	6,893	20.71
Rs. 100/-	1,883	11.27	18,834	56.58
Rs. 500/-	3	.02	132	0.40
Total	16,710	100.00	33,284	100.00

Notes in the denominations of Re. 1, Rs. 2 and Rs. 5 constituted about 57% of the total number of notes in circulation, their individual shares being around 21%, 19% and 17% respectively. However, valuewise, these denominations taken together accounted for only about 7% of the value of all the notes in circulation. Meeting the replacement requirement of such a large percentage of the notes in circulation at short intervals of six months to 2 years and their servicing have greatly added to the operational workload and costs at the note printing presses, the RBI and the currency chests managed by the public sector banks. The number of notes in circulation by the end of March, 1989, was 18,500 million pieces and it is expected to be 61,000 million pieces by 2000 A.D., the lower denomination notes accounting for about 32,000 million pieces. It is easy to appreciate that though the percentage of the lowest three denominations will decline to 53%, their number will be far higher than that of all of today's notes put together. Therefore, the single most effective reform in the management of currency in the 1990's will be the withdrawal of the three lower denominations and their coinisation leading to substantial savings in handling and servicing, apart from the cost of paper and printing.

3.4 The Long-term Coinage Policy Committee appointed by the Government of India in 1985 had gone into this matter and had recommended the coinisation of Re. 1, Rs. 2 and Rs. 5 notes and the Government of India had accepted the recommendation in principle. The decision to coinise these denominations will have to be implemented without delay to avoid the imminent break-down of the systems and procedures in the banking sector in general and the RBI in particular. The Committee recommends that the Re. 1, Rs. 2 and Rs. 5 notes may be fully coinised by 1995. The need to coinise the Rs. 10/- notes may also have to be considered in due course after gaining adequate experience of coinising the lowest three denominations.

3.5 While implementing the policy of coinisation, the following aspects will have to be kept in view :

(a) It has been the experience of the RBI that when notes and coins of the same denomination were put into circulation, there was very little demand for coins. The demand for notes in preference to coins has been so high that while, on the one hand, there have been malpractices in the issue of notes, adversely affecting the image of the RBI, the banking sector, on the other, has failed to provide adequate vault space to store the coins. The notes will,

therefore, have to be completely phased out by 1995 to create an atmosphere for the acceptance of the coins. Additional storage space, if necessary, will need to be planned even from now.

(b) There has been valid criticism that the differences between the sizes of coins were not discernible and much inconvenience was caused to the public. It will be necessary to ensure that the sizes, shapes and composition of the coins are so fixed that the members of the public can differentiate between two close denominations easily.

(c) Coins should be small and light to make them easily acceptable. They could be made of stainless steel and circular in shape with a differential of at least 3 mm. in diameter between one denomination and the other. The Re. 1, Rs. 2 and Rs. 5 coins could be approximately of the same size and shape as the present 25p., 50p. and Re. 1 coins, respectively.

(d) The composition and shape of coins of denominations of 50p. and less should be different from those of the Re. 1, Rs. 2 and Rs. 5 coins.

3.6 The projected requirements of notes in the denominations of Re. 1/-, Rs. 2/- and Rs. 5/- up to the year 2000 A.D. and the quantities of coins in these denominations that would be required consequent upon coinisation are shown in Annexure-3 (page 65). It may be seen that the RBI will need coins of Re. 1/-, Rs. 2/- and Rs. 5/- of the order of 13,600 million pieces by 2000 A.D. The Committee understands that when the 5 paise coin is discontinued in due course and the Long-term Coinage Policy Committee's recommendations regarding the rationalisation of the composition, shapes and sizes of coins are implemented, it would be within the capacities of the four existing mints to produce the coins of Re. 1, Rs. 2 and Rs. 5.

3.7 As observed earlier, the reduction in the volume of notes is the single most important contributor to the easing of the RBI's difficulties in currency management. When the notes of Re. 1, Rs. 2 and Rs. 5 cease to be in circulation after the process of coinisation is completed and the notes are fully withdrawn, the total quantity of notes in cirulation is expected to come down sharply to about 15,600 million pieces in 1995 from about 35,000 million pieces which is the quantity that would be in circulation, if these notes were not to be coinised (Fig. 3 - page 9). The numbers for the year 2000 A.D. have been projected at about 28,700

million and about 61,000 million respectively. Coinisation will, therefore, result in a more than 50% reduction in note traffic. However, it is likely that the coinisation of Re. 1, Rs. 2 and Rs. 5 will increase the demand for the Rs. 10 note but it is not possible to estimate the impact. After the process of coinisation is completed, the notes in circulation will revert in 1996 to about 17,500 million pieces which is less than the March, 1989 circulation of 18,500 million pieces, having, in the intervening years, risen substantially. After 1996, however, they will rise again by about 64% before the turn of the century.

3.8 An important benefit flowing from this development will be the improvement in the quality of notes. The quality of notes in circulation is a function of the fresh notes put into circulation in a year as a proportion of the total number of notes in circulation. This proportion came down from 65.6% in March 1981 to 40.9% in March, 1988, assuming that all the fresh notes supplied by the presses were put into circulation in the same year, but much of the deterioration was in Re. 1, Rs. 2 and Rs. 5 notes where the proportion was only 35.7%. The proportion of fresh notes of Rs. 10 and above to the total circulation was 47.9% but even here the Rs. 100 note rated the lowest at 31%. In the day-to-day experience of the user the low ratios are reflected in the poor quality of such notes as have a low content of fresh notes in total circulation.

3.9 The Committee has examined the levels at which the quantum of fresh notes to be put into circulation should be maintained till the year 2000 A.D. in the context of the felt need for upgrading the quality of the notes. It is of the view that a ratio of at least 50% of fresh notes to the total notes should be maintained to ensure the good quality of notes. This objective can be achieved by putting into circulation every year that number of fresh notes which together with the immediate past year's fresh notes equal the notes in circulation. The Committee realises that older notes may not all be offered for withdrawal and this will result in a reduction of both the fresh notes put into circulation and the soiled notes withdrawn. The merit of planning for a ratio of 50%, however, will be that sorting of unserviceable notes will be less subjective and will also lend itself to mechanisation more efficiently than if there were to be a high proportion of notes of poor quality.

3.10 The Annexure 4 (page 66) indicates the quantities of fresh notes to be put into circulation during the years 1990 to 2000 A.D. under two alternatives - first, of making up the total circulation with 2 years' cumulative fresh notes and the second, with 3 years' cumulative fresh notes. It would be observed that the fresh notes in

circulation would be around 50% of the total number of notes from 1994 under the 2-year alternative and a little under 40% throughout the 10-year period under the 3-year alternative. It also projects the resultant quantities of notes to be withdrawn from circulation for examination and destruction. It is clear that the fresh notes required will be well within the capacities of the note presses from the year 1995 under the first alternative and in all the years under the second alternative. However, there will be an increase in the notes withdrawn for destruction as compared to the present capacity for examination which is about 3500 million pieces per year based on the present sanctioned strength of coin/note examiners and the present quotas for examination and verification. The capacity for examination will, therefore, need to be increased from the year 1994 and 1996, respectively, under the two alternatives and should rise substantially by 2000 A.D.

3.11 The Committee recommends that fresh notes may be put into circulation so that the total circulation in any year may consist of not more than the fresh notes of that year and the immediate past year and capacities may be built up for the examination and destruction of the accelerated generation of soiled notes.

3.12 **Note printing capacity released by coinisation**

The capacity of the currency note press which prints Re. 1, Rs. 2 and Rs. 5 notes presently will be available for printing notes of the denominations of Rs. 10 and above once the process of coinisation commences. The possibility also exists of reducing the sizes of notes, though the Committee does not favour continuing the sizes of the present Re. 1 and Rs. 2. To quicken the pace of change, the RBI, the Security Paper Mill, and the note presses should initiate steps towards changing the sizes and design of notes, and manufacturing the bank note paper with altered positions of the watermark and the security thread.

3.13 **Small coins of 50p. and lower denominations**

The minting of 1p., 2p. and 3p. coins has already been discontinued by the Government. In the case of the 5p. coin, however, there is still a demand for it in the rural areas, as also, in the urban cities to take care of the fare structure of the public transport undertakings. As recommended by the Long-term Coinage Policy Committee, the minting of this denomination will, therefore, continue till such time as the Governments and the public bodies decide to levy their taxes or adjust the fare structures by rounding them off to the nearest 10p. A view has been expressed

that there is little demand for the 20p. coin. If this view is confirmed, the minting of the 20p. coin may also be discontinued. The other denominations of small coins viz. 10p., 25p. and 50p. will be in demand in the foreseeable future and their minting will have to continue for some years to come.

3.14 In view of the proposal to coinise Re. 1, Rs. 2 and Rs. 5 denominations and increase in the volume of coins that will, consequently, have to be handled by the RBI and its agencies in future, the Committee has examined the present procedures and practices of handling coins in the mints, the RBI and the agencies with a view to streamlining the operations and recommends that the RBI may adopt the procedures described below for the handling and distribution of coins.

3.15 Handling and distribution of coins

3.15.1 Allocation of command area to mints

Each of the existing four mints at Alipore (Calcutta), Bombay, Hyderabad and NOIDA may produce all the denominations of coins to meet the demand of its command area. The allocation of the command area for each mint would save expenses on transport and security and make for quicker despatch of coins to all parts of the country.

3.15.2 Packing

(a) **Potla bags :** The coins may be packed by the mint in small "potla" bags made of high density transparent polythene. Each such potla may contain say 50 or 100 pieces of coins of any one denomination as may be found convenient to handle. The potla may be sealed with the distinctive seal of the concerned mint. A distinctive colour may be used for each of the denominations to facilitate easy identification of the denomination contained in the potla. The denomination and the net weight may be printed on the polythene bag.

(b) **Gunny bags :** The potlas may then be packed in jute gunny bags with a uniform coin count per gunny bag for each denomination ranging from 2000 to 5000 pieces per bag ensuring a standard weight for each denomination of

coins and adhering to a maximum weight limit of say 20 kgs. per jute gunny bag. The bag may be sealed and the denomination and weight of coins may be printed on the gunny bag to facilitate quick identification and verification at the time of handing and taking over.

(c) **Coin boxes :** The sealed gunny bags may be packed in coin boxes for despatch to RBI offices or a Currency Transit Centre (CTC) which is described in the next chapter. The wooden boxes presently used may be replaced by low weight aluminium boxes with steel reinforcement and security locking arrangements, as recommended by the Long-term Coinage Policy Committee, or in strong and durable boxes of any other material and design finalised in consultation with the mints. The dimension of the box may be standardised to pack 3 or 4 coin bags of any denomination.

(d) **Mechanised packing :** The packing of the coins in potlas and, if possible, of potlas into gunny bags may be done mechanically in continuation of the process of the minting of coins. The requirement of the RBI's representative being present at the mint while the bags are sealed by the mint may be dispensed with.

3.15.3 Despatch

The coins boxes duly sealed and locked may be despatched by the mints direct to the Issue Offices, CTCs, selected chests or small coin depots as per the requirements of the RBI. The remittances of Re. 1/-, Rs. 2/- and Rs. 5/- coins may be despatched by railway container service, wherever possible, accompanied by the police escort and a local representative of the RBI. Stainless steel and aluminium-magnesium coins of 50p. and less may be despatched under railway risk as at present.

3.15.4 Taking delivery

The RBI's Issue Offices, CTCs, selected chests or small coin depots should arrange to receive the remittance from the escort party after examining the external condition and the seal on the boxes and the railway receipt, as the case may be. The remittance may be taken over by the joint custodians of the coin vault or other

authorised persons at the chest or small coin depot and kept in their joint custody. The escort party may be relieved after the boxes are taken over on such examination. The boxes may be opened in the presence of the representative of the RBI and their contents checked by counting only the sealed gunny bags before he is relieved and the boxes locked again by the joint custodians or other authorised persons at the chest or small coin depot.

3.15.5 Despatch to Currency Chests/Small Coin Depots by RBI/CTC

The remittances may be despatched, as per the programme drawn up, in combined remittances to the currency chests or small coin depots duly accompanied by a representative of the RBI and the police escort party. The coin boxes may be opened in the presence of the representative of the RBI who accompanied the remittance. The chest may verify the number of gunny bags and denominations contained in the box and then lock and reseal the box. At the currency chests or small coins depots the police escort may be relieved after an examination of the external condition of the boxes. Before the RBI/CTC representative is relieved, the remittance may be received by counting only the sealed gunny bags in each coin box. Before issue to the public at the counters, each gunny bag may be weighed to tally its weight with the number printed on it.

3.15.6 Return of discrepant bags/potla bags

Gunny bags which do not agree with the recorded weight may be sent by RBI Office/currency chests/CTC or small coin depots back to the concerned mint in the same mint-sealed condition under intimation to the concerned Issue Office of the RBI.

3.15.7 Issue to the public

As far as possible, coins may be issued in the form of potlas as per the requirement of large customers, such as, transport undertakings, milk schemes and hotels. For issuing smaller number to individuals, coin dispensing machines may be provided at all the Issue Offices of the RBI and large branches of the public sector banks and public places like the railway stations to facilitate the easy availability of coins required by the public for their daily use.

CHAPTER-4

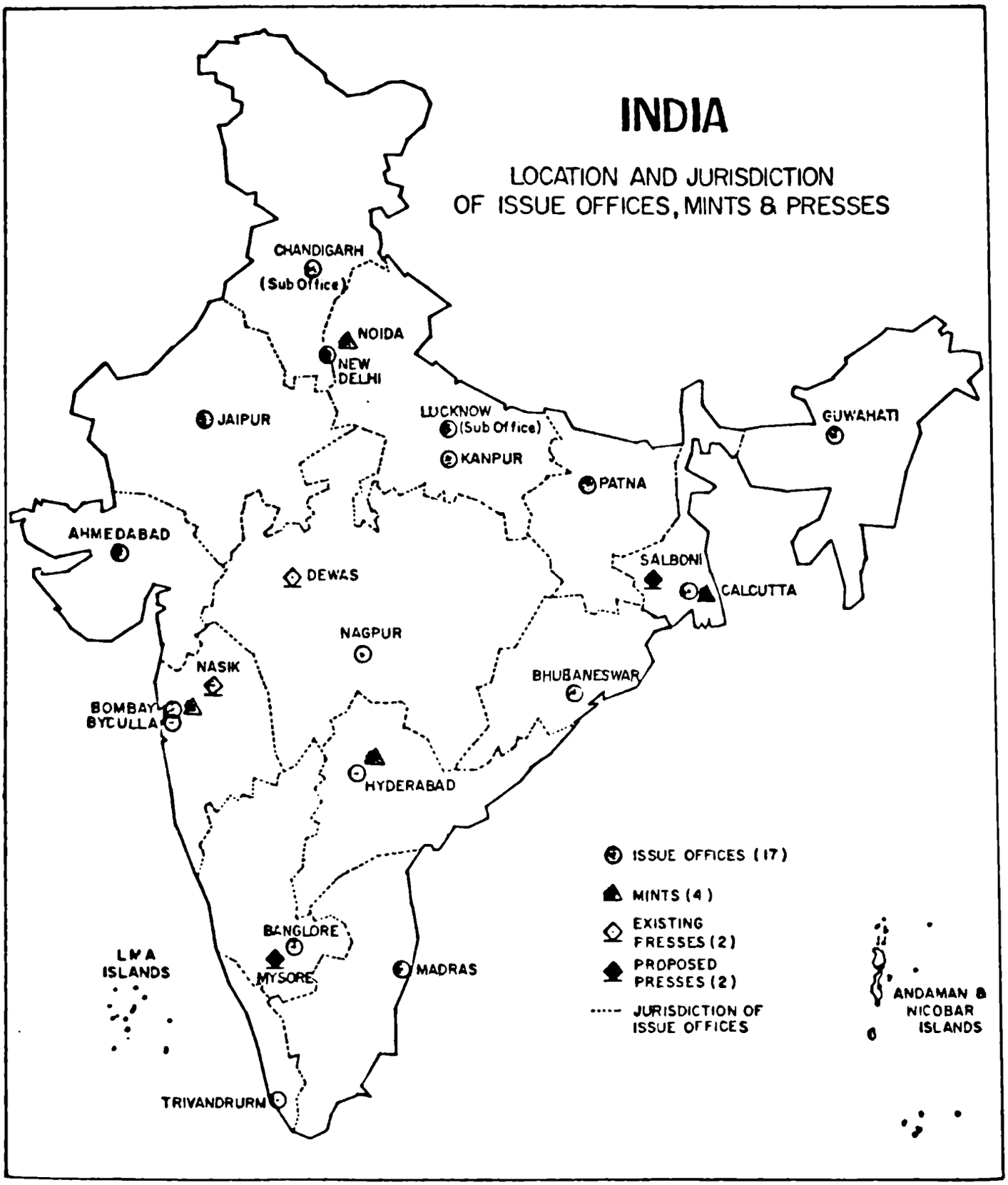
Rationalisation of Currency Movements - Infrastructure

4.1 The pattern of movement of currency notes within the country has evolved, over time, in response to the emerging needs of the different centres of economic activity. The location of the RBI offices, of the note presses at a later date and gradually of the currency chests of various banks were, understandably, not all planned with a view to bringing about a rational currency note distribution and collection net-work. In the light of the increasing diversification of the economy of several new regions in the recent decades and the expected huge increase in currency circulation, the question needs to be examined whether and in what manner the net-work needs to be streamlined with respect to the modes and routes of bulk movement of the currency notes.

4.2 There are at present 15 offices and two sub-offices of the Issue Department with jurisdictions as shown in the sketch at Fig. 4 (page 20). In accordance with the policy of the RBI to open at least one RBI office in every state, one more Issue Office is likely to be established in Bhopal (MP) in the near future. The seven States in the North East have, at present, a common Issue Office at Guwahati and, if the volume of work justifies it, one or more Issue Offices may have to be opened in this region after a few years.

4.3 The RBI obtains its supplies of fresh notes from the Currency Note Press, Nasik (Maharashtra) and the Bank Note Press, Dewas (Madhya Pradesh). Notes of Re.1, Rs. 2, Rs. 5 and Rs. 10 denominations are printed at Nasik and Rs. 20, Rs. 50, Rs. 100 and Rs. 500 denominations are printed at Dewas. The present production capacities of these two presses are 4,800 million pieces and 1,800 million pieces of notes respectively, per annum. Two more new note printing presses are proposed to be established at Mysore (Karnataka) and Salboni (West Bengal) by 1995. With the commissioning of the proposed new presses and the modernising of the existing ones, the total production capacity of all the four presses taken together is expected to be of the order of 15,500 million pieces of notes per annum. The four Government of India mints from which the RBI obtains supplies of coins are located at Alipore, Calcutta (West Bengal), Bombay (Maharashtra), Hyderabad (Andhra Pradesh) and Noida (near Delhi). The total production capacity of all the four mints is at present 3,700 million pieces of coins per annum, including rupee coins. After the planned modernisation of the mints it is expected that the total capacity will be higher at 4,500 million pieces, including coins of Re. 1 and Rs. 2.

FIG.: 4


INDIA
LOCATION AND JURISDICTION
OF ISSUE OFFICES, MINTS & PRESSES
CHANDIGARH
(Sub Office)
NOIDA
NEW DELHI
JAIPUR
LUCKNOW
(Sub Office)
KANPUR
PATNA
GUWAHATI
AHMEDABAD
DEWAS
SALBONI
CALCUTTA
NAGPUR
NASIK
BHUBANESWAR
BOMBAY
BYCULLA
HYDERABAD
BANGLORE
MYSORE
MADRAS
LAKA ISLANDS
TRIVANDRURM
ISSUE OFFICES (17)
MINTS (4)
EXISTING PRESSES (2)
PROPOSED PRESSES (2)
JURISDICTION OF ISSUE OFFICES
ANDAMAN & NICOBAR ISLANDS

The location of the presses and mints is shown in the sketch at Figure 4 (page 20). It is apparent that while the mints are fairly well spread out, the presses will attain a good regional balance only when the two new presses become operational. To achieve the maximum economy, all the four presses should print all denominations of notes and each press should depatch all the notes required by the centres which fall within the command area of that press. Even when the four presses and the four mints produce all the denominations of notes and coins the distances through which the notes and coins are to be transported to the Issue Offices across the country will be considerable. These difficulties are compounded by the refusal of the police of some States to cross the State borders while escorting remittances from the presses and the mint-linked Issue Offices.

The net-work of currency chests which depend on the several RBI offices for their operations has developed, over the years, mainly on the basis of the demand for notes from the area served by the chests and the generation of soiled notes thereat which are a reflection of the currency-related economic activity in the zone of operation of each chest. The Issue office-wise details of the year 1988-89 of the number of currency chests, the annual supply of fresh notes and offerings of soiled notes at the present level of circulation are presented in Annexure 5 (page 67 and 68). An analysis shows that there are significant regional differences of currency note traffic expressed as the fresh notes supplied to the Issue Offices and the offerings of soiled notes for withdrawal from circulation. Regional offices handle fresh note quantities in a wide range from 200 million pieces per office to over 1000 million pieces and receive soiled notes ranging from about 40 million pieces per year to over 550 million. Offices which deal with enormous quantities face difficulties of co-ordination and long waiting time of accompanying bank personnel and escort parties apart from more and longer cross-movements of consignments. It seems desirable that, from the point of view of transporting and handling the ever increasing quantities of notes and the infrastructure required for it, a net-work of transit centres should be planned, each centre handling approximately equal quantities of notes in future.

It is further seen from Annexure 5 that while currency chests in most regions receive an average of between 1 and 2 million fresh notes per year, in some regions the number approaches 3 million. It has even reached 5 million in the Calcutta Region and 15 million in the Bombay region. A closer examination has also revealed that such variations are observed between chest and chest within regions. Whether it is not desirable also to have chests handling comparable quantities of notes is an interesting point but the Committee has not gone into this matter in

depth. It will involve a study of each chest, its feeder areas and the number and location of currency chests. The setting up of new currency chests in future should take such studies into account.

4.7 There is another aspect of the operations of the currency chests that needs to be mentioned here. There were over 3,700 currency chests in the country as in March, 1989. About 73 percent of the chests are with the branches of the State Bank of India and its associate banks, 16 per cent are with the branches of the nationalised banks and 11 per cent, with the Treasuries/Sub-treasuries of Governments. There are no chests either with the private sector banks, except Jammu and Kashmir Bank, or co-operative banks. The public sector banks without currency chests, private sector banks and co-operative banks accumulate large quantities of surplus cash with their branches spread over more than one State. The currency chests maintained by the branches of the State Bank of India and other public sector banks are often unable to freely accept these notes for deposit in their currency chests, even though they may be in the same area. This situation arises from a lack of storage space with the chests and also from the reluctance on the part of such chests to take on the additional work involved in the sorting and despatch of soiled notes to the RBI offices. Consequently, some public sector bank branches transfer their surplus cash to the chests of their own bank located, in some cases, further away from the Issue Office to which the surplus cash is finally bound. The private and co-operative banks are often left with no choice but to transfer their surplus cash to the Issue Offices which generally send the same cash back to them when they indent for note supplies. It is easy to see that there is avoidable cross-movement of notes under these circumstances.

4.8 The Committee feels that there will be advantage of rational movement, quicker turn-around of escort, better economy and greater all-round convenience, if additional centres are established in each region to receive, store and redistribute to currency chests fresh note/coin consignments from the presses/mints. The Issue Offices perform no significant function in the transfer of notes/coins to chests. Such centres may also be used as transit points for the return flow of notes to Issue Offices. The Committee, therefore, recommends that the RBI may determine locations at which such "Currency Transit Centres" (CTCs) may be established and the areas of their operations. It has to be clarified that CTCs are not Issue Sub-offices. They are for the limited purpose of receipt, storage and redistribution of fresh notes and coins and the withdrawal of soiled notes and uncurrent coins from the currency chests and the small coin depots.

4.9 A CTC will receive stocks of fresh notes and coins directly from the presses and mints nearest to it and carry out a tally of the packets of notes and bags of coins in each remittance box in the presence of the press/RBI representative and store the boxes under lock and seal. The boxes will be redistributed to the currency chests, when needed, after a similar counting of the packets and boxes. The currency chests will remit their collection of non-issuable notes to the CTC duly packeted and security-sealed for being remitted by the CTC to an Issue Office in due course. The CTC will also accept cash which is surplus to the requirements of the public sector banks not having currency chests, from private banks, from co-operative banks and Government undertakings under the guarantee system, provided the notes are duly sorted into re-issuables and non-issuables, packeted and security sealed and deposited with the CTC in separate locked/sealed boxes. While the CTC will re-issue the sealed boxes of re-issuable notes to the same institution which deposited the notes under guarantee, when it needs the funds at a later date, the sealed boxes of non-reissuable notes will be remitted, in due course, to an Issue Office. It is thus clear that the CTCs are, for the present designed to be only transit points for the bulk movement of the currency notes and coins and will not undertake the work of processing the soiled notes.

