



|  | Country   | BURKINA FASO               |           | DR-CONGO  |           | ETHIOPIA |           | GHANA     |           | KENYA   |           | MADAGASCAR |           | MALAWI    |           | MALI    |           | MOZAMBIQUE |           | NIGERIA   |           | RWANDA    |           | SENEGAL   |           | SOUTH AFRICA |           | TANZANIA   |            | UGANDA  |           | ZAMBIA    |           | ZIMBABWE  |           | AVERAGE   |    |   |
|--|---|----------------------------|-----------|-----------|-----------|----------|-----------|-----------|-----------|---------|-----------|------------|-----------|-----------|-----------|---------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|-----------|------------|------------|---------|-----------|-----------|-----------|-----------|-----------|-----------|----|---|
|  |   | Year                       | 2018      | 2016      | 2016      | 2016     | 2016      | 2017      | 2016      | 2016    | 2017      | 2016       | 2016      | 2016      | 2018      | 2016    | 2018      | 2018       | 2016      | 2016      | 2016      | 2016      | 2016      | 2016      | 2016      | 2016         | 2016      | 2016       | 2016       | 2016    | 2016      | 2016      | 2016      | 2016      |           |           |    |   |
| Focus crop 1                           | Area harvested in hectares  | Maize                      | 956,385   | Maize     | 1,506,884 | Maize    | 2,114,876 | Maize     | 1,019,000 | Maize   | 2,116,141 | Maize      | 215,113   | Maize     | 1,676,213 | Maize   | 1,233,008 | Maize      | 1,703,500 | Maize     | 6,540,000 | Maize     | 297,447   | Maize     | 146,361   | Maize        | 2,688,200 | Maize      | 4,146,000  | Maize   | 1,105,000 | Maize     | 1,205,202 | Maize     | 2,283,803 | 1,820,773 |    |   |
| Focus crop 2                           | Area harvested in hectares  | Rice                       | 165,086   | Rice      | 405,074   | Wheat    | 1,663,845 | Rice      | 224,000   | Sorghum | 213,520   | Rice       | 961,831   | Beans     | 329,959   | Rice    | 767,874   | Rice       | 376,500   | Rice      | 4,912,000 | Bean      | 549,441   | Rice      | 134,973   | Soya bean    | 502,900   | Beans      | 1,134,394  | Sorghum | 373,000   | Rice      | 33,207    | Beans     | 69,651    | 753,956   |    |   |
| Focus crop 3                           | Area harvested in hectares  | Sorghum                    | 1,667,193 | Beans     | 459,100   | Teff     | 3,762,000 | Soya bean | 97,957    | Beans   | 1,052,408 | Beans      | 73,017    | Groundnut | 373,925   | Sorghum | 1,585,986 | Cowpea     | 377,900   | Sorghum   | 5,820,000 | Wheat     | 10,758    | Groundnut | 878,659   | Sunflower    | 598,950   | Soya bean  | 5,907      | Beans   | 674,000   | Groundnut | 237,423   | Soya bean | 56,312    | 1,043,029 |    |   |
| Focus crop 4                           | Area harvested in hectares  | Cowpea                     | 1,254,934 | Soya bean | 41,206    | Sorghum  | 1,834,650 | Cowpea    | 168,659   | Cowpea  | 281,877   | Groundnut  | 53,000    | Soya bean | 139,005   | Cowpea  | 282,736   | Soya bean  | 15,000    | Soya bean | 750,000   | Soya bean | 143,940   | Millet    | 715,996   | Wheat        | 476,570   | Pigeon pea | 250,509    | Millet  | 175,000   | Beans     | 88,673    | Sorghum   | 588,945   | 427,074   |    |   |
| Number of farming households (million) | Millions  |                            | 1.7       |           | 7.1       |          | 15.6      |           | 2.5       |         | 6.4       |            | 2.43      |           | 2.64      |         | 0.81      |            | 3.17      |           | 23.5      |           | 2.10      |           | 0.76      |              | 2.3       |            | 5.8        |         | 9.1       |           | 1.47      |           | 0.6       | 5         |    |   |
| Population                             | Millions  |                            | 19.2      |           | 78.7      |          | 102.4     |           | 28.2      |         | 44.0      |            | 24.9      |           | 18.1      |         | 18.5      |            | 28.8      |           | 190.0     |           | 12.2      |           | 15.4      |              | 55.9      |            | 55.6       |         | 41.5      |           | 16.6      |           | 16.2      | 45        |    |   |
| Total land area                        | Millions of hectares  |                            | 27.4      |           | 234.5     |          | 110.4     |           | 23.8      |         | 58.0      |            | 58.7      |           | 11.8      |         | 124.0     |            | 78.6      |           | 91.1      |           | 2.6       |           | 19.3      |              | 121.3     |            | 88.6       |         | 24.0      |           | 74.3      |           | 38.7      | 70        |    |   |
| Arable land                            | % of total land area  |                            | 22%       |           | 3%        |          | 15%       |           | 21%       |         | 5%        |            | 15%       |           | 40%       |         | 5.3%      |            | 15%       |           | 37%       |           | 47%       |           | 17%       |              | 10%       |            | 15%        |         | 34%       |           | 5%        |           | 10%       | 18%       |    |   |
| Ease of Doing Business rank            | 2020 rank out of 190 countries  |                            | 151       |           | 183       |          | 159       |           | 118       |         | 56        |            | 161       |           | 109       |         | 148       |            | 161       |           | 131       |           | 38        |           | 123       |              | 84        |            | 141        |         | 116       |           | 85        |           | 140       | 124       |    |   |
| <b>A. RESEARCH AND DEVELOPMENT</b>     |   |                            |           |           |           |          |           |           |           |         |           |            |           |           |           |         |           |            |           |           |           |           |           |           |           |              |           |            |            |         |           |           |           |           |           |           |    |   |
| 1                                      | Number of active breeders (Note: in cases where one breeder works with multiple crops, numbers for the four crops may not equal the total.) | Crop 1                     | Maize     | 2         | Maize     | 7        | Maize     | 23        | Maize     | 10      | Maize     | 18         | Maize     | 2         | Maize     | 3       | Maize     | 3          | Maize     | 6         | Maize     | 11        | Maize     | 4         | Maize     | 2            | Maize     | 27         | Maize      | 28      | Maize     | 7         | Maize     | 17        | Maize     | 17        | 12 |   |
|  |   | Crop 2                     | Rice      | 3         | Rice      | 3        | Wheat     | