

VII

CURRENCY MANAGEMENT

VII.1 Ensuring adequate availability of good quality banknotes and coins is one of the core functions of the Reserve Bank. Towards this objective, the Reserve Bank continued to take measures during 2006-07 to meet the public's demand for banknotes and coins while simultaneously improving the quality of banknotes. The demand for banknotes was met almost in full. There was a marked improvement in the quality of Rs.10 denomination banknotes due to sustained efforts. The mechanisation of note processing activities at currency chests was carried forward by equipping the currency chests with the sorting machines. The disposal capacity of soiled notes has been augmented by putting in place six Currency Verification and Processing Systems (CVPS) at a new sub-office in Lucknow. With this, the Reserve Bank now has a total of 54 CVPS and 28 Shredding and Briquetting Systems (SBS) at its 19 offices.

VII.2 In this backdrop, this Chapter details the currency management operations of the Reserve Bank during 2006-07. A multi-pronged approach was followed by the Reserve Bank with the objective of meeting the public's demand for good quality banknotes and coins. The approach comprised regular supply of fresh notes, speedier disposal of soiled banknotes, improvements in inventory management and mechanisation of cash processing activity. Total supplies of banknotes, both in volume and value terms, from the printing presses were almost close to the indents. The growth in the volume of banknotes remained substantially lower than that in value terms, reflecting the ongoing compositional shift in favour of higher denomination banknotes. Star series banknotes were issued for the first time in 2006-07 with the objective of streamlining the procedures and reducing manpower deployed in the replacement activity at the printing presses. Operations aimed at computerisation and networking of the currency chests with the Reserve Bank's offices were pursued during 2006-07 to reap efficiency gains in reporting and accounting transactions.

BANKNOTES IN CIRCULATION

VII.3 During 2006-07, the value of banknotes in circulation rose by 17.5 per cent (16.8 per cent during

2005-06). The ratio of currency with the public to GDP has risen steadily over the years from 9.5 per cent of GDP at end-March 1990 to 11.6 per cent at end-March 2006 and further to 11.7 per cent at end-March 2007. The ratio of currency with the public to broad money (M_3) declined from 15.1 per cent at end-March 2006 to 14.6 per cent at end-March 2007 continuing with its declining trajectory over the past few years (Chart VII.1).

VII.4 The volume of banknotes rose by 5.2 per cent during 2006-07 (2.3 per cent a year ago). The growth in the volume of banknotes, thus, continued to be substantially lower than that in value terms, mainly on account of the gradual compositional shift towards higher denomination banknotes, particularly Rs.1000 and Rs.500 denominations. While the volume of Rs.500 denomination notes increased by 23.6 per cent during 2006-07 (19.4 per cent a year ago), that of Rs.1000 denomination notes rose by 45.7 per cent (52.7 per cent a year ago). The volume of Rs.10 banknotes increased by 14 per cent due to sustained efforts to pump in more fresh banknotes into circulation to bring about an improvement in the quality of these banknotes. On the other hand, the volume of banknotes of denominations Rs.2 and Rs.5

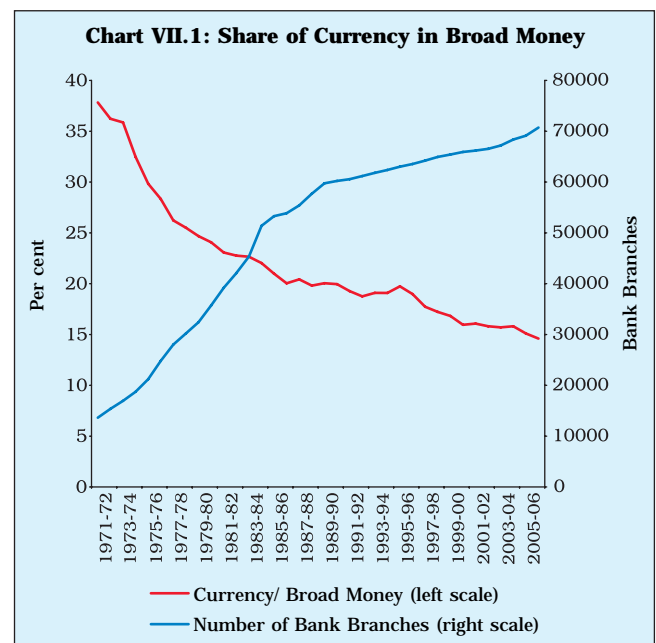


Table 7.1: Banknotes in Circulation

Denomination	Volume (Million pieces)			Value (Rupees crore)		
	End-March 2005	End-March 2006	End-March 2007	End-March 2005	End-March 2006	End-March 2007
1	2	3	4	5	6	7
Rs.2 & Rs.5	6,484	6,217	6,008	2,548	2,431	2,334
Rs.10	6,770	6,274	7,155	6,770	6,274	7,155
Rs.20	1,938	2,038	2,089	3,876	4,076	4,178
Rs.50	5,988	5,568	5,590	29,941	27,840	27,951
Rs.100	12,328	13,464	13,544	1,23,282	1,34,640	1,35,444
Rs.500	3,055	3,647	4,508	1,52,728	1,82,350	2,25,400
Rs.1000	421	643	937	42,082	64,300	93,676
Total	36,984	37,851	39,831	3,61,227	4,21,911	4,96,138

declined during the year, while that of Rs.20, Rs.50 and Rs.100 remained at almost the same level as in 2005-06 (Table 7.1).

VII.5 In volume terms, Rs.100 denomination notes had the largest share (34 per cent of the total pieces in circulation) at end-March 2007. In terms of value, Rs.500 denomination notes had the largest share (over 45 per cent of the total value of banknotes in circulation) at end-March 2007 (Chart VII.2).

VII.6 In the year 2004-05, the Reserve Bank had to contend with the reverse flow of coins. The overall stock of coins with the Reserve Bank, as a result, increased considerably causing strain on storage and distribution of coins. The trend continued for almost two years. In view of the comfortable stock of coins at the currency chests/small coin depots and the Reserve Bank, the Reserve Bank did not place any indent for coins for 2005-06 and 2006-07. There was a reversal in this trend from October 2006 onwards

as there was a sudden spurt in the demand for Rs.2 coins. In view of the reported melting of Rs.2 cupronickel coins due to rising metal prices, the Government of India, in consultation with the Reserve Bank, decided to mint all denomination coins in ferritic stainless steel (FSS). An indent of 700 million pieces was placed in December 2006 for Rs.2 FSS coins and these coins have already been issued. For the year 2007-08, the Reserve Bank placed an indent of 300 million pieces, subsequently raised to 500 million pieces for Re.1 coins, 1,500 million pieces for Rs.2 coins and 300 million pieces for Rs.5 coins. The total value of coins (including small coins in circulation) increased by 11.2 per cent during 2006-07 (2.3 per cent in 2005-06). In volume terms, the increase was 6.5 per cent in 2006-07 (1.4 per cent in 2005-06) (Table 7.2). The value of coins, relative to the value of the banknotes, remains fairly small and has declined in recent years (from 1.7 per cent at end-March 2006 to 1.6 per cent at end-March 2007).

Chart VII.2: Banknotes in Circulation: March 2007

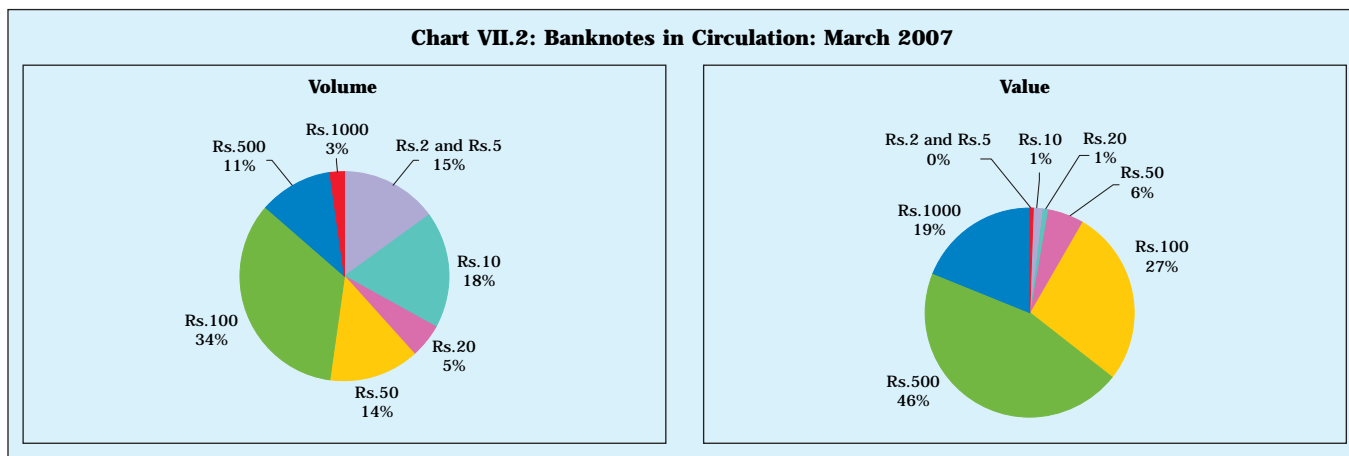


Table 7.2: Coins in Circulation

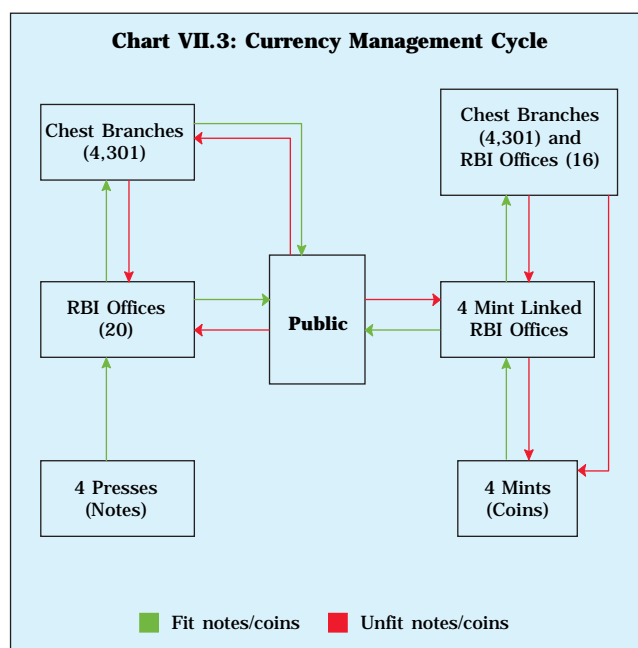
Denomination	Volume (Million pieces)			Value (Rupees crore)		
	End-March 2005	End-March 2006	End-March 2007	End-March 2005	End-March 2006	End-March 2007
1	2	3	4	5	6	7
Small Coins	54,051	54,115	54,277	1,353	1,357	1,364
Re.1 coin	17,896	18,730	22,878	1,790	1,873	2,288
Rs.2 coin	6,449	6,684	7,441	1,290	1,337	1,488
Rs.5 coin	5,238	5,289	5,761	2,619	2,645	2,881
Total	83,631	84,818	90,357	7,052	7,212	8,021

Currency operations

VII.7 The Reserve Bank continued with its initiatives to provide the public with good quality banknotes. Towards this objective, a multi-pronged approach is pursued involving regular supply of fresh notes, speedier disposal of soiled banknotes, improvement in inventory management and mechanisation of cash processing activity. In the recent period, the discontinuance of the practice of stapling banknotes has also contributed to improvement in quality of banknotes. Banks have been advised to issue only clean notes to the public and to remit the soiled notes in unstapled condition to the Reserve Bank through currency chests. Efforts are being made to increase the life of the banknotes and the Reserve Bank is examining various options in this regard.

Currency Chests

VII.8 The core central banking function of note issue and currency management is performed by the Reserve Bank through its 18 Issue Offices, the sub-office of the Issue Department at Lucknow, a currency chest at Kochi and a wide network of 4,301 currency chests and 4,027 small coin depots. The Reserve Bank has agency arrangements, mainly with scheduled commercial banks, under which a currency chest facility is granted to them. The currency chest branch is an extended arm of the Reserve Bank's Issue Department and carries out the same functions of issue of fresh banknotes/coins, retrieval of soiled banknotes, exchange of banknotes and coins including mutilated banknotes (Chart VII.3). The total number of currency chests declined further during 2006-07 reflecting the impact of the on-going policy to progressively convert and/or close currency chests held with the State Treasuries as well as rationalisation of currency chests mainly by State Bank of India (Table 7.3).