4.10 Such of the currency chests as are near an Issue Office may be linked to that Issue Office rather than to a CTC. Also, if any currency chest finds it more convenient to remit its collection of soiled notes to an Issue Office than to a CTC, it should be permitted to do so. A CTC need not necessarily remit its collections of non-issuable notes to the nearest Issue Office for processing. A certain amount of flexibility is built into the concept of the CTC which should remit non-issuable notes to any Issue Office that may have spare capacity to process them.

4.11 Any new capacities to be established for the transit of currency in this manner should be planned to provide, in due course, for the most cost- effective methods of handling and processing currency in the 21st century. The concept of the CTC should, however, be independent of the need for establishing sub- offices. If new sub-offices of the Issue Department are likely to be opened in the future at some of the CTCs, care has to be taken to plan, even now, for adequate land and facilities for the conversion of a CTC into a sub-office in due course.

4.12 The question naturally arises why some of the larger currency chests should not receive note supplies directly from the presses. Security arrangements and adequate vault space for storage already exist in such chests and marginal additions can be provided at an economical cost. The presses have no objection to transfer note

consignments directly to chests, provided the chests are notified by the Government as permitted delivery points and the consignments are big enough to conform to their pattern of deployment of security personnel for escort duties. As the presses generally despatch consignments in a minimum of one wagon load consisting of 14 million larger denomination pieces to 20 million lower denomination pieces, the larger chests which have intake capacities of that order could easily receive such consignments. A very large chest could also be converted into a CTC.

4.13 The Committee, therefore, recommends that public sector banks may receive fresh note supplies at their larger chests directly from the presses and they should also be encouraged to expand their very large currency chests into CTCs at selected centres, provided they have adequate vault space and other infrastructure. Such CTCs established by the public sector banks will, however, also have to meet the needs of the chests of other banks falling within the area of the CTC.

4.14 The CTCs should be established, in the first instance, in the jurisdiction of the Issue Offices which handle unusually heavy currency traffic and should centre around the chests whose total business can take away a substantial load off such Issue Offices. Experience with such CTCs will indicate where else and how many CTCs may be set up consistent with overall economy in handling. The Committee feels that CTCs may be planned each to handle about 200 million fresh notes per year along with the corresponding return flow of soiled notes. Such capacity can accommodate one wagon-load of fresh notes per month. About 35 CTCs, including the present Issue Offices and the converted chests of the public sector banks, could take care of the annual fresh note production of 6,800 million notes at present. It may be possible to expand the capacity of CTCs further when the currency note production expands. If, however, it is considered not feasible to expand their capacities, additional CTCs, as may be necessary, should be planned to come into existence by 1995 when the higher note production capapcities are expected to materialise.

4.15 **Containerisation**

Remittances from the note presses to the Issue Offices or from the Issue Offices to the currency chests are at present transported by railway wagons and accompanied by police escort and the representatives of the remitting institutions. In this system, at the remitting end, the boxes are loaded into trucks at the press at Nasik or Issue Offices, transported to the railway stations and loaded into the wagons. At the

receiving end, the boxes are unloaded into the trucks, transported to the receiving offices and carried into the vaults/strong rooms. The inconvenience of repeated handling of remittance boxes will be reduced to the minimum, if the note and coin boxes are transported through containers from the presses and mints to the Issue Offices and the CTCs with suitable arrangements for accommodating, in the same container wagon, the police escort and, if required, the representatives of the remitting institution. It is understood that the presses have already entrusted to the Research, Design and Standards Organisation of the Railways the task of designing suitable railway wagons for the bulk movement of notes. The Committee recommends that containerisation should be the normal mode of bulk transport of notes/coins upto the Issue Offices and CTCs. The wagon design may provide for the use of containers and such modifications as may be necessary should be effected at the Issue Offices and CTCs to receive containers.

4.16 Remittance of notes and coins to the various RBI offices or chests/small coin depots are presently being escorted by the police force of the State in which the remitting office/organisation is located. This arrangement has come under some strain in recent years, as the police authorities have raised objections of a legal or administrative nature, to their police force crossing their State borders. Since it was found to be operationally difficult to shift the responsibility for the security of the treasure at each State boundary, the RBI explored alternative arrangements. The Committee understands that the arrangement recently concluded with the Railways for the remittance of the coins from the Bombay mint escorted by the Railway Protection Force has been working well. The Committee recommends that similar arrangements may be made elsewhere, whenever the need arises.

4.17 **Sorting of notes by currency chests and Government bodies**

Although currency chests are required to sort the notes returning from circulation into re-issuables and non-issuables, in practice, sorting is seldom done by the currency chests. As a result, notes received in remittances from the currency chests are required to be sorted at the Issue Offices of the RBI and re-issuables sent back again to the chests in fresh remittances. These cross-movements, involving avoidable expenditure on transport and manpower, should no longer be permitted. The Committee recommends that the RBI should compulsorily have the soiled notes sorted at chests. Since the exercise of judgement in manual segregation of notes into re-issuables and non-issuables at chests will be subjective, it will be desirable to introduce machines for uniform and quick sorting of notes. The

Committee appreciates that such machines may have to await a significant improvement in the quality of notes to be sorted and may not be cost effective in all chests. Larger currency chests where the volume of cash handling justifies such a facility should, however, be provided, in due course, with note counting-cum-sorting machines.

4.18 The RBI's manpower and infrastructure are subjected to a heavy load on account of the acceptance of cash tenders from the public sector banks having no currency chests, private and co-operative banks, Government Departments, the Railways and other Government undertakings. On an average, about 47 per cent of the RBI's examination capacity is utilised for the examination of such tenders. These bodies, virtually, use the RBI as their Central Cash Department for sorting of their cash collections. Their tenders, containing a large percentage of re-issuable notes, are accepted by the RBI under a guarantee whereby immediate credit is afforded to them on a mere count of the packets and bundles pending detailed examination as and when the staff becomes available. Such tenders block storage space and restrict the RBI's ability to remove the soiled note accumulations from the currency chests at the required regular intervals. The Committee has examined how best the RBI could be relieved of this burden in the years to come.

4.19 The public sector banks without currency chests, private sector/co-operative banks, the Railways and the Government undertakings normally bring their notes to the Issue Offices of the RBI for deposit. Often, even the Issue Offices find it difficult to accept their entire offerings. In the case of the banks this leads to complaints that because of the non-acceptance of cash by the RBI they were unable to comply with the cash reserve requirement under the Reserve Bank of India Act. In the absence of the chest facilities, the private sector banks are required to hold large cash balances and, as a result, in some cases, the cash-deposit ratio of such banks is reported to have gone up to as high as 9 per cent, thus seriously affecting their profitability. The Committee recommends that such banks, the Railways and Government undertakings deposit their excess cash into the nearest CTC under the guarantee system of the RBI, provided it is duly sorted and security-sealed into re-issuable note and non-issuable note packets and packed in separate boxes to be locked and sealed.

4.20 **MIS and Computerisation**

Efficient currency management is as much a function of physical factors like the

volume of currency, the distribution channels and transportation media as the organisation of information relating to the currency requirements, the storage and examination capacities and the accounting of transactions. Several measures for improving the infrastructural arrangements have already been suggested. On the front of the organisation of information also, it is necessary for the RBI to bring about an integrated information system encompassing all the activities of the Issue Department and the Department of Currency Management at the Central Office, relating, in particular, to currency forecasting, defective notes accounting, manpower deployment and several control and monitoring returns.

The Committee understands that computers have been already installed at seven Issue Offices to cater, basically, to two needs viz. inventory modules for the remittance of treasure and the accounting of chest/depot transactions. Plans are afoot to instal computers at all the Issue Offices over the next 12 months. Another computer system has been installed at the Claims Section in Bombay which could be replicated, if necessary, at other centres later. Also, it is planned to instal a microprocessor at the Central Office for improving MIS and developing a reliable data base for purposive management action. It is also understood that the State Bank of India and the nationalised banks have computerised several of their Regional Offices. They should be persuaded to computerise their Link Offices and then their larger chests, so that information can be exchanged, first, through magnetic media and later, through the proposed data communication network of banks and the RBI BANKNET. CTCs should also be equipped with Personal Computers and connected through the BANKNET.

It is, indeed, a policy imperative that RBI and banks speedily move towards taking the maximum advantage of a synergic combination of computer and communication technologies. It is inconceivable that the task of managing information relating to the currency of the country expected to be nearly Rs.170,000 crores in value and covering over 3,700 chests could be successfully tackled in the future, if attempted on the basis of traditional methods. The Committee recommends speedy action along the lines suggested above.

CHAPTER-5
CURRENCY HANDLING - NOTES

5.1 The procedures used in the operations of an organisation are designed to carry out its objectives efficiently. Wherever such operations require detailed accounting of the work turned out, the procedures also provide for great accuracy. Faultless operations are the soul of the RBI's functions, as the accounting of each unit of treasure it is required to handle is inescapable. It was, therefore, natural for those who had first set up the system of currency management to have laid down procedures embodying great caution at every step. They could hardly have imagined, however, the problems that would have to be faced when the operations would expand a hundred times and more in the 1980s and would race ahead breathlessly towards the new century. It is necessary to ask in what ways the system stands in need of change in the emerging situation.

5.2 The Committee has examined the existing systems and procedures for the management of currency with a view to suggesting improvements to meet the present and future requirements including modernising the physical facilities for speeding up operations and strengthening the security arrangements relating to the issue function of the RBI. It is useful to briefly describe the present system for handling currency and review the same critically in order to understand the rationale of the new methods and procedures recommended.

5.3 Present systems and procedures

5.3.1 Printing of notes

Notes are printed by the Government of India in its two printing presses at Nasik and Dewas. The requirements of notes are forecast by the Department of Statistical Analysis and Computer Services of the RBI on a long-term basis from time to time. Such forecast is useful to the Government of India in planning its long-term production programme. The paper of special quality used for printing notes is manufactured by the Government of India at its Security Paper Mill, Hoshangabad. While the lower denomination notes are printed by the conventional wet offset and dry offset processes, the higher denominations of Rs. 10/- and above, are printed by a combination of the dry offset and the modern intaglio processes which, it is believed, make forgery difficult.

5.3.2 Form or bank notes

The design, form and material of bank notes are approved by the Government of India after considering the recommendations made by the Central Board of Directors of the RBI. Special care is taken in the choice of size, colour and design of the notes to enable the public to distinguish, at a glance, between one denomination and another. The necessary security features are also incorporated to deter attempts at forgery.

5.3.3 Indenting for notes

Indents are placed on the Government presses twice a year,for six months at a time, for the different denominations of notes required by the 17 Issue Offices of the RBI for issue to the public, banks and Government Departments. The half-yearly requirements are estimated on the basis of stocks available at the beginning of the indenting period, the stocks likely to be received as a spill-over of the previous indent and the past experience of the RBI offices in meeting the demand for notes.

5.3.4 Receipt of fresh notes at the RBI

Fresh notes printed at the Nasik and Dewas Presses are made into packets of hundred pieces each by means of a wire-stitch by a stitching machine on the left hand edge of the packet. Ten such packets are made into a bundle. Hundred bundles are packed in a deal-wood box. The boxes are secured by steel strappings and sealed. The sealed boxes containing note bundles are despatched by rail to the 15 regional offices and 2 sub-offices of the Issue Department accompanied by two representatives of the press along with the police escort. On arrival at the RBI office, the boxes are weighed and the weight tallied with that shown in the invoice. The external condition of each box is examined to ensure that the boxes had not been tampered with. The police escort is thereafter relieved. The contents of the boxes are taken over jointly by an Asst. Currency Officer and an Asst. Treasurer, known as joint custodians, by counting the packets and bundles with the assistance of a few coin/note examiners. The number of coin/note examiners employed for this purpose varies from office to office depending upon the local practices. Normally, an Issue Office deploys coin/note examiners for this purpose at the rate of one examiner for 20 boxes per day. Half the Rs. 50/- and Rs. 100/- notes and all the Rs. 500/- notes are subjected to 'quantity' and 'quality' checks which involves

the counting of notes in detail and examination to check for printing defects. After all the notes received in a consignment are thus taken over, the press representatives are relieved and the note packets and bundles are stored in the same wooden boxes or in bins, as may be convenient, by the joint custodians. The lower denominations of notes up to Rs. 20/- are not counted or checked except before they are issued over the counter when the first and the last pieces of each packet are verified.

5.3.5 Despatch of fresh notes to currency chests

Fresh note bundles received from the presses and taken over by the RBI are again re-packed in wooden boxes in the presence of a coin/note examiner and the joint custodians. Whenever the receipt of fresh note boxes from the press synchronises with the programme of remittances of fresh notes to the currency chests, the opening of the fresh note boxes and their repacking is done by the coin/note examiner deputed for remittance duty. The boxes, accompanied by the coin/note examiner in whose presence the remittance was packed and the police escort, are despatched to the currency chests by rail/road and, occasionally, by air to places not easily accessible by road.

5.3.6 Receipt of fresh notes at currency chests

When fresh note boxes are received at the chests, the police escort is relieved after the weighment and verification of the external condition of the boxes and the contents of each box are taken over by the chest officials by detailed counting and examination of the notes in each packet in the presence of the RBI's coin/note examiner before he is relieved to return to the RBI.

5.3.7 Issue of notes to the public

Notes are issued by the teller to the customers in full packets and the teller is not required to count the pieces in the packet. However, when less than 100 notes are to be issued to the customer the teller is required to satisfy himself, before breaking the stitch on the full note packet, that the packet contains 100 pieces.

5.3.8 Receipt of soiled notes at the RBI from chests

Soiled note accumulations at the currency chests, packed in wooden boxes are sent

to the RBI offices by rail/road accompanied by a representative of the chest and police escort. On arrival at the RBI office, the soiled note boxes are taken over by the joint custodians by weighment and they also check the external condition of the boxes before the police escort is relieved. Thereafter, the contents of each box are taken over by a count of packets and bundles and the note bundles are deposited in bins under the triple locks of the two joint custodians and the chest representative. At this stage the chest representative is temporarily relieved. As and when the Issue Office is in a position to take up these notes for detailed examination in the chronological order of the inward remittances from the currency chests, the chest representative is called back to witness the process of detailed examination of his notes in the RBI. The approximate time interval between his relief and recall may range between six months and two years depending upon the availability of the coin/note examiners at each Issue Office. After the soiled notes are taken over by the RBI finally by detailed examination, the chest representative is relieved to return to the chest.

3.9 Examination of soiled notes

Large tenders of soiled notes received locally and those received in remittances from the chests are examined in the note Examination Sections. The examination is carried out with respect to both quality and quantity by the coin/note examiner in the following sequence :

(a) counting and verifying the number of pieces in each packet,

(b) opening the packets by breaking the stitches,

(c) examining the notes individually to detect defective or forged notes.

(d) sorting the notes into re-issuable and non-issuable notes.

(e) exchanging defective or forged notes for good notes with the chest representative to make good the deficiency,

(f) making separate packets of re-issuables and non-issuables,

(g) labelling the packets with blue labels for re-issuables and white labels for non-issuables,

(h) stitching the re-issuable and non-issuable note packets at the stitching machine,

(i) cancelling the non-issuable packets by punching at the punching machine,

(j) authenticating the labels with dated signature,

(k) getting the note packets sealed by affixing a heavy postal-type seal with the assistance of a mazdoor, and

(l) recounting of the re-issuable note packets of all the denominations examined by another coin/note examiner and recounting of the non-issuable note packets of the denominations of Rs. 5/- and above prepared by another examiner and authenticating the label on each packet in token of having recounted the packet.

5.3.10 The defective notes detected during examination are processed and exchanged in terms of the RBI (Note Refund) Rules. If any forged notes are found, the police is informed for taking up investigation. The re-issuable notes are taken over by the joint custodians by counting the packets and bundles and transferred to the fresh notes vault and again sent in remittance to the chests or issued across the counters. The non-issuables which are cancelled by punching are taken over by the joint custodians by counting the packets and bundles and transferred to the defaced notes vault for eventual verification and destruction. A daily quota of note examination is perscribed for every examiner which is as follows :

Denominations	Quota
Re. 1/- & Rs. 2/-	(i) 9,200 with sorting for re-issuables.
	(ii) 11,500 without sorting for re-issuables,
Rs.5/-	4,600 with sorting for re-issuables.

Rs. 10/- & Rs. 20/-	4,600 with sorting for reissuables.
Rs. 50/- & Rs. 100/-	4,000 with sorting for reissuables.
Higher denominations	4,000 with sorting for reissuables.

(6,200 pieces per person per day on an average)

The quota work is generally completed by a Note Examination Section within 70% of the office hours.

5.3.11 **Verification**

A certain percentage of the non-issuable notes examined and cancelled in the Note Examination Sections is verified for quality and quantity in the Verification Section on the basis of the quota which is 18,200 pieces per person per day on an average. Verification is an audit of the work done by the Note Examination Sections.

5.3.12 The clerical staff engaged for verification are made up into groups of six. Each group consists of five checkers and one verifier who will be incharge of the group. The various steps of verification are as follows :

(a) the checkers clip a varying number of notes, between 10 and 20, either in the middle or at the end of each packet.

(b) they verify (count and/or examine quality) only the unclipped portion in each packet.

(c) they draw an oblique line in pencil on the last note of the unclipped portion.

(d) they indicate on the label of the packet the number of pieces counted in the unclipped portion.

(e) they initial the label and pass on the packet to the verifier.

(f) the verifier crosses the diagonal line before he removes the clip and verifies the notes in the clipped portion of the packet.

(g) the verifier enters the number of notes in the clipped portion on the label and initials it after satisfying himself that the sum of his count and the checker's count is 100.

(h) the verifier checks 5% of the note packets selected at random to satisfy himself that the quality of the notes has been properly checked.

After verification the cancelled verified notes are taken over by the joint custodians of the cancelled notes vault by counting packets and bundles and stored in gunny bags in the cancelled notes vault.

5.3.13 Destruction

The Asst. Currency Officer and the Asst. Treasurer incharge of the cancelled note vault arrange for the destruction of the verified cancelled notes by burning and/or shredding in the chronological order of their cancellation. Though they have themselves jointly and severally taken over the cancelled note packets and bundles from the Verification Sections and sealed the gunny bags in which the cancelled notes are bagged, the joint custodians count the content by packets and bundles again before they are thrown into the incinerator or fed into the shredder. This process of counting the packets and bundles again at the incinerator takes about 2 hours in a large office.

5.4 Review of existing systems and methods for handling currency

5.4.1 Except for the increase in the quota for examination and verification of soiled notes by 15% effected in 1982 and a change in the composition of the Note Examination Sections, the systems and procedures devised in 1935 to handle the then circulation of hardly Rs. 172 crores remain, by and large, the same. The value of notes in circulation at the end of March 1989 stood at Rs. 38,600 crores and is expected to be of the order of Rs. 1,69,000 crores by the turn of the century, going by the current currency expansion trend. Similarly, the number of currency chests which are the RBI's agencies for the distribution of fresh notes and the return flow of soiled notes has increased over the years from less than 1000 in 1935 to over 3700

in 1989. While there has been considerable increase in manpower and infrastructural facilities, over the years, to handle the work, the system shows signs of being overtaken by the ever increasing circulation of notes.

4.2 The methods and procedures employed to handle the notes, both fresh and non-issuables, at the presses, in the RBI and at the chest have, therefore, been subjected to closer examination with a view to eliminating unnecessary operations and bringing about cost-effectiveness through increased productivity and ensuring, at the same time, responsibility at every stage of handling. The objective is to formulate a scheme to handle currency more smoothly, speedily, efficiently and economically with the least risk of pilferage in transit of fresh notes right from the Government Press till they reach the public and of soiled notes from the public to the destruction of non-issuable notes at the incinerator/shredder of the RBI. Special care has also been taken to suggest measures to ensure better public confidence in the numerical accuracy of a note packet, as any shortages, however rare, adversely affect the image of the RBI.

5.4.3 While undertaking a critical analysis of the existing systems and methods for handling currency, the Committee addressed itself to the following questions :

(a) Does a note packet which has been machine counted and checked at the press need to be counted at any intermediate stage of its handling before it reaches the end-user, the customer? Is it possible to fix the responsibility for any shortage in a fresh note packet detected at the last stage?

(b) Is it possible to devise a system of handing over fresh note consignments by counting only large packages and to reduce the handling of bundles, packets and notes, to the minimum say, once at the press before packing and again at the currency chest before issuing to the public?

(c) Can the present method of packing note bundles in deal-wood boxes be improved upon to make for convenience, ease and speed in taking over?

(d) Can a security-sealing system be devised to ensure that a non-issuable note packet made up by a cashier of a bank is preserved intact throughout the

various stages of its handling till it is examined at the RBI, so that any deficiency in the packet can be directly traced to the cashier who made the packet?

(e) Is there scope for economy in the procedures now in vogue for the receipt of non-issuable notes at the Issue Offices, their storage and issue for examination?

(f) Is it possible to eliminate inessential operations in the process of examination of notes in the RBI with a view to increasing productivity?

(g) How can the present method of verification of cancelled notes which is a percentage audit of the work done by the coin note examiners be made more effective and meaningful and less prone to misuse?

(h) Can the scope for malpractices, such as, pilferage and substitution of the cancelled note pieces/packets in the RBI be altogether eliminated?

(i) Is any improvement in the present method of destruction of cancelled notes feasible in order to reduce the atmospheric pollution caused by the RBI's incinerators?

5.5 The above issues were examined and the Committee has come to the following conclusions :

5.5.1 Detailed counting of fresh notes in packets

When the fresh note consignments are received by the currency chests, they are subjected to detailed counting of the notes in every packet. Even in the RBI, 50 per cent of the Rs. 50/- and Rs. 100/- denomination notes and 100 per cent of the Rs. 500/- denomination notes are counted in detail. This follows the counting at the press through manual and mechanical means which are almost fool-proof. The Committee feels that such repeated operations waste time and manpower, as they involve the detention of the press representatives at the RBI offices and of the RBI staff at the chests for periods ranging from one week to one or two months. If a fool-proof security sealing system for the note packets of the type in use in the State Bank of India for remittances between their branches can be devised, the need to subject the fresh note packets to detailed counting at the various stages

prior to issue to the customer will not arise. The responsibility for any shortage of a whole note in a fresh note packet noticed before the seal is broken or tampered with can be fixed on the press which originally made the packet. If, however, such shortage is noticed after the seal is broken or tampered with, the responsibility will shift to the last person who had the custody of the packet immediately before the seal was broken or tampered with. In rare cases of notes pulled out leaving tell-tale portions in the packets, the RBI should fix the responsibility after such investigation as it considers necessary. The Committee, therefore, recommends the adoption of a security-sealing system for fresh notes packets in consultation with the note presses.

5.5.2 Handing over notes in large packages

The counting of the number of packets in every bundle at the RBI while taking over the consignments of fresh notes from the press and the counting of the packets again before packing the boxes of notes for remittance to the currency chests and the counting of the packets for a third time while the chests take over the boxes from the RBI representative are unnecessary and time-consuming operations. If due care is taken to security-seal the packets and bundles, as described in the following paragraphs, these steps can be dispensed with. Ten security-sealed packets can be shrink-wrapped and heat-sealed in transparent polythene sheets permitting visual inspection of the packets in the bundle and five such bundles can again be similarly shrink-wrapped and sealed into a "package". The packets in the package can be visually inspected and counted at the RBI and the chest and taken over as such without breaking the package in the presence of the press/RBI representative. The security of packeting, bundling or packaging can be ensured by appropriate security devices, such as, the use of polythene sheets on which the name of the press and its monogram are printed. The presses have agreed, in principle, to the proposed system. The Committee recommends the introduction of such a system of shrink-wrapping of fresh note packets and bundles in consultation with the Government presses.

5.5.3 Taking over and devolution of responsibilities

The untampered seal on the package is proof to the chest that the package has not been opened since it left the press. If there is any shortage of bundles within the

package, it has to be detected without breaking the seal on the package and the entire package returned to the Issue Office and then to the press for replacement. So should any shortage of a packet in a bundle or a whole note in a packet be dealt with. So long as the security-seal on a note packet, a polythene shrink-wrapped note bundle and a polythene shrink-wrapped note package is intact, the responsibility for any shortage of whole pieces in the note packet, packets in the note bundle and bundles in the package will be that of the press official responsible, respectively, for the packeting, bundling and packaging of the notes. The responsibility will, of course, attach to an intermediate agency/person who, having taken over the untampered packages, hands over a package which, by usual inspection alone, is seen to have been tampered with.

5.5.4 Improved packing in newly designed note boxes

The packing and opening of the deal-wood boxes used at present for the remittance of notes is cumbersome and time consuming and also risky from the security angle. Further, owing to the dwindling forest resources, the presses experience difficulty in procuring wood for the manufacture of remittance boxes. The Committee believes that the continued use of wood for remittance boxes will not be in the national interest. The Nasik Press is currently engaged in developing a strong, fire and water resistant plastic box with improved locking and sealing arrangements for the remittance of notes. These or any other type of box of new design and material may be used by the Government presses for despatching their consignments. As these boxes will also be useful to the RBI for sending remittances of fresh notes to the curency chests and the withdrawal of soiled notes from circulation, the Committee recommends that the design of the box may be finalised by the Department of Currency Management in consultation with the presses.

5.5.5 The Committee has observed that the box presently packed with 100 bundles with a gross weight of over 100 kg. in the case of higher denomination notes becomes heavy and unwieldy. For the convenience of handling, the Committee would prefer a smaller box designed to hold 50 bundles containing 50,000 pieces. Further, to enable the official concerned to visually inspect the packages without removing them from the box, it would be convenient to have 10 packages placed in the box, 5 each in the two equal halves, and the box locked, sealed and secured with nylon strapping material. The Committee recommends that 50,000 pieces in 500 packets, 50 bundles and 10 packages may be packed in each remittance box of new design.

5.5.6 Security-sealing of re-issuable note packet

In tune with the recommendation to introduce a security-sealing system for fresh note packets and in order to minimise the possibility of abstraction of pieces from a re-issuable note packet, the Committee recommends a security-sealing system for re-issuable note packets made at the currency chests/others similar to the one for fresh note packets. While re-issuable notes may not ordinarily be received by the RBI from currency chests/others, there will be need to salvage re-issuables from out of the receipts at the counters of the RBI. These re-issuable note packets should also be security-sealed, like fresh note packets, by the teller at the counter after examination.

5.5.7 Security sealing of non-issuable note packet

The Committee has recommended later in this chapter that the process of examination of the soiled notes should be speeded up at the Issue Offices by dispensing with the operations which are regarded as unnecessary. One improvement suggested is to keep a note packet with one stitch intact throughout its journey from the note examiner to the incinerator. However, to ensure that such packet is not tampered with until it reaches the note examiner of the RBI from its starting point, an additional stitch with security-seal on the right hand side edge of the packet should be placed by the chest, the Railways, the Government Departments or the Government Undertakings. The additional seal will make the extraction of pieces impossible en route to the RBI. It will be broken only in the presence of the local representative of the remitting bank/others at the time of the examination of the non-issuable note packet in the Note Examination Section of the RBI. The responsibility of the chest/others for the numerical accuracy of the packet is attracted upto this stage and thereafter only the note examiner will be held responsible for any shortage in the packet. In the case of the non-issuable note packets made at the counters of the RBI, the right hand seal will be broken in the presence of the Cash Department representative in the Verification Section.

5.5.8 Taking over of non-issuable notes at RBI

The present method of taking over chest remittances by a count of the packets and bundles by the joint custodians is called preliminary verification. It involves the detaining of the chest representatives at the RBI for periods ranging from a week to

one or two months. This arises from the fact that when a combined inward remittance of, say, 10 chests is received on the same day, the one set of joint custodians available will not be able to take over the remittances of the chests all in a day. From the point of view of the public sector banks, if one remittance per year from one chest is sent on an average to RBI, nearly 3,500 employees of the banks are immobilised in the RBI for varying durations. The period of such detention of the chest representative at the RBI can be minimised, if the locked and sealed boxes are taken over by a local representative of the remitting bank by counting the packets and bundles in the RBI vaults in the presence of the joint custodians incharge of the vault and stored in the chest note vaults in the same boxes under lock/seal to be placed by the local representative of the remitting bank. The joint custodians will be responsible for the safe custody of the remittance boxes till they are opened in the presence of the local representative of the remitting bank and sent to the Note Examination Section for detailed examination. For accounting purposes, the boxes held in the safe custody of the RBI could be treated as part of the Chest Notes Account balance of the local chest. Till the notes are taken up for examination by the RBI, they would be treated as a remittance sent by the outstation chest and received by the local chest of the same bank.

5.5.9 It is likely that at some offices the space available in the chest note vault may not be sufficient to store a large number of such locked remittance boxes. In the interest of overall economy it will be necessary for the RBI to initiate immediate action to increase storage space at centres where it has Issue Offices.

5.5.10 While the RBI should add to its vault space, much can be done by the public sector banks themselves. Since about 75% of the total number of currency chests are maintained with the branches of the SBI, it would be economical for it to earmark its own chests at or in close proximity of the centres where the Issue Offices of the RBI are located for taking over the locked and sealed non-issuable note boxes from its own outstation chests and for their storage, pending their transfer to the RBI for further processing. As a matter of policy, the RBI should encourage all public sector banks to provide for such storage facilities at places where the RBI has its Issue Offices.

5.5.11 **Note Examination**

It is in the examination of non-issuable notes meant for eventual destruction that the Committee has found the greatest need and scope for eliminating unproductive

and inessential operations. The possibilities of improvement in the process of examination are considerable. Since only non-issuable notes are to be sent to the RBI, the stage of sorting out the re-issuables can be given up. The saving of this one stage, which involves the breaking of the packets and their reassembly into packets of re-issuables and non-issuables, avoids many further stages, including the recounting of the packets reassembled. Therefore, the note packets will be continuously processed till the stage of destruction with the security-seal preserved intact on the left hand side. Later in this chapter, the Committee has recommended that the work of the cancellation of non-issuable notes by punching be transferred from the Examination Section to the Verification Section. Altogether, the following operations in the Note Examination Section will not be necessary.

(a) sorting the notes into re-issuables and non-issuables,

(b) making separate packets of re-issuables and non-issuables,

(c) labelling the packets,

(d) stitching the re-issuable and non-issuable note packets at the stitching machine,

(e) cancelling the non-issuable note packets by punching at the punching machine,

(f) affixing heavy postal-type note examiner's seals and

(g) recounting of re-issuable and non-issuable note packets assembled by another examiner.

5.5.12 There may be occasions when a shortage of a few pieces in a packet is detected. Similarly, a few forged or defective notes may be found mixed up in a non-issuable note packet. The Committee recommends that the packets in which such deficiencies are detected by a coin note examiner may be handed over to a separate coin note examiner in the presence of the representative of the remitting bank. This examiner will have the deficiency in the note packets made good by the representative of remitting bank after breaking the security seals on the packets, as per the existing procedure. Thereafter he will label, stitch, security-seal and

authenticate the packet for onward transmission to the Verification Section on the same day. It will be necessary for the RBI to provide a few hand-stitching machines to have such packets stitched.

5.5.13 The problem of cut notes being mixed up in the non-issuable note packets, which is often noticed by the Issue Offices, could be solved by the Asst. Treasurer of the Examination Section passing the notes for payment on the spot without disturbing the security-seal. If large numbers of cut notes are found mixed up with non-issuable notes, the remitting bank should be disciplined by returning the packets containing cut notes with the security-seal intact to the remitting bank at the cost of the remitting bank and reporting the matter to its Head Office.

5.5.14 The Committee visualises the need only for the following few steps in the Examination Section before the non-issuable note packets are handed over to the Verification Section :

(a) breaking the right hand security seal and stitch of the non-issuable note packet,

(b) counting the notes in the packet,

(c) Examining the notes in the packet to detect defective notes or forged notes,

(d) signing the label on the note packet or affixing a light self-inking distinctive seal in token of his having checked the packet.

(e) transferring to a separate examiner deficient packets for settling the shortages or other discrepancies in the note packet with the chest representative,

5.5.15 The Committee is convinced that the above improvements make possible significant productivity gains leading to an increase in the work turned out by the Examination Section. Accordingly, the Committee recommends an appropriate increase in the present rate of quota for examination.

5.5.16 **Verification**

Verification consists of a check of both quantity and quality of note packets examined by the coin/note examiners. The existing method of checking/verifying by the "clip" system where a checker counts a part of the packet and leaves the

balance in a clip to be counted by a verifier for tallying the total to 100 notes in a packet, has lent itself to misuse by the employees who find it convenient to do virtually no work at all - neither the counting, nor the tallying - and pass the packet as a perfect 100. The Committee is of the view that manual counting cannot be relied upon, as there is no further audit of this work and it is desirable to introduce mechanical counting which provides the only flawless method of check at this final stage of verification. This also fits in with the recommendation to dispense with the recounting in the Note Examination Section. It will be reassuring to have a cent per cent check of the numerical accuracy of all the note packets to be carried out by officers with the use of the note-counting machines. In the case of verification of quality, the Committee is of the view that only a certain percentage of the notes examined needs to be verified. In view of the proposal to do away with the quantity check manually, a suitable quota for quality check alone may be prescribed to be done by the checkers and verifiers. The Committee further recommends that the percentage of relaxation for limiting the quality verification may be determined from time to time in such a manner that a surprise element is maintained and different denomination notes are subjected to quality check on different dates.

.17 The objective of punching the notes, so far being carried out in the Examination Section, is to cancel them and render them unfit for circulation and ineligible for payment . It is now recommended that this work should be transferred to the Verification Section and the distinctive serial number or numbers of the notes should be punched out after the entire process of verification is over, that is, the quantity check by the use of the machines and the quality check by the checkers and verifiers. As a measure of abundant caution, the notes verified for quality check by the checkers and verifiers should again be counted by the machine before the punching operation commences.

.18 The reasons for transferring the punching operation to the last stage of processing the non-issuable notes before destruction are the following :

(a) if the serial numbers of the notes are punched out at the last stage before destruction, the possibility in the Note Examination Sections, which are as many as 10 to 16 in the large offices, of substituting punched note pieces or punched note packets abstracted at any stage after examination, more particularly, at the incinerator, will be totally ruled out,

(b) unpunched notes are easier to verify or count and can be counted faster by

note-counting machines. Notes with numbers punched out cannot be checked and verified with ease for detection of forged notes, and

(c) the high level of noise in the Note Examination Sections will be greatly reduced.

5.5.19 The Committee is of the view that there should ordinarily be no time lag between examination, verification and destruction. It is necessary, therefore, that verification and destruction should be done on the same day on which the notes are examined. The Verification Section officials should directly take over the examined notes from the Assistant Treasurer incharge of the Note Examination Section and after verification and punching, the officials incharge of destruction should take over the balances directly from the officials incharge of the Verification Section and load the cancelled verified notes directly into the incinerator/shredding machine on the same evening. To facilitate this, the working hours of the Verification Section and the officials incharge of destruction will have to be staggered in such a way that the Verification Section Commences work only when the pre-lunch quota in the Note Examination Sections is completed and the officials incharge of destruction are able to complete their work relating to both the pre-lunch and post-lunch examination and verification work by 8 or 9 p.m. The working hours and duties of the officials incharge of destruction will have to be adjusted accordingly.

5.5.20 The Manager may periodically review the number and nature of irregularities in the Cash Department and, if circumstances warrant or otherwise, at his discretion, he may order the preservation of the examined or punched notes for such intervals as he may deem necessary before destruction to facilitate investigations or departmental enquiries. The continuous process and destruction on the same day will need to be interrupted to the extent so required by the Manager. The Committee is aware that there can be extra-ordinary circumstances, such as, power failure and staff agitations when it may not be possible to destroy the notes examined and verified on the same day. The RBI should evolve a contingency plan to store such notes until the next day.

5.5.21 **Elimination of malpractices**

In the system recommended above, any malpractice by any employee at any earlier stage will be detected by the Verification Section. The Committee is aware that

while the risk of pilferage of pieces or theft of packets in all areas of Cash Department has been reasonably well covered, the risk of such malpractices in the Verification Section itself is required to be eliminated.

5.5.22 At the counting stage itself the officer incharge of counting could pull out a few whole notes from the packets. There can be collusion between the checkers/verifiers and the officers incharge of machine-counting to pilfer unpunched notes. If the staff incharge of punching and those incharge of destruction collude, whole packets of punched notes can be abstracted at the destruction stage, smuggled into the punching area and substituted for an equal number of unpunched packets to be smuggled out.

5.5.23 The important question, therefore, is how to ensure maximum security in the Verification Section, apart from the 100% counting by machines before the punching of notes. The Committee has carefully examined this aspect and recommends strict surveillance of the staff of the Verification Section - more especially, officers and staff incharge of counting and punching-by installing a suitable CC TV system with video recording facility, one-way look-through glass panelling and a thorough body search of the staff of the entire Verification Section and the staff incharge of destruction.

5.5.24 **Methods of destruction other than incineration**

Notes unfit for further use and defaced after examination at the RBI are destroyed by incineration. Air pollution laws in the country prohibit incineration by the conventional methods. The efforts made in the past for developing smoke-free incinerators, such as, oil-fired incinerators and water-jacketed incinerators have not always been successful. The Committee, therefore, recommends that any future investment for the destruction of notes withdrawn from circulation should be in modern shredding machines such as those used by some foreign central banks.

5.6 Detailed procedure for handling currency

5.6.1 Based on the analysis of the existing procedures and the recommendations of the Committee as detailed in the earlier paragraphs, a detailed description of the revised procedures which may be prescribed by the RBI for handling fresh, re-issuable and non-issuable notes at the various stages will be useful.

5.6.2 **Security sealing of fresh note packets**

Every packet of fresh notes will be security-sealed. 100 notes will be made into a packet. A label covering the left hand edge of the packet, part obverse and part reverse, will be placed on the packet and held in position by a rubber/plastic band. The packet will then be stitched at the left hand edge. Thereafter the security seal, which is a transparent adhesive sticker with the monogram of the Press making the packet, will be affixed on the stitch to cover both the obverse and the reverse.

5.6.3 **Shrink-wrapping of fresh note bundles.**

Ten security sealed packets will be shrink-wrapped into a bundle with transparent polythene and heat-sealed. On the polythene sheet will be printed, in running lines, the name and monogram of the Press in fine print. Each bundle will contain a slip indicating the contents of each bundle (e.g. 10 packets of Rs. 10, 10 packets of Rs. 20 etc.). Labels showing such packing details will also be pasted to the two lateral sides of each bundle, as an additional security precaution.

5.6.4 **Packaging of fresh note bundles**

5 shrink-wrapped bundles will again be shrink-wrapped in similarly printed transparent polythene sheet and heat-sealed. This may be called a "package". Each package will contain a slip indicating the number and denomination of note bundles in it and the slip will be duly authenticated by the person(s) responsible for making the package.

5.6.5 Polythene wrapped and sealed packages will be placed in a specially designed box in such a manner that it would be easy to verify the contents merely by opening the lid of the box. The box may be designed to contain 10 packages of 5 bundles each, arranged equally in the two halves of the box. The box will have a suitably designed sealing system with provision for affixing two locks. A packing slip indicating the denomination of the notes, the number of packages, bundles, packets and pieces in each box duly authenticated by the person(s) responsible for the packing of the box will be placed in each box. As a measure of further security, every note box will be bound with nylon straps and sealed.

5.6.6 Despatch and transport of fresh notes

Boxes containing note packages, packed in the manner described above, will be sent by the presses in railway containers, wherever possible, to all the RBI Offices and CTCs or selected chests accompanied by police escort. The press representative need not necessarily accompany the remittance when it is carried by containers but can travel separately to reach the RBI office in time to formally hand over the boxes. The RBI may take steps to obtain the concurrence of the Government of India to waive the requirement of the press representative accompanying the note boxes and, if necessary, amend the provisions of the Central Treasury Rules. On the arrival of the railway containers at the safety yard of the RBI/CTC/selected chests, the boxes should be transported to the vault by the use of fork lifts/elevating trucks. Conveyor systems may also be installed, in due course, for conveying boxes from the safety yard to the vault.

5.6.7 Taking over of fresh note boxes at RBI offices, CTCs and selected chests

The Assistant Currency Officer and the Assistant Treasurer incharge of the fresh note vault should check the external condition of each box to satisfy themselves that the boxes and the seals thereon have not been tampered with. The police escort should then be relieved. The Assistant Currency Officer and the Assistant Treasurer, with the help of a class IV employee should thereafter open the boxes one by one in the presence of the press representative and take over, with the help of a class III employee, the contents of each box by counting the number of packets in each package without breaking the bundles and packages, and verifying the seal and condition of the note packages. In case an outward remittance to a chest could be sent concurrently with the receipt of fresh note boxes from the pressess, the coin/note examiner accompanying the outward remittance should himself be entrusted with the counting of the note packets and verify the external condition of the note packages and the seals thereon at the time of taking delivery from the press. After the contents of all the fresh note boxes are taken over in the manner explained above, the press representative will be relieved. The note boxes should thereafter be locked and sealed by the joint custodians and stacked in the vault pending remittance to the chests and issue to the counters.

5.6.8 Outward remittances of fresh notes from RBI Offices/CTCs to currency chests

The joint custodians will arrange to have the boxes opened by the coin/note

examiners accompanying the remittance with the assistance of a class IV employee and the contents checked by packets without breaking the bundles or packages. After the boxes are taken over by the coin/note examiner, the boxes will be locked and sealed by him. As a measure of additional security, the note boxes will be bound by nylon straps and sealed. The boxes accompanied by the coin-note examiner and police escort will be transported to the chest concerned by the Railway Container Service, to the extent such service is made available by the Railways, or by railway wagon/RBI bullion van.

5.6.9 Taking over of fresh note boxes by chests from RBI/CTC representatives

On the arrival of the remittance at the chest, the boxes will be checked for their external condition and seals before the police escort is relieved. Thereafter, the boxes will be opened in the presence of the RBI/CTC representative and the contents taken over by the chest by a preliminary check of the external condition of the packages and by counting the number of packets without breaking the package before he is relieved. For the purpose of taking to the bank balance of the bank or issue to the public, before breaking open the package (5 bundles), bundle (10 packets) and packet (100 pieces), the contents of the package or bundle or packet, as the case may be, will be counted by bundles, packets and pieces respectively. In the event of any shortage of a bundle in a package or a packet in a bundle or piece(s) in a packet, as the case may be, the relative package/bundle/packet will be sent to the RBI (not CTC) in its original sealed condition to enable the RBI to investigate the matter. The responsibility for the verification of the number of bundles in a package, packets in a bundle and piece(s) in a packet is distributed to the levels at which the package/bundle/packet is broken.

5.6.10 Sorting of soiled notes and remittance of non-issuable notes to RBI/CTC

Soiled notes received at a chest from the public and others should be sorted into reissuables and non-issuables by the receiving chest and made into separate packets. While the re-issuables will be security-sealed in the same manner in which fresh notes are sealed and retained in the chest itself for reissue or for remittance to some nearby chest which needs the funds, the non-issuables will be security-sealed both at the left hand and right hand side edges of the packet. The security sealed non-issuable note packets made into bundles of 10 packets each will be sent along with a representative of the chest and police escort to the RBI/CTC. The remittance

of non-issuable note packets will be packed in the same boxes in which fresh notes are supplied to the chest. To ensure quick turn-around of the boxes, the currency chest should, as far as possible, arrange to remit the non-issuable notes to the RBI immediately after taking delivery of fresh notes. The RBI/CTC representative should return to the Issue Office/CTC along with the empty boxes except those which the chest may require for remitting non-issuable notes in the next few days.

5.6.11 Taking over of non-Issuable notes at RBI

At the RBI a local representative of the remitting bank will take over the non-issuable notes from the chest representative accompanying the remittance by counting the packets. Thereafter, the local representative will apply his own locks/seals and deposit the keys with his bank. The boxes so taken over by the local representative will be deposited by him in the RBI vault which will be in the joint custody of an Asst. Currency Officer and an Asst. Treasurer. The joint custodians of the vault will be responsible for the safe custody of the boxes and the overall supervision of the operations in the vault and the maintenance of the appropriate books of account.

5.6.12 Taking over of non-issuable notes at CTC

The procedure for the taking over of the non-issuable notes from the chest representative will be the same as that followed at RBI offices.

5.6.13 Remittance of non-issuable notes by CTC to RBI

Depending upon the availability of the storage space and persons available for the examination of notes at any of the RBI offices, the locked and sealed non-issuable note boxes received from chests and retained at the CTC will be taken over by a local representative of the remitting bank from the joint custodians and delivered to the Issue Office concerned. The CTC will make necessary arrangements for transport and the required number of police escort.

5.6.14 Taking over of non-issuable notes at RBI from CTC

The procedure for taking over at the RBI of the non-issuable notes from the CTC

by the local representative of the remitting bank will be the same as in the case of taking over of non-issuable notes from the chest at the RBI.

5.6.15 Examination of non-issuable notes in the Note Examination Section

The local representative of the remitting bank, when called upon by the RBI, will arrange to have the required number of note packets, according to the indent made by the Asst. Treasurer incharge of the Note Examination Section, taken out from the sealed boxes and handed over to the Asst. Treasurer of the Note Examination Section in the vault for being brought to the Note Examination Section. The coin/note examiners will examine the notes issued to them according to the prescribed quota in the manner indicated below in the presence of the local representative of the remitting bank :

- open the stitch and security-seal on the right hand edge of the non-issuable note packet,

- count and examine the pieces in the packet without opening the stitch and security-seal on the left hand edge of the packet,

- get the slightly mutilated notes, if any, in the packet validated on the spot by the Asst. Treasurer incharge of the Section,

- affix the self-inking distinctive seal on the obverse of the first piece and reverse of the last piece of every note packet in token of his having counted and examined it. The design and quality of the self-inking seal should be such that its cost is not disproportionate to the savings in labour and its impressions should be clear even on badly soiled notes.

- hand over to a separate coin/note examiner the packets containing deficiencies (shortages, forged notes, defective notes) in the presence of the representative of the remitting bank for getting the deficiencies made good by the representative of the remitting bank.

The separate coin/note examiner to whom the packets containing deficiencies are handed over will have the deficiencies made good, as per the existing procedure, after breaking open the left hand security seal of the remitting chest. To enable him to make up the packet, after the deficiency is made good, the RBI should provide a hand-operated stitching machine and security seals and labels for use by the separate coin/note examiner.

After the examination of the pre-lunch quota of all the examiners in the Section, the Asst. Treasurer incharge will hand over the balances direct to the official incharge of the Verification Section. Similarly, the post-lunch work will also be handed over by the Asst. Treasurer direct to the official incharge of the Verification Section.

5.6.16 Verification and cancellation of notes examined in the Note Examination Section

All the work processes in the Verification Section will be done in the presence of a representative of the Cash Department as at present. The official incharge of the Verification Section will have the notes brought from the Note Examination Section segregated into two lots-those to be verified for quality and the balance portion. The notes in the portion to be verified will first be counted on machines by officers and then issued to the checkers and verifiers according to the quota to be prescribed. After the quality check of the notes issued to the checkers and verifiers is completed, the note packets will be handed back to the officers responsible for the quantity check for a second counting to preclude the possibility of pilferage of pieces by the checkers/verifiers. They will then be passed on to the official incharge of punching. On receipt of the balance portion for the quantity check, the officers responsible for the quantity check will machine-count every note packet for its numerical accuracy and thereafter hand over the packets to the officer incharge of punching for cancelling the note packets by punching out the serial number(s) of the notes in such a way that the punched out digits are also perforated. After the serial numbers of the notes in all the packets are so punched out, the official incharge of punching will hand over the cancelled note packets to the official incharge of the destruction of the cancelled notes on the same day.

5.6.17 Destruction of verified cancelled notes

The verified cancelled note packets taken over by the official incharge of destruction will straightaway be incinerated in the evening of the same day. Where a modern shredding machine is used for destruction, the verified cancelled note packets will be deposited into the shredding machine on the same day. The destruction process being automatic, with proper planning and staggering of the working hours of the staff incharge of verification and destruction, it should be possible to complete the destruction by 8.00 p.m. or 9.00 p.m. on the same day as the notes are examined.

CHAPTER-6
PERSPECTIVES OF THE YEAR 2010 AND MECHANISATION

6.1 The view of currency management that the Committee has taken in the foregoing chapters is essentially of the shorter term ending with the next decade. The main objective, as observed earlier, is to stabilise the note volume in the next few years at manageable levels and to rationalise currency movements and streamline procedures. No study of currency, however, can be complete without a look at the long-term scenario, for the underlying trends, which seem to hibernate at lower magnitudes, show up with all their force at the higher levels of growth.

6.2 It is not wise to take a very long view of the future in a matter which can undergo revolutionary change in the electronic age. The nineties will give some breathing time to the RBI to pause and have a foretaste of the first decade of the next century. The yardstick of growth can only be assumed, however tentatively, to be the same as of the last decade of this century. A note circulation of about 94,000 million pieces is entirely possible in the year 2010. If the Rs. 10 denomination is coinised, in the meantime, as is likely, the circulation could be curbed and contained at 60,000 million notes. The quality of notes in circulation will not be allowed to deteriorate from the standard set in the nineties. Under these circumstances, note circulation will need the infusion of 30,000 million fresh notes in the year 2010 and will also require the withdrawal of 24,000 million pieces. In short, all the parameters of note circulation assumed for the year 2000 will be slightly more than doubled in the year 2010.

6.3 The implications of such expansion may be briefly stated. Note production capacity available in the year 2000 will have to be doubled. However, the pattern of despatch of the currency notes to the chests will have undergone a significant change. About half of the fresh notes will be despatched directly by the presses to about 800 chests which will have acquired a size of operations adequate for the purpose of the taking delivery of a full wagon-load of notes and many more chests will split a wagon load through the use of the railway container service. What will remain to be despatched by the presses will be redistributed by the Issue Office/CTCs to the smaller chests. Such balance will be comparable in quantity to the volume passing through the RBI in the year 2000. It is, therefore, reasonable to assume that the fresh note supplies will proceed smoothly.

6.4 The processing of the return flow of soiled notes however, is, seen to be an entirely different story. The number of notes to be withdrawn from circulation in the year 2010, is expected to be almost seven times the present capacity with the RBI for the examination of notes which is about 3500 million pieces per year. The comparison, it may be noted, is with the year 1990 rather than with 2000. The RBI is not at present prepared for the processing of such large quantities and has to plan its future strategy from scratch. The Committee appreciates that the ingredients of the strategy will be many, including, prominently, the fact that a large number of employees of the RBI are presently handling notes manually. It is obvious, however, that the task of processing such voluminous quantities of soiled notes cannot be managed in the usual manner. It is also true but not so obvious that unless a comprehensive strategy is evolved and implemented not later than the mid-nineties, the first decade of the 21st Century may see insuperable difficulties in the way of currency management.

6.5 Neither the infrastructure nor the manpower presently available with the RBI is even remotely comparable to the task of withdrawing 24,000 million notes from circulation. Nor is it feasible to expand the infrastructure available at the Issue Offices. The Committee has earlier recommended the establishment of 18 CTCs in addition to the existing 17 Issues Offices. Such CTCs are primarily meant to receive and redistribute fresh and soiled notes, the latter to the Issue Offices for processing. In the not too distant future, however, the CTCs may have to be used also as processing offices to take care of the overflow of the soiled notes received for examination which cannot be processed at the Issue Offices. Even after providing for the full sanctioned capacity of personnel at the Issue Offices and the increase in the quotas recommended for the processing personnel, not more than 6000 million notes per year could be processed in the existing offices. The RBI should, therefore, plan for the CTCs to absorb the entire overflow, estimated at about 6,000 million notes in the year 2000 and 18,000 million in the year 2010.

6.6 It is natural to look towards mechanisation in the face of such large volumes. The Committee understands that the question of the mechanisation of some of the operations of the RBI has been considered in the past and has also been the subject matter of an Award of the National Industrial Tribunal in 1981 which had allowed the use of machines in certain operations. The concept of mechanisation is often confused with automation. Mechanisation should not, at least under Indian conditions, lead to the displacement of workers. It is conceived of, firstly, as a device to save time where time is of the essence of a business and human labour cannot deliver in time. Secondly, it is used for carrying out essential reform in

procedures where manual effort is not reliable. There is also a third objective of mechanisation which is to aid human beings to become more productive. The Committee has considered all these aspects and its recommendations regarding mechanisation are suited to the requirements of each operation in the RBI and the currency chests.

6.7 Before considering the use of machines and mechanical aids and identifying the areas where they could be gainfully introduced and the machines suitable to Indian conditions, the Committee thought it useful to obtain first-hand information from the Central Banks of both the developed and the developing countries as to the types of machines used by them, their capacities and the areas where such machines have been introduced. Accordingly, a team consisting of Shri R. Srinivasan, Member and Shri B.K. Basu, Member-Secretary, of the Committee visited the Central Banks of the Federal Republic of Germany, the United Kingdom, the United States of America, Japan, Malaysia and Singapore. They also visited some leading companies manufacturing bank-note handling equipment. The team has observed that all the six countries visited by it have switched over from the manual to the machine handling of the entire currency management function, despite the fact that the volume of circulation of notes is far less than in India.

6.8 Based on the observations of the team regarding the working of the machines, the systems and procedures followed by the Central Banks for cash handling and the discussions it had with their functionaries, the scope for mechanisation in the RBI and its agencies has been examined with respect to the long-term needs of the system as well as the needs of the next decade.

6.9 **Note-sorting machines at currency chests**

The Committee understands that the purpose of sorting of notes abroad is for segregating the maximum number of reissuables from the mixed lots and the machines are designed to sort out notes which are moderately unclean by Indian standards. This objective is what the Committee had in mind when it recommended a high proportion of fresh notes to be put into circulation every year. However, the situation at present is that the RBI intends to continue for some more years the extensive recycling of soiled notes to supplement the inadequate supply of fresh notes. The introduction of the sorting machines at this stage could be counter-productive, as a major portion of the notes now in circulation is likely to be rejected by the note-sorting machine as non-issuables. This will severely restrict the RBI's ability to meet the demand for notes. The present is, therefore, not the time to induct note-sorting machines in the currency chests.

6.10 The position will change by the turn of the century when the proportion of new notes put into circulation to the total number of notes will rise substantially with the establishment of the two new note presses by 1995. The Committee has gathered that the capacities of the note-sorting machines in use in other countries are very large ranging from 25 million notes to 100 million per year. Only large currency chests in the country may reach a processing capacity of 25 million notes or more even in the year 2010. In most chests such machines, which are very expensive, are likely to be heavily underutilised. The Committee, therefore, feels that the note-sorting machines may be provided at large currency chests when the supply of fresh notes improves and after the matter is examined once again at that time.

6.11 Note-sorting machines at the RBI

The need for note-sorting machines at the RBI offices stands on a different footing. As observed earlier, the CTCs will need to take the heavy load of soiled notes returning from circulation which the existing Issue Offices will be unable to process after the middle of the next decade. Note-sorting machines or versatile note-sorting/counting/examining machines will be of great value to the RBI in processing such high volumes of notes. Considering the magnitude of the work devolving on the CTCs, each will need to process about 300 million notes in the year 2000 and more than 1000 million notes in the year 2010. The machine capacities available abroad are well-suited to this order of magnitudes. The Committee, therefore, recommends that note-sorting/counting/examining machines may be introduced in the CTCs other than Issue Offices in a phased manner to process soiled notes received by them in excess of the processing capacities available at the Issue Offices.

6.12 Note-counting machines at currency chests

The inability of the public sector banks having currency chests to accept, by counting, surplus cash from other public sector banks having no currency chests, private and co-operative banks, Government departments, Railways and other public undertakings causes a heavy work load on the RBI. Major currency chests could receive the cash tendered by the above customers, if they are provided with note-counting machines. Such chests can also permit large customers to use the machines to count their withdrawals of currency before they leave the bank. The

Committee, therefore, recommends that all currency chests with a predetermined minimum holding capacity be provided immediately with note-counting machines.

6.13 Note-counting machines at the RBI

6.13.1 Under the revised procedure recommended for handling currency, a fresh note packet made and counted at the presses will not be subjected to a piece-wise count at any intermediate stage of its handling till it reaches the customer. It is also envisaged that the responsibility for any shortage detected in a note packet should be that of the person who breaks its security seal. It is, therefore, natural for a customer who has to handle cash in large quantities, to expect the RBI to make available to him a facility for ensuring, on the spot, the numerical accuracy of every note packet that he may receive at the RBI's counter.

6.13.2 It has been suggested elsewhere that the chests, the Railways, Government departments and undertakings should remit to the RBI only non-issuable notes meant for destruction. Thus the only source from which the RBI will be getting unsorted notes will be at its counters. There is need to provide note counting machines at the RBI's counters for assisting the teller at the counter in counting the number of notes in each re-issuable and non-issuable note packet made by him.

6.13.3 It has also been recommended that there should be a hundred percent quantity check of all non-issuable notes in the Verification Section of the Issue Office which is the last stage of the final audit of the work done by the Cash Department staff before the notes are sent for destruction. To enable the Section to complete the quantity check of all such notes within the stipulated time, it is necessary to provide the Verification Section with note-counting machines.

6.13.4 Thus, the Committee recommends the provision of note-counting machines in the banking hall for the use of the public at the counters, at the counters to assist the tellers and in the Verification Section for the final counting of the examined notes.

6.14 Coin dispensing machines

When the coinisation of Re. 1, Rs. 2 and Rs. 5 notes is completed, the volume of coins that will be handled by the RBI will increase substantially. Presently, the

coins are issued to the public at the counters of the RBI by weighment and/or manual counting. In order to facilitate the smooth and speedy issue of coins and better customer service at the counters, the Committee recommends that coin dispensing machines may be installed at the coin counters of the offices of the RBI. The Committee also feels that the coin sorting and dispensing machines should be used by large commercial banks' branches, railway stations and public sector undertakings.

6.15 Conveyor systems

It has been recommended elsewhere that with a view to minimising the inconvenience and expense of repeated handling of the remittance boxes, the note and coin boxes may be transported through containers from the presses/mints to the RBI/CTCs. In tune with this recommendation and depending on the lay-out of the existing buildings, and in all future offices, including CTCs, the Committee recommends that conveyor systems may be provided for the movement of the remittance boxes from the safety yard at which the containers will be delivered by the railways to the vaults of the RBI/CTC.

6.16 Elevating trucks

The Committee recommends that for easy handling and reducing the effort involved in the stacking of the note boxes in the vaults and also for utilising the optimum capacity of the vault for storage, modern elevating trucks may be provided at all the offices of the RBI for stacking coins/note boxes in the vaults.

6.17 Incineration

The RBI continues to use the conventional method of incineration for the destruction of notes. Because of the atmospheric pollution caused by such incineration, Pollution Control authorities have been objecting, time and again, to the use of conventional incinerators for the destruction of notes. The efforts made in the past for developing alternative methods of smoke-free incineration of notes, such as the oil-fired incinerator and the water-jacketed incinerator have not been uniformly successful. The Committee recommends that any new investment hereafter for the destruction of notes should preferably be in modern shredding machines.

CHAPTER-7
STAFF MOTIVATION AND THE WORKING ENVIRONMENT

7.1 The environment plays an important role in motivating employees to perform their task. While job satisfaction depends, to a great extent, on the individual attributes and attitudes of a person, a good environment has a direct impact on the morale of the work-force.

7.2 Highly qualified graduates seek employment in the RBI as clerks and coin/note examiners. They are all posted, after recruitment, to the Cash Department and despite the RBI's policy of moving them out of the department periodically, they continue there for very long periods. They are assigned the same work as is done by the undergraduates recruited in earlier years and matriculates promoted from the class IV cadre. The nature of work is monotonous and does not provide any challenge and scope for a serious application of the mind. The work environment is well below the expectations of a white-collar worker. With their high aspirations and expectations, natural in highly qualified newcomers, they soon develop a sense of a great letdown and extreme demotivation at the routine and mechanical work of note-examination they are required to do day after day. They get into the habit of not taking their work responsibilities seriously and often fall a prey to undesirable influences present in the work environment, adversely affecting discipline. The morale of such staff is not likely to be high.

7.3 The demotivation inherent in the prevailing system of the first long posting and the work environment in the department have been the major factors contributing to the overall erosion in values and efficiency. Since the Cash Department staff comprise the largest group of staff in any RBI office, it has also affected the morale of the entire organisation. The situation arising from all these factors has remained, by and large, unattended over the years, though often debated.

7.4 The Committee was informed that the debate centred around the question whether the work of coin/note examination should at all be given to such highly qualified graduates and why it should not be entrusted to a separate cadre of officials with lower qualifications. There was a cadre before 1972 of Clerk - Gr. II recruiting graduates and undergraduates and a separate cadre in the same pay scale for Coin/Note Examiner-Grade II recruiting only undergraduates, but a settlement was reached in May 1972 with the Employees' Association to form a combined cadre for Clerk/Coin-Note Examiner Grade II with a view to equalising their promotion

prospects and providing for an automatic switchover of coin/note examiner to clerk. The matter was reviewed in 1986 on the basis of a consultant's recommendation that two separate cadres may be formed again but on a balance of all considerations the RBI decided to continue with the scheme of the combined cadre.

7.5 The Committee felt that, the main issue being one of removing the handicaps placed on the new graduate recruit, a way should be found to ease the rigour of the constraining work schedule and the demotivating environment. If this could be ensured, there may be no great advantage in disturbing an arrangement which had been worked out in a settlement 17 years ago. Foremost among the steps needed to be taken is to ensure that new recruits are not continued in the Cash Department for very long periods at one stretch.

