

Appendix table 5-45

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**Regional and country portfolio of S&E articles, by field: 2003**

(Percent distribution)

| Region and country/economy       | Articles (number) | All fields | Clinical medicine | Biomedical research | Biology | Chemistry | Physics | Earth/space sciences | Engineering/technology | Mathematics | Psychology | Social sciences | Health sciences | Professional fields |
|----------------------------------|-------------------|------------|-------------------|---------------------|---------|-----------|---------|----------------------|------------------------|-------------|------------|-----------------|-----------------|---------------------|
| All countries/economies.....     | 698,726           | 100.0      | 27.9              | 13.7                | 7.1     | 11.9      | 13.9    | 5.5                  | 9.0                    | 2.2         | 2.2        | 3.1             | 1.4             | 2.1                 |
| Major S&E article producers..... | 546,626           | 100.0      | 29.3              | 14.2                | 6.4     | 11.0      | 13.3    | 5.4                  | 9.0                    | 2.1         | 2.3        | 3.2             | 1.5             | 2.3                 |
| United States.....               | 211,233           | 100.0      | 31.2              | 16.3                | 6.6     | 7.5       | 8.8     | 5.9                  | 7.0                    | 3.7         | 1.8        | 4.6             | 2.4             | 4.1                 |
| EU-15.....                       | 220,002           | 100.0      | 31.6              | 13.7                | 6.8     | 11.1      | 13.3    | 5.7                  | 7.6                    | 2.0         | 2.5        | 3.0             | 1.2             | 1.5                 |
| Austria .....                    | 4,906             | 100.0      | 42.3              | 12.9                | 5.0     | 9.1       | 12.4    | 4.4                  | 6.2                    | 1.3         | 2.7        | 2.4             | 0.4             | 1.0                 |
| Belgium .....                    | 6,604             | 100.0      | 31.5              | 13.7                | 8.5     | 11.1      | 13.3    | 5.0                  | 7.4                    | 2.2         | 2.3        | 2.6             | 0.8             | 1.6                 |
| Denmark .....                    | 5,291             | 100.0      | 36.5              | 17.5                | 11.7    | 7.0       | 9.1     | 6.1                  | 4.3                    | 1.4         | 1.5        | 2.6             | 0.9             | 1.4                 |
| Finland .....                    | 5,202             | 100.0      | 35.9              | 13.2                | 10.5    | 7.5       | 9.6     | 5.1                  | 7.9                    | 2.0         | 1.5        | 2.5             | 2.3             | 2.1                 |
| France.....                      | 31,971            | 100.0      | 26.4              | 14.3                | 5.9     | 12.9      | 16.9    | 6.8                  | 8.6                    | 1.0         | 4.7        | 1.8             | 0.3             | 0.5                 |
| Germany .....                    | 44,305            | 100.0      | 31.3              | 13.7                | 5.3     | 12.4      | 16.8    | 5.4                  | 7.7                    | 2.0         | 2.2        | 1.9             | 0.6             | 0.8                 |
| Greece .....                     | 3,770             | 100.0      | 32.4              | 8.0                 | 8.8     | 12.3      | 12.3    | 6.2                  | 12.1                   | 0.8         | 2.6        | 3.1             | 0.3             | 1.2                 |
| Ireland .....                    | 1,758             | 100.0      | 30.7              | 14.6                | 11.6    | 10.5      | 10.0    | 3.9                  | 7.3                    | 1.3         | 2.2        | 4.8             | 1.6             | 1.6                 |
| Italy.....                       | 24,696            | 100.0      | 34.8              | 12.3                | 4.9     | 11.5      | 16.7    | 6.2                  | 8.0                    | 0.9         | 2.8        | 1.2             | 0.3             | 0.5                 |
| Luxembourg.....                  | 46                | 100.0      | 29.9              | 13.1                | 12.8    | 4.7       | 12.9    | 3.2                  | 7.6                    | 1.1         | 1.6        | 4.3             | 2.7             | 6.1                 |
| Netherlands.....                 | 13,475            | 100.0      | 38.6              | 13.3                | 6.8     | 7.9       | 8.8     | 5.2                  | 5.7                    | 4.0         | 1.4        | 4.0             | 1.8             | 2.5                 |
| Portugal .....                   | 2,625             | 100.0      | 13.4              | 13.5                | 12.3    | 16.4      | 16.6    | 5.5                  | 15.8                   | 0.8         | 3.4        | 1.4             | 0.3             | 0.7                 |
| Spain .....                      | 16,826            | 100.0      | 24.5              | 13.0                | 12.0    | 17.8      | 11.9    | 5.5                  | 7.4                    | 1.1         | 3.5        | 1.9             | 0.4             | 1.0                 |
| Sweden .....                     | 10,237            | 100.0      | 36.5              | 15.4                | 7.5     | 8.5       | 10.0    | 4.4                  | 7.1                    | 2.2         | 1.5        | 2.6             | 3.0             | 1.4                 |
| United Kingdom.....              | 48,288            | 100.0      | 32.1              | 14.2                | 6.2     | 8.2       | 9.3     | 6.0                  | 7.1                    | 3.1         | 1.6        | 6.1             | 2.8             | 3.4                 |
| Japan.....                       | 60,067            | 100.0      | 27.2              | 13.3                | 6.3     | 14.7      | 20.8    | 3.1                  | 12.1                   | 0.4         | 1.3        | 0.5             | 0.1             | 0.1                 |
| East Asia-4.....                 | 55,324            | 100.0      | 14.9              | 9.2                 | 4.2     | 20.2      | 22.5    | 4.0                  | 19.2                   | 2.8         | 0.5        | 1.0             | 0.4             | 1.1                 |
| China .....                      | 29,186            | 100.0      | 10.7              | 8.2                 | 4.2     | 24.8      | 24.9    | 4.3                  | 16.8                   | 0.4         | 3.6        | 0.8             | 0.3             | 0.9                 |
| Singapore.....                   | 3,122             | 100.0      | 15.3              | 9.4                 | 2.7     | 12.8      | 18.2    | 2.4                  | 28.1                   | 0.8         | 3.1        | 3.7             | 0.6             | 3.0                 |
| South Korea .....                | 13,746            | 100.0      | 17.0              | 12.0                | 4.3     | 16.5      | 22.7    | 2.8                  | 20.7                   | 0.3         | 1.8        | 0.9             | 0.4             | 0.8                 |
| Taiwan .....                     | 9,270             | 100.0      | 25.0              | 8.0                 | 4.7     | 13.8      | 16.3    | 5.0                  | 21.3                   | 0.7         | 1.6        | 1.2             | 0.7             | 1.7                 |
| Other regions/countries          |                   |            |                   |                     |         |           |         |                      |                        |             |            |                 |                 |                     |
| Other Western Europe             |                   |            |                   |                     |         |           |         |                      |                        |             |            |                 |                 |                     |
| Croatia .....                    | 845               | 100.0      | 21.4              | 8.4                 | 6.8     | 18.2      | 13.3    | 3.4                  | 4.9                    | 1.2         | 1.1        | 20.3            | 0.3             | 0.8                 |
| Cyprus .....                     | 92                | 100.0      | 18.6              | 3.7                 | 3.1     | 9.6       | 16.3    | 4.8                  | 9.3                    | 4.2         | 8.0        | 12.5            | 0.1             | 9.8                 |
| Iceland .....                    | 203               | 100.0      | 34.1              | 14.6                | 10.0    | 6.1       | 5.4     | 13.8                 | 3.2                    | 3.1         | 1.6        | 1.9             | 4.3             | 2.0                 |
| Norway .....                     | 3,339             | 100.0      | 32.8              | 12.0                | 14.3    | 5.2       | 4.5     | 10.0                 | 5.8                    | 3.4         | 1.5        | 5.6             | 2.9             | 2.0                 |
| Switzerland .....                | 8,542             | 100.0      | 31.8              | 16.0                | 5.6     | 12.5      | 14.5    | 6.6                  | 6.2                    | 1.3         | 1.6        | 2.4             | 0.7             | 0.9                 |
| Turkey .....                     | 6,224             | 100.0      | 44.6              | 7.2                 | 7.6     | 11.2      | 8.9     | 4.6                  | 10.9                   | 0.8         | 1.0        | 1.6             | 0.7             | 1.0                 |
| Yugoslavia.....                  | 600               | 100.0      | 17.3              | 8.4                 | 5.5     | 19.2      | 20.8    | 3.6                  | 20.2                   | 0.3         | 3.6        | 0.6             | 0.3             | 0.2                 |
| All others.....                  | 124               | 100.0      | 22.9              | 6.1                 | 4.5     | 24.9      | 16.2    | 10.0                 | 10.3                   | 1.5         | 2.0        | 1.3             | 0.4             | 0.0                 |
| Other Asia                       |                   |            |                   |                     |         |           |         |                      |                        |             |            |                 |                 |                     |
| Bangladesh .....                 | 204               | 100.0      | 14.3              | 10.3                | 10.5    | 13.2      | 19.1    | 7.9                  | 13.7                   | 0.7         | 0.0        | 6.2             | 3.6             | 0.5                 |
| India.....                       | 12,774            | 100.0      | 15.5              | 12.9                | 6.9     | 26.6      | 18.1    | 4.9                  | 11.9                   | 0.2         | 1.2        | 1.1             | 0.2             | 0.4                 |
| Indonesia .....                  | 178               | 100.0      | 16.5              | 13.1                | 24.3    | 8.4       | 7.9     | 9.4                  | 5.9                    | 0.4         | 0.9        | 10.5            | 2.3             | 0.6                 |
| Malaysia .....                   | 520               | 100.0      | 20.4              | 9.5                 | 16.9    | 17.6      | 9.0     | 4.2                  | 15.5                   | 1.1         | 1.3        | 3.2             | 0.0             | 1.4                 |
| Pakistan .....                   | 368               | 100.0      | 20.1              | 9.8                 | 18.8    | 21.1      | 15.1    | 3.3                  | 5.9                    | 0.4         | 0.2        | 4.1             | 0.7             | 0.4                 |
| Philippines .....                | 179               | 100.0      | 15.9              | 12.5                | 32.4    | 4.8       | 8.0     | 5.9                  | 3.4                    | 1.6         | 3.1        | 9.6             | 2.0             | 0.9                 |
| Sri Lanka.....                   | 141               | 100.0      | 25.2              | 8.9                 | 29.5    | 5.5       | 13.0    | 6.3                  | 4.8                    | 0.4         | 0.4        | 3.2             | 1.7             | 1.1                 |

Appendix table 5-45

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**Regional and country portfolio of S&E articles, by field: 2003**

(Percent distribution)

| Region and country/economy      | Articles (number) | All fields | Clinical medicine | Biomedical research | Biology | Chemistry | Physics | Earth/space sciences | Engineering/technology | Mathematics | Psychology | Social sciences | Health sciences | Professional fields |
|---------------------------------|-------------------|------------|-------------------|---------------------|---------|-----------|---------|----------------------|------------------------|-------------|------------|-----------------|-----------------|---------------------|
| Thailand.....                   | 1,072             | 100.0      | 31.7              | 13.0                | 15.9    | 15.7      | 4.7     | 3.6                  | 9.2                    | 0.6         | 0.8        | 1.8             | 2.2             | 0.8                 |
| Vietnam.....                    | 216               | 100.0      | 14.3              | 4.9                 | 11.0    | 5.3       | 37.0    | 2.9                  | 5.4                    | 0.0         | 12.6       | 1.8             | 4.1             | 0.7                 |
| All others.....                 | 125               | 100.0      | 33.1              | 9.9                 | 17.9    | 3.3       | 5.4     | 14.2                 | 2.6                    | 0.1         | 2.7        | 6.6             | 3.4             | 0.8                 |
| Eastern Europe/former USSR..... | 35,067            | 100.0      | 9.1               | 9.0                 | 4.7     | 25.5      | 30.6    | 5.9                  | 9.2                    | 0.7         | 3.6        | 1.5             | 0.1             | 0.2                 |
| Armenia .....                   | 175               | 100.0      | 3.2               | 5.8                 | 0.9     | 17.3      | 56.3    | 7.5                  | 5.0                    | 0.0         | 3.4        | 0.6             | 0.0             | 0.0                 |
| Azerbaijan .....                | 107               | 100.0      | 0.7               | 2.7                 | 2.1     | 34.7      | 44.3    | 3.9                  | 7.4                    | 0.0         | 2.8        | 0.9             | 0.5             | 0.0                 |
| Bulgaria .....                  | 829               | 100.0      | 11.9              | 10.8                | 6.1     | 24.9      | 21.1    | 3.9                  | 16.9                   | 0.1         | 3.5        | 0.5             | 0.1             | 0.2                 |
| Belarus .....                   | 532               | 100.0      | 3.1               | 6.5                 | 3.5     | 26.3      | 45.0    | 1.1                  | 10.6                   | 0.0         | 2.9        | 0.8             | 0.0             | 0.1                 |
| Czech Republic .....            | 2,950             | 100.0      | 16.1              | 16.3                | 8.5     | 22.8      | 15.9    | 5.3                  | 8.4                    | 1.1         | 2.8        | 2.3             | 0.0             | 0.6                 |
| Estonia.....                    | 368               | 100.0      | 13.9              | 12.2                | 11.1    | 10.5      | 17.6    | 11.7                 | 11.2                   | 3.8         | 1.8        | 3.9             | 1.7             | 0.5                 |
| Georgia .....                   | 117               | 100.0      | 10.1              | 4.1                 | 2.0     | 13.0      | 39.6    | 9.6                  | 9.5                    | 0.0         | 9.5        | 1.9             | 0.1             | 0.6                 |
| Hungary .....                   | 2,503             | 100.0      | 26.4              | 14.4                | 5.4     | 20.0      | 16.0    | 3.0                  | 7.6                    | 0.8         | 4.2        | 1.6             | 0.2             | 0.4                 |
| Kazakhstan .....                | 128               | 100.0      | 3.4               | 5.4                 | 2.4     | 43.9      | 24.5    | 3.8                  | 8.7                    | 0.0         | 6.6        | 1.2             | 0.0             | 0.0                 |
| Latvia.....                     | 153               | 100.0      | 7.1               | 12.4                | 2.1     | 26.6      | 31.3    | 3.1                  | 14.1                   | 0.3         | 0.3        | 2.0             | 0.7             | 0.0                 |
| Lithuania .....                 | 322               | 100.0      | 10.3              | 12.1                | 8.6     | 17.5      | 25.4    | 3.3                  | 9.4                    | 0.0         | 10.2       | 2.2             | 0.8             | 0.1                 |
| Moldova .....                   | 78                | 100.0      | 1.9               | 4.3                 | 4.3     | 25.8      | 55.7    | 0.0                  | 5.8                    | 0.0         | 1.0        | 1.3             | 0.0             | 0.0                 |
| Poland.....                     | 6,770             | 100.0      | 15.5              | 8.7                 | 6.1     | 25.4      | 26.8    | 4.1                  | 8.7                    | 0.4         | 3.4        | 0.7             | 0.1             | 0.1                 |
| Romania .....                   | 988               | 100.0      | 3.6               | 3.0                 | 1.1     | 39.3      | 29.6    | 3.0                  | 10.9                   | 0.2         | 8.5        | 0.7             | 0.0             | 0.3                 |
| Russia.....                     | 15,782            | 100.0      | 3.5               | 7.6                 | 3.5     | 27.2      | 35.6    | 8.0                  | 8.5                    | 0.8         | 3.5        | 1.6             | 0.1             | 0.2                 |
| Slovakia .....                  | 943               | 100.0      | 13.1              | 16.7                | 6.0     | 19.9      | 21.4    | 3.3                  | 6.8                    | 2.3         | 2.4        | 7.5             | 0.1             | 0.5                 |
| Ukraine .....                   | 2,089             | 100.0      | 3.4               | 4.2                 | 2.0     | 21.6      | 45.0    | 4.7                  | 15.5                   | 0.2         | 3.0        | 0.3             | 0.0             | 0.0                 |
| Uzbekistan .....                | 192               | 100.0      | 2.9               | 2.0                 | 2.7     | 36.2      | 46.1    | 2.9                  | 3.8                    | 0.5         | 1.9        | 0.5             | 0.5             | 0.0                 |
| All others.....                 | 42                | 100.0      | 7.3               | 1.1                 | 4.3     | 11.8      | 22.2    | 27.2                 | 9.5                    | 0.0         | 9.4        | 5.9             | 0.0             | 1.2                 |
| Near East/North Africa.....     | 13,465            | 100.0      | 27.3              | 9.5                 | 6.5     | 16.3      | 14.9    | 3.6                  | 11.3                   | 1.9         | 3.6        | 2.4             | 1.0             | 1.7                 |
| Algeria .....                   | 285               | 100.0      | 5.0               | 2.8                 | 2.9     | 17.7      | 36.0    | 2.6                  | 27.1                   | 0.0         | 5.7        | 0.1             | 0.0             | 0.0                 |
| Egypt .....                     | 1,720             | 100.0      | 18.6              | 5.7                 | 5.4     | 31.0      | 17.1    | 4.5                  | 15.6                   | 0.0         | 1.0        | 0.4             | 0.1             | 0.4                 |
| Iran .....                      | 1,806             | 100.0      | 18.2              | 4.0                 | 5.1     | 39.3      | 13.6    | 2.7                  | 12.8                   | 0.7         | 2.3        | 0.7             | 0.1             | 0.3                 |
| Israel.....                     | 6,941             | 100.0      | 32.3              | 13.0                | 6.9     | 7.4       | 14.9    | 3.2                  | 7.3                    | 3.1         | 3.9        | 3.7             | 1.6             | 2.7                 |
| Jordan .....                    | 263               | 100.0      | 20.1              | 8.2                 | 13.2    | 12.3      | 14.9    | 5.8                  | 19.6                   | 0.2         | 2.4        | 2.2             | 1.0             | 0.0                 |
| Kuwait.....                     | 244               | 100.0      | 38.9              | 8.4                 | 6.9     | 9.0       | 2.2     | 3.4                  | 19.7                   | 3.8         | 2.6        | 2.0             | 1.9             | 1.2                 |
| Lebanon.....                    | 223               | 100.0      | 49.5              | 6.9                 | 5.3     | 3.7       | 3.9     | 5.1                  | 11.6                   | 0.4         | 4.3        | 4.9             | 2.6             | 1.7                 |
| Morocco .....                   | 428               | 100.0      | 15.1              | 5.3                 | 7.2     | 21.5      | 22.3    | 6.2                  | 11.1                   | 0.1         | 10.9       | 0.4             | 0.0             | 0.0                 |
| Oman .....                      | 114               | 100.0      | 25.3              | 7.4                 | 10.8    | 9.6       | 12.8    | 7.3                  | 21.1                   | 1.3         | 3.7        | 0.3             | 0.0             | 0.4                 |
| Saudi Arabia.....               | 573               | 100.0      | 35.2              | 5.4                 | 3.2     | 16.9      | 11.6    | 3.4                  | 18.1                   | 0.6         | 3.0        | 1.0             | 0.8             | 1.0                 |
| Syria .....                     | 67                | 100.0      | 16.7              | 10.0                | 44.1    | 13.2      | 5.7     | 7.8                  | 1.2                    | 0.0         | 0.0        | 0.7             | 0.5             | 0.0                 |
| Tunisia .....                   | 452               | 100.0      | 24.4              | 7.2                 | 6.5     | 19.8      | 14.1    | 4.2                  | 14.8                   | 0.0         | 8.1        | 0.7             | 0.0             | 0.2                 |
| United Arab Emirates.....       | 193               | 100.0      | 25.2              | 12.1                | 5.8     | 6.5       | 7.8     | 4.7                  | 20.6                   | 2.9         | 4.8        | 3.5             | 1.5             | 4.7                 |
| All others.....                 | 158               | 100.0      | 29.7              | 12.3                | 3.9     | 12.0      | 8.7     | 5.5                  | 18.1                   | 0.6         | 2.2        | 3.5             | 1.3             | 2.1                 |
| Central/South America.....      | 18,933            | 100.0      | 22.6              | 14.4                | 13.9    | 12.5      | 16.5    | 5.8                  | 7.9                    | 0.8         | 2.4        | 1.5             | 1.3             | 0.5                 |
| Argentina .....                 | 3,086             | 100.0      | 21.3              | 15.2                | 18.7    | 13.4      | 14.5    | 6.7                  | 5.7                    | 0.5         | 1.9        | 1.4             | 0.4             | 0.3                 |
| Brazil .....                    | 8,684             | 100.0      | 24.6              | 15.7                | 10.8    | 12.9      | 17.1    | 4.3                  | 9.0                    | 0.6         | 2.4        | 1.0             | 1.4             | 0.4                 |
| Chile .....                     | 1,500             | 100.0      | 24.5              | 10.5                | 11.7    | 15.2      | 10.8    | 10.5                 | 7.7                    | 0.9         | 4.3        | 2.1             | 0.5             | 1.3                 |
| Colombia.....                   | 337               | 100.0      | 25.2              | 14.3                | 17.1    | 8.9       | 15.7    | 3.4                  | 6.2                    | 2.3         | 2.4        | 2.6             | 1.5             | 0.5                 |

Appendix table 5-45

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**Regional and country portfolio of S&E articles, by field: 2003**

(Percent distribution)

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| Region and country/economy | Articles (number) | All fields | Clinical medicine | Biomedical research | Biology | Chemistry | Physics | Earth/space sciences | Engineering/technology | Mathematics | Psychology | Social sciences | Health sciences | Professional fields |
|----------------------------|-------------------|------------|-------------------|---------------------|---------|-----------|---------|----------------------|------------------------|-------------|------------|-----------------|-----------------|---------------------|
| Costa Rica.....            | 84                | 100.0      | 25.1              | 16.6                | 36.3    | 1.2       | 5.7     | 4.6                  | 2.3                    | 1.2         | 1.8        | 2.8             | 2.5             | 0.0                 |
| Cuba.....                  | 264               | 100.0      | 24.3              | 19.4                | 12.4    | 13.5      | 17.7    | 1.6                  | 7.4                    | 0.5         | 0.9        | 1.3             | 0.9             | 0.0                 |
| Mexico.....                | 3,747             | 100.0      | 17.5              | 12.0                | 15.6    | 9.8       | 21.2    | 7.4                  | 8.4                    | 1.5         | 2.1        | 2.1             | 1.9             | 0.5                 |
| Peru.....                  | 129               | 100.0      | 28.7              | 13.0                | 25.2    | 6.3       | 5.9     | 7.3                  | 6.0                    | 0.4         | 1.2        | 3.2             | 2.6             | 0.3                 |
| Uruguay.....               | 194               | 100.0      | 21.6              | 27.3                | 18.6    | 6.8       | 12.4    | 4.3                  | 1.7                    | 0.0         | 3.9        | 2.1             | 0.7             | 0.5                 |
| Venezuela.....             | 563               | 100.0      | 20.5              | 13.6                | 12.1    | 21.4      | 14.1    | 3.1                  | 9.7                    | 0.3         | 2.9        | 1.4             | 0.6             | 0.2                 |
| All others.....            | 908               | 100.0      | 22.9              | 12.9                | 18.9    | 15.7      | 10.7    | 5.5                  | 6.9                    | 0.8         | 2.0        | 2.3             | 0.9             | 0.4                 |
| Sub-Saharan Africa .....   | 4,219             | 100.0      | 26.4              | 11.3                | 23.3    | 7.5       | 4.5     | 7.9                  | 5.2                    | 1.9         | 1.3        | 5.8             | 2.2             | 2.7                 |
| Botswana.....              | 76                | 100.0      | 12.2              | 4.1                 | 25.2    | 14.4      | 11.8    | 4.1                  | 1.8                    | 0.0         | 1.3        | 11.8            | 0.9             | 12.5                |
| Cameroon.....              | 123               | 100.0      | 27.6              | 9.3                 | 27.7    | 3.9       | 16.8    | 3.6                  | 3.9                    | 0.7         | 2.2        | 3.4             | 0.8             | 0.0                 |
| Ethiopia.....              | 99                | 100.0      | 30.0              | 9.9                 | 37.4    | 2.4       | 1.0     | 7.8                  | 0.5                    | 0.0         | 0.0        | 6.1             | 2.4             | 2.5                 |
| Ghana.....                 | 83                | 100.0      | 36.3              | 10.2                | 19.7    | 5.6       | 6.2     | 2.2                  | 3.4                    | 0.6         | 0.0        | 10.0            | 4.5             | 1.2                 |
| Kenya.....                 | 258               | 100.0      | 32.0              | 11.9                | 32.4    | 1.5       | 0.8     | 8.0                  | 1.2                    | 0.8         | 0.0        | 7.5             | 1.6             | 2.4                 |