VII.9 Out of the 4,301 currency chests maintained by various banks, 4,027 chests have so far been

Table 7.3: Currency Chests

Category	Number of Currency Chests		
	June 30, 2005	June 30, 2006	June 30, 2007
1	2	3	4
Treasuries	149	116	26
State Bank of India	2,198	2,182	2,127
SBI Associate Banks	1,008	994	988
Nationalised Banks	983	1,028	1,061
Private Sector Banks	72	83	94
Co-operative Banks	1	1	1
Foreign Banks	4	4	4
Reserve Bank	20	20	20
Total	4,435	4,428	4,321

CURRENCY MANAGEMENT

Table 7.4: Volume of Banknotes Indented and Supplied

(Million pieces)

Denomination	2004-05			2005-06			2006-07			2007-08
	Indent	Supply	% of Supply to Indent	Indent	Supply	% of Supply to Indent	Indent	Supply	% of Supply to Indent	Indent
1	2	3	4	5	6	7	8	9	10	11
Rs.5	160	179	112	–	50	–	–	50	–	–
Rs.10	4,700	4,332	92	3,300	1,183	36	3,500	3,480	99	4,200
Rs.20	1,000	755	76	1,200	706	59	500	438	88	600
Rs.50	2,040	1,862	91	2,700	1,063	39	1,400	1,458	104	1,200
Rs.100	5,030	3,956	79	5,550	3,208	58	4,000	4,034	101	4,200
Rs.500	1,625	1,252	77	1,800	661	37	1,500	1,473	98	1,800
Rs.1000	300	257	86	450	130	29	600	589	98	700
Total	14,855	12,593	85	15,000	7,001	47	11,500	11,472	99.8	12,700

equipped with note sorting machines. The progress made in respect of installation of note sorting machines in the remaining currency chests of the various banks is being closely monitored.

Printing of Fresh Banknotes

VII.10 The supply of banknotes, both in volume and value terms, from the printing presses recovered during 2006-07 from the sharp decline in the preceding year. Total supplies in volume terms rose by 64 per cent during 2006-07 while those in value terms increased by almost 115 per cent during the year. Total supplies during 2006-07 were 99.8 per cent in terms of volume and 99.0 per cent in terms of value of the indent (Tables 7.4 and 7.5). The relatively lower supply of Rs.20 denomination banknotes *vis-à-vis* the indent was due to the reason that printing of these denominations with new/

additional security features commenced late during 2006-07.

VII.11 As part of its ongoing efforts to reduce the expenditure for printing of banknotes, the Reserve Bank continued with its efforts to source banknotes from the lowest cost producer (Box VII.1).

VII.12 The position of indent and supply of coins during 2004-05 to 2006-07 is set out in Table 7.6.

Disposal of Soiled Notes

VII.13 During 2006-07, 7,325 million pieces of soiled banknotes (18.3 per cent of banknotes in circulation) were disposed off. Notes of Rs.100 denomination constituted the largest share of soiled notes, followed by Rs.10 denomination notes (Table 7.7). As against a disposal of 7,325 million pieces during the year, 10,214 million pieces of fresh banknotes were

Table 7.5: Value of Banknotes Indented and Supplied

(Rupees crore)

Denomination	2004-05			2005-06			2006-07			2007-08
	Indent	Supply	% of Supply to Indent	Indent	Supply	% of Supply to Indent	Indent	Supply	% of Supply to Indent	Indent
1	2	3	4	5	6	7	8	9	10	11
Rs.5	80	90	113	–	–	–	–	–	–	–
Rs.10	4,700	4,332	92	3,300	1,183	36	3,500	3,480	99	4,200
Rs.20	2,000	1,510	76	2,400	1,412	59	1,000	876	88	1,200
Rs.50	10,200	9,310	91	13,500	5,316	39	7,000	7,292	104	6,000
Rs.100	50,300	39,560	79	55,500	32,084	58	40,000	40,348	101	42,000
Rs.500	81,250	62,600	77	90,000	33,065	37	75,000	73,655	98	90,000
Rs.1000	30,000	25,700	86	45,000	12,960	29	60,000	58,910	98	70,000
Total	1,78,530	1,43,102	80	2,09,700	86,020	41	1,86,500	1,84,561	99	2,13,400

Box VII.1 Printing Cost of Banknotes

The Reserve Bank has been sourcing banknotes from the two presses of the Security Printing and Minting Corporation of India (SPMCIL), and the two presses of its wholly owned subsidiary, Bharatiya Reserve Bank Note Mudran Pvt. Ltd. (BRBNMPL). The cost of printing banknotes during the year ended March 2007 was Rs.2,020.20 crore. Of this, Rs.1041.95 crore was paid to the SPMCIL presses in respect of 4,642 million banknotes supplied by them and Rs.978.25

crore to BRBNMPL for 6,830 million notes procured from its presses. It has been the Reserve Bank's endeavour to consistently bring down the cost of banknotes by encouraging the note presses to bring about greater efficiency in their operations while maintaining the quality of printed notes. The cost of banknotes paid to the SPMCIL and BRBNMPL presses in the last five years is set out in the Table.

Table: Supply and Cost of Banknotes

Year (April-March)	SPMCIL		BRBNMPL	
	Supply (Million pieces)	Cost (Rupees crore)	Supply (Million pieces)	Cost (Rupees crore)
2002-03	5,198	750.10	6,172	682.99
2003-04	5,065	894.23	8,101	815.33
2004-05	4,622	783.25	7,971	660.32
2005-06	2,694	405.90	4,307	628.96
2006-07	4,642	1,041.95	6,830	978.25

supplied to members of public and to currency chests (9,485 million pieces supplied in 2005-06). The number of notes withdrawn from circulation and eventually disposed off in the Reserve Bank offices has, therefore, decreased due to improvement in the quality of notes in circulation as part of the Reserve Bank's Clean Note Policy.

Mechanisation

VII.14 Mechanisation of cash processing activity and disposal of soiled banknotes has been one of the major thrust areas of the Reserve Bank in currency management. With the opening of Lucknow sub-office in October 2006 and resultant capacity augmentation, the Reserve Bank has now in place 54 Currency Verification and Processing Systems (CVPS) and 28

Shredding and Briquetting Systems (SBS) at its 19 Offices. During 2006-07, 4,532 million pieces of banknotes were processed on these machines. The remaining notes were disposed off under other modes including manual system.

Counterfeit Banknotes

VII.15 During 2006-07, the number of counterfeit banknotes detected at the Reserve Bank offices and bank branches declined by 15.5 per cent. However, in value terms, the counterfeit banknotes increased by 31.2 per cent on account of rise in detections in the banknotes of higher denominations, viz., Rs.1000 and Rs.500 banknotes (Table 7.8). All banks have been advised to install note sorting machines at their currency chest branches to facilitate careful

Table 7.6 : Indent and Supply of Coins

Denomination	2004-05		2005-06		2006-07	
	Indent	Supply	Indent	Supply	Indent	Supply
1	2	3	4	5	6	7
25 paise	0	0	0	0	0	0
50 paise	0	0	0	0	0	0
Re. 1	1,250	463	0	12.7	0	45 *
Rs.2	500	232	0	21.5	700	686
Rs.5	750	201	0	7.2	0	11
Total	2,500	896	0	41.4	700	742

* : Includes mainly commemorative coins.

Table 7.7: Denomination-wise Disposal of Soiled Notes

Denomination	Volume in million pieces		
	2004-05	2005-06	2006-07
1	2	3	4
Rs.1000	5	5	7
Rs.500	257	242	276
Rs.100	4,324	3,250	2,360
Rs.50	2,490	2,160	1,456
Rs.20	485	532	489
Rs.10	3,716	2,593	2,243
Up to Rs.5	475	522	494
Total	11,752	9,304	7,325
<i>Memo:</i>			
Total Banknotes in Circulation	36,984	37,851	39,831

examination and detection of counterfeit banknotes at the currency chest level as also to ensure efficient sorting of banknotes.

New/Additional Security Features of Banknotes

VII.16 In order to maintain the confidence of the public in the banknotes, the Reserve Bank, in consultation with the Government of India, reviews the security features of banknotes periodically. As a part of this process, the Reserve Bank had started from 2005-06, the introduction of banknotes with several new/additional security features in denominations of Rs.10, Rs.50, Rs.100, Rs.500 and Rs.1000. These include (a) demetallised, magnetic and machine readable windowed security thread with a colour shift from green to blue in Rs.100, Rs.500 and Rs.1000 denominations; (b) improved intaglio printing; (c) improved see-through feature incorporating the denominational numeral instead of

the floral design; and (d) electrotype watermark featuring the denominational numeral alongside Mahatma Gandhi portrait in the watermark window. The process of issuance of all the denominations of the banknotes in the Mahatma Gandhi Series 2005 with additional/new security features was completed during 2006-07 with the issuance of Rs.20 denomination banknotes with additional/new security features in August 2006. Posters containing the pictorial details of additional/new security features on banknotes have been provided to all the banks for public dissemination. The Regional Offices of the Reserve Bank have been advised to facilitate public awareness of these security features at the local levels through organisations such as the railways and police authorities as well as through posters printed in vernacular. The details regarding the security features of the new banknotes have been posted on the Reserve Bank's website.

Introduction of Star Series Banknotes

VII.17 The Reserve Bank commenced the issuance of Star series banknotes in the denomination of Rs.10, Rs.20 and Rs.50 during 2006-07. The Star series banknotes look exactly like the earlier banknotes in the Mahatma Gandhi series but have an additional character, viz., * (Star) in the number panel between the prefix and the serial number. The packets with Star series notes contain, as usual, 100 pieces, though not in serial order. The Star series system helps in streamlining the procedures at the printing presses and reducing manpower deployed in replacement activity. The bands of the fresh note packets containing the Star series numbered note/s clearly indicate the presence of such banknotes in the packets.

Table 7.8: Counterfeit Banknotes Detected

Denomination	Number of pieces			Value (Rupees)		
	2004-05	2005-06	2006-07	2004-05	2005-06	2006-07
1	2	3	4	5	6	7
Rs.10	79	80	110	790	800	1,100
Rs.20	156	340	305	3,120	6,800	6,100
Rs.50	4,737	5,991	6,800	2,36,850	2,99,550	3,40,000
Rs.100	1,61,797	1,04,590	68,741	1,61,79,700	1,04,59,000	68,74,100
Rs.500	14,400	12,014	25,636	72,00,000	60,07,000	1,28,18,000
Rs.1000	759	902	3,151	7,59,000	9,02,000	31,51,000
Total	1,81,928	1,23,917	1,04,743	2,43,79,460	1,76,75,150	2,31,90,300

Note: Data are exclusive of the counterfeit notes seized by police and other enforcement agencies.

Computerisation of Currency Management

VII.18 The Reserve Bank has taken up the task of putting in place an Integrated Computerised Currency Operations and Management System (ICCOMS) in the Issue Departments in regional offices and in the central office. The project also includes computerisation and networking of the currency chests with the Reserve Bank's offices to facilitate prompt, efficient and error-free reporting and accounting of the currency chest transactions and seamless flow of information between Issue Departments and the Central Office in a secure manner with proactive monitoring. All offices of the Reserve Bank commenced 'live-run' on the Currency Chest Reporting System (CCRS) and the Chest Accounting Module (CAM) of ICCOMS-ID component. Once these two components are completed, the Currency Management Information System (CMIS) Module at the Department of Currency Management (DCM) at the Central Office of the Reserve Bank will be taken up for implementation, the testing for which has already begun.

Customer Service

VII.19 As a part of its efforts to improve customer service in matters relating to issue/acceptance of coins from public and exchange of soiled and mutilated banknotes, the Reserve Bank reiterated its directions to all scheduled commercial banks to issue/accept coins and soiled banknotes in transactions or for exchange without any restriction. Offices where demand for coins has picked up were advised to arrange for coin camps at identified locations in consultation with banks. Efforts were continued to

provide timely and efficient customer service not only at the Reserve Bank offices but also at the bank branches.

ISO 9001:2000 Certification

VII.20 Apart from DCM, the two Issue offices at Kolkata and Hyderabad were ISO (9001:2000) Certified in May 2006. Four more Issue offices, viz., New Delhi, Jaipur, Chennai and Bangalore have been taken up for ISO Certification.

Bharatiya Reserve Bank Note Mudran Pvt. Ltd.

VII.21 The Bharatiya Reserve Bank Note Mudran Pvt. Ltd. (BRBNMPL), incorporated as a wholly owned subsidiary of the Reserve Bank, was set up in 1996 to take over the work of the New Note Press project. The BRBNMPL prints Bank Note Forms at its two note presses at Mysore (Karnataka) and Salboni (West Bengal). The total supply of banknotes by BRBNMPL during 2006-07 was 6,830 million pieces.

Outlook

VII.22 The Reserve Bank would continue to conduct its currency management operations with a view to ensuring efficient customer service through an adequate supply of good quality banknotes and coins in the country. The Reserve Bank will continue with its efforts to explore various options for increasing the circulation life of banknotes. Rationalisation of systems and procedures with a view to increasing the efficiency of operations and to strive towards setting international benchmarks in currency management would also be pursued.