7.6 The Committee recognises that it may not be possible to rotate the staff working in the Cash Department too frequently. However, there is need to lay down that the offices make a conscious effort to move the Cash Department personnel around regularly according to a planned scheme, taking out every month a fixed number/ proportion of staff in each cadre from the Cash Department and bringing in an equal number into the Cash Department. The number/proportion to be so moved may be fixed by the Central Office for each office in consultation with the concerned Manager ensuring that such movement does not lead to dislocation or hampering of the usual work in the respective Departments. The Manager should adhere to the scheme and review compliance before the next month's rotation is effected. Even within the Cash Department some degree of movement among different desks should be planned.

7.7 The Committee is of the view that the following measures will also help in the proper rotation of staff.

(a) Such Cash Department persons who have left the department on a switch to another department may, if they so wish, and to the extent possible, be accorded promotion against the Cash Department's posts, even if they do not wish to come back to the department, but if their transfer to the Cash Department becomes necessary to ensure proper rotation, they should be required to join the department.

(b) The minimum required number of Senior coin-note examiners - Gr. II and coin-note examiners - Gr. I should be positioned in the Cash Department to facilitate day-to-day promotions. They should, however, be rotated within the department periodically.

(c) While security reasons may dictate that the RBI should have the option to rotate the undergraduates and class IV promotees also to other departments, such of them who wish to continue in the Cash Department and whose continued presence in the Cash Department does not constitute a security risk need not necessarily be disturbed.

7.8 In order to have a feel of the work environment in the Cash Department, the Committee visited one of the Bank's offices. During the visit the Committee gathered the impression that there was ample scope to improve the environment and the working conditions of the staff, especially of those working in the note examination halls, the note verification halls and the vaults. With a view to providing a better working environment, the Committee recommends the following measures :

(a) With 42 note examiners-Gr. II at the base level and the supporting staff in a note examination hall, there will be a total of 70 persons in the hall making it overcrowded and not congenial either for close supervision and security or for smooth working. It would, therefore, be preferable to form a Note Examination Section with 5 groups each with 5 coin/note examiners Gr. II, a group supervisor Gr. I and one mazdoor under an Asstt. Treasurer as Officer incharge of the Section.

(b) Work in the Note Examination Section and the Verification Section becomes difficult if electric fans are used. The vaults in many offices are stuffy. It will be necessary to ensure that the central air-conditioning is quite effective in these areas of work.

(c) To prevent the inhalation of dust emanating from the examination/counting of soiled notes, face masks may be provided to the employees in note examination halls, note verification halls, vaults and incinerators. To counteract the stale atmosphere in these areas, aerosol perfume sprays may be used twice a day.

(d) The look of the Note Examination/Verification Sections needs to be improved by more frequent painting of the walls, by furnishing it with wall-hangings and indoor plants and in due course, by providing tiled walls and floorings. To break the monotony of the counting and examination of notes, soft channel music could be provided in the Note Examination and Note Verification Sections. The lighting arrangements need to be greately improved.

(e) the tables of officers responsible for examining defective notes may be so designed that a portion of its top is of translucent glass with the bulb beneath it. This would facilitate easier examination of the defective notes and make for better productivity.

(f) Special attention should be given to the cleanliness of the premises and especially, the toilets in the Cash Department in which almost 40% of the total staff of an average office are employed.

(g) The timings of the medical officer should be so adjusted that the employees in the Cash Department are not required to go for consultation with him when work is in progress.

A summary of the Committee's recommendations is given separately in the form of a supplement to this report.

Sd/-
(P.R. Nayak)
Chairman

Sd/-
(R. Srinivasan)
Member

Sd/-
(V. Atal)
Member

Sd/-
(S. n . Bagai)
Member

Sd/-
(R. Janakiraman)
Member

Sd/-
(A.P. Aiyer)
Member

Sd/-
(R.K. Chaudhury)
Member

Sd/-
(B.J. Mandhyan)
Member

Sd/-
(B.K. Basu)
Member-Secretary

Bombay
30th September, 1989

Annexure–1

ORDER

The currency requirements of the economy have been increasing year after year. The continuing rate of increase in the circulation of notes is likely to strain the organisational machinery dealing with the issue function of the Reserve Bank of India. It is, therefore, considered desirable to undertake a comprehensive review of the present systems, procedures, technologies and security arrangements employed in the Bank's Issue Offices with a view to making improvements to meet efficiently the increasing demands on currency management. Accordingly, it has been decided to set up a Committee to go into the entire gamut of issues in the area of currency management and to suggest how the Reserve Bank of India should go about its issue function in the next decade.

The members of the Committee will be as follows :

1.	Shri P.R. Nayak, Dy. Governor, RBI	.....	Chairman
2.	Shri R. Srinivasan, Chairman, IBA	.....	Member
3.	Shri V. Atal, Managing Director, SBI	.....	Member
4.	Shri S.n . Bagai, Executive Director, RBI	.....	Member
5.	Shri R. Janakiraman, Executive Director, RBI	.....	Member
6.	Shri R.K. Chaudhury, Chief Officer, PPD., RBI	.....	Member
7.	Shri A.P. Aiyer, Chief Inspector, RBI	.....	Member
8.	Shri B.J. Mandhyan,* Adviser, MSD., RBI	.....	Member
9.	Shri B.K. Basu, Chief Officer, DCM., RBI	.....	Member- Secretary

* Subsequently co-opted by the Chairman

3. The Committee shall, if considered necessary, engage for a short term, the services of one or two consultants from India or abroad who have expertise regarding mechanical handling of currency notes.

4. The terms of reference of the Committee will be as under :

(a) To examine the existing systems, procedures and technologies for the management of currency and suggest improvements to meet present and future requirements including modernising physical facilities for speeding up operations and strengthening security arrangements relating to the issue function of the Reserve Bank.

(b) To examine the environment, work practices and staff morale in the Issue Offices and to make recommendations for improving motivation, output and job satisfaction of personnel handling currency.

(c) To examine the relationship of issue offices with (i) the currency note presses and mints, (ii) commercial banks with particular reference to currency chests and (iii) Police Department of State Governments and suggest how these can be made more effective to enable the Reserve Bank to discharge its currency management functions efficiently.

5. The Committee will submit its report by June 30, 1989.

RESERVE BANK OF INDIA,
CENTRAL OFFICE, BOMBAY

Sd/-
(R.N. MALHOTRA)
GOVERNOR

DATED : 21-12-1988

Annexure–2

Supply of fresh notes and salvaged notes

(In million pieces)

Year (April-March)	Notes in circulation at start of year	Government's supply of fresh notes	Supply to chests/RBI issues (as on September)	
			Fresh notes	Salvaged notes
(1)	(2)	(3)	(4)	(5)
1980-81	7981	5678	5022	703
1981-82	8655	4981	5780	731
1982-83	9393	4306	4675	1000
1983-84	9910	3566	4145	1119
1984-85	10613	5356	4242	1072
1985-86	12482	5678	5705	989
1986-87	14026	6566	5750	951
1987-88	15161	6833	7195	1110
1988-89	16710	6785	6331	1170

Annexure–3

Projected requirements of coins of the denominations of Re. 1/-, Rs. 2/- and Rs. 5/- upto 2000 AD

(In million pieces)

Year ending March	Requirements of							
	Notes				Coins			
	Re. 1	Rs. 2	Rs. 5	Total	Re. 1	Rs. 2	Rs. 5	Total
1990	4190	4000	3580	11770	1676	1600	1432	4708
1991	4570	4470	4020	13060	1828	1788	1608	5224
1992	4980	5000	4510	14490	1992	2000	1804	5796
1993	5440	5600	5060	16100	2176	2240	2024	6440
1994	5950	6270	5680	17900	2380	2508	2272	7160
1995	6500	7020	6370	19890	2600	2808	2548	7956
1996	7110	7880	7150	22140	2844	3152	2860	8856
1997	7780	8840	8020	24640	3112	3536	3208	9856
1998	8510	9930	9000	27440	3404	3972	3600	10976
1999	9320	11160	10110	30590	3728	4464	4044	12236
2000	10210	12560	11340	34110	4084	5024	4536	13644

Substitution ratio : 1 Coin = 2.5 Notes as per
Long-term Coinage Policy Committee

Annexure–4

Projected notes in circulation, notes to be destroyed and fresh notes to be put into circulation during 1990-200

(In million pieces)

Year ending March	Circulation of Rs. 10-100	Increase in circulation	Alternative I				Alternative II			
			Soiled notes destruction	Fresh notes addition	2 year cumulative total of fresh notes	Percentage (5)/(2)	Soiled notes destruction	Fresh notes addition	3 year cumulative total of fresh notes	Percentage (9)/(2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1990	8800	900	3500	3400		39	3500	3400		39
1991	9900	1100	3500	3500	6900	35	3500	3500		35
1992	11000	1100	3500	4100*	7600	37	3500	4100	11000	37
1993	12300	1300	3500	4800@	8900	39	3500	4800	12400	39
1994	13900	1600	4900	6500@	11300	47	3500	5100	14000	37
1995	15600	1700	6800	8500+	15000	54	4100	5800	15700	37
1996	17500	1900	7100	9000	17500	51	4700	6600	17500	38
1997	19800	2300	8500	10800	19800	55	5100	7400	19800	37
1998	22400	2600	9000	11600	22400	52	5800	8400	22400	38
1999	25300	2900	10800	13700	25300	54	6600	9500	25300	38
2000	28700	3400	11600	15000	28700	52	7400	10800	28700	38

* Modernisation of the Dewas Press is expected to add 720 million pieces to its present capacity of 1800 million pieces.

@ The Nasik Press is expected to convert its capacity of 4800 million pieces all to notes of Rs. 10 and above with a consequent capacity reduction to 4000 million pieces.

\+ The two new Presses are expected to come into operation with a total full capacity of 9000 million pieces.

Annexure 5

Issue Office-wise details of currency chests, supply of fresh notes, receipts of notes in chest remittances, local tenders and guarantee

Sr. No.	Name of the Office	State/Union Territories	Currency chests (State-wise) (March-1989)	Total No. of currency chests	Annual Supply of fresh notes (April 1988 to March 1989)		Annual receipt of notes in the chest remittances, local tenders and guarantee (in million pieces) (July 1988-June 1989)
					Volume (Million pieces)	Value (Rs. crores)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Ahmedabad	i) Gujarat	296				
		ii) Dadra & Nagar Haveli	2	301	301	478	292
		iii) Daman & Diu	3				
2.	Bangalore	Karnataka	243	243	328	563	376
3.	Bhubaneshwar	Orissa	96	96	255	661	53
4.	Bombay	Greater Bombay	41	41	612	1550	245
5.	Byculla	i) Maharashtra (Part)	211				
		ii) Goa	8	219	209	506	248
6.	Calcutta	i) Sikkim	2				
		ii) West Bengal	147	151	764	1748	537
		iii) Andaman & Nicobar Islands	2				
7.	Guwahati	i) Assam	60				
		ii) Manipur	12				
		iii) Meghalaya	7				
		iv) Nagaland	17	131	344	1175	163
		v) Tripura	13				
		vi) Arunachal Pradesh	15				
		vii) Mizoram	7				
8.	Hyderabad	Andhra Pradesh	378	378	443	1021	312
9.	Jaipur	Rajasthan	266	266	198	335	181

Annexure–5 (Contd.)

Sr. No.	Name of the Office	State/Union Territories	Currency chests (State-wise) (March-1989)	Total No. of currency chests	Annual Supply of fresh notes (April 1988 to March 1989)		Annual receipt of notes in the chest remittances, local tenders and guarantee (in million pieces) (July 1988-June 1989)
					Volume (Million pieces)	Value (Rs. crores)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
10.	Kanpur	Uttar Pradesh	430	430	462	703	461
11.	Lucknow*	—	—	—	—	—	176
12.	Madras	i) Tamil Nadu	326	328	456	819	556
		ii) Pondicherry	2				
13.	Nagpur	i) Machya Pradesh	294	412	1032	2032	503
		ii) Maharashtra (Part)	118				
14.	New Delhi	i) Haryana	107				
		ii) Himachal Pradesh	55				
		iii) Jammu & Kashmir	28	387	677	1655	532
		iv) Chandigarh	16				
		v) New Delhi	48				
		vi) Punjab	133				
15.	Patna	Biher	147	147	254	396	391
16.	Trivandrum	i) Kerala	194	200	357	724	39
		ii) Lakshadweep	6				
17.	Chandigarh*	—	—	—	—	—	13
			3730	3730	6692	14366	5078

* Sub-Office