





भारतीय खाद अनुसंधान संस्थान
Indian Fertilizer Research Institute of India
फर्टिलाइजर रिसर्च इंस्टीट्यूट ऑफ इंडिया
सं. S/A/ACC. No. 243133
दिनांक / Date: 05/18
नाम/Initials

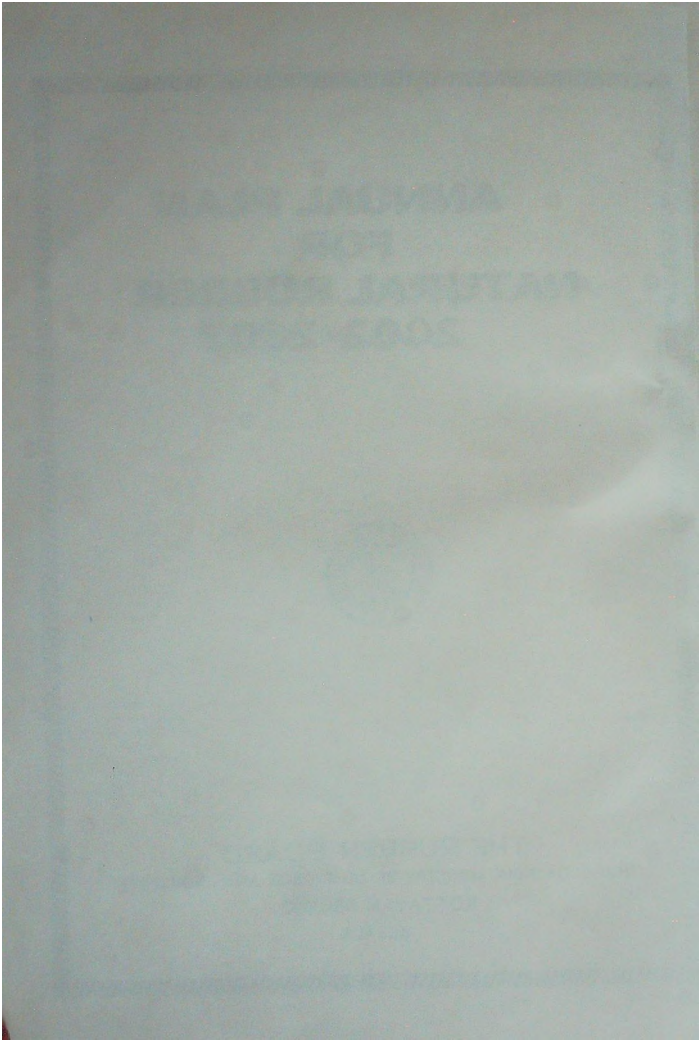


5

**ANNUAL PLAN
FOR
NATURAL RUBBER
2002-2003**



THE RUBBER BOARD
(GOVT. OF INDIA, MINISTRY OF COMMERCE AND INDUSTRY)
KOTTAYAM-686 002
KERALA



Annual Plan for Rubber for 2002-03

1. Introduction

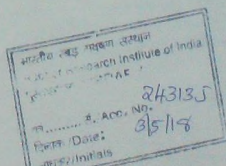
Rubber cultivation in India, since its commercial introduction by European planters in 1902, has registered remarkable progress in area, production and productivity. At present India stands third in natural rubber (NR) production, next only to Thailand and Indonesia contributing 9.2 percent of the global output. Predominance of small holders is an important characteristic of the Indian rubber plantation industry. Eighty eight percent of the area and production in the country is accounted for by the small holders who number around one million, with an average holding size of less than 0.50 ha. Most of the rubber plantations are located in remote rural areas and have been catalytic to rural development. The growth and development of the Indian rubber plantation industry in the post independent era is depicted in the following table.

Table-1

Area, Yield/ha. and Production of NR

Year	Area (⁰⁰⁰ ha)	Yield (Kg/tapp. ha)	Production (Tonnes)	Annual Growth in Production (%)
1950-51	75	284	15,830	
1960-61	144	365	25,697	
1970-71	217	653	92,171	
1980-81	284	788	153,100	
1990-91	475	1,076	329,615	10.9
1995-96	524	1,422	506,910	7.4
1996-97	533	1,503	549,425	8.4
1997-98	545	1,549	583,830	6.3
1998-99	553	1,563	605,045	3.6
1999-2000	559	1,576	622,265	2.8
2000-01	563	1,576	630,405	1.3
2001-02(e)	567	1,580	643,000	2.0

e- estimate



The consumption of NR which registered an average annual growth of 8.0 percent during the 8th Five Year Plan period (1992-93 to 1996-97) suffered a major set-back during 1997-98 and 1998-99 due to the demand recession. The growth in consumption had declined to 1.8 percent during 1997-98 and 3.4 per cent during 1998-99. As is evident from the Table -2 below, the sluggish performance of the consumption sector of NR, continued in 2000-01, though the year 1999-00 had witnessed a marked resurgence in demand growth. In consequence, the domestic market scenario continued to be depressed with excess stock and low price of rubber.

Table-2

Growth in Consumption vis-a-vis Production of NR
(000 tonnes)

Year	Consumption	Growth rate (%)	Production	Growth rate (%)
1997-98	572	1.8	584	6.3
1998-99	592	3.4	605	3.6
1999-2000	628	6.2	622	2.8
2000-01	631	0.5	630	1.3
2001-02(e)	650	3.0	643	2.0

e-estimate.

The average growth in NR production during the first four years of the IXth Five Year Plan period (1997-98 to 2000-01) was 3.5%. The target of production fixed by the Planning Commission for the terminal year (2001-02) of IXth Plan was 6.70 lakh tonnes, against which the realization anticipated is around 6.43 lakh tonnes or 96% of the target. The continued low price of rubber and adverse weather condition in the state of Kerala, which accounts for 92 percent of the production of NR in India, adversely affected the production growth of natural rubber. As against 8.4% growth realized during VIIIth Plan, the growth in production expected during IXth Plan is 3.2%.

The development strategy adopted during the IXth Five Year Plan, mostly focused on raising production, was as follows.

- i) Expansion of area through newplanting with thrust in non-traditional (NT) region, particularly in the North-East.
- ii) Replanting of old and uneconomic plantation with high yielding cultivars; mostly in the traditional region.
- iii) Improving the productivity of existing plantations by popularising better agro-management and exploitation techniques;
- iv) Improving the quality of small grower's rubber by promoting group processing through the Rubber Producer's Societies (RPS), the grass root level voluntary organization of small growers.

The IXth Plan outlay approved by the Planning Commission for NR was Rs.373.19 crores. As against this, the budget sanctioned year-wise aggregated to Rs.390.10 crores. The expenditure incurred during the first four years totaled to Rs.286.56 crores. Anticipating an expenditure of Rs.82.84 crores during the terminal year 2001-02 the total financial achievement comes to Rs.369.40 crores, which shows that 98.98 % of the approved outlay would be utilized.

A World Bank Assisted Rubber Project was under implementation from January 1994 onwards which was continued during the IXth Plan period till the end of September 2000. Total investment cost of the project was Rs.6169 Million. Out of this, Rs.2152 Million was Rubber Board's expenditure target for the project period. The project target during the IXth Plan period was Rs.1840.18 Million, against which the Board's achievement was Rs.1486.80 Million. There were six major components in the World Bank Assisted India Rubber Project viz; (1) Newplanting (2) Replanting (3) Processing (4) Productivity enhancement (5) Institutional development (6) Women and Tribal Development in Tripura. The overall achievement in the project was satisfactory and in major components good. The transitional arrangement for regular operation was made at the close of the project to ensure the sustainability of the project activities. Most of the schemes stated above were inter linked and ongoing, which were integrated in to the general plan against collection of cess (domestic resources) and continued.

2 Review of Schemes/Projects under Implementation

2.1 Rubber Plantation Development Scheme (RPD)

The scheme was implemented during the IXth Plan period with the objective of promoting/assisting planting of rubber (both newplanting and replanting) in a scientific manner, adopting all packages of practices as recommended. The scheme, which is an integrated one, provides for technical and financial assistance so that the entire cost of cultivation of the crop can be met through the financial assistance and loan available under NABARD Refinance scheme. The planting grant approved during the commencement of the IXth Plan was as follows: (1) In the traditional region (state of Kerala and Kanyakumari District of Tamilnadu), a grant of Rs.18,000 per ha for holdings upto 5 ha, the assistance being limited to 2 ha; (2) In the non-traditional region, the grant was Rs.22,000 per ha for holdings up to 5 ha and Rs.18,000 per ha for holdings between 5 and 20 ha. In addition to this, reimbursement of the cost of poly bag plants was allowed @ Rs.6/-per plant for all categories of growers. The planting grant has been reduced to Rs.12,000 per ha in the traditional region, Rs.16,000 per ha in the non-traditional area for holdings up to 5 ha and Rs.14,000 per ha for holdings above 5 ha but below 20 ha with effect from 1/4/2000. The assistance for polybag planting material also is being phased out @ Re.1 per year.

Physical targets and achievements for new planting and replanting during the IXth Plan (including World Bank Project) are given in Table 3.

Table-3

Rubber Plantation Development Scheme - Physical targets and achievements

(Area in hectares)

Year	New Planting		Replanting	
	Target	Achievement*	Target	Achievement
1997-98	9700	12476	5400	5889
1998-99	8500	6989	5400	4807
1999-2000	6000	4685	4000	3842
2000-01	2750	3133	3250	3365
2001-02	2750	#	3250	#
Total	29700		21300	

* As on 31-8-2001 # being processed

The continuing decline in the price of rubber and rubber wood during the last four years, reduction in the rate of planting grant and incentives for use of advanced planting materials etc were the detrimental factors to the progress of the planting tempo. Frequent eruption of social/political disturbances in the non-traditional regions was another reason for decline in the rate of planting. Hence the annual targets for planting (NP/RP) during the IXth Plan were brought down subsequently on the basis of manpower, infrastructure and financial resources available.

Processing of applications for new planting and replanting in 2001-02 season has commenced. Some pending cases of 2000-01 planting are being finalized. Therefore, the achievements furnished in the table above for the last two years are not complete.

2.2 Rubber Development in Non-traditional (NT) region

The scheme has been formulated for the expansion of rubber cultivation in NT areas. It aims at development and potential utilization of the vast stretches of fallow land in the North-Eastern states, part of Orissa, Andhra Pradesh, Goa, Karnataka and Maharashtra for rubber planting. Group/Block plantings are encouraged under the scheme with the support of state Governments.

Infrastructure development such as maintaining Nucleus Rubber Estates and Training Centre (NRETC), District Development Centres (DDCs) for demonstration and training and nurseries for production and distribution of high yielding planting materials is the vital part of this plan scheme. At present there are two NRETCs, one established in Tripura in an area of 100 hectares and another in South Andamans with 206.50 hectares. Three DDCs set up in a total area of 63 hectares, two in Assam and one in Meghalaya, serve as training centers for local growers. In addition, eight nurseries having a total area of 28.47

ha. and Tappers' Training Schools for imparting training in tapping and related activities are also maintained by the Board. The scheme involves the following sub components also.

- i) North Eastern Rubber Development Scheme, Guwahati
- ii) North Eastern Rubber Development Scheme, Agarthala
- iii) Eastern India Rubber Development Scheme
- iv) Western India Rubber Development Scheme

The targets and achievements under new planting in non-traditional areas during the IXth Plan period are given in the following table. Figures furnished in table-3 are inclusive of these figures.

Table -4

New planting in Non-traditional areas
(Area in Hectares)

IX th Plan	Target	Achievement*
1997-98	4700	3705
1998-99	4000	3784
1999-2000	3200	3097
2000-01	1900	2261
2001-02	1900	#
Total	15700	

- #-Processing of applications just started

2.3 Special Component Plan and Tribal Sub Plan (SCP/TSP)

Since 1988-89, the Board has been implementing various rubber based sustainable farming projects for providing support to the weaker sections of the society aimed at their socio-economic upliftment as well as development of rural areas. Financial assistance for scientific planting of rubber @ Rs.12000 per ha. in the traditional area and @ Rs.16000 per ha. in the non-traditional area is provided. Additional assistance is also provided as free supply of high yielding planting materials, distribution of fertilizer at subsidised rate, incentives for boundary protection and support for irrigation.

The main programme envisaged under TSP is promotion of block planting units in a compact area of land owned by tribals. This provides rehabilitation to the tribal shifting cultivators, as also increase production of NR in the country. The Board maintains the rubber plantations till the tapping stage and then hands over them to the beneficiaries to tap and take the yield. The scheme also envisages, apart from providing training to the beneficiaries in scientific tapping, setting up of processing facilities and formation of Rubber Producers' Societies to look after proper processing and marketing of rubber.

Sizeable areas in non-traditional region are planted under the block planting scheme with the financial support of the State Governments concerned. Total area planted in the region so far is 2569 ha, out of which 2199 ha is in the state of Tripura where the scheme was first introduced in 1992. Successful operation of the project is now continued in Tripura, Orissa, Andhra Pradesh and Karnataka. Progress of the scheme with year wise achievement in area and number of beneficiaries during the IXth Plan are given in Table 5.

Table 5

Block Plantation Scheme		
	Area (ha)	Beneficiaries (No)
1997-98	694	1234
1998-99	876	1389
1999-2000	583	865
2000-01	416	861
2001-02(t)	335	600
Total	2904	4949

(t) - target

A similar Tribal Rubber Plantation Project is under implementation in Kerala from 1995-96 onwards with the assistance of the Govt. of Kerala. As against a total target of 1200 hectares, block plantations have been raised in 1899 ha of tribal lands (upto 2000-01). Thus the cumulative achievement in area under the project, both in the traditional and non-traditional regions, so far is 4468 ha.

The proposal for another Block Planting project in around 200 hectares in the Karbi Anglong District Council area of Assam, is still pending. Though proposed in 1999-2000, the required land has not yet been identified and handed over to the Board by the District Council.

2.4 Research

The Rubber Research Institute of India (RRII), which started functioning in 1955 under the Rubber Board, is now widely recognized as an international centre of excellence in natural rubber research. The broad objective of various programmes implemented by the institute is to increase productivity of NR plantations by developing appropriate agro-technology through research on crop management, bio-technology, crop improvement, plant protection, crop exploitation, physiology etc. The scheme *inter-alia* includes maintenance of the RRII and its five Regional Stations in Kerala, West Bengal, Orissa, Madhya Pradesh (now in Chhatisgarh) and Maharashtra and the two Hevea Breeding Sub-Stations, one each in Tamil Nadu and Karnataka.

The ongoing research programmes are concerned with the following.

- (a) Strengthening of location specific research for identification of suitable clones, development of suitable agro-technology etc. to suit the stress situation specific to each region.
- (b) Research in the fields of Bio-technology such as shoot tip culture, meristem culture, somatic embryogenesis, isozyme studies and Molecular Biology.
- (c) Maintenance of Germ plasm gardens already established.
- (d) Strengthening of technical and supporting services at RRIL.
- (e) Improvement of central facility for soil and tissue testing.
- (f) On – farm evaluation and demonstration.
- (g) Product improvement.

Exploitation trials are being conducted in an area of 16 ha of land leased out by the Government of Kerala in the Rajiv Gandhi Institute of technology, Kottayam, apart from those being conducted in farmer's fields.

Physical achievements during the IXth Plan period are summarized below:-

- a) Eight field trials and polyclonal seed garden were established at Hevea Breeding Sub Station (HBSS), Nettana (Karnataka). One breeding orchard, one clone trial and nursery have been established at HBSS, Kanyakumari.
- b) Multidisciplinary research programmes on clone evaluation, agro-management, Physiological studies etc were undertaken.
- c) Various field trials on evaluation, agro-management, GXE studies have been established.
- d) 40 ha. land has been acquired for Regional Research Station (RRS), Padiyoor (Kannur, Kerala). Long-term field experiments were laid out in 30 ha.
- e) Evaluation of clones, Agronomic research, screening of Germ Plasm etc. were initiated in West Bengal. Germ Plasm evaluation trials were initiated in Sukma (Chhatisgarh).
- f) Eight research programmes are in progress in Bio- Technology. Genetic transformation in Hevea has been achieved. Protocols were standardized for shoot tip culture and Molecular investigation are in progress.

2.5 Research in North Eastern (NE) Region

Research schemes in NE region envisages setting up and maintaining of Regional Research Stations, nurseries, research farms with training and demonstration facilities, and laboratories for multi-disciplinary evaluation of different clones, germplasm nursery, mobile soil testing unit, etc. All research programmes in the North-East progressed well and location specific recommendations were offered.

Sizeable areas in non-traditional region are planted under the block planting scheme with the financial support of the State Governments concerned. Total area planted in the region so far is 2569 ha, out of which 2199 ha is in the state of Tripura where the scheme was first introduced in 1992. Successful operation of the project is now continued in Tripura, Orissa, Andhra Pradesh and Karnataka. Progress of the scheme with year wise achievement in area and number of beneficiaries during the IXth Plan are given in Table 5.

Table 5

Block Plantation Scheme		
	Area (ha)	Beneficiaries (No)
1997-98	694	1234
1998-99	876	1389
1999-2000	583	865
2000-01	416	861
2001-02(t)	335	600
Total	2904	4949

(t) - target

A similar Tribal Rubber Plantation Project is under implementation in Kerala from 1995-96 onwards with the assistance of the Govt. of Kerala. As against a total target of 1200 hectares, block plantations have been raised in 1899 ha of tribal lands (upto 2000-01). Thus the cumulative achievement in area under the project, both in the traditional and non-traditional regions, so far is 4468 ha.

The proposal for another Block Planting project in around 200 hectares in the Karbi Anglong District Council area of Assam, is still pending. Though proposed in 1999-2000, the required land has not yet been identified and handed over to the Board by the District Council.

2.4 Research

The Rubber Research Institute of India (RRII), which started functioning in 1955 under the Rubber Board, is now widely recognized as an international centre of excellence in natural rubber research. The broad objective of various programmes implemented by the institute is to increase productivity of NR plantations by developing appropriate agro-technology through research on crop management, bio-technology, crop improvement, plant protection, crop exploitation, physiology etc. The scheme *inter-alia* includes maintenance of the RRII and its five Regional Stations in Kerala, West Bengal, Orissa, Madhya Pradesh (now in Chathisgarh) and Maharashtra and the two Hevea Breeding Sub-Stations, one each in Tamil Nadu and Karnataka.

The ongoing research programmes are concerned with the following.

- (a) Strengthening of location specific research for identification of suitable clones, development of suitable agro-technology etc. to suit the stress situation specific to each region.
- (b) Research in the fields of Bio-technology such as shoot tip culture, meristem culture, somatic embryogenesis, isozyme studies and Molecular Biology.
- (c) Maintenance of Germ plasm gardens already established.
- (d) Strengthening of technical and supporting services at RRIL.
- (e) Improvement of central facility for soil and tissue testing.
- (f) On – farm evaluation and demonstration.
- (g) Product improvement.

Exploitation trials are being conducted in an area of 16 ha of land leased out by the Government of Kerala in the Rajiv Gandhi Institute of technology, Kottayam, apart from those being conducted in farmer's fields.

Physical achievements during the IXth Plan period are summarized below:-

- a) Eight field trials and polyclonal seed garden were established at Hevea Breeding Sub Station (HBSS), Nettana (Karnataka). One breeding orchard, one clone trial and nursery have been established at HBSS, Kanyakumari.
- b) Multidisciplinary research programmes on clone evaluation, agro-management, Physiological studies etc were undertaken.
- c) Various field trials on evaluation, agro-management, GXE studies have been established.
- d) 40 ha. land has been acquired for Regional Research Station (RRS), Padiyoor (Kannur, Kerala). Long-term field experiments were laid out in 30 ha.
- e) Evaluation of clones, Agronomic research, screening of Germ Plasm etc. were initiated in West Bengal. Germ Plasm evaluation trials were initiated in Sukma (Chhatisgarh).
- f) Eight research programmes are in progress in Bio- Technology. Genetic transformation in Hevea has been achieved. Protocols were standardized for shoot tip culture and Molecular investigation are in progress.

2.5 Research in North Eastern (NE) Region

Research schemes in NE region envisages setting up and maintaining of Regional Research Stations, nurseries, research farms with training and demonstration facilities, and laboratories for multi-disciplinary evaluation of different clones, germplasm nursery, mobile soil testing unit, etc. All research programmes in the North-East progressed well and location specific recommendations were offered.

2.6 Improving Processing and Marketing

This scheme has been implemented with the objective of improving processing and marketing of rubber in the small holding sector. Establishment of group processing centers and sheet/scrap collection centers, supply of equipment to latex collection centers, providing financial assistance for the purchase of generators and construction of smoke houses, etc are the various programmes implemented. The scheme also includes a provision of share capital contribution to Rubber Marketing co-operative Societies, trading and processing companies jointly promoted by the Board and the rubber producers societies for improving their marketing facilities such as setting up of processing units, pollution control system and for procuring lab equipments and computer, besides the incentives provided to latex processors for improving the quality of cenex (centrifuged latex) for export.

The establishment of the Rubber Park India Pvt. Ltd near Kochi in association with the Kerala Industrial Infrastructure Development Corporation (KINFRA) is a fruitful effort of the Board in promoting rubber and rubber based industries in the country. Setting up of 70 manufacturing units in 41 ha. of land with export orientation was the aim of the project. The Rubber Park would be serving as technology models for potential entrepreneurs.

The Board has established a plant at Kottayam for the processing of pre-vulcanised latex by radiation. The Plant has started regular production of a new product, Styrene Grafted Natural Rubber (SGNR). This technology of Radiation Vulcanisation of Natural Rubber Latex (RVNRL) is relatively new. The product finds its market in footwear manufacturing.

The component under the World Bank project envisaged encouraging establishment and upgradation of rubber and rubber wood processing facilities in the private sector by making available a line of bank credit and technical assistance. Credit offtake under the project was negligible due to the cumbersome procedures involved in the credit refinance facilities offered by the project through NABARD. However, a number of processing units have come up in the private sector through their own contributions and funding by participatory Banks.

A major achievement under the scheme during the IXth Plan is the establishment of a Rubber and Rubber wood Training and Demonstration Complex (RRTDC) at Kottayam. This complex comprising a Model Technically Specified Rubber Factory (TSR), a joint sector Model Rubber Wood Factory and a Rubber Wood Testing Laboratory is meeting all requirements of training and demonstration purposes.

2.7 Extension, Training and Supplies.

Technical and financial assistance on a need basis are provided under the scheme for construction of smoke houses and bio-gas plants using rubber effluent, purchase of sheeting rollers, fencing materials, sprayers/dusters, irrigation and bee-keeping in rubber plantations. Implementation of all these schemes during the IXth Plan, have brought significant achievements against their respective yearly targets. Physical achievement under the scheme during 2000-01 was as follows.

Table-6

Physical Achievements (2000-01)

Item	No. of growers benefited
Roller	1899
Smoke house	656
Beekeeping	240
Cover crop seeds	2.65 MT
Biogas plants	791
Sprayers	28
Boundary protection (SC/ST)	1075
" (General)	539
Irrigation	15

Apart from the above schemes, operated both in traditional and non-traditional regions, the Board maintains 15 central/regional nurseries (seven in Kerala, six in North East, and one each in Andhra Pradesh and Andaman and Nicobar islands) for ensuring supply of good quality planting materials to growers and 23 Tappers' Training Schools for providing continuous training to growers/tappers on tapping and other technical aspects. During 2000-01, as against a production target of 16.59 lakhs green/budded stumps 16.22 lakhs were produced and distributed. From the 23 Tappers' Training Schools, during 2000-01, 1814 workers/growers were trained in tapping and 3963 tappers were trained for improving their skills.

Board's extension activities also include technology transfer through regular conduct of group meetings, seminars, campaign on specific themes, distribution of leaflets and mass media etc. involving the Rubber Producers Societies (RPSs). information provided cover various topics like discriminatory use of fertilizers based on soil and leaf testing, soil management, rain guarding, systematic plant protection, modern tapping methods, processing of quality rubber etc. During 2000-01, 2527 village level meetings were conducted in which 57252 growers/workers participated. The theme of the campaign during 2001 was 'replanting'.

2.8 Labour Welfare

The scheme envisages providing assistance for improvement of amenities and incentives for a large number of low-income group plantation workers, who are not covered under the Plantation Labour Act. Housing subsidy scheme, sanitary subsidy scheme and medical attendance scheme are the schemes being implemented. The scheme has special components for SC/ST category of plantation labourers. A maximum grant of Rs. 7500/- or 25% of the estimated cost of construction, whichever is less, is given as housing subsidy whereas the amount disbursed for providing sanitary facilities either covers 75% of the cost of construction or Rs.3000/-, whichever is less. The total performance of the scheme during the IXth Plan period was quite impressive. Year wise progress under the scheme is shown in Table-7.

Table-7

Year wise physical achievement during IXth Plan

Year	No. of beneficiaries
1997-98	2032
1998-99	2072
1999-2000	1995
2000-01	2050
2001-02 *	394

* Provisional(1st quarter only)

2.9 Productivity Enhancement

This scheme was in operation under the World Bank Assisted Rubber Project from 1993-94 to 2000-01(September). It envisaged improving productivity of small holdings through improved agro-management and exploitation practices. Procurement and distribution of main estate inputs, such as fertilizers, plant protection chemicals, and tapping materials with nominal price concessions among small holders owning upto 5 hectare of rubber through small growers self help groups known as Rubber Producers' Societies (RPSs) was undertaken. Nearly 50,000 ha of small rubber holdings were covered under the scheme every year. The study undertaken to evaluate the impact of productivity enhancement scheme has revealed that the average productivity in the project area has increased during the project period from 1494 kg/ha in 1993 to 1835 kg/ha in 1998.

The scheme was continued as a measure to increase productivity of small holdings after the closing of the World Bank project. During 2000-01, essential items of estate inputs were supplied to growers at concessional rates through Regional Offices of the Rubber Board and has covered an extent of 28000 ha under the scheme.

Financial incentives were provided under the World Bank Project for setting up demonstration plots in farmers own fields for popularizing various agro-management practices such as Controlled Upward Tapping (CUT), Discriminatory Fertilizer Applications (DFA), Soil Moisture Conservation (SMC), Disease Control (DC) etc. Achievements in all the items have exceeded the targets. Cumulatively, 45698 demonstration plots were set up with an extent of 19691 ha against the project target of 25275 plots covering 12638 ha. The scheme also envisaged strengthening group extension approach by encouraging formation of voluntary organizations of smallholders, Rubber Producers Societies (RPSs). Due to the efforts continued, the number of RPSs which was 1200 at the beginning of the World Bank project has now increased to 2100. 35 Model RPSs were created under the project to function as Technology Transfer Centres for sheet processing and RPS management. The Board also supported the RPSs for engaging Extension Agents/Tapping Assistants on a cost sharing basis for intensifying adoption of technologies.

2.10 Training and technical Assistance

The scheme was implemented as a component of the World Bank project during the period from 1993-94 to September 2000. The scheme is being continued under the plan schemes of the Board.

The main objective of the scheme is upgradation of skills by providing training on a need basis to small holders, small scale rubber based entrepreneurs, plantation executives, processors, and Board's own personnel. The scheme also envisages to provide for exposure visits by opinion leaders among small rubber growers to major rubber producing countries, providing training to the trainers, besides helping technical officers for participating in international conferences. Consultancy studies on various aspects concerning the rubber industry by experts was another major objective under the scheme.

Two major training centers, one each at Kottayam in Kerala and at Agarthala in Tripura, were constructed with a view to increasing the in-house training capabilities. During 2000-01, the Board has imparted need based training on rubber cultivation (processing, quality control, grading etc) to 3697 small scale manufactures and entrepreneurs which included 383 women and 48 SC/ST peoples. Various training programmes conducted during 2001-02 so far have benefited 834 persons.

2.11 Women & Tribal Development

The Women and Tribal Development programme, a component of the WB assisted project, was mostly intended for Tripura where the participating population is tribals to the extent of over 50 %. The project ensured larger involvement of women and tribal people in planting activities and to assist them in engaging in additional income generating activities such as inter-cropping,

horticulture, pisciculture, social forestry, etc. The expenditure involved is being shared equally between the Govt. of Tripura and the Rubber Board. Social development programmes integrated are those for adult literacy, drinking water supply improvement, development of access roads, provision of schools, health centres and sanitary facilities, promotion of savings, etc. The scheme was operated through participating NGOs under the Development Unit (DU) created for the purpose. Against the project target of covering 3000 tribal families, 4009 families have been supported under the programme. Activities have been aimed at ensuring larger involvement of women and tribal people in planting. The programmes are being continued by the Development Unit of the Govt. of Tripura for sustaining the progress achieved under the scheme.

3. Programmes for 2002-03

Rubber is a perennial tree crop with a gestation period of about 7 years and an economic life span of over 25 years. Long term projections for NR points to a deficit in supply, with higher growth rate in demand. In order to bridge the gap between production and consumption of rubber in the country, projected for the next few years, there is need for long term planning for production of NR as well as for the sustained growth and development of the industry.

Forecast of production and consumption of NR in India during the Xth Plan is as follows:

('000 tonnes)			
Year	Production	Consumption	Gap (Production – Consumption)
2002-03	660	683	-23
2003-04	678	717	-39
2004-05	694	752	-58
2005-06	706	790	-84
2006-07	717	830	-113

The target of NR production for 2002-03 is fixed as 660 thousand tonnes. To achieve the production target, the same three pronged strategy, which was adopted during the IX Plan period, is proposed, i.e.,

- Expansion of area.
- Replanting.
- Productivity enhancement.

While continuing the support for production and planting, encouraging replanting the old and uneconomic plantations will be given thrust in the annual plan for 2002-03. In North East, rubber development through an integrated approach incorporating the concept of agro-forestry and sustainable farming systems is planned. Short term measures for yield improvement is also necessary. There is significant difference in yield rates of well managed plantations compared to others. Sample studies carried out has revealed that

about 1/5 of the mature holdings yield less than 1000 kg/ha. 15-50 percent increase in yield could be achieved substantially by adoption of newer techniques on agro-management and crop processing.

Support for processing and marketing to improve the quality and value addition, promoting export and exploring new avenues for rubber consumption, and promotion of ancillary income generation activities to make the plantations economically viable are the other main priorities, in the annual plan for 2002-03.

Schemes proposed to be initiated/continued during 2002-03 are listed below.

3.1. Rubber Plantation Development Scheme:

The Rubber Plantation Development Scheme is proposed to be continued with the objective of promoting rubber planting (both replanting and newplanting) in a scientific manner, adopting the recommended package of practices. The scheme provides for free technical assistance upto the tapping stage and payment of planting grant as a financial incentive for adoption of appropriate technology. Disbursement of financial assistance is phased out over a period of six years, i.e., the gestation period of rubber. The scheme is proposed to be operated in the traditional rubber growing region. For the non traditional area, a separate scheme is proposed.

At present the financial assistance for newplanting and replanting is at the same level, ie, at the rate of Rs 12000 per ha for holdings up to 5 ha with assistance limited to 2 ha in traditional regions and 16000 per ha for holdings up to 20 ha in non-traditional regions. The same rate which is existing now is proposed to be continued for new planting during 2002-03, while the assistance for replanting is proposed to be enhanced to Rs.20,000 per ha for holdings up to 5 ha. This is for encouraging replanting, by which the productivity in the long run will be increased as uneconomic plantations will be replaced with high yielding clones. A higher rate of incentive for replanting will be a motivation for small farmers to replant the uneconomic holdings. This is particularly important in the prevailing situation of unstable price for rubber and rubber wood.

The large growers who own above 5 ha of rubber area in traditional region, are not entitled to any assistance under the above scheme except reimbursement of the cost of polybagged plants @ Rs 5 per plant subject to a maximum of Rs.2500 per ha. The additional incentive for planting poly bagged plants allowed in the 9th Plan period is proposed to be withdrawn as it has now become an accepted practice among the farmers.

Lack of assistance can lead to less investment in the plantation sector leading to poor planting. To encourage investment, availing of credit by growers has to be promoted. The planting grant extended to the growers under the scheme at present is sufficient only to meet a part of the cultivation and maintenance expenditure during the immature phase. Remaining part of the cost of cultivation is expected to be met by the growers as credit under the NABARD

Refinance Scheme. As an incentive to the growers who avail themselves of credit, it is proposed to provide an interest subsidy of 3% to all category of growers on credit availed from banks.

The targets proposed for newplanting and replanting in the traditional region of Kerala and Tamil Nadu are given below. As the Government has been providing budget provision separately for north-eastern region (NE), details of programmes in NE region is furnished separately:

Table-9

Physical target
(Area in hectares)

State	Newplanting	Replanting	Total
Kerala	800	10,500	11,300
Tamil Nadu	100	500	600
Total- traditional	900	11,000	11,900
Non-traditional other than NE	740	250	990

It is expected that only 7,000 ha will be replanted by the small growers in traditional region. The remaining area of 4000 ha. is expected to be replanted by large growers for which planting grant is not eligible.

The outlay proposed under the Rubber Plantation Development Scheme, including the implementation expenses and non-traditional regions other than NE region is Rs.22.91 crores. The revised outlay proposed for 2001-02 is Rs.9.48 crores as against the sanctioned outlay of Rs.7.32 crores. The outlays proposed include provisions for disbursement of planting grant, interest subsidy, and servicing the previous years plantings in traditional and non-traditional areas other than NE regions. An allocation of Rs.7.34 crores is earmarked for the North Eastern Region under this head against which the programmes proposed to be under taken are furnished separately in para 3.2.

3.2 Rubber Development in Non-traditional area (NT)

Considering the very limited scope for expansion of rubber area in the traditional region of Kerala and Tamil Nadu, and also aimed at the socio economic development of that region, the Board has been implementing a scheme for 'Accelerated Rubber Development in the NE Region' from 1985 onwards. In addition to the NE Region, Board's activities were concentrated in the eastern and western parts of India as well. Separate schemes for Eastern India Rubber Development and Western India Rubber Development have also been under implementation in these regions. As a result of implementation of these schemes a total area of 69604 ha could be brought under rubber in the NT area, out of which 46,885 ha was in the NE region.

The major objectives of the scheme proposed for rubber development in NT area are –

- a) Gainful utilization of vast stretches of land identified as suitable for rubber planting in the NT region.
- b) Socio-economic upliftment of the people, especially tribals in the NT region.
- c) Controlling the practice of shifting cultivation that causes ecological damage and soil depletion.
- d) Increase the production of natural rubber in the country.
- e) Employment generation in rural area.
- f) Scientific maintenance and increasing the productivity of plantations already established in the region.

The different components proposed to be implemented under the scheme in the NT region with separate physical and financial targets for NE region are as follows.

i) Newplanting and replanting

The target assigned for new planting in the NT region is 2100 ha, out of which 1360 ha is in the NE region. Ninety per cent of the plantations will be raised by small farmers owning less than 5 ha and the remaining 10 per cent, by farmers with area between 5 and 20 ha. Planting grant proposed for plantations below 5 ha is Rs.16,000/- per ha payable in 6 installments and for plantations between 5 and 20 ha. Rs. 12,000/- per ha. For those having more than 20 ha. no planting grant is proposed. A planting material subsidy of Rs. 4,000/- per ha is proposed to be paid for newplanting in the NT area except in Karnataka. The total area assessed in the NT region for payment of planting material grant is 1600 ha. The target proposed under replanting is 250 ha. of which 200 ha is in Karnataka and 50 ha in other non-traditional states. Rate of planting grant proposed for replanting is Rs. 20,000/- per ha.

The provisions made in the plan proposals include maintenance of the Nucleus Rubber Estate and Training Centres (NRETC) established in Agartala and Andamans and the three District Development Centres (DDC) (two established in the state of Assam and one in Meghalaya). The DDC s will be providing training to local as well as new entrepreneurs on all aspects of rubber cultivation and crop processing as small scale NRETCs. Besides, the eight regional nurseries functioning, six in the NE region, and one each in Andhra Pradesh and Andamans will be maintained for production and distribution of good quality planting materials to needy growers in that region. Apart from these, conducting educational meetings/seminars and study tour of local farmers, providing financial assistance to the small growers for constructing smoke houses, purchasing rollers, irrigation and boundary protection, maintenance of the Tappers' Training Schools established in the non-traditional region for

continuing training of rubber tappers on scientific tapping, processing etc. are also contemplated under this component.

The Integrated village level rubber development programme is another scheme proposed under this component during 2002-03. It is planned to adopt potential villages in different states in the NT region and support all the rubber development activities in the village as a compact package. The proposal is to cover a total of 300 ha under block planting out of which 250 ha will be in NE region and 50 ha in other non traditional (ONT) region. Under group planting 600 ha will be covered out of which 400 ha will be in NE region and 200 ha in other non-traditional region. The block and group planting are exclusively for the benefit of SC/ST category of growers. The State Governments of Tripura, Orissa, Karnataka and Andhra Pradesh are also evincing keen interest in rubber planting as a tribal settlement programmes in those states. In Block Planting programmes, planting and maintenance operations are directly undertaken by the Board on the land belonging to tribal people. The developed plantations will be handed over to the actual owners after establishing common processing facilities and training the farmers in tapping and processing.

Steps will be taken for revitalization of the sick rubber plantations that were raised by individual growers in earlier years. It is also proposed to purchase essential estate input materials such as fertilizers, spraying chemicals, rain guarding materials etc in bulk and distribute to individual growers through Rubber Producers' Societies. Group processing facilities will be established on a need basis to growers belonging to mainly SC / ST category. Group formation and strengthening of existing rubber farmer groups will also be supported by the Board. The financial provision made for this programme is Rs. 400lakhs, out of which Rs. 300lakhs will be spent in the NE region and 100lakhs in the ONT region. Fifty percent of this fund is expected to be returned to the Board by way of sale of plantation requisites and the amount will be used as a revolving fund for continuation of the activities in subsequent years.

In addition to the above, an amount of Rs. 45lakhs is provided for establishing a Rubber Research & Training Centre, in Assam in 2002-03. The Scheme has been approved by Govt. of India in principle. Implementation is expected to commence in 2002-03. This is proposed to serve as a model plantation and Training Centre for local farmers in Assam.

Various physical targets proposed under the component are given below:

Table- 10

Sl.No	Activity	Physical target			Rate (RS per unit/ha)
		NE region	Other NT region	Total NT region	
1	Newplanting	1360 ha	740 ha	2100ha	16000/12000/ha
2	Replanting	50 ha	200 ha	250 ha	20000/ha
3	Smoke house	35 nos	15 nos	50nos	5000
4	Roller	50 nos	500 nos	550nos	1500
5	Irrigation	30 ha	20 ha	50 ha	5000
6	Boundary protection	50 ha	50 ha	100 ha	2000

The total outlay proposed under this component for 2002-03, including operational expenses is Rs.1.70 crores as against Rs.7.56 crores sanctioned for 2001-02. Out of Rs.1.70crores an amount of 1.02 crores is for NE region (excluding planting activities).

3.3 Special Component Plan and Tribal Sub Plan.

Implementation of the scheme has its main objective as assisting socio economic upliftment of the weaker sections of the society especially the tribals and development of rural areas through rubber based programmes which would ultimately help increasing NR production.

The scheme proposes to implement another component exclusively for the benefit of SC/ST growers which envisages settlement of tribals in the traditional area through rubber cultivation. Under this tribal rubber plantation programme, the Board will directly plant rubber on the land owned by tribal people in traditional region with financial support from the concerned state governments. The tribal department will identify the tribal beneficiaries and the planting and maintenance operations upto maturity will be done by the Board. The target is to cover 150 ha in traditional region as new planting under this component during 2002-03. Another 3345 ha of plantations which have already been established under various activities covered by the tribal settlement programme in traditional area during previous years will also be maintained scientifically. Of the plantations under new/replantings in non-traditional areas 352 ha will be covered exclusively by individual SC / ST category of growers. The target of new planting under the scheme in non-traditional region is fixed as 315 ha of which 204ha. would be in NE regions. Area proposed for replanting under the component in NE region is about 37 ha.

An estimated area of 320 ha is expected to be ready for tapping under this project during 2002-03. The tribal growers are not in a position to tap the trees, process the latex into marketable form and do the marketing by themselves individually. As a result of this, there is a chance of the plantations

being alienated to non-tribals and the usufructs being enjoyed by them. In order to prevent such a situation, Rubber Producers Societies have to be formed and supported to carry out group processing and marketing of rubber produced by individual growers. It is proposed to set up the required number of common latex collection centers, group processing facilities and smoke houses in areas where tribal rubber plantations have been established.

Similarly under the 'Integrated Village Level Rubber Development Programme', the entire area proposed under block planting/group planting is targeted at groups of SC /ST category of growers only. Target of block planting in 2002-03 is 300 ha under which 250 ha is proposed for NE region. Area target for group planting is set as 600 ha, out of which 400ha. is for NE region. In the programme for revitalization of sick rubber plantations already established, 50% of the beneficiaries will be growers belonging to SC/ST category. In block/group plantations, the Board and the participating state governments will meet the entire expenditure under this component jointly.

Proper implementation of the block/group planting programme necessitates strengthening of Board's extension set up in the NE region. Against the sanctioned budget of Rs.3.80 crores in 2001-02 the revised outlay provided is Rs 5.02 crores.

The total out lay proposed for implementation of the scheme during 2002-03 is 6.97 crores. This includes a provision for providing the special assistance to SC/ST communities such as supply of planting materials, fertilizer and fencing materials at concessional rate etc. The outlay proposed, also includes estimates for maintenance of block plantations already raised in the state of Tripura, Andhra Pradesh, Orissa, Karnataka and Assam.

3.4 Research

Various ongoing research programmes aimed at evaluation and testing of various rubber clones, agro-management practices, rubber based cropping systems, disease and pest aspects, physiology of crop productivity etc. will be continued, taking into account the long term nature of the projects. Continuation of the well conceived research schemes in regional research centres, germ-plasm centre, research in bio-technology and tissue culture, product development etc. is also proposed. Besides strengthening of the research stations established in Madhya pradesh (now in Chhatisgarh), Maharashtra, Kerala, Orissa and West Bengal by providing additional library and communication facilities will be taken up. The station in Kanyakumari District needs more land and infra structure facilities.

Establishment of an Advanced Centre for Rubber Technology in RRII is another proposal with a view to undertaking research on product diversification, finding new areas of application for NR, improvement in quality of the domestic rubber products, cost reduction etc. This is all the more important in the present

context of globalisation and WTO regime, to ensure value addition to rubber by strengthening the product manufacturing industry.

The revised outlay for continuation of Research schemes during 2001-02 is 7.06 crores against the sanctioned outlay of Rs7.04 crores. The outlay proposed for the year 2002-03 is Rs. 9.03 crores.

3.5. Research in North-Eastern Region

There are five Regional Research Stations in the North East, one each in Tripura, Mizoram, Assam and two in Meghalaya for carrying out location specific research. Maintenance of these Regional Research Stations and continuation of all the on-going research activities in various states of NE region are proposed. New experiments are planned to be undertaken. The laboratory facilities have to be strengthened. Extension of the farm area at Tura and Agarthala is also contemplated.

The outlay proposed for 2001-02 under the research schemes in the NE region is Rs.2.10 crores and that for the year 2002-03 is Rs.2.25 crores.

3.6. Processing & Marketing

About 88% of the production in the country is contributed by the smallholders who lack better facilities for processing of the crop. Because of this, the quality of the processed rubber in India generally is not at internationally accepted level. In the present context of market integration and WTO mandated regime, it is imperative that rubber produced in the country be internationally competitive quality-wise to prevent import of better quality rubber as well as to promote manufacture of quality rubber products. It is also necessary to reduce the cost of processing so that the overall cost of production of rubber is reduced. Therefore, one of the major objectives identified for the Xth Plan is to give additional thrust to post harvest handling through improved technology, value addition, cost reduction and meeting international quality standards. This calls for upgradation of machinery, processing of raw materials, testing laboratories for ensuring quality parameters, better packaging, etc. It is also necessary that the factories implement ISO 9000 quality management systems. Therefore, it is proposed to give financial and technical assistance to the factories set up under co-operatives, joint sector and under private initiatives for achieving the above objectives. Providing support for infrastructure development and marketing of rubber is another proposal. An outlay of Rs.23.39 crores is required for 2002-03 to undertake the proposed activities as detailed below: As against the sanctioned outlay of Rs.11.13 crores, revised outlay proposed for the year 2001-02 is Rs.18.00 crores.

Details of activities proposed.

1. Processing and quality improvement

Upgrading/ modernisation of factories for processing field coagulum into Technically Specified Rubber (TSR).

The proposal involves providing financial assistance to 4 Technically Specified Rubber Factories (TSR)/ latex centrifuging factories for improving the machinery and processing methods to cater to the needs of the consuming industry.

It is proposed to extend financial assistance to latex collection centers set up with RPSs /Co-operatives for blending of latex with field coagulum grade and thereby improve the quality of Block rubber produced. The scheme involves establishing additional infrastructure, testing facilities and proper quality management and ISO 9000 certification systems. It is expected that 10 units will utilize this at a financial outlay of 100 lakhs.

The factories/latex collection centers of the RPSs will be supported to set up effluent treatment facilities. Physical target proposed under this is 8 units. Provision is also provided for computerization of 8 processing units, as a part of factory modernization programme.

2. Export promotion

The Indian NR sector has changed significantly since 1996 creating a surplus situation with plummeting of prices in the market, mainly on account of the slump in demand due to all pervasive industrial recession. Removal of Quantitative Restrictions on NR import from 1-4-2001, is another threat to the industry. To minimize the import of NR into India under the WTO regime, it is imperative that the country aggressively promote export of NR. For 2001-02 Govt. of India has sanctioned a scheme with an outlay of Rs.9.2 crores for realizing the target of export of 20,000 tonnes of NR. During 2002-03 also, 20,000 tonnes of NR are proposed to be exported under the scheme. It is proposed to give indirect financial incentives and assistance to the exporters to realize the target

3. Infra structure for Marketing.

One of the major problems faced by small rubber grower is the inadequate facility for the storage of their out put. It is proposed to set up 10 godowns of 100 tonnes capacity each under the management of selected RPSs. Construction of a higher capacity godown of 2000 tonnes at Kochi to facilitate storage and export of NR collected by RPSs, Co-operatives, Companies promoted jointly by RPSs and Rubber Board etc is also contemplated.

4. Rubber wood

The Rubber wood Processing Industry in the country is in its infancy. There are only 52 units engaged in rubber wood processing in India. Technology development and upgradation, quality assurance, market promotion etc. are the thrust areas identified in this field. The plan proposals for 2002-03 include assistance for strengthening the rubber wood processing industry and promotion of rubber wood as an eco-friendly timber. Financial and technical assistance proposed under the scheme will include provisions for quality improvement and value addition of both existing and new units, to encourage them acquire environmental protection and waste utilization facilities, sales incentives for consumers, subsidy for godown rent, financial assistance to RPSs to modernize the logging operation. Promotional campaigns by way of participation in fairs and other meets/exhibitions for popularizing use of rubberwood, and export of rubber wood. Govt. of India has already approved the proposal for export promotion of processed rubber wood and products. This activity has to be carried out vigorously.

The Board has already set up a laboratory at Kottayam for the testing of processed rubber wood. Further development of the laboratory is also envisaged in the plan proposals for 2002-03. Market intelligence facilities to the processors, as also training and demonstration for rubber wood processing are other proposals made.

3.7. Extension, Productivity and Primary Processing:

The Board has been implementing various extension programmes for Productivity Enhancement and quality upgradation of small farmers' rubber during the VIIIth and IXth Five Year Plan Periods by providing assistance to individual growers as well as groups of small farmers. As a result of these activities, the productivity of rubber plantations in India has now reached the highest level among the major rubber producing countries in the world. Still there is a wide gap between the realizable yield and the actual yield obtained in the small holding sector. The national average productivity is just above 50% of the realizable yield per ha. In order to increase the economic viability of rubber plantations, especially during this period of low price of rubber, productivity enhancement needs special focus. This points to the necessity of continuing such programmes.

Measures suggested for increasing productivity are the following:

- a) Discriminatory fertilizer application
- b) Scientific tapping including Controlled Upward Tapping
- c) Scientific Disease Control Measures
- d) Soil and Moisture Conservation measures and
- e) Rain guarding the tapping trees.

The activity proposed under the scheme in 2002-03 is procurement and distribution of plantation input materials such as fertilizers, spraying chemicals, rain guarding materials etc, utilizing a revolving fund for Rs.10.00 crores. The inputs will be disbursed to small farmers through Rubber Producers' Societies. Every year there will be an outflow of Rs.1.5 crore towards subsidy given to the farmers. This programme is proposed to be continued during the coming years also with the same fund which would come back to the Board, once distribution of inputs for one year is completed.

At present there are about one million rubber small growers in the country. To make the transfer of technology more effective among them, group management system has to be followed. The Rubber Board has been encouraging formation of grass root level organizations of small growers viz, the Rubber Producers' Societies (RPSs) as a means for devolution of extension functions. So far around 2100 RPSs could be formed from mid 1980s onwards. These RPSs are being gainfully utilized for implementing the various productivity enhancement schemes. The scheme proposes to take up formation of new RPSs and strengthening the existing ones. Model RPSs established as technology transfer centres under the World Bank Project will be supported to continue their activities.

Support for increasing the quality of sheet rubber produced in the small holding sector, which accounts for 88 per cent of the production, is one of the priorities in this Annual Plan. Strengthening of RPSs for group processing of latex in the small holding sector into better quality sheets and selling it directly avoiding middlemen, is also proposed in this scheme. This would benefit the small farmers to a very great extent. Environmental pollution control measures by generating biogas from the effluent of latex processing, additional income generation activities like bee keeping in rubber plantations, women empowerment programmes etc are also proposed under this scheme.

It may be noted that out of the 10 lakh small farmers in the country, around 20% are members of Rubber Producers Societies. The remaining 80% being unorganized are not in a position to enjoy the benefits of group/community facilities. To benefit these individuals it is proposed to subsidize smoke houses constructed, rollers purchased, biogas plants installed and beekeeping units established by individual small growers also. Physical targets and rate of assistance per unit for various activities proposed to be undertaken during the year 2002-03 are furnished in the table below:

Table-11

Sl. No	Programmes Activities	Physical (nos.)	Rate of assistance (Rs) per unit	Outlay proposed in Annual Plan 2002-03 (Rs.in crores)
1	Smoke house	2000	5,000	1.00
2	Roller	3000	1,500	0.45
3	Bio-gas	1,000	2,000	0.20
4	Api culture	1,000	2,000	0.20
5	Community Processing Centres	15	500,000	0.75
6	Women development activities	10	50,000	0.05

With a view to meeting the industry's requirement of skilled tappers, Tappers' Training Programmes will be conducted through Board's tapping schools. In order to update the knowledge and skill of practicing tappers short duration training programmes will also be conducted in selected farmers' fields through RPSs. A stipend of Rs.25/- per day is proposed to be given to trainees of both these programmes. Trainees of regular TT Schools will be provided dormitory accommodation also.

Another proposal under the scheme is production and distribution of high quality planting materials through Board's central as well as regional nurseries. Even though Board's production of plants will not be sufficient to meet the entire requirement of the industry, this would definitely be a check against the monopoly of private nursery owners besides helping to ensure quality and maintaining pure stock source bush nurseries of high quality.

Intensive educational activities like seminars, group meetings, campaign meetings etc will be carried out to keep the small farmers informed of the modern scientific agro-management practices. Audiovisual equipments purchased and educational films produced under the World Bank Project, will be extensively used in these educational meetings for technology transfer.

With a view to getting real feed back from the field and modifying the schemes on a need basis in the coming years, it is proposed to conduct certain surveys/studies on the impact of various schemes operated.

Human resource development of the extension machinery of the Board is one area where much attention is to be given. In the changed scenario, the role of Rubber Board Extension set up will be that of a facilitator. Skill upgradation, group activities, participatory extension management etc are some of core areas

where proper training is to be imparted through extension officers of the Board to make the extension delivery system more effective.

Implementation of the scheme will help small farmers increase their productivity, improve quality of rubber produced by them and develop a culture of group activities and self reliance among farmers. The farmer groups (RPSs) will be made stronger ensuring sustainable development in the Rubber Plantation Sector in the traditional region. For taking up all the activities proposed under this component an outlay of Rs.12.11 crores is required for the year 2002-03.

3.8 Training and Technical Assistance

Training activities on regular basis are envisaged under the scheme for improving the capabilities of growers, tappers and Board's own personnel from the Rubber Training Centre (RTC). The provision sought includes purchase of vehicles for transportation of trainees, maintaining /improving the facilities at RTC and for providing quality training. The amount proposed for 2002-03 is Rs. 1.65 crores. The revised outlay proposed for 2001-02 is Rs.0.39 crores as against sanctioned outlay of Rs.0.10 crores.

3.9 Labour Welfare

The Labour Welfare schemes are implemented for providing subsidy/financial assistance to the labourers of both organized and unorganized sector employed in plantations as tappers etc for construction of houses, providing sanitary facilities, medical attendance and group life insurance.

A large number of the low income group plantation workers do not own houses. The housing subsidy schemes would inspire them to construct houses for them, thereby fulfilling the national policy of providing shelter for the homeless. Sanitary subsidy scheme is aimed at encouraging the rubber tappers to maintain better hygienic conditions by constructing modern toilets at low cost. Medical attendance scheme helps the poor tappers for proper health care and the group life insurance provide security to their family.

The following new schemes are proposed to be implemented during 2002-03, in addition to the existing schemes.

Table-12

Scheme	Targets	
	Physical	Financial
	(No)	(Rs in Lakhs)
1) Group Insurance Cum Deposit Scheme	1330	2.00
2) Welfare fund scheme for women and tribal rubber tappers in small holding sector	2500	1.25

The outlay proposed under the scheme is Rs.1.92 crores as against Rs.1.00 crores of revised outlay proposed for 2001-02.

3.10. Infrastructure Development

The scheme includes construction of office/residential buildings, standardization of electrical installations, water supply systems at Rubber Research Institute of India and Central Experimental Station. The financial target proposed for 2002-03 is Rs.2.68crore.

4 Plan Outlay

The progress in expenditure under Plan Schemes during the first four years of the IXth Plan, sanctioned outlay and revised outlay proposed for 2001-02 and outlay proposed for 2002-03 are as follows:

Table-13

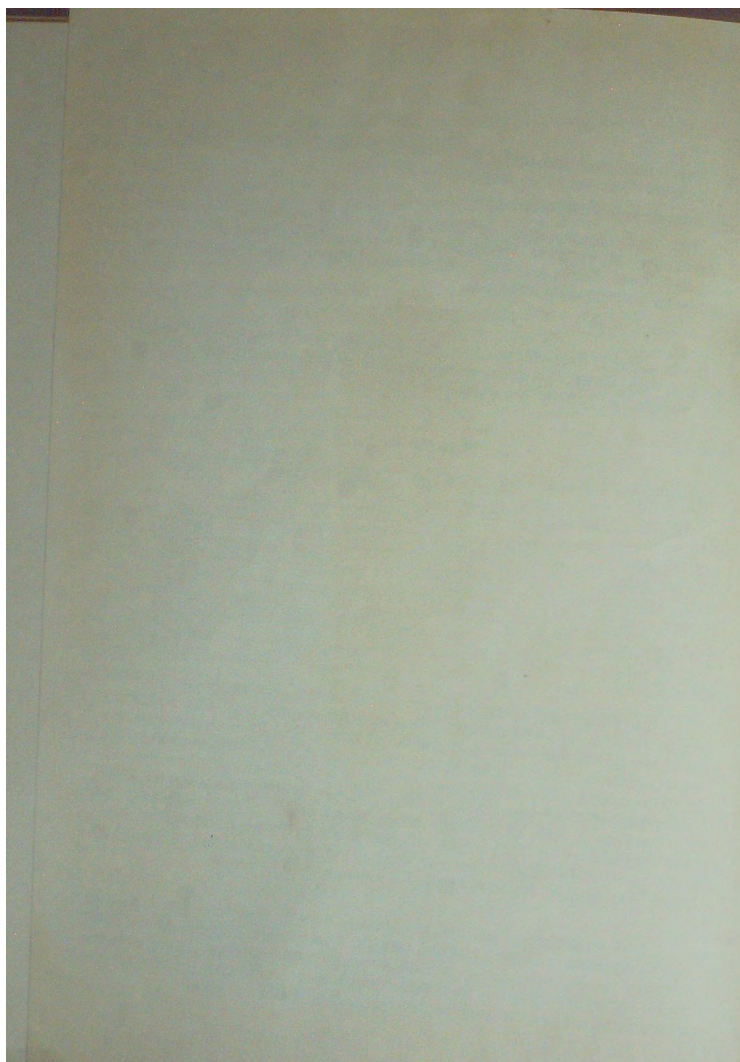
Expenditure

(Rs.Crores)

	World Bank Assisted Project	Against Cess	Total
IX Plan			
1997-98 (Actual)	26.87	33.06	59.91
1998-99 (Actual)	41.32	29.65	70.97
1999-00 (Actual)	44.45	35.47	79.92
2000-01 (Actual)	36.04	39.73	75.77
2001-02 (BS)		70.00	70.00
2001-02 (RE)		82.84	82.84
2002-03 (BE)		91.96	91.96

The gross outlay proposed under plan (against collection of cess) for the year 2002-03 is Rs.91.96 crores. The anticipated internal and extra budgetary resources (IEBR) that will be available for the year is Rs.2.87 crores. Hence, the net requirement of funds to be released by the Govt. under Plan for 2002-03 is Rs.89.09 crores. This includes an amount of Rs.15.69 crores earmarked for implementation of schemes in NE region. The revised outlay proposed for 2001-02 envisages a total expenditure of Rs 82.84 crores. After adjusting the estimated IEBR of Rs. 2.93 crores net budgetary support required from the Govt. under plan is Rs.79.91 crores, as against the approved outlay of Rs 70.00 crores. The amount provided for the NE region is Rs.9.93 crores.

The instructions issued by the Ministry from time to time with regard to exercising utmost economy in expenditure and zero based budgeting have been kept in view, while proposing the outlays for 2001-02 and 2002-03 and only the barest minimum which are essentially required for the implementation of the approved schemes to achieve the pre-set goals have been provided.



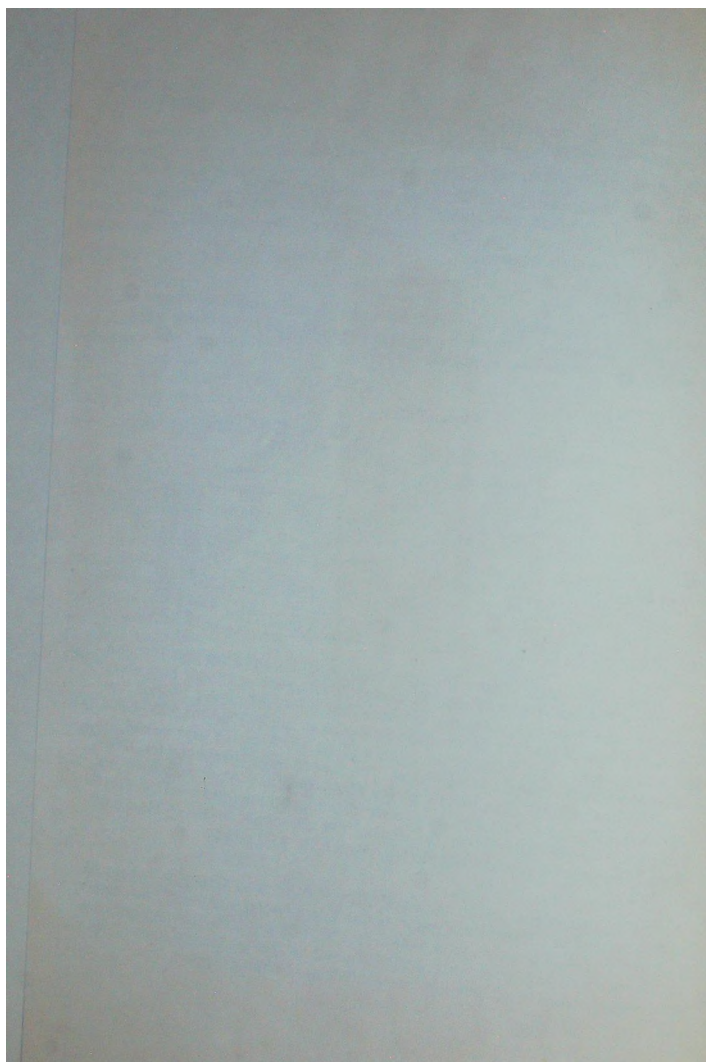
The overall position of gross outlay and 'source is as follows.

Table -14

Annual Plan (2002-03)
Gross Outlay and Sources of fund for Plan Schemes

	2001-02 Budget Sanctioned	2001-02 Revised Outlay Proposed	2002-03 Proposed Outlay
Gross Outlay			
Plan Schemes (against Cess)	53.42	67.82	76.27
Other than NE region.			
Plan Schemes - NE region	16.58	15.02	15.69
Non-Plan	15.42	15.65	15.76
Total	85.42	98.49	107.72
Closing balance as on 31 st March	..	1.00	1.00
Grand Total	85.42	99.49	108.72
Source			
Opening balance as on 1 st April			1.00
Plan- Other than NE region	..	..	..
NE region	..	5.09	..
Non-Plan	..	..	..
Foreign aid	..	9.93	..
Receipts			
Plan - Other than NE region	..	2.93	2.87
Non-plan	5.92	4.15	4.52
Sub Total	..	7.08	7.39
Release from Govt.			
Against collection of cess- other than NE region	53.42	65.88	73.40
NE region	16.58	9.93	15.69
Non-Plan	9.50	11.51	11.24
Foreign aid	..	-9.93	..
Sub Total	85.42	77.39	100.33
GRAND TOTAL	85.42	99.49	108.72

The scheme wise break up of the total outlays required for implementation of various plan schemes during 2001-02 and 2002-03 are furnished in Annexure 'A'. Annexure 'B' gives the details for the NE region separately.



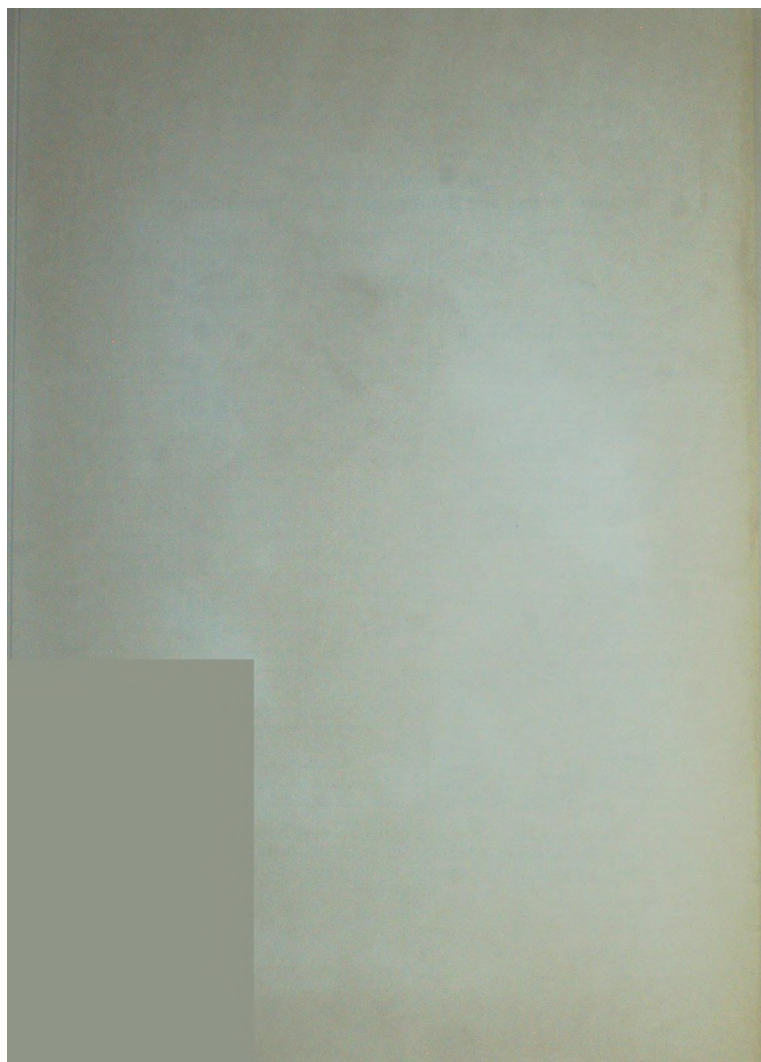
The overall position of gross outlay and 'source is as follows.

Table -14

Annual Plan (2002-03)
Gross Outlay and Sources of fund for Plan Schemes

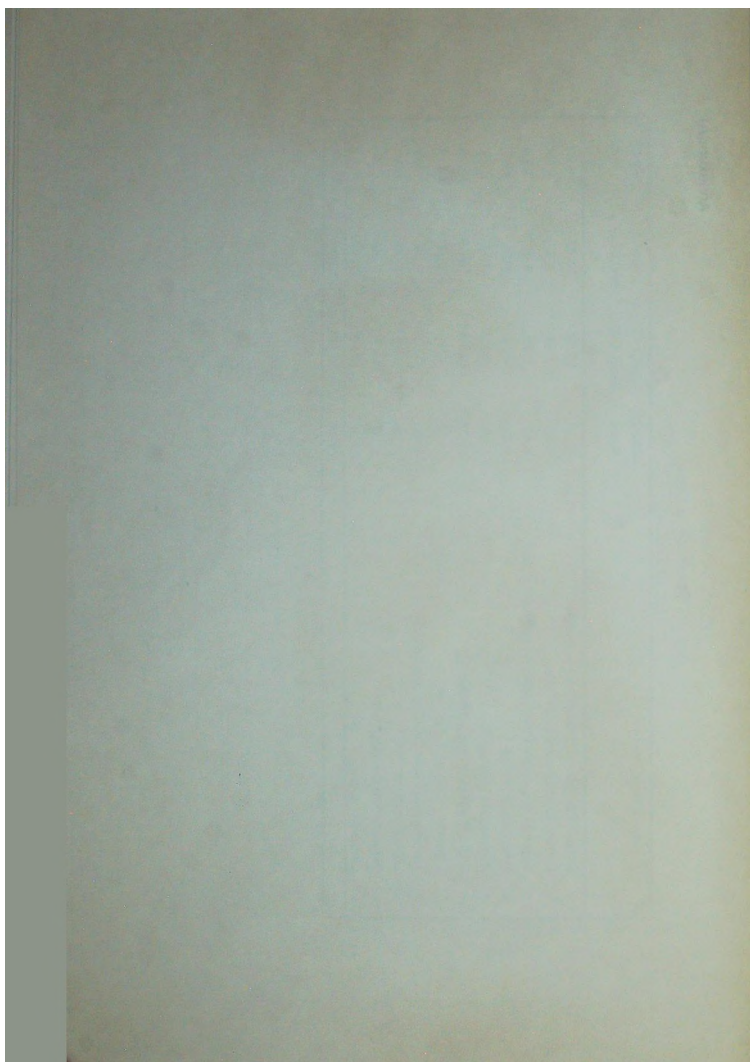
	2001-02 Budget Sanctioned	2001-02 Revised Outlay Proposed	2002-03 Proposed Outlay
Gross Outlay			
Plan Schemes (against Cess)	53.42	67.82	76.27
Other than NE region.			
Plan Schemes – NE region	16.58	15.02	15.69
Non-Plan	15.42	15.65	15.76
Total	85.42	98.49	107.72
Closing balance as on 31 st March	..	1.00	1.00
Grand Total	85.42	99.49	108.72
Source			
Opening balance as on 1 st April			
Plan- Other than NE region	..	..	1.00
NE region	..	5.09	..
Non-Plan	..	..	..
Foreign aid	..	9.93	..
Receipts			
Plan – Other than NE region	..	2.93	2.87
Non-plan	5.92	4.15	4.52
Sub Total	..	7.08	7.39
Release from Govt.			
Against collection of cess- other than NE region	53.42	65.88	73.40
NE region	16.58	9.93	15.69
Non-Plan	9.50	11.51	11.24
Foreign aid	..	-9.93	..
Sub Total	85.42	77.39	100.33
GRAND TOTAL	85.42	99.49	108.72

The scheme wise break up of the total outlays required for implementation of various plan schemes during 2001-02 and 2002-03 are furnished in Annexure 'A'. Annexure 'B' gives the details for the NE region separately.



PLAN SCHEMES
Against Collection of Cess
(Rs. In Crores)

Sl. No.	Name of the Scheme	2000-01 Actual 3	2001-02 Sanct. Outlay 4	2001-02 Rev.Outlay 5	2002-03 Prop.Outlay 6
1	2				
1	Rubber Plantation Development Scheme	11.16	13.32	14.47	30.25
2	Rubber Development in NT* area	4.43	7.56	6.62	1.70
3	Special Component Plan/Tribal Development Plan	6.61	3.80	5.02	6.97
4	Research Schemes	2.54	7.04	7.06	9.03
5	Research in NE Region	1.27	2.10	2.10	2.25
6	Improving Processing & Marketing	11.71	11.13	18.00	23.39
7	Extension, training & Supplies	11.32	5.60	5.91	12.11
8	Training and Technical consultancies	2.00	0.10	0.39	1.65
9	Labour Welfare	0.96	0.88	1.00	1.92
10	Infrastructure Development	0.20	1.18	1.50	2.68
11	General charges	23.57	17.20	20.77	
	Total	75.78	70.00	82.84	91.96



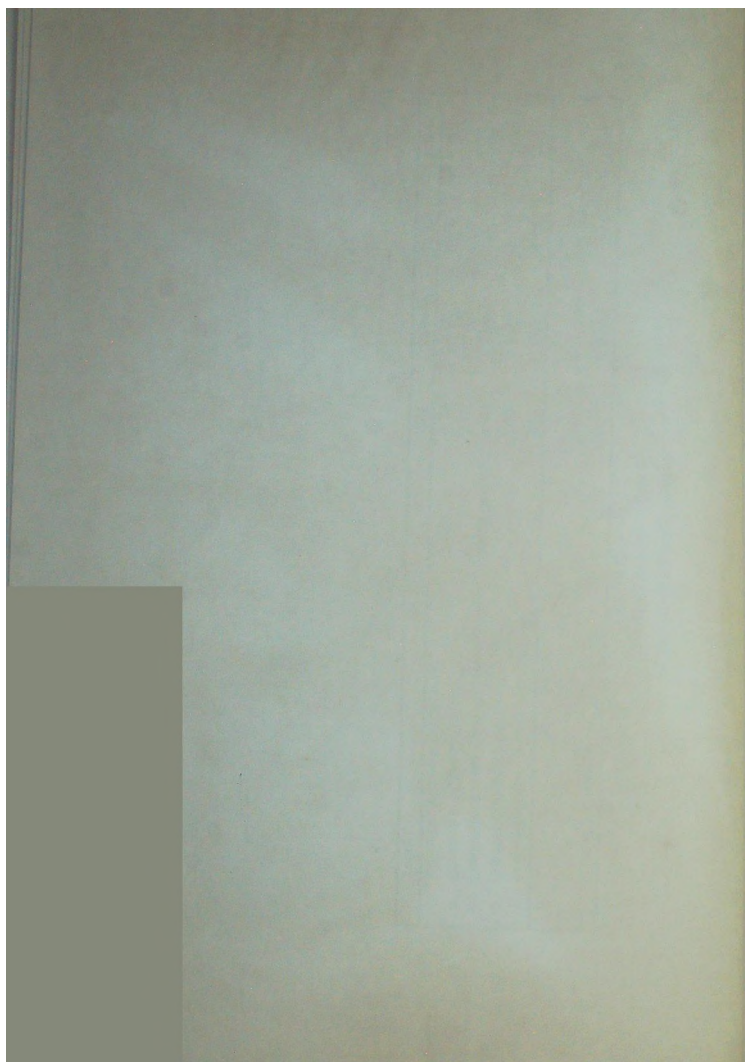
PLAN SCHEMES -Other than NE Region)
Against Collection of Cess
(Rs. In Crores)

Sl. No.	Name of the Scheme	2000-01 Actual	2001-02 Sanct. Outlay	2001-02 Rev. Outlay	2002-03 Prop. Outlay
1	2	3	4	5	6
1	Rubber Plantation Development Scheme	8.99	7.32	9.48	22.91
2	Rubber Development in NT* area	1.37	1.71	1.71	0.68
3	Special Component Plan/Tribal Development Plan	4.13	2.29	3.12	4.49
4	Research Schemes	2.54	7.04	7.06	9.03
6	Improving Processing & Marketing	11.71	11.13	18.00	23.39
7	Extension, training & Supplies	10.39	4.48	4.79	9.51
8	Training and Technical consultancies	2.00	0.10	0.39	1.65
9	Labour Welfare	0.96	0.98	1.00	1.92
10	Infrastructure Development	0.20	1.18	1.50	2.68
11	General charges	23.57	17.20	20.77	
	Total	65.87	53.42	67.82	76.27

PLAN SCHEMES-NE Region
Against Collection of Cess
(Rs. In Crores)

Sl. No.	Name of the Scheme	2000-01 Actual	2001-02 Sanct. Outlay	2001-02 Rev. Outlay	2002-03 Prop. Outlay
1	2	3	4	5	6
1	Rubber Plantation Development Scheme	2.17	6.00	4.99	7.34
2	Rubber Development in NE region	3.06	5.85	4.91	1.02
3	Special Component Plan/Tribal Development Plan/Block Pla	2.48	1.51	1.90	2.48
4	Research in NE Region	1.27	2.10	2.10	2.25
5	Extension, training & Supplies	0.93	1.12	1.12	2.60
		9.91	16.58	15.02	15.69

Annexure(B)



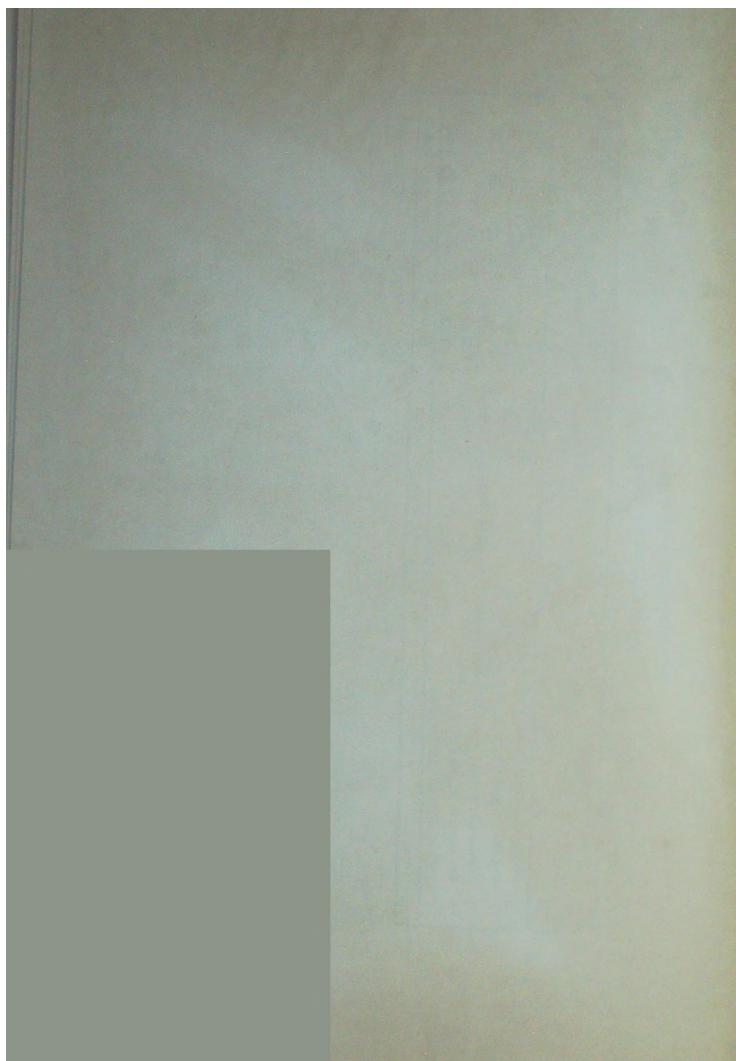
Summary Statement

Proposal for Tenth Plan (2002-07) and Annual Plan (2002-03)

(Rs. Crore)

[illegible]

* Accumulated Expenditure (actual till 1999-2000 and anticipated thereafter till 2001-02)



Summary Statement

Proposal for Tenth Plan (2002-07) and Annual Plan (2002-03)

(Rs. Crore)

Ministry/Department	DBS	Ninth Plan (1997-2002) Estimated Projects	DBS	IEBR	Approved Outlay/Expenditure	DBS	IEBR	Tenth Plan (2002-07) Estimated Projects	DBS	IEBR	Proposed Outlay/Annual	DBS	IEBR	Proposed Outlay/Annual	DBS	IEBR
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
MINISTRY OF COMMERCE AND INDUSTRY																
RUBBER BOARD	238.35	85.33	323.68	49.51	373.19	369.40	459.83	1	459.83	10.52	470.35	89.09	1	89.09	2.87	11.56

* Accumulated Expenditure (actual till 1999-2000 and anticipated thereafter till 2001-02)



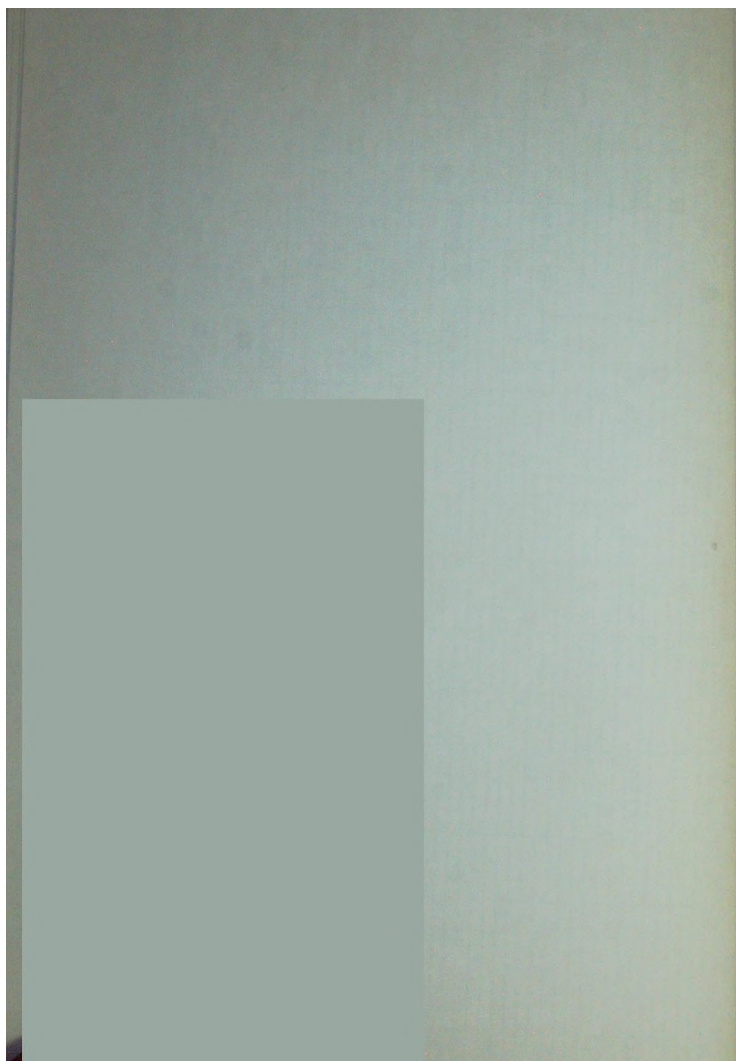
Tenth Plan (2002-07) and Annual Plan, 2002-03 Proposed

(Rs Crores)

Schemes of Ministries/Departments/Central Public Enterprises/Undertakings

MINISTRY OF COMMERCE AND INDUSTRY/RUBBER BOARD

MINISTRY OF COMMERCE AND INDUSTRY/ROBBER WORK															
S No.	Name of the Scheme (with details)	Only Anticipated/ proposed	Estimates of Internal Resources												
			Total component covered by External Aid	Gross Internal (Rebate Profit + Depreciation)	Amount raised by way of ARI (changes in User Price etc.)		Provision for repayment of loan	Resources for working capital	Non-Plan Capital works	Net Internal Resources for Plan Outlay (C1+4+5+10)	Extra Budgetary Resources				
					State Yield	Net Yield					Bandar	ECB	Inter Corporate Transfers	Others	Budgetary Support
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2000-01 (Actual)	See Annexure A & B														
Total for all Schemes		75.78	36.04	9.62						9.62					80.12
2001-02 (Anticipated)															
Total for all Schemes		82.84	4	2.93						2.93					79.91
Ninth Plan (1997-2002)															
Total for all Schemes		373.19	85.33	39.77						39.77					348.4
Tenth Plan Proposal (2002-07)															
Total for all Schemes		470.35		10.52						10.52					459.8
2002-03 (Proposed)															
Total for all Schemes		91.96		2.87						2.87					89.1



Annexure-II

Financial Outlays : Tenth Plan (2002-07) and Annual Plan (2002-2003)

Ministry COMMERCE & INDUSTRY

Major Head

Department RUBBER BOARD

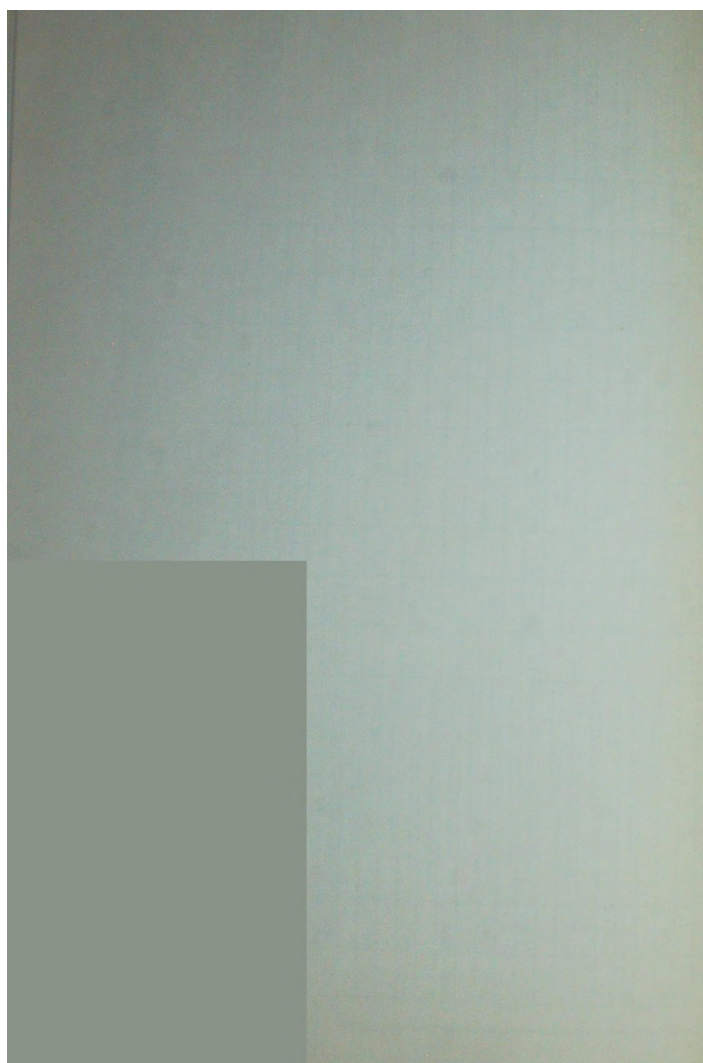
Sub-Head

(Rs. Crore)

Particulars	Central Schemes	Centrally Sponsored Schemes	Total
1	2	3	4
2000-2001 (Outlays as Budgetted)	100.28		100.28
2000-2001 (Actuals)	75.77		75.77
2001-2002 (Outlays as Budgetted)	70.00		70.00
2001-2002 (Anticipated)	82.84		82.84
Total Ninth Plan Anticipated (1997-2002)	369.40		369.40
Tenth Plan (2002-07) (proposed Outlay)	470.35		470.35
Annual Plan 2002-2003 (Proposed)	91.96		91.96

Memo Items : All major heads and sub-heads should be grouped under the relevant Plan Heads of Development as per Budget Documents : (Statement - I, listing the Heads of Development and Statement-II listing the Ministries/Departments governing them are enclosed for ready reference).





ANNEXURE-III B

Tenth Plan (2002-07) and Annual Plan 2002-03 - Proposals for Programmes/Projects to be Financed Wholly by Domestic Resources

Name of Ministry/Department/Central Public Enterprises/Undertaking :

[illegible]

- Only those programmes/projects Schemes be shown in Annexures III-A to III-D, which do not have any External Aid Component. Their total outlay (External Aid Component plus Domestic Resources Rupee Counterpart amount) is to be shown in Annexures IV-A to IV-D.



Tenth Plan (2002-07) and Annual Plan (2002-03) - Proposals for Projects/Programmes to be Financed Wholly by Domestic Resources*

(Outlay/Expenditure in Rs. Crore and Physical Target/Benefits in Relevant Units of Measurement)

Name of Ministry/Department/Central Public Enterprises/Undertakings : COMMERCE & INDUSTRY, RUBBER BOARD

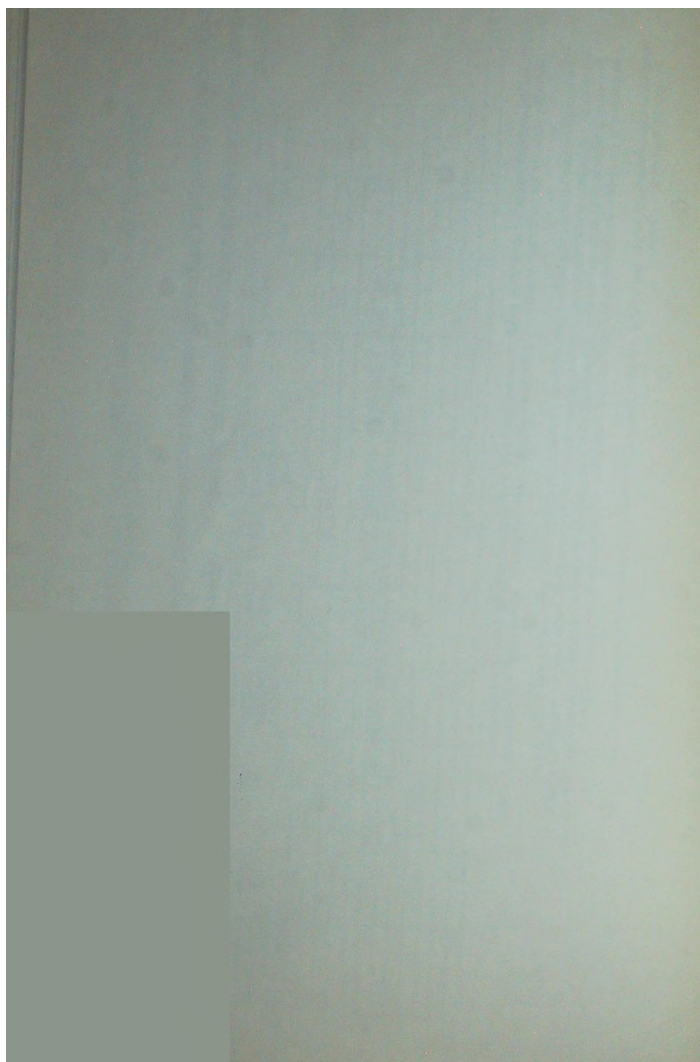
Name of Ministry/Department/Central Public Enterprises/Other Agencies											
Particulars	Code No. Major Head Minor Head Item of the Scheme	Nature and Commence- ment Year	Estimated Cost	Ninth Plan (1997-2000) Approved Outlay	Expenditure (1997-2000)	Proposed Tenth Plan (2002-07) (Proposed Outlay)	Annual Plan (2002-03)	Anticipated Benefits (in units)	Beyond 2002-03	Remarks (Specifically Environmental Measures Costs)	
1	2	3	4	5	6	7	8	9	10	11	12
New Schemes**											
i)			No new schemes proposed for 2002-2003								
ii)			New programmes included in the existing schemes.								
iii)											
iv)											
TOTAL											

**No new schemes proposed for 2002-2003
New programmes included in the existing schemes.**

* Only those Programmes/Projects/Schemes to be shown in Annexure II A to III D which do not have any External Aid Component. Their total outlay (External Aid Component plus Domestic Resources Rupee Counterpart amount) is to be shown in Annexures IV A to IV D.

** (i) The Proposals for New Schemes may be listed after exhausting schemes: (A) covered under Annexure III A Viz., Critical Ongoing Schemes as well as sanctioned/committed schemes and (B) covered under Annexure III B Viz., those designed to maximise benefits from existing capacity. In such cases the investment whether 'Upgradation/Expansion', 'Modernisation/Balancing', 'Replacement investment' as indicated in the Guidelines for Classification of Expenditure may be reported in the column for Remarks.

(ii) Stage of consideration of Schemes and whether cleared by Planning Commission and other concerned authorities may be indicated in the Remarks column.



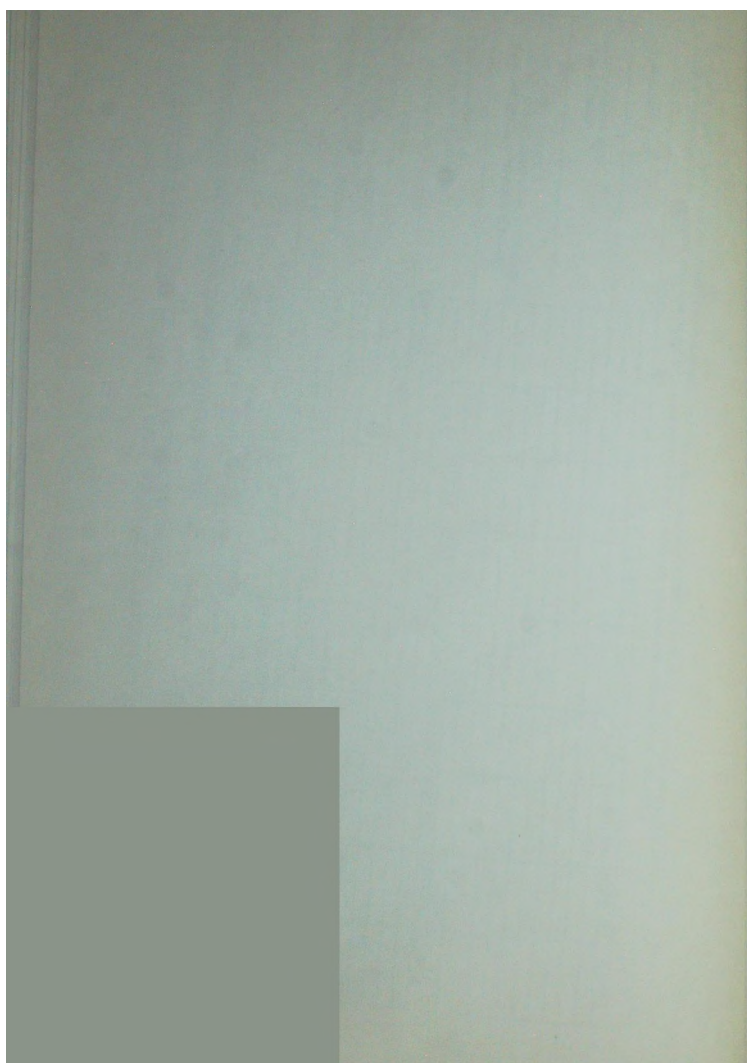
Annexure - III D

Tenth Plan (2002-07) Annual Plan 2002-03. Particulars for Projects/Programmes to be Financed Wholly by Domestic Resources.

COMMERCE & INDUSTRY/RUBBER BOARD

Name of Ministry/Departments/Central Public Enterprises/Undertakings :	Particulars	Code No. Major Head Minor Head	Estimated Cost (1987-2000)	Ninth Plan (1987-2000) Approved Outlay	Expenditure (2000-01) Actual	Annual Plan (2002-03) Anticipated Outlay	Tenth Plan 2002-07 Proposed Outlay	Annual Plan (2002-03) Proposed Outlay
1	2	3	4	5	6	7	8	9
1. Scheme Completed during 2000-01 likely to be completed during 2001-02 (Spill over liability, if any, for 2002-03 (Vide Annexure III A)								
2. Critical Ongoing Schemes (Vide Annexure III A)	Rs. 124.07		81.61	116.13	49.56	70.00	65.01	459.83
3. Schemes aimed at Maximising Benefits from the existing capacity as on 31.03.2002 (Vide Annexure III B)			-	-	-	-	-	-
4. New Schemes (Vide Annexure III C)			-	-	-	-	-	-
5. Department Total			81.61	116.13	49.56	70.00	65.01	459.83
								89.09

* Only those programmes / projects / schemes be shown in Annexure III A to III D which do not have any external aid component. Their total outlay (External Aid Component plus Domestic Resources Rupee Counterpart amount) is to be shown in Annexure IV-A to IV-D.



PARTICULARS		Year 1 (1997-98)	Year 2 (1998-99)	Year 3 (1999-2000)	Year 4 (2000-01)	Year 5 (2001-02)	Year 6 (2002-03)	Year 7 (2003-04)	Year 8 (2004-05)	Year 9 (2005-06)	Year 10 (2006-07)	Year 11 (2007-08)	Year 12 (2008-09)	Year 13 (2009-10)	Year 14 (2010-11)	Year 15 (2011-12)	Year 16 (2012-13)	Year 17 (2013-14)	Year 18 (2014-15)	Year 19 (2015-16)	Year 20 (2016-17)	Year 21 (2017-18)	Year 22 (2018-19)	Year 23 (2019-20)	Year 24 (2020-21)	Year 25 (2021-22)	Year 26 (2022-23)	Year 27 (2023-24)	Year 28 (2024-25)	Year 29 (2025-26)	Year 30 (2026-27)	Year 31 (2027-28)	Year 32 (2028-29)	Year 33 (2029-30)	Year 34 (2030-31)	Year 35 (2031-32)	Year 36 (2032-33)	Year 37 (2033-34)	Year 38 (2034-35)	Year 39 (2035-36)	Year 40 (2036-37)	Year 41 (2037-38)	Year 42 (2038-39)	Year 43 (2039-40)	Year 44 (2040-41)	Year 45 (2041-42)	Year 46 (2042-43)	Year 47 (2043-44)	Year 48 (2044-45)	Year 49 (2045-46)	Year 50 (2046-47)	Year 51 (2047-48)	Year 52 (2048-49)	Year 53 (2049-50)	Year 54 (2050-51)	Year 55 (2051-52)	Year 56 (2052-53)	Year 57 (2053-54)	Year 58 (2054-55)	Year 59 (2055-56)	Year 60 (2056-57)	Year 61 (2057-58)	Year 62 (2058-59)	Year 63 (2059-60)	Year 64 (2060-61)	Year 65 (2061-62)	Year 66 (2062-63)	Year 67 (2063-64)	Year 68 (2064-65)	Year 69 (2065-66)	Year 70 (2066-67)	Year 71 (2067-68)	Year 72 (2068-69)	Year 73 (2069-70)	Year 74 (2070-71)	Year 75 (2071-72)	Year 76 (2072-73)	Year 77 (2073-74)	Year 78 (2074-75)	Year 79 (2075-76)	Year 80 (2076-77)	Year 81 (2077-78)	Year 82 (2078-79)	Year 83 (2079-80)	Year 84 (2080-81)	Year 85 (2081-82)	Year 86 (2082-83)	Year 87 (2083-84)	Year 88 (2084-85)	Year 89 (2085-86)	Year 90 (2086-87)	Year 91 (2087-88)	Year 92 (2088-89)	Year 93 (2089-90)	Year 94 (2090-91)	Year 95 (2091-92)	Year 96 (2092-93)	Year 97 (2093-94)	Year 98 (2094-95)	Year 99 (2095-96)	Year 100 (2096-97)	Year 101 (2097-98)	Year 102 (2098-99)	Year 103 (2099-00)	Year 104 (2100-01)	Year 105 (2101-02)	Year 106 (2102-03)	Year 107 (2103-04)	Year 108 (2104-05)	Year 109 (2105-06)	Year 110 (2106-07)	Year 111 (2107-08)	Year 112 (2108-09)	Year 113 (2109-10)	Year 114 (2110-11)	Year 115 (2111-12)	Year 116 (2112-13)	Year 117 (2113-14)	Year 118 (2114-15)	Year 119 (2115-16)	Year 120 (2116-17)	Year 121 (2117-18)	Year 122 (2118-19)	Year 123 (2119-20)	Year 124 (2120-21)	Year 125 (2121-22)	Year 126 (2122-23)	Year 127 (2123-24)	Year 128 (2124-25)	Year 129 (2125-26)	Year 130 (2126-27)	Year 131 (2127-28)	Year 132 (2128-29)	Year 133 (2129-30)	Year 134 (2130-31)	Year 135 (2131-32)	Year 136 (2132-33)	Year 137 (2133-34)	Year 138 (2134-35)	Year 139 (2135-36)	Year 140 (2136-37)	Year 141 (2137-38)	Year 142 (2138-39)	Year 143 (2139-40)	Year 144 (2140-41)	Year 145 (2141-42)	Year 146 (2142-43)	Year 147 (2143-44)	Year 148 (2144-45)	Year 149 (2145-46)	Year 150 (2146-47)	Year 151 (2147-48)	Year 152 (2148-49)	Year 153 (2149-50)	Year 154 (2150-51)	Year 155 (2151-52)	Year 156 (2152-53)	Year 157 (2153-54)	Year 158 (2154-55)	Year 159 (2155-56)	Year 160 (2156-57)	Year 161 (2157-58)	Year 162 (2158-59)	Year 163 (2159-60)	Year 164 (2160-61)	Year 165 (2161-62)	Year 166 (2162-63)	Year 167 (2163-64)	Year 168 (2164-65)	Year 169 (2165-66)	Year 170 (2166-67)	Year 171 (2167-68)	Year 172 (2168-69)	Year 173 (2169-70)	Year 174 (2170-71)	Year 175 (2171-72)	Year 176 (2172-73)	Year 177 (2173-74)	Year 178 (2174-75)	Year 179 (2175-76)	Year 180 (2176-77)	Year 181 (2177-78)	Year 182 (2178-79)	Year 183 (2179-80)	Year 184 (2180-81)	Year 185 (2181-82)	Year 186 (2182-83)	Year 187 (2183-84)	Year 188 (2184-85)	Year 189 (2185-86)	Year 190 (2186-87)	Year 191 (2187-88)	Year 192 (2188-89)	Year 193 (2189-90)	Year 194 (2190-91)	Year 195 (2191-92)	Year 196 (2192-93)	Year 197 (2193-94)	Year 198 (2194-95)	Year 199 (2195-96)
-------------	--	---------------------	---------------------	-----------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

[illegible]



Name of Ministry/Department/Central Public Enterprise	Actual	Annual Plan
Outlay/Expenditure in Rs. Lakhs		

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

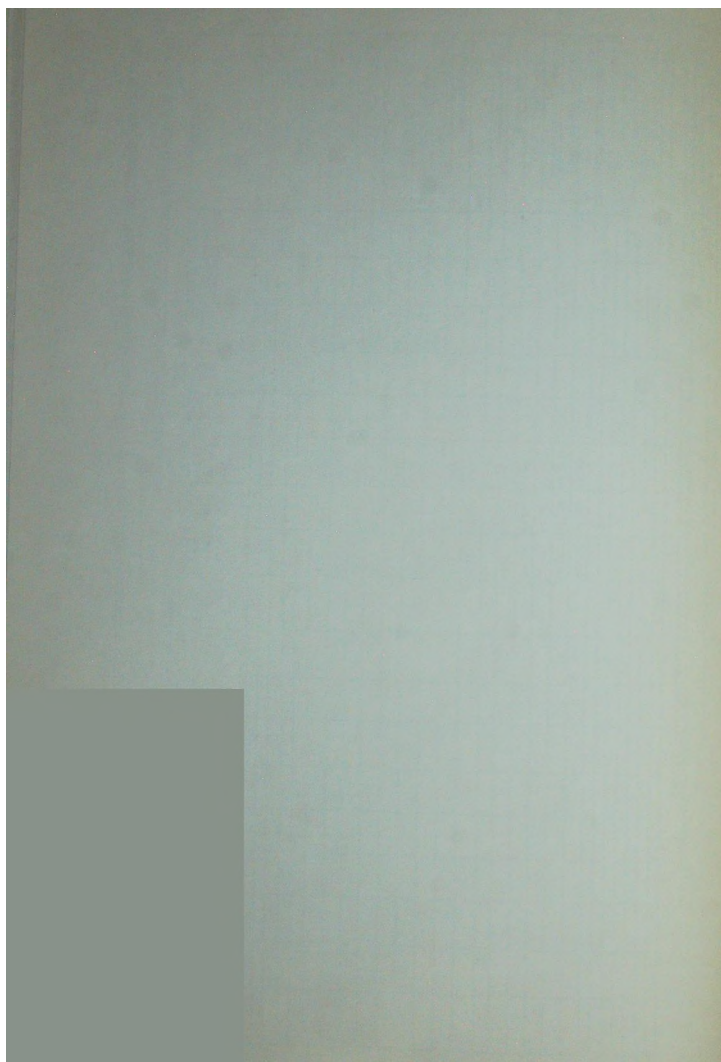
[illegible]

(i) Rupee components as well as external and domestic components should be specified in three rows as shown in Col. 1, viz. (a) amount through external aid be shown in Annexure IV-A to IV-D

(a) The outlay, expenditure and cost in each component.
(b) RUPPEL, i.e. domestic resources. Component and (c) total (i.e. $a + b$).

(iii) Date to which exchange rate portafolio may be given for the respective countries

(iv) Source of Aid and approval letter Number of the Department



COMMERCE & INDUSTRY/RUBBER BOARD

Name of Ministry/Department/Cultural Planning agency

COMMERCE & INDUSTRY

[illegible]

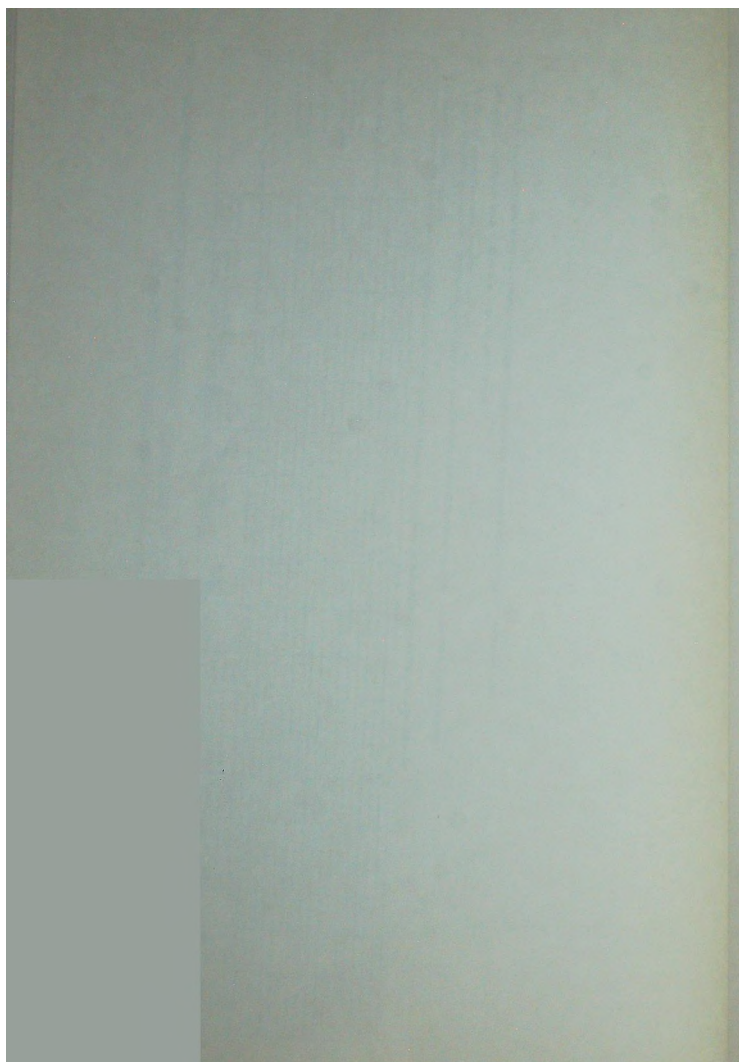
* (1) Rupee components as shown in Col. 1, viz. (a) amount through external aid, as shown in Annexure IV-A to IV-D

(b) None (i.e. domestic resources counterpart and (c) IDA) (i.e. 'a' - 'c')

data must be given for the respective columns

(iii) Date to which exchange rate pertains may be given (US \$ 1 = 100 Indian Rupees) _____

(iv) Source of Aid and approval letter number(s) of the Corporation.



Name of Ministry/Department/Central Public Enterprises/Undertakeings	COMMERCE AND INDUSTRY/RUBBER BOARD
(iii) The following are the units producing or manufacturing in R., Croom and Physical Target/Benefits in relevant units of measurement)	

Category	Amount	Anticipated Benefits (in units)
Outlay/Expenditure in Rs. Crore and Physical Target/Benefits in Tons/MT/acre		

[illegible]

Rupee components as well as external aid component, i.e., total outlay/expenditure of externally aided schemes for which aid is routed through Central Budget should be known. It should be specified in three rows, as shown in Col. 1, viz. (a) amount through external aid, (b) amount through Government of India, and (c) amount through Government of Karnataka. U.A. to I.V.D.

(b) The outlay, expenditure and cost of each scheme in Annexure IV-A to IV-D shall be shown in rupees.

(c) Domestic resources counterpart and (d) total (i.e., (a + b))

(e) rupee, i.e., domestic resources counterpart may be given for the respective columns.

(ii) The proposals for new schemes may be listed after existing schemes : (a) covered under Annexure III A critical ongoing schemes as well as sanctioned/committed schemes; (b) covered under Annexure III B viz. those designed to maximise benefits from existing capacity. In such cases, the nature of investment must be reported in the format prescribed in the Guidelines for Classification of Expenditure may be reported.

schemes, and (3) direct urban infrastructure upgrade/exansion. Modernization/Balancing or Replacement Investment as indicated in the Guidelines for Urban Investment Schemes may be indicated in the Remarks Column in the column for Remarks.

(ii) Stage of consideration of schemes and whether cleared by Planning Commission...



Annexure IV D

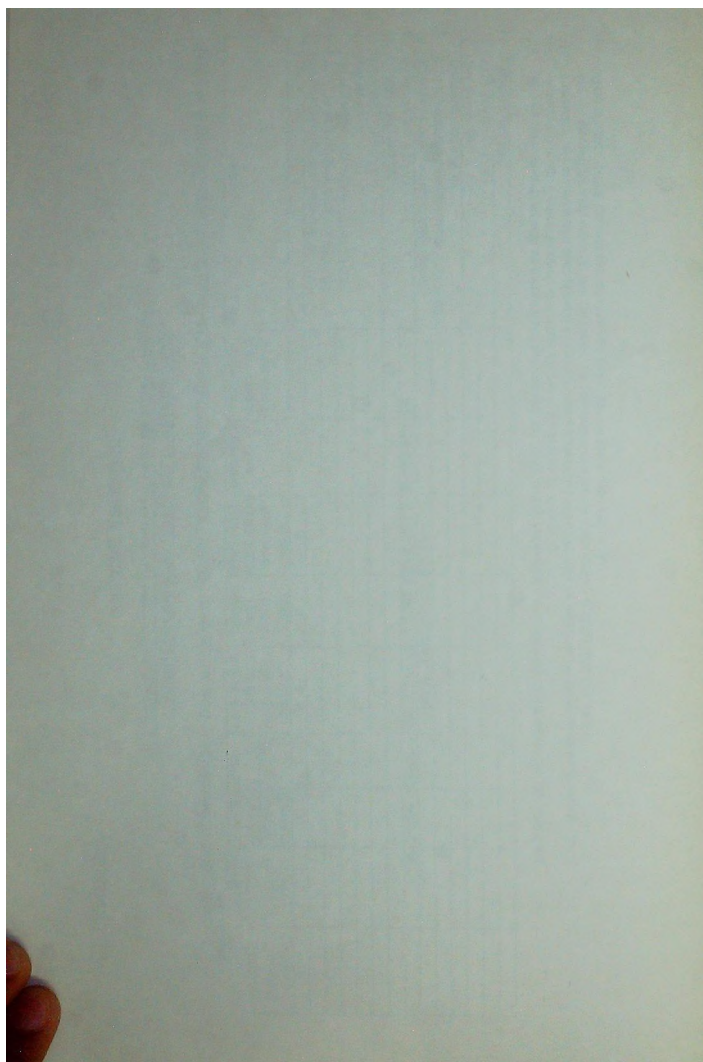
Department Summary

Tenth Plan (2002-07) and Anticipated Plan 2002-03 - Progress for
Externally Aided Project(s)/Programme(s)/Schemes.-

Name of Ministry/Department/Central Public Enterprises/Undertakings Commerce and Industry/Rubber Board

Particulars	Code No.	Estimated Cost (1997-2000)	Ninth Plan Approved Outlay (1997-2000)	Expenditure Actual (2000-01)	Annual Plan 2001-02 Outlay	Annual Plan 2001-02 Anticipated Expenditure	Tenth Plan 2002-07 Proposed Outlay	Anticipated Plan 2002-03 Proposed Outlay
1. Schemes completed during 2000-01 likely to be completed during 2001-02 (Spill over liability, if any, for 2002-03 and beyond)	2	3	4	5	6	7	8	9
2. Critical Ongoing Schemes (Vide Annexure IV A)								
3. Schemes of increasing benefits from the existing capacity as on 31.3.2002 (Vide Annexure IV B)								
4. New Schemes (Vide Annexure IV C)								
5. Department Total								

- (i) Rupee components as well as external aid component, i.e., total outlay/expenditure of externally aided schemes (for which aid is routed through Central Budget) should be shown in Annexure IV-A to IV-D.
- (ii) The outlay, expenditure and cost of each scheme in Annexure IV-A to IV-D should be specified in three rows as shown in Col. 1, viz. (a) amount through external aid, (b) rupee, i.e., through Central Budget and (c) total (i.e. (a) + b).
- (iii) Date to which exchange rate pertains may be given for the respective columns.



Annexure V A

Employment Generation During the Tenth Plan (2002-07) and Annual Plan (2002-03)

Details of Schemes/Programmes designed for Employment Generation per se

Ministry COMMERCE AND INDUSTRY

Department RUBBER BOARD

Particulars	Head of Development	Estimated Continuing Regular Employment (Persons)				Estimated Employment generated in the construction phase*		Expenditure (Outlay, in Rs. Crore)				Of which Capital Content	
		March 2001 (Art.)	March 2002 (Art.)	Tenth Plan March 2007	March 2003	2001-02 (Art.)	2002-03 (Target)	2001 - 2002 Total	2002 - 2003 Total	2002 - 2003 Total	2002 - 2003 Total	Of which Capital Content	Of which Capital Content
1 Schemes continuing from the Ninth Plan	2	3	4	5	6	7	8	9	10	11	12	13	14
2 New Schemes proposed for the Tenth Plan													
3 Total													

* Should be arrived at by adding the employment (in person days) generated to be generated in each year of the construction phase.

Note : Annexure IV A & V B seek information for assessing the direct and indirect impact of plan programmes/schemes/projects and the overall policy framework as applicable to a particular sector for meeting the stated plan objectives for employment generation and for accelerating the concerned sectoral growth rates.



Employment Generation during the Tenth Plan (2002-07) and Annual Plan (2002-03)

Annexure V B

Details of Schemes/Programmes other than those designed for Employment Generation per se

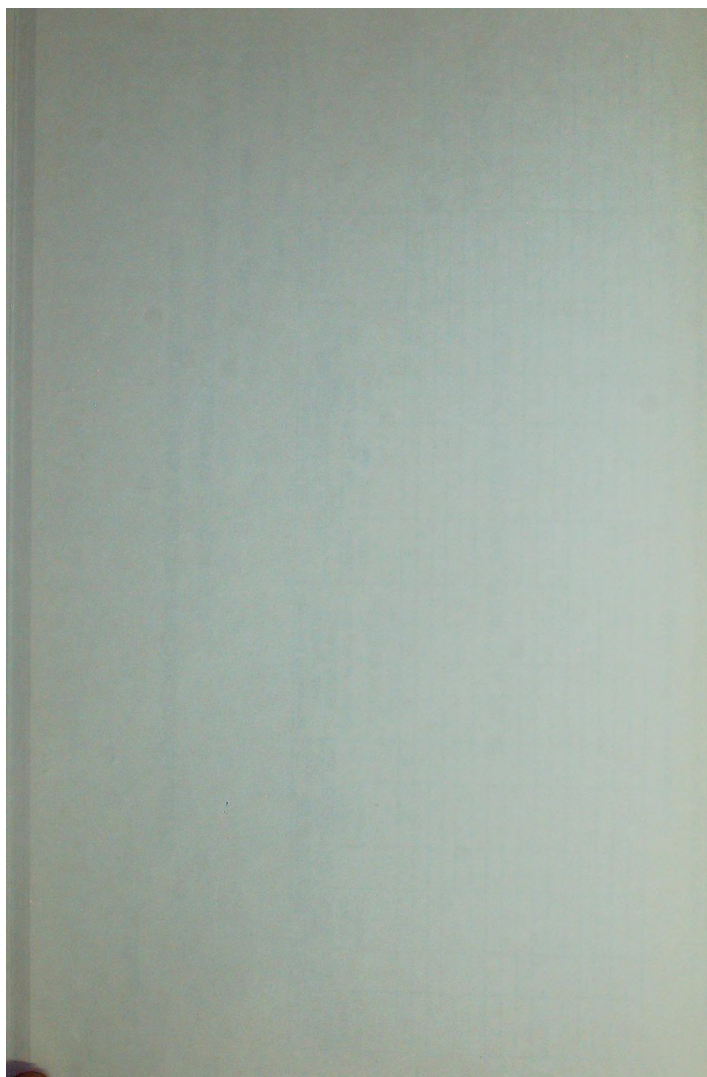
Ministry COMMERCE AND INDUSTRY

Department COMMERCE/ RUBBER BOARD

Particulars	Head of Development	Estimated Continuing (Regular Employment (Persons)				Estimated Employment (in person days) generated in the construction phase -		Expenditure (Outlay, in Rs. crore)		2002-03		2002-03		2002-03		2002-03	
		March 2001	March 2002 (Actl.)	March 2007 (Antl.)	March 2003 (Antl.)	2001-02	2002-03 (Target)	2001-2002	2002-2003	Total	Of which Capital Content	2002-2003	2002-2003	Total	Of which Capital Content	2002-2003	2002-2003
1 Schemes continuing from the Ninth Plan	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1				(1,000 numbers)													
2 New Schemes proposed for the Tenth Plan.		347	350	378	352	37	35	32.84	2.6	31.96	2.00	470.35	10.00				
3 Total				8612,407													

Should be arrived at by adding the employment (in person days) generated by schemes generated in each year of the construction phase.

Note: Annexure IV A & V B seek information for assessing the direct and indirect impact of plan programmes/schemes/projects and the overall policy framework, as applicable, to a particular sector for meeting the stated plan objectives for employment generation and for accelerating the economic sectoral growth rates.



Annexure V B

**Ministry
COMMERCE AND INDUSTRY**

Department
COMMERCE / RUBBER BOARD

[illegible]

* Should be arrived at by adding the employment (in person days) generated to be generated in each year of the construction phase

Note: Annexure IV A & B seek information for assessing the direct and indirect impact of plan programmes/schemes/projects and the overall policy framework, as applicable, to a particular sector for meeting the stated plan objectives for employment generation and for accelerating the concerned sectoral growth rates.



Annexure V C

189. Crops

Name of the Scheme	Subsidy Head at 10 Digit Level	Nature and Location of the Scheme	Commencement of the first year	Approved Scheme	Approved Plan 2000-01	Approved Actual Outlay	Approved Actual Outlay	Approved Extended till date	Actual Plan 2001-02	Actual Extended till date	Anticipated Expenditure	3rd Plan 2002-07 Proposed Outlay	4th Plan 2002-03 Proposed Outlay	Anticipated Benefits	Remarks
UBSOF welfare scheme	2		1998-99	-	0.98	0.96	0.95	0.32	1.00	9.00	1.92	**			

With a view to implementing the national policy of providing shelter for the homeless, sanitation assistance to maintain better hygienic conditions, medical attendance scheme helps the poor tapers for proper health care.



Information pertaining to Labour and Labour Welfare Schemes

Ministry : Commerce & Industry

Department : RUBBER BOARD

Tenth Plan (2002-07) and Annual Plan 2002-2003 New Schemes.

(Rs. Crore)

Name of the Scheme	Budget Head at 10 Digit Level	Nature and Location of the Scheme	Commence-ment Year	Estimated Cost	Tenth Plan 2002-07 Approved Outlay	Annual Plan 2002-03 Proposed Outlay	Anticipated Benefits	Remarks
1	2	3	4	5	6	7	8	9
Labour Welfare								
1. Housing Subsidy Scheme for the organized and un-or-ganised sector.			1988-89					
2. Housing and sanitary SC/ST/OMC.			1993-94					
3. Medical attendance scheme.			1997-98		9.00	1.92		(Same as men-tioned in Annexure V C)
4. Sanitary subsidy scheme.								
5. Group Insurance scheme.								
6. Educational stipend scheme								
7. Educational scholarship								
8. Welfare fund scheme for women & tribal tappers in small holding sector.								

- Annexure V D is for new schemes approved/proposed for the Tenth Plan.

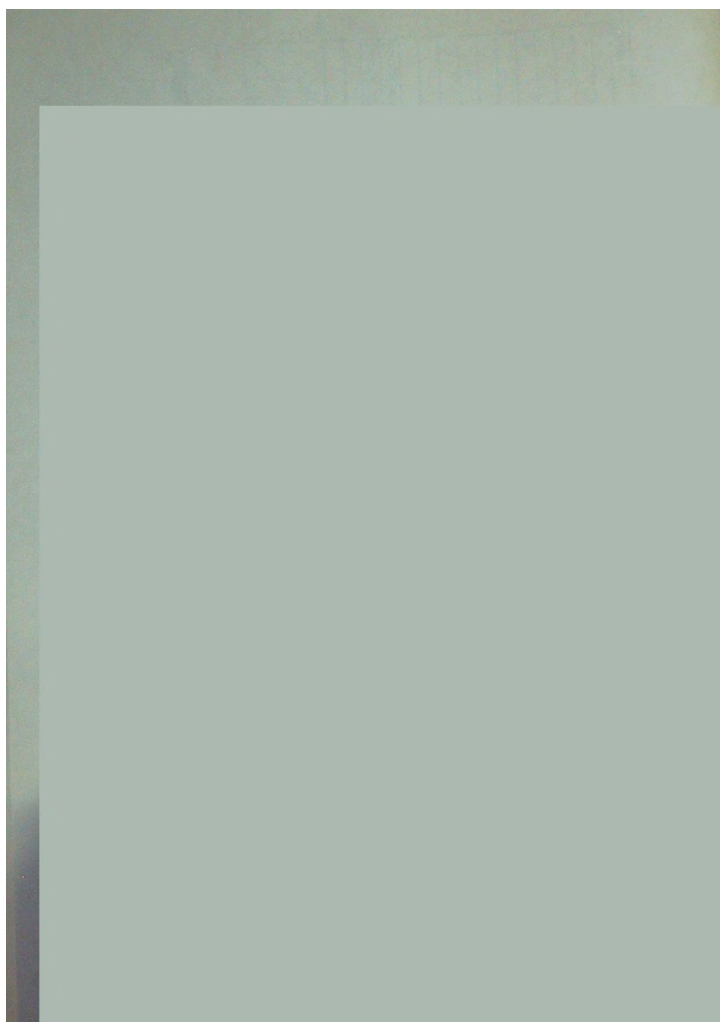


Weeded Out

INDUSTRY RUBBER BOARD

(Rs. Crore)

Particulars	Code No. Major Head/ Minor Head	Nature & Location of the Scheme	Commencement Year	Estimated Cost	Ninth Plan (2002-07) Approved Outlay	Annual Plan 2001-02 Anticipated Expenditure	Remarks
1	2	3	4	5	6	7	8
Name of the Scheme/ Programme							
1)			1981				
2)							
3)							
4)							
5)							
6)							
7)							
8)							
9)							
10)							
11)							
12)							
13)							
14)							
15)							
16)							
17)							
18)							
19)							
20)							
Total							



Financial Outlays : Tenth Plan (2002-07) and Annual Plan (2002-03) Rural Component

(Rs. Crore)

S No	Development Head & Sub-Head*	Sectoral Outlay				Rural Component			
		Ninth Plan (Actual)	2000-01 (Antl)	2001-02 (Antl)	Tenth Plan (Proposal)	Ninth Plan (Actual)	2000-01 (Antl)	2001-02 (Antl)	Tenth Plan (Proposal)
1	Development Head	3	4	5	6	7	8	9	10
1	Directly Identifiable Rural Outlays by Location & Benefit								
✓ 1	Agriculture & Allied Activities	All activities come under Agriculture allied activities only which is in Rural Development.							
2	Rural Development								
3	Special Area Programmes								
4	Irrigation & Flood Control								
	Sub - Total (1 to 4)					373.19	75.78	82.84	470.35
5	Rural Electrification (RE)								
6	Village Industries								
6.1	Khadi & Village Industries								
6.2	Handloom								
6.3	Handloom								
6.4	Handicrafts								
6.5	Coir								
7	Rural roads								
8	Rural Health								
8	Village Health Guides (Family Welfare)								
10	Rural Housing								
11	Rural Water Supply								
12	Rural Sanitation								
	Sub - Total - (5 to 12)								
13	Energy								
13.1	Power (Other than RE)								
13.2	Petroleum								
13.3	Coal & Lignite								
13.4	Non-Conventional Source of Energy								

contd. J.



Financial Outlays : Tenth Plan (2002-07) and Annual Plan (2002-03) : Rural Component

(Rs. Crore)

S.No	Development Head & Sub-Head*	Sectoral Outlay				Rural Component			
		Ninth Plan	2000-01 (Actual)	2001-02 (Antl)	Tenth Plan	2002-03 (Proposal)	Ninth Plan	2000-01 (Actual)	2001-02 (Antl)
		3	4	5	6	7	8	9	10
1	2								
14	Industry & Minerals								
14.1	Small Scale Industries & Powerlooms								
14.2	Other Industries								
15	Transport								
15.1	Railways								
15.2	Other Transport (Excluding Rural Roads)								
16	Communications								
17	Science, Technology & Environment								
18	Social Services								
18.1	Education								
18.2	Health & Public Health (Excluding Rural Health)								
18.3	Family Welfare (Excluding Village Health Guide)								
18.4	Housing (Excluding Rural Housing)								
18.5	Urban Development								
18.6	Water Supply & Sanitation (excluding Rural Water Supply & Rural Sanitation)								
18.7	Other Social Services								
19	Other Development Programmes								
19.1	Public Distribution System (PDS)								
19.2	Other than PDS								
	Sub-Total (13 to 19)						378.19	75.78	82.84
	Public Sector Outlay (1 to 19)*						470.35	91.36	

* - All the items listed may be retained but further sub-classification, if necessary, may be done under each head/sub-head
 Notes : Rural component to be specified in Rr, Crrr and as per cent of the sectoral outlay



Annexure VIII A

COMMERCE & INDUSTRY, / RUBBER BOARD

(Rs. Crore)



Tenth Plan (2002-07) and Annual Plan 2002-03 : Annual Plan 2002-03 : Tribal Sub-Plan : Physical Achievements

Ministry/Department: COMMERCE & INDUSTRY/ RUBBER BOARD.

[illegible]

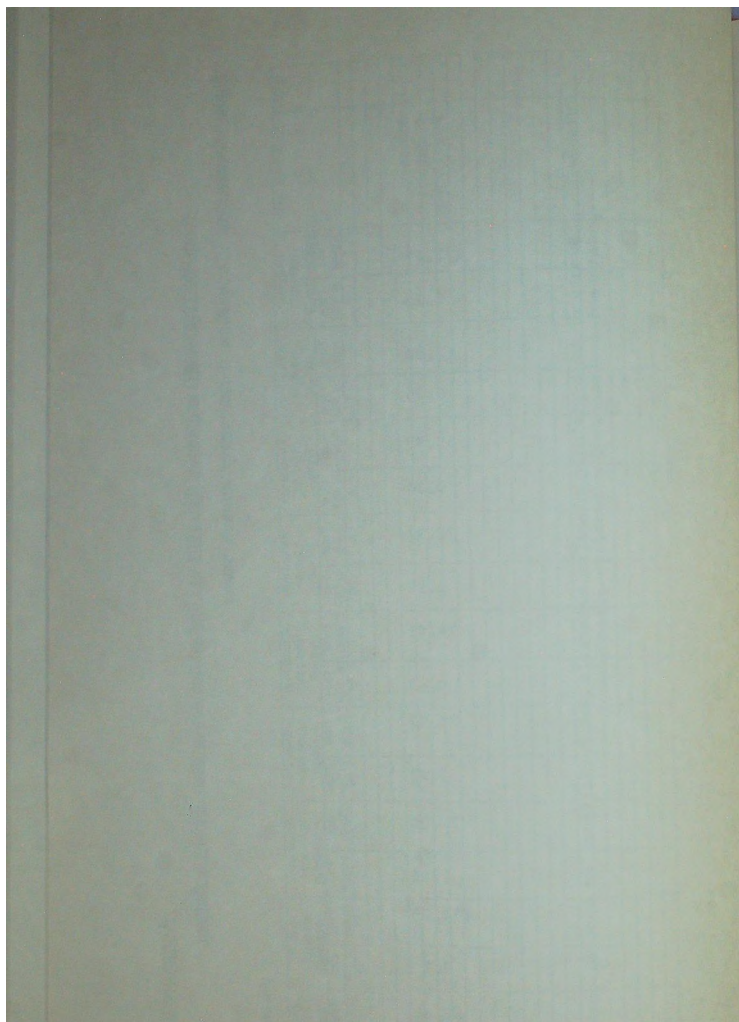
* Including Block planting



Tenth Plan (2002-2007) and Annual Plan 2002-03 : Special Component Plan : Financial Outlays

(Rs. crore)

[illegible]



Annexure VIII D

Tenth Plan (2002-07) and Annual Plan 2002-03 : Special Component Plan : Physical Achievement

Ministry/Department : COMMERCE & INDUSTRY/ RUBBER BOARD.

Sl. No.	Sector/Sub-Sector	Unit	Ninth Plan 1997-2002 Target	Annual Plan 1996-97 Achievement	Annual Plan 1997-98 Achievement	Annual Plan 1988-89 Achievement	Annual Plan 1989-00 Achievement	Annual Plan 2000-01 Achievement	Annual Plan 2001-02 Anticipated	Tenth Plan 2002-07 Target	Annual Plan 2002-03 Target
1	2	3	4	5	6	7	8	9	10	11	12
	Sector										
1.	Cash subsidy for NR ERP	Ha		399	275	465	385	300	350		350
2.	Planting material of coconut	Ha		300	275	465	385	300	350	2000	350
3.	Fertilizers at 50% subsidy	Ha	2500	300	275	465	385	300	350		350
4.	Boundary protection	Ha		50	60	100	85	70	50		100
5.	Block planting	Ha		**		100	MTL	MTL	MTL		MTL
	Programme										
			(Mentioned in Annexure VIII C)								



Annexure IX

Tenth Plan (2002-07) and Annual Plan 2002-03

Financial Outlays/Expenditure for Voluntary Sector

(Rs. Crore)

Ministry/Department: COMMERCE & INDUSTRY/ RUBBER BOARD.

Scheme	Ninth Plan 1997-2002 Outlay	Annual Plan 1996-97 Actual Expend.	Annual Plan 1997-98 Actual Expend.	Annual Plan 1998-99 Actual Expend.	Annual Plan 1999-2000 Actual Expend.	Annual Plan 2000-2001 Actual Expend.	Annual Plan 2001-02 Outlay	Annual Plan 2001-02 Actual Expend.	Tenth Plan 2002-07 Prop. Outlay	Annual Plan 2002-03 Proposed
1	2	3	4	5	6	7	8	9	10	11
1										
2										
3										
4										
5										
6										
7										
8										
9										
Total		0.69	1.43	1.36	1.76	2.30	1.40	1.46	7.50	1.50



Annual Plan (2002-2003) - Sub Plan for Women : Financial Outlays

Ministry/Department: Commerce/Rubber Board

[illegible]

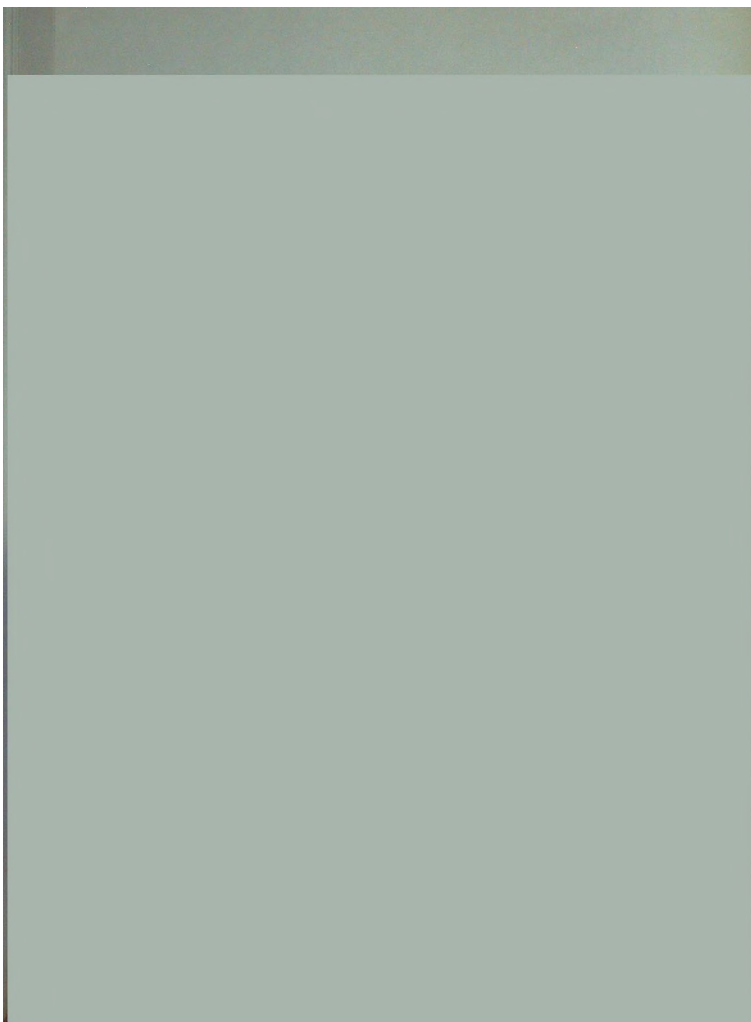


Tenth Plan (2002-07) and Annual Plan (2002-2003) - Sub Plan for Women : Physical Achievements

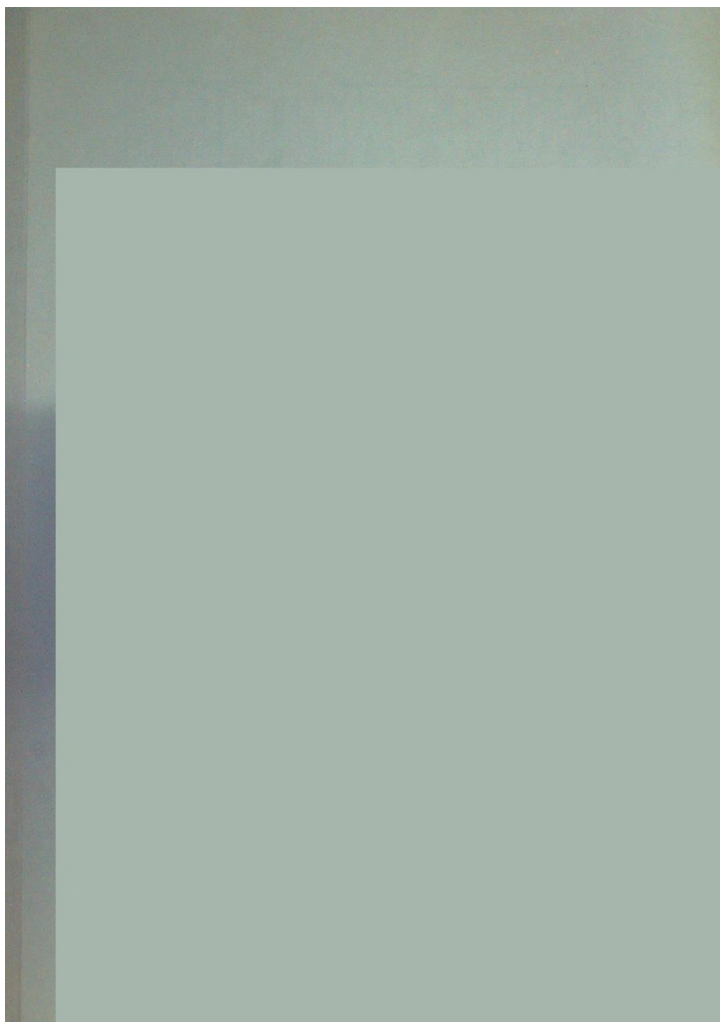
Ministry/Department : Commerce/Rubber Board

(Rs. Crore)

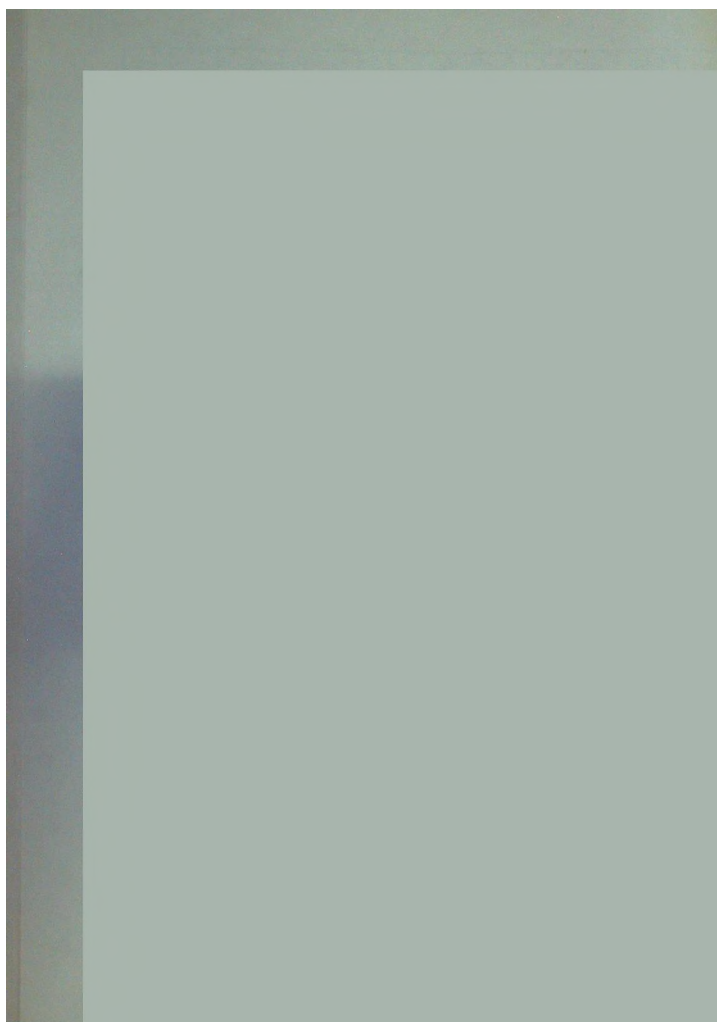
Sl.No.	Sector/Sub Sector	Unit	Ninth Plan (1997-2002) Outlay	Expected Benefits to sub-plan for women	Annual Plan (2000-01) Target	Achievement	Annual Plan (2001-02) Target	Achievement	Tenth Plan (2002-07) Target	Expected Benefits to sub-plan for women	Annual Plan (2002-03) Proposed Target	Remt
1	2	3	4	5	6	7	8	9	10	11	12	13
	Sector											
	Women & Tribal Development (Tribals & Kastias)											
	Programmes				(Mos.)	(Mos.)						
	Training in tapping/processing, training in embroidery, biogas plants, sanitary, latrines, health, camps, drinking water, bee-keeping facilities, poultry, etc)				2500	2535	-	-	-	-	-	



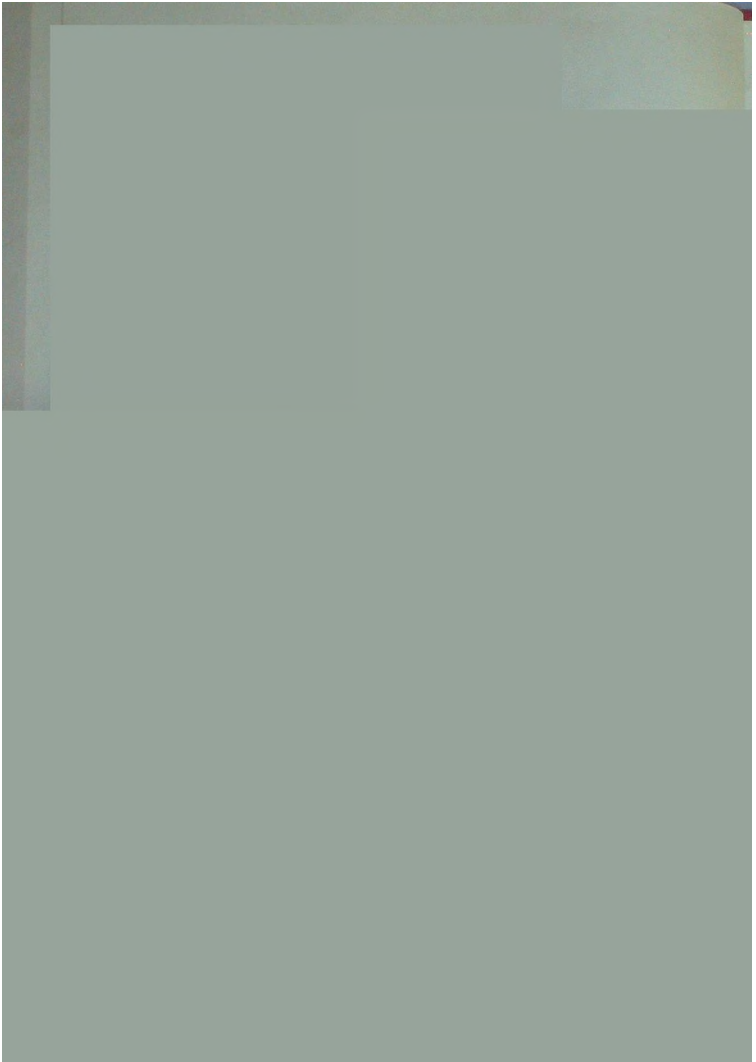
Statement-4									
Hand-wise Central Plan Outlay/Expenditure for Tenth Plan (2002-2007) and Annual Plan (2002-03).									
(Rs. crore)									
Tenth Plan/Proposed Outlay									
Ninth Plan									
2000-01 (Actual Exps)									
2001-02 (Anticipated)									
2002-07									
2002-03									
Gross IEBR Total Plan									
Gross IEBR Total Plan									
Budget									
Outlay									
Support									
No.									
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
AGRICULTURE & ALLIED ACTIVITIES									
1									
Crop Husbandry									
D1									
D1									
2									
Soil & Water Conservation									
D1									
D1									
3									
Animal Husbandry									
D3									
D3									
4									
Dairy Development									
D3									
D3									
5									
Fisheries									
D3									
D3									
6									
Forestry & Wildlife									
D21									
D21									
D25									
D25									
7									
Plantations (Rubber)									
D5									
D5									



Head-wise Central Plan Outlay/Expenditure for Tenth Plan (2002-2007) and Annual Plan (2007-08)										Statement-I	
										(Rs. crore)	







भारतीय रसायन संस्थान Rajendra Research Institute of India Gurgaon, Haryana
क्र. सं. / Acc. No. 243135
दिनांक / Date: 3/5/16
हस्ताक्षर / Initials

