

BRAZIL

Federal
Expenditures
on **S**cience
&
Technology

Time Series 1980-94

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CNPq
NATIONAL COUNCIL FOR SCIENTIFIC &
TECHNOLOGICAL DEVELOPMENT

ISSN 0104 7337

SYNOPSIS

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FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY

Time Series 1980-94 - Synopsis

BRASÍLIA, DECEMBER, 1995

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Foreword

In Brazil, the Federal Government is the most important financial source for Science and Technology, and represents more than half the national expenditure on S&T.

This consolidation of the 1994 Federal Government Expenditure continues CNPq's tradition of providing time-series information on S&T. This synopsis represents an effort to create a light, concise and convenient document that can provide essential data on the main federal agencies that finance and invest on S&T.

*José Galizia Tundisi
President of CNPq*

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Federal Expenditure on S&T 1980-94

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TABLE 1

FEDERAL EXPENDITURE ON S&T AS A PERCENTAGE OF CURRENT REVENUES AND TOTAL FEDERAL EXPENDITURE
TREASURY FUNDS - 1980-94

| YEAR | FEDERAL EXPENDITURE ON S&T (A) | CURRENT REVENUES (2) (B) | % | IN US\$ MILLION, 1994 (1) | |
|------|--------------------------------------|--------------------------------|------|-------------------------------------|------------|
| | | | | TOTAL FEDERAL EXPENDITURE (C) | % (A/C) |
| 1980 | 1.014,6 | 42.042,9 | 2,41 | 42.385,2 | 2,39 |
| 1981 | 2.619,2 | 40.009,5 | 6,55 | 40.314,8 | 6,50 |
| 1982 | 2.854,2 | 40.410,7 | 7,06 | 40.820,9 | 6,99 |
| 1983 | 2.325,3 | 42.754,9 | 5,44 | 43.501,8 | 5,35 |
| 1984 | 2.001,7 | 44.004,5 | 4,55 | 41.376,2 | 4,84 |
| 1985 | 1.740,4 | 46.552,9 | 3,74 | 45.789,2 | 3,80 |
| 1986 | 2.377,1 | 53.540,1 | 4,44 | 77.198,4 | 3,08 |
| 1987 | 2.878,4 | 56.776,4 | 5,07 | 74.325,8 | 3,87 |
| 1988 | 3.075,3 | 54.407,3 | 5,65 | 100.233,4 | 3,07 |
| 1989 | 2.679,6 | 52.123,9 | 5,14 | 238.470,5 | 1,12 |
| 1990 | 2.197,6 | 66.004,4 | 3,33 | 335.211,0 | 0,66 |
| 1991 | 2.038,3 | 80.298,2 | 2,54 | 151.196,4 | 1,35 |
| 1992 | 1.552,8 | 79.583,2 | 1,95 | 198.178,9 | 0,78 |
| 1993 | 2.196,1 | 167.199,0 | 1,31 | 273.243,9 | 0,80 |
| 1994 | 2.199,0 | 167.300,9 | 1,31 | 269.744,2 | 0,82 |

SOURCE: MCT/CNPq/SUP/COOE

NOTES: (1) Values were updated based on GNP implicit price deflator and translated to dollars using the average exchange rate for 1994, provided by the Brazilian Central Bank (US\$ 1,00 = R\$ 0,645).

(2) Data do not include Revenues from Social Security Contributions paid by employees and employers.

GRAPH 1

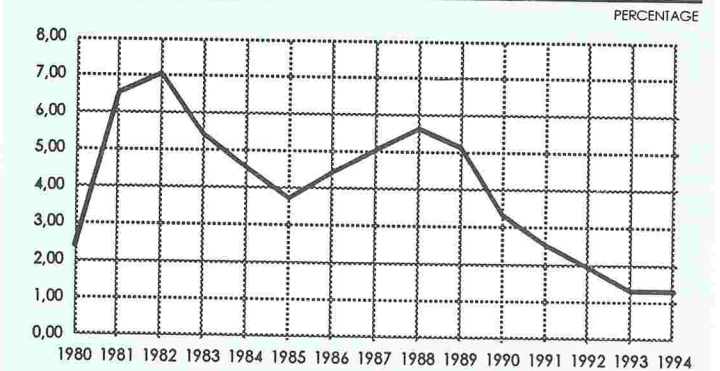
FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY
TREASURY FUNDS - 1980-94



SOURCE: MCT/CNPq/SUP/COOE

GRAPH 2

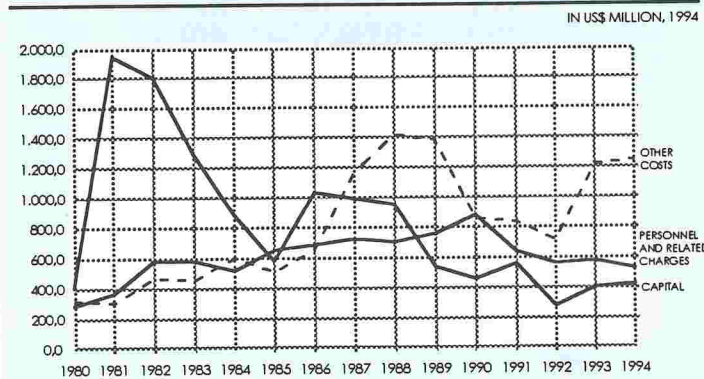
FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY
AS A PERCENTAGE OF CURRENT REVENUES - 1980-94



SOURCE: MCT/CNPq/SUP/COOE

GRAPH 4

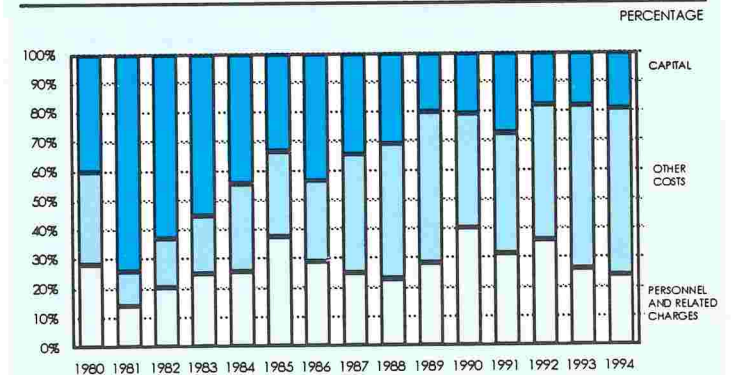
FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY BY ELEMENTS OF EXPENSE - 1980-94



SOURCE: MCT/CNPq/SUP/COOE

GRAPH 5

SHARE OF FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY BY ELEMENTS OF EXPENSE - 1980-94



SOURCE: MCT/CNPq/SUP/COOE

TABLE 4

FEDERAL EXPENDITURE ON S&T - BY CATEGORY OF S&T ACTIVITIES:
R&D - RESEARCH AND DEVELOPMENT AND CSTA - CORRELATED SCIENTIFIC AND TECHNICAL ACTIVITIES
TREASURY FUNDS - 1980-94

| YEAR | R&D | | CSTA | | TOTAL |
|------|---------------------------|-------|---------------------------|-------|---------|
| | IN US\$ MILLION, 1994 (1) | % | IN US\$ MILLION, 1994 (1) | % | |
| 1980 | 643,4 | 63,41 | 371,2 | 36,59 | 1.014,6 |
| 1981 | 1.617,1 | 61,74 | 1.002,1 | 38,26 | 2.619,2 |
| 1982 | 1.736,0 | 60,82 | 1.118,2 | 39,18 | 2.854,2 |
| 1983 | 1.680,9 | 72,29 | 644,4 | 27,71 | 2.325,3 |
| 1984 | 1.327,7 | 66,33 | 674,0 | 33,67 | 2.001,7 |
| 1985 | 1.235,1 | 70,97 | 505,3 | 29,03 | 1.740,4 |
| 1986 | 1.611,0 | 67,77 | 766,0 | 32,23 | 2.377,1 |
| 1987 | 1.523,9 | 52,94 | 1.354,5 | 47,06 | 2.878,4 |
| 1988 | 1.699,1 | 55,25 | 1.376,1 | 44,75 | 3.075,3 |
| 1989 | 1.414,5 | 52,74 | 1.267,5 | 47,26 | 2.682,0 |
| 1990 | 1.154,5 | 52,53 | 1.043,1 | 47,47 | 2.197,6 |
| 1991 | 1.107,1 | 54,32 | 931,2 | 45,68 | 2.038,3 |
| 1992 | 826,7 | 53,24 | 726,2 | 46,76 | 1.552,8 |
| 1993 | 1.371,2 | 62,44 | 824,9 | 37,56 | 2.196,1 |
| 1994 | 1.521,6 | 69,20 | 677,3 | 30,80 | 2.199,0 |

SOURCE: MCT/CNPq/SUP/COOE

NOTE: (1) Values were updated based on GNP implicit price deflator and translated to dollars using the average exchange rate for 1994, provided by the Brazilian Central Bank (US\$ 1,00 = R\$ 0,645).

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GRAPH 6

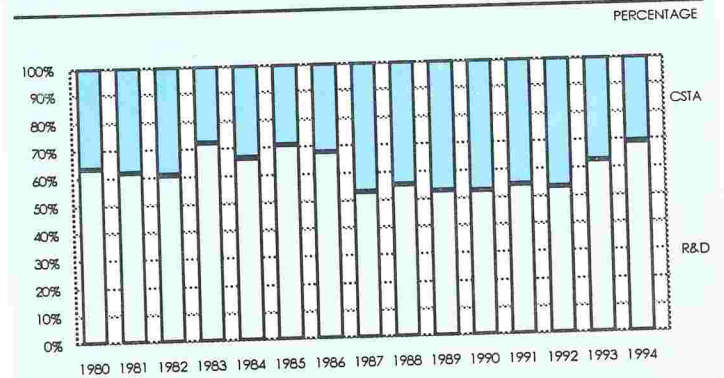
FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY
BY CATEGORIES OF S&T ACTIVITIES - R&D AND CSTA - 1980-94



SOURCE: MCT/CNPq/SUP/COOE

GRAPH 7

SHARE OF FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY
BY CATEGORIES OF S&T ACTIVITIES - R&D AND CSTA - 1980-94



SOURCE: MCT/CNPq/SUP/COOE

TABLE 5

FEDERAL EXPENDITURE ON RESEARCH AND DEVELOPMENT - BY CHARACTER OF WORK
TREASURY FUNDS - 1980-94

In US\$ million, 1994 (1)

| YEAR | APPLIED RESEARCH | BASIC RESEARCH | EXPERIMENTAL DEVELOPMENT | OTHER (2) | TOTAL |
|------|------------------|----------------|--------------------------|-----------|---------|
| 1980 | 335,7 | 74,8 | 12,9 | 219,8 | 643,3 |
| 1981 | 1.285,6 | 77,4 | 11,6 | 242,6 | 1.617,2 |
| 1982 | 1.323,0 | 131,8 | 47,0 | 234,2 | 1.736,0 |
| 1983 | 1.295,4 | 114,5 | 46,2 | 224,8 | 1.680,9 |
| 1984 | 953,9 | 97,9 | 67,9 | 208,0 | 1.327,7 |
| 1985 | 708,1 | 137,1 | 104,4 | 285,5 | 1.235,1 |
| 1986 | 952,3 | 201,8 | 108,1 | 349,4 | 1.611,5 |
| 1987 | 803,9 | 167,3 | 58,8 | 493,6 | 1.523,6 |
| 1988 | 810,2 | 182,0 | 52,5 | 654,5 | 1.699,1 |
| 1989 | 447,2 | 180,5 | 137,7 | 647,7 | 1.413,2 |
| 1990 | 371,5 | 283,6 | 76,8 | 422,6 | 1.154,5 |
| 1991 | 364,6 | 278,2 | 48,1 | 416,2 | 1.107,1 |
| 1992 | 207,8 | 200,9 | 47,5 | 370,5 | 826,7 |
| 1993 | 330,3 | 363,6 | 59,8 | 617,5 | 1.371,2 |
| 1994 | 280,4 | 437,1 | 48,5 | 755,6 | 1.521,6 |

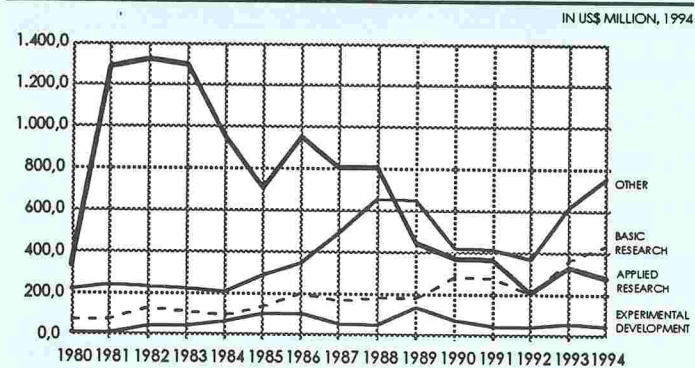
SOURCE: MCT/CNPq/SUP/COOE

NOTE: (1) Values were updated based on GNP implicit price deflator and translated to dollars using the average exchange rate for 1994, provided by the Brazilian Central Bank (US\$ 1,00 = R\$ 0,645).

(2) This column is comprised by data that is a mixture of the three kinds of research work, but could not be broken down into their component parts.

GRAPH 8

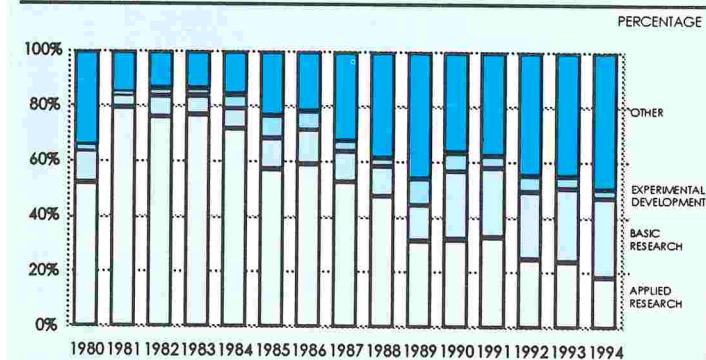
FEDERAL EXPENDITURE ON RESEARCH AND DEVELOPMENT BY CHARACTER OF WORK - 1980-94



SOURCE: MCT/CNPq/SUP/COOE

GRAPH 9

SHARE OF FEDERAL EXPENDITURE ON RESEARCH AND DEVELOPMENT BY CHARACTER OF WORK - 1980-94



SOURCE: MCT/CNPq/SUP/COOE

Federal Expenditure on S&T 1980-94

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TABLE 6

FEDERAL EXPENDITURE ON S&T - BY MAIN AGENCIES (1)
TREASURY FUNDS - 1980-94

IN US\$ MILLION, 1994 (2)

| YEAR | MCT | MEC | MAARA | PR | MAer | MS | OTHERS | TOTAL |
|------|---------|-------|-------|-------|-------|-------|---------|---------|
| 1980 | 393,9 | 77,5 | 227,6 | 102,5 | 17,1 | 25,9 | 170,0 | 1.014,5 |
| 1981 | 863,2 | 115,6 | 318,4 | 121,1 | 5,7 | 27,6 | 1.167,6 | 2.619,3 |
| 1982 | 566,6 | 227,8 | 562,4 | 192,5 | 22,5 | 30,2 | 1.252,3 | 2.854,3 |
| 1983 | 409,7 | 225,1 | 451,9 | 178,7 | 22,4 | 24,3 | 1.013,2 | 2.325,3 |
| 1984 | 367,6 | 188,1 | 545,5 | 198,6 | 70,6 | 26,9 | 604,5 | 2.001,7 |
| 1985 | 403,3 | 283,1 | 409,9 | 183,9 | 119,1 | 19,0 | 322,2 | 1.740,4 |
| 1986 | 605,7 | 422,9 | 411,4 | 298,0 | 76,6 | 29,1 | 534,0 | 2.377,8 |
| 1987 | 871,7 | 393,0 | 431,1 | 238,5 | 268,8 | 21,4 | 653,4 | 2.877,8 |
| 1988 | 960,6 | 401,6 | 446,8 | 370,0 | 462,6 | 71,5 | 362,1 | 3.075,2 |
| 1989 | 940,5 | 451,3 | 538,2 | 340,7 | 214,5 | 80,3 | 114,0 | 2.679,6 |
| 1990 | 706,2 | 328,0 | 455,6 | 240,6 | 265,0 | 73,5 | 128,7 | 2.197,6 |
| 1991 | 739,1 | 268,9 | 409,1 | 144,0 | 254,7 | 85,5 | 137,0 | 2.038,3 |
| 1992 | 617,8 | 235,4 | 297,4 | 124,9 | 74,3 | 77,2 | 125,8 | 1.552,8 |
| 1993 | 1.150,2 | 322,6 | 452,5 | 87,1 | 4,5 | 71,9 | 107,3 | 2.196,0 |
| 1994 | 928,4 | 464,1 | 284,7 | 157,3 | 132,2 | 104,8 | 127,4 | 2.199,0 |

SOURCE: MCT/CNPq/SUP/CODE

NOTES: (1) Consolidation based on the administrative structure provided for by the 1994 Federal Government Budget Law;

(2) Values were updated based on GNP implicit price deflator and translated to dollars using the average exchange rate for 1994, provided by the Brazilian Central Bank (US\$ 1,00 = R\$ 0,645).

MCT - MINISTRY OF SCIENCE AND TECHNOLOGY

MEC - MINISTRY OF EDUCATION AND SPORTS

MAARA - MINISTRY OF AGRICULTURE, PROVISION AND AGRARIAN REFORM

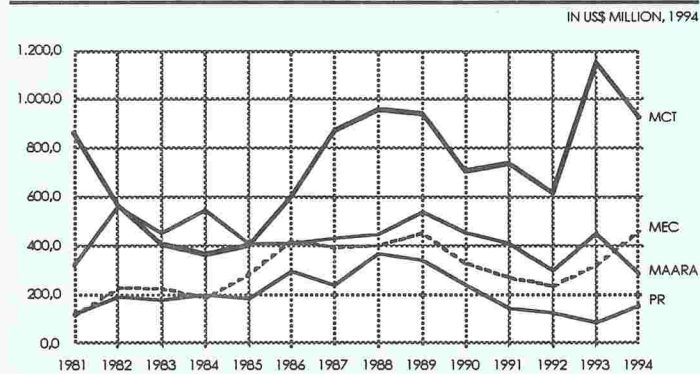
PR - PRESIDENCY OF THE REPUBLIC

MAer - MINISTRY OF AERONAUTICS

MS - MINISTRY OF HEALTH

GRAPH 10

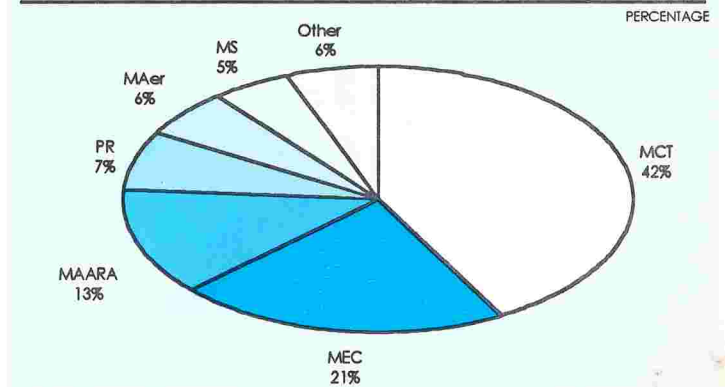
FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY BY MAIN AGENCIES - 1980-94



SOURCE: MCT/CNPq/SUP/COOE

GRAPH 11

SHARE OF FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY BY MAIN AGENCIES - 1994



SOURCE: MCT/CNPq/SUP/COOE

TABLE 7

FEDERAL EXPENDITURE ON S&T - BY MAIN BUDGET UNITS (1)
TREASURY FUNDS - 1980-94

| YEAR | CNPq | CAPES | EMBRAPA | MAER | CNEN | FNDCT | FIOCRUZ | IFES | INPE | OTHER | In US\$ million, 1994 (2) | |
|------|-------|-------|---------|-------|-------|-------|---------|-------|------|---------|---------------------------|--|
| | | | | | | | | | | | TOTAL | |
| 1980 | 115,1 | 19,7 | 196,8 | 17,1 | 54,1 | 212,7 | 18,0 | 53,2 | 22,5 | 305,2 | 1.014,5 | |
| 1981 | 150,9 | 43,4 | 289,0 | 5,7 | 628,0 | 138,8 | 17,7 | 66,3 | 33,9 | 1.245,6 | 2.619,3 | |
| 1982 | 185,1 | 52,9 | 396,5 | 22,5 | 598,5 | 279,1 | 24,4 | 167,2 | 47,2 | 1.080,9 | 2.854,3 | |
| 1983 | 163,5 | 59,2 | 382,3 | 22,4 | 331,9 | 107,6 | 19,6 | 160,7 | 34,3 | 1.043,8 | 2.325,3 | |
| 1984 | 155,2 | 52,7 | 465,1 | 34,6 | 270,2 | 89,4 | 23,3 | 130,9 | 30,6 | 749,8 | 2.001,7 | |
| 1985 | 216,6 | 83,6 | 355,9 | 70,7 | 145,0 | 90,5 | 14,9 | 193,8 | 44,2 | 525,3 | 1.740,4 | |
| 1986 | 225,9 | 94,5 | 368,1 | 14,0 | 341,3 | 163,9 | 21,6 | 320,5 | 68,1 | 759,9 | 2.377,8 | |
| 1987 | 419,5 | 178,5 | 403,7 | 268,8 | 531,2 | 155,0 | 8,6 | 202,2 | 83,0 | 627,3 | 2.877,8 | |
| 1988 | 485,5 | 230,4 | 423,0 | 462,6 | 326,9 | 138,0 | 51,3 | 157,4 | 73,6 | 726,4 | 3.075,2 | |
| 1989 | 539,7 | 208,4 | 525,1 | 214,5 | 255,7 | 91,0 | 62,2 | 235,9 | 85,8 | 461,3 | 2.679,6 | |
| 1990 | 431,3 | 151,5 | 442,7 | 265,0 | 190,4 | 61,4 | 53,7 | 164,4 | 69,1 | 368,0 | 2.197,6 | |
| 1991 | 429,2 | 168,9 | 403,1 | 254,7 | 102,1 | 77,6 | 61,2 | 93,4 | 43,5 | 404,6 | 2.038,3 | |
| 1992 | 341,7 | 182,9 | 294,4 | 74,3 | 103,1 | 43,6 | 59,4 | 49,6 | 43,8 | 360,1 | 1.552,8 | |
| 1993 | 616,0 | 252,6 | 311,0 | 4,5 | 83,8 | 263,8 | 38,8 | 67,7 | 52,5 | 505,4 | 2.196,0 | |
| 1994 | 593,7 | 382,1 | 282,4 | 132,2 | 107,8 | 98,1 | 94,5 | 78,5 | 77,5 | 352,1 | 2.199,0 | |

SOURCE: MCT/CNPq/SUP/COOE

NOTES: (1) Amortization and funding charges are not included;

(2) Values were updated based on GNP implicit price deflator and translated to dollars using the average exchange rate for 1994, provided by the Brazilian Central Bank (US\$ 1,00 = R\$ 0,645).

CNPq - NATIONAL COUNCIL FOR SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT

CAPES - FOUNDATION FOR THE IMPROVEMENT OF HIGHER EDUCATION PERSONNEL

EMBRAPA - BRAZILIAN ENTERPRISE FOR AGRICULTURAL AND LIVE STOCK RESEARCH

MAer - MINISTRY OF AERONAUTICS

CNEN - NATIONAL COMMITTEE ON NUCLEAR ENERGY

FNDCT - NATIONAL FUND FOR SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT

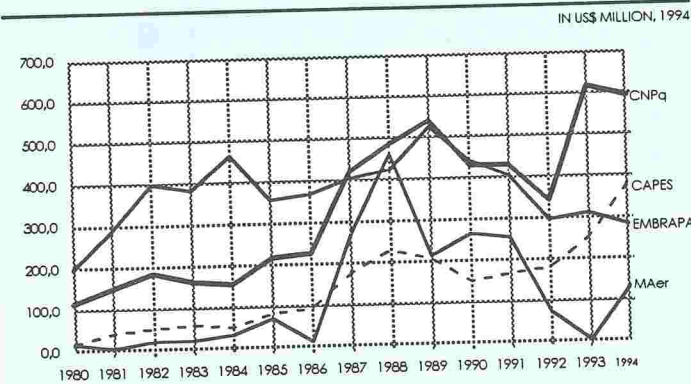
FIOCRUZ - OSVALDO CRUZ FOUNDATION

IFES - FEDERAL HIGHER EDUCATION INSTITUTIONS¹³

INPE - NATIONAL SPACE RESEARCH INSTITUTE

GRAPH 12

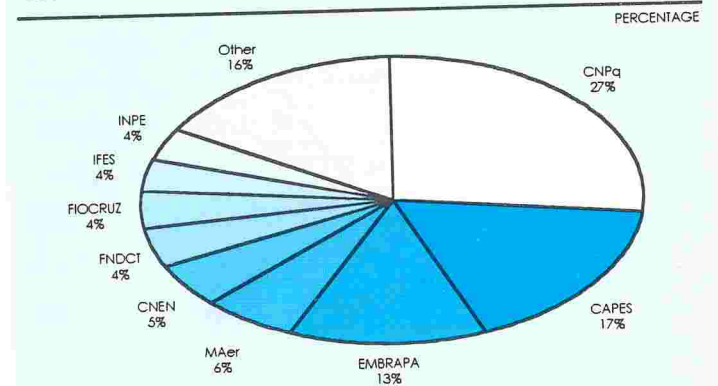
FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY
BY MAIN BUDGET UNITS - 1980-94



SOURCE: MCT/CNPq/SUP/COOE

GRAPH 13

SHARE OF FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY
BY MAIN BUDGET UNITS - 1994



SOURCE: MCT/CNPq/SUP/COOE

TABLE 8

FEDERAL EXPENDITURE ON S&T - BY MAIN SECTORS OF INVESTMENT
TREASURY FUNDS - 1980-94

In US\$ million, 1994 (1)

| YEAR | S&T FUNDING AND PERFORMING % | | HIGHER EDUCATION % | | MILITARY EXPENSES % | | OTHER % | | TOTAL |
|------|---------------------------------|----------|-----------------------|------|------------------------|------|---------|------|---------|
| | | AGENCIES | | | | | | | |
| 1980 | 347,4 | 34,2 | 53,2 | 5,2 | 85,3 | 8,4 | 528,5 | 52,1 | 1.014,5 |
| 1981 | 333,1 | 12,7 | 66,3 | 2,5 | 653,3 | 24,9 | 1.566,6 | 59,8 | 2.619,3 |
| 1982 | 517,1 | 18,1 | 167,2 | 5,9 | 661,1 | 23,2 | 1.508,9 | 52,9 | 2.854,3 |
| 1983 | 330,2 | 14,2 | 160,7 | 6,9 | 437,0 | 18,8 | 1.397,4 | 60,1 | 2.325,3 |
| 1984 | 297,3 | 14,8 | 130,9 | 6,5 | 391,3 | 19,5 | 1.182,3 | 59,1 | 2.001,7 |
| 1985 | 390,7 | 22,4 | 193,8 | 11,1 | 370,5 | 21,3 | 785,4 | 45,1 | 1.740,4 |
| 1986 | 506,5 | 21,3 | 320,5 | 13,5 | 560,7 | 23,6 | 990,1 | 41,6 | 2.377,8 |
| 1987 | 787,0 | 27,3 | 202,2 | 7,0 | 999,2 | 34,7 | 889,4 | 30,9 | 2.877,8 |
| 1988 | 871,7 | 28,3 | 157,4 | 5,1 | 1.025,2 | 33,3 | 1.020,9 | 33,2 | 3.075,2 |
| 1989 | 861,7 | 32,2 | 235,9 | 8,8 | 590,0 | 22,0 | 992,0 | 37,0 | 2.679,6 |
| 1990 | 653,5 | 29,7 | 164,4 | 7,5 | 579,5 | 26,4 | 800,2 | 36,4 | 2.197,6 |
| 1991 | 711,0 | 34,9 | 93,4 | 4,6 | 478,5 | 23,5 | 755,4 | 37,1 | 2.038,3 |
| 1992 | 648,3 | 41,7 | 49,6 | 3,2 | 240,6 | 15,5 | 614,3 | 39,6 | 1.552,8 |
| 1993 | 1.193,1 | 54,3 | 67,7 | 3,1 | 98,0 | 4,5 | 837,3 | 38,1 | 2.196,0 |
| 1994 | 1.121,5 | 51,0 | 78,5 | 3,6 | 292,0 | 13,3 | 706,9 | 32,1 | 2.199,0 |

SOURCE: MCT/CNPq/SUP/COOE

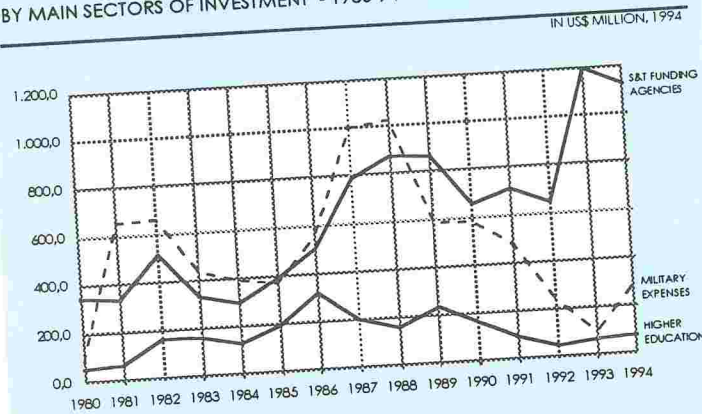
NOTE: (1) Values were updated based on GNP implicit price deflator and translated to dollars using the average exchange rate for 1994, provided by the Brazilian Central Bank (US\$ 1,00 = R\$ 0,645).

Federal Expenditure on S&T 1980-94

SYNOPSIS

GRAPH 14

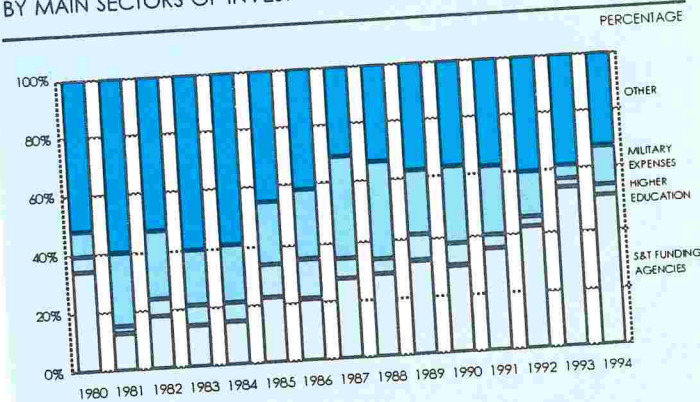
FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY BY MAIN SECTORS OF INVESTMENT - 1980-94



SOURCE: MCI/CNPq/SUP/COOE

GRAPH 15

SHARE OF FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY BY MAIN SECTORS OF INVESTMENT - 1980-94



SOURCE: MCI/CNPq/SUP/COOE

TABLE 9

FEDERAL EXPENDITURE ON S&T - BY MAIN BUDGET FUNCTIONS
TREASURY FUNDS - 1980-94

In US\$ million, 1994 (1)

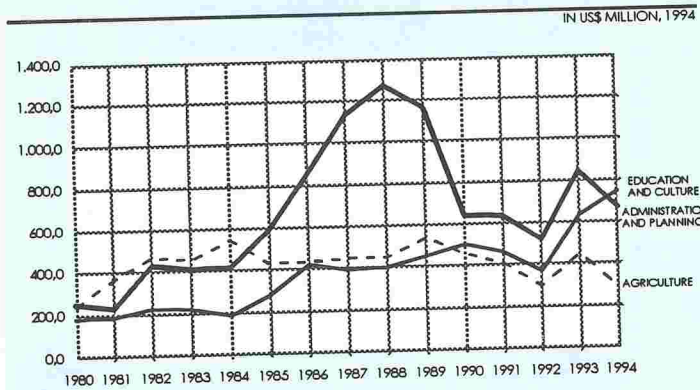
| YEAR | EDUCATION AND CULTURE | ADMINISTRATION AND PLANNING | AGRICULTURE | NATIONAL DEFENSE AND PUBLIC SAFETY | ENERGY AND MINERAL RESOURCES | HEALTH AND SANITATION | OTHER | TOTAL |
|------|-----------------------------|-----------------------------------|-------------|--|------------------------------------|-----------------------------|-------|---------|
| 1980 | 182,3 | 250,4 | 242,6 | 13,5 | 86,0 | 28,1 | 211,5 | 1.014,5 |
| 1981 | 189,0 | 229,6 | 368,2 | 13,1 | 1.130,5 | 44,3 | 644,7 | 2.619,3 |
| 1982 | 229,9 | 429,5 | 470,9 | 14,0 | 1.383,4 | 30,2 | 296,4 | 2.854,3 |
| 1983 | 220,6 | 411,1 | 455,5 | 12,3 | 1.073,7 | 25,0 | 127,1 | 2.325,3 |
| 1984 | 189,6 | 415,2 | 545,8 | 46,5 | 615,9 | 27,3 | 161,5 | 2.001,7 |
| 1985 | 284,2 | 592,2 | 431,9 | 61,9 | 251,3 | 19,3 | 99,7 | 1.740,4 |
| 1986 | 424,2 | 856,0 | 437,1 | 74,4 | 458,1 | 30,3 | 97,8 | 2.377,8 |
| 1987 | 393,9 | 1.130,5 | 450,4 | 237,5 | 562,5 | 22,6 | 80,4 | 2.877,8 |
| 1988 | 403,2 | 1.272,4 | 450,1 | 408,6 | 354,2 | 84,7 | 101,9 | 3.075,2 |
| 1989 | 451,4 | 1.161,7 | 538,2 | 108,7 | 255,7 | 81,9 | 82,0 | 2.679,6 |
| 1990 | 501,6 | 643,3 | 457,4 | 280,0 | 191,3 | 73,5 | 50,5 | 2.197,6 |
| 1991 | 463,0 | 636,7 | 409,1 | 282,7 | 107,4 | 85,5 | 53,8 | 2.038,3 |
| 1992 | 369,7 | 520,7 | 297,7 | 104,7 | 144,2 | 78,7 | 37,1 | 1.552,8 |
| 1993 | 634,9 | 844,2 | 451,1 | 12,0 | 145,0 | 75,1 | 33,7 | 2.196,0 |
| 1994 | 745,9 | 670,1 | 284,3 | 156,4 | 144,1 | 140,8 | 57,4 | 2.199,0 |

SOURCE: MCT/CNPq/SUP/COOE

NOTE: (1) Values were updated based on GNP implicit price deflator and translated to dollars using the average exchange rate for 1994, provided by the Brazilian Central Bank (US\$ 1,00 = R\$ 0,645).

GRAPH 16

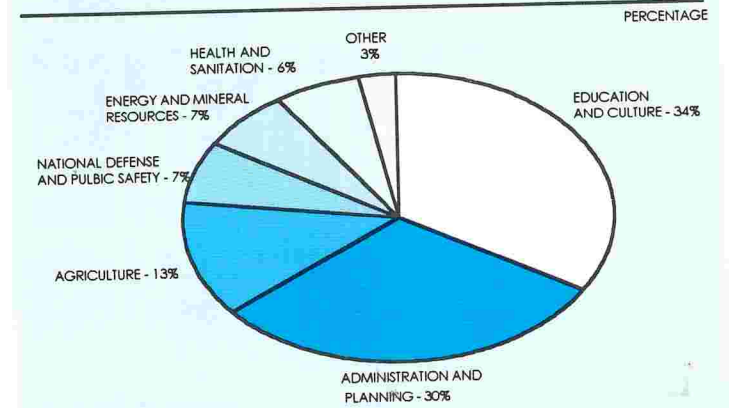
FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY BY MAIN BUDGET FUNCTIONS - 1980-94



SOURCE: MCI/CNPq/SUP/COOE

GRAPH 17

SHARE OF FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY BY MAIN BUDGET FUNCTIONS - 1994



SOURCE: MCI/CNPq/SUP/COOE

Federal Expenditure on S&T 1980-94

SYNOPSIS

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TABLE 10

FEDERAL EXPENDITURE ON S&T - BY MAIN BUDGET PROGRAMS
TREASURY FUNDS - 1980-94

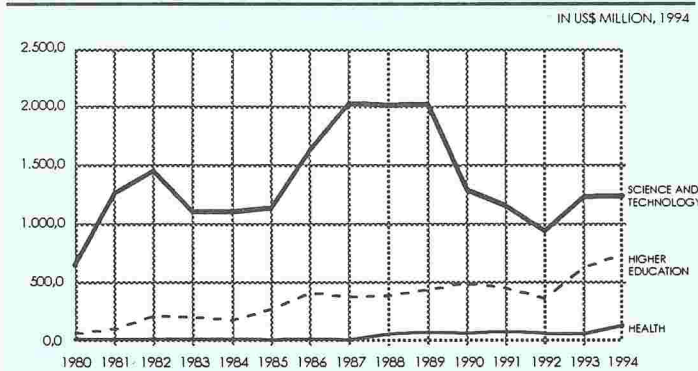
| YEAR | | | | | In US\$ million, 1994 (1) |
|------|------------------------|------------------|--------|---------|---------------------------|
| | SCIENCE AND TECHNOLOGY | HIGHER EDUCATION | HEALTH | OTHER | TOTAL |
| 1980 | 655,1 | 73,7 | 25,8 | 259,9 | 1.014,5 |
| 1981 | 1.268,7 | 110,3 | 23,6 | 1.216,8 | 2.619,3 |
| 1982 | 1.458,7 | 220,6 | 29,7 | 1.145,3 | 2.854,3 |
| 1983 | 1.109,2 | 214,5 | 24,3 | 977,3 | 2.325,3 |
| 1984 | 1.108,9 | 184,2 | 26,7 | 681,9 | 2.001,7 |
| 1985 | 1.138,8 | 277,8 | 18,9 | 304,9 | 1.740,4 |
| 1986 | 1.633,3 | 416,9 | 27,6 | 300,0 | 2.377,8 |
| 1987 | 2.037,3 | 380,7 | 21,4 | 438,4 | 2.877,8 |
| 1988 | 2.025,2 | 390,7 | 71,5 | 587,9 | 3.075,2 |
| 1989 | 2.034,5 | 444,2 | 80,3 | 120,6 | 2.679,6 |
| 1990 | 1.294,5 | 497,7 | 73,5 | 331,8 | 2.197,6 |
| 1991 | 1.155,7 | 455,5 | 85,5 | 341,5 | 2.038,3 |
| 1992 | 944,7 | 366,8 | 77,3 | 164,0 | 1.552,8 |
| 1993 | 1.233,0 | 632,7 | 72,3 | 258,1 | 2.196,0 |
| 1994 | 1.243,1 | 741,9 | 140,0 | 74,0 | 2.199,0 |

SOURCE: MCT/CNPq/SUP/COOE

NOTE: (1) Values were updated based on GNP implicit price deflator and translated to dollars using the average exchange rate for 1994, provided by the Brazilian Central Bank (US\$ 1,00 = R\$ 0,645).

GRAPH 18

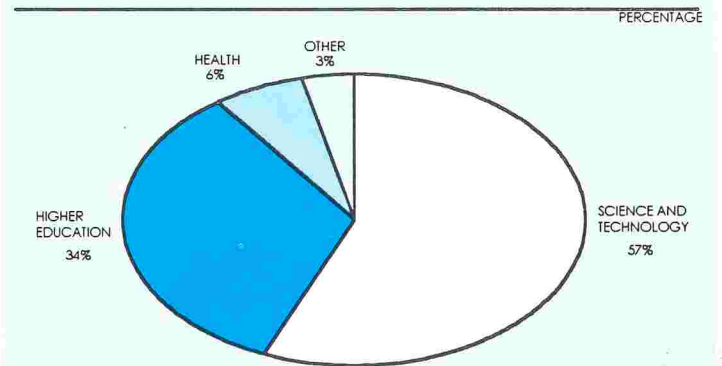
FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY BY MAIN BUDGET PROGRAMS - 1980-94



SOURCE: MCT/CNPq/SUP/COOE

GRAPH 19

SHARE OF FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY BY MAIN BUDGET PROGRAMS - 1994



SOURCE: MCT/CNPq/SUP/COOE

TABLE 11

FEDERAL EXPENDITURE ON S&T - BY MAIN BUDGET SUBPROGRAMS
TREASURY FUNDS - 1980-94

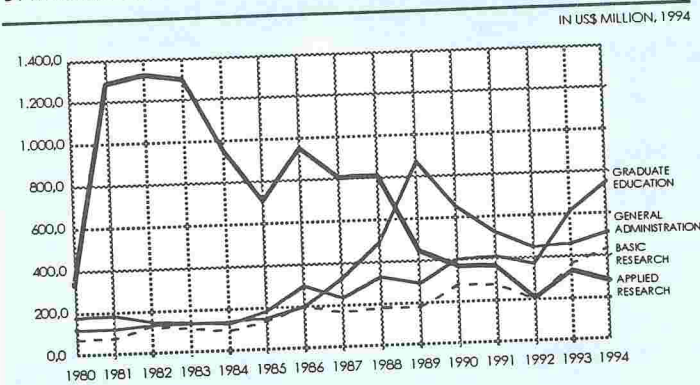
| YEAR | In US\$ million 1994 (1) | | | | | | | T O T A L |
|------|--------------------------|---------------------------|-------------------|---------------------|-----------------------------|---------------------------|---------|-----------|
| | GRADUATE EDUCATION | GENERAL ADMINISTRATION | BASIC RESEARCH | APPLIED RESEARCH | EXPERIMENTAL DEVELOPMENT | SOCIETAL PARTICIPATION | OTHER | |
| 1980 | 177,3 | 123,5 | 74,8 | 335,7 | 12,9 | 48,8 | 241,4 | 1.014,5 |
| 1981 | 184,0 | 122,6 | 77,4 | 1.285,6 | 11,6 | 610,6 | 327,5 | 2.619,3 |
| 1982 | 151,1 | 138,7 | 131,8 | 1.323,0 | 47,0 | 550,3 | 512,4 | 2.854,3 |
| 1983 | 141,8 | 137,4 | 114,5 | 1.295,4 | 46,2 | 263,6 | 326,3 | 2.325,3 |
| 1984 | 129,9 | 144,7 | 97,9 | 953,9 | 67,9 | 243,6 | 363,8 | 2.001,7 |
| 1985 | 184,8 | 153,0 | 137,1 | 708,1 | 104,4 | 94,9 | 358,2 | 1.740,4 |
| 1986 | 300,6 | 199,6 | 201,8 | 952,3 | 108,1 | 300,1 | 315,4 | 2.377,8 |
| 1987 | 236,8 | 330,6 | 167,3 | 803,9 | 58,8 | 457,3 | 823,0 | 2.877,8 |
| 1988 | 328,9 | 495,0 | 182,0 | 810,2 | 52,5 | 128,0 | 1.078,8 | 3.075,2 |
| 1989 | 294,4 | 871,1 | 180,5 | 447,2 | 137,7 | 79,0 | 669,6 | 2.679,6 |
| 1990 | 403,6 | 655,6 | 283,6 | 371,5 | 76,8 | 9,3 | 397,2 | 2.197,6 |
| 1991 | 410,4 | 527,5 | 278,2 | 364,6 | 48,1 | 39,5 | 370,0 | 2.038,3 |
| 1992 | 367,9 | 449,8 | 200,9 | 207,8 | 47,5 | 80,2 | 198,8 | 1.552,8 |
| 1993 | 613,1 | 462,4 | 363,6 | 330,3 | 59,8 | 60,8 | 306,1 | 2.196,0 |
| 1994 | 750,1 | 512,3 | 437,1 | 280,4 | 48,5 | 47,6 | 122,9 | 2.199,0 |

SOURCE: MCT/CNPq/SUP/COOE

NOTE: (1) Values were updated based on GNP implicit price deflator and translated to dollars using the average exchange rate for 1994, provided by the Brazilian Central Bank (US\$ 1,00 = R\$ 0,645).

GRAPH 20

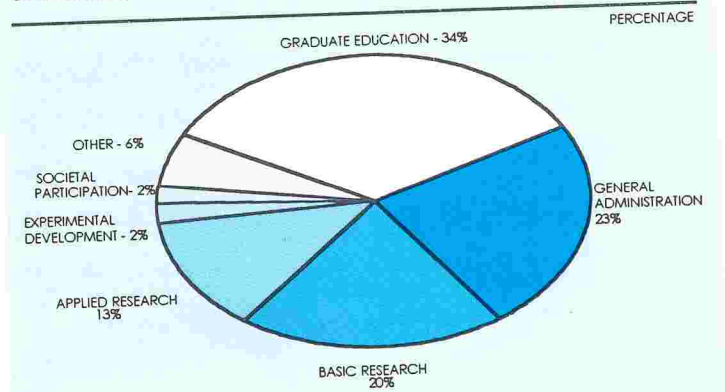
FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY BY MAIN BUDGET SUBPROGRAMS - 1980-94



SOURCE: MCT/CNPq/SUP/COOE

GRAPH 21

SHARE OF FEDERAL EXPENDITURE ON SCIENCE AND TECHNOLOGY BY MAIN BUDGET SUBPROGRAMS - 1994



SOURCE: MCT/CNPq/SUP/COOE