| Nigeria.....               | 384               | 100.0      | 29.1              | 9.0                 | 32.2    | 6.0       | 3.6     | 4.9                  | 3.3                    | 0.6         | 0.4        | 5.5             | 2.2             | 3.3                 |
| Senegal.....               | 79                | 100.0      | 28.3              | 8.3                 | 27.1    | 8.7       | 6.3     | 4.4                  | 4.0                    | 0.0         | 3.6        | 4.9             | 3.2             | 1.3                 |
| South Africa .....         | 2,364             | 100.0      | 21.3              | 12.6                | 18.4    | 10.4      | 5.0     | 9.9                  | 7.4                    | 3.0         | 1.7        | 5.6             | 1.6             | 3.1                 |
| Tanzania.....              | 86                | 100.0      | 44.8              | 16.4                | 20.0    | 1.5       | 2.3     | 6.1                  | 0.0                    | 0.0         | 1.2        | 4.0             | 3.7             | 0.0                 |
| Uganda.....                | 90                | 100.0      | 35.3              | 7.0                 | 32.1    | 0.0       | 0.0     | 5.0                  | 1.1                    | 1.7         | 0.0        | 6.5             | 10.7            | 0.6                 |
| Zimbabwe.....              | 96                | 100.0      | 34.9              | 7.6                 | 30.7    | 0.5       | 2.1     | 5.5                  | 2.6                    | 0.7         | 0.9        | 10.1            | 1.2             | 3.1                 |
| All others.....            | 481               | 100.0      | 38.8              | 9.2                 | 28.4    | 2.5       | 2.6     | 4.5                  | 2.7                    | 0.7         | 1.6        | 4.3             | 3.7             | 1.1                 |
| Other                      |                   |            |                   |                     |         |           |         |                      |                        |             |            |                 |                 |                     |
| Australia.....             | 15,809            | 100.0      | 30.2              | 12.3                | 14.9    | 7.3       | 6.8     | 7.5                  | 6.6                    | 3.7         | 1.4        | 4.2             | 2.4             | 2.6                 |
| Canada.....                | 24,803            | 100.0      | 29.0              | 14.6                | 9.9     | 8.0       | 7.3     | 6.9                  | 8.6                    | 3.9         | 2.0        | 4.6             | 2.6             | 2.4                 |
| New Zealand.....           | 3,034             | 100.0      | 25.3              | 9.5                 | 23.5    | 5.3       | 4.2     | 10.1                 | 5.1                    | 4.8         | 1.5        | 4.9             | 1.7             | 4.2                 |
| All others.....            | 52                | 100.0      | 31.4              | 12.3                | 23.8    | 4.2       | 0.0     | 8.9                  | 5.4                    | 1.0         | 2.9        | 9.6             | 0.0             | 0.5                 |

EU = European Union; USSR = Union of Soviet Socialist Republics

NOTES: Publication counts from set of journals classified and covered by *Science Citation Index (SCI)* and *Social Sciences Citation Index (SSCI)*. Articles assigned to region/country/economy on basis of institutional address(es) listed on article. Articles on fractional-count basis, i.e., for articles with collaborating institutions from multiple countries/economies, each country/economy receives fractional credit on basis of proportion of its participating institutions. Countries with article output <0.0% of world output in 2003 grouped in "all others" except Luxembourg. China includes Hong Kong.

SOURCES: Thomson ISI, *SCI* and *SSCI*, <http://www.isinet.com/products/citation/>; iplQ, Inc.; and National Science Foundation, Division of Science Resources Statistics, special tabulations.

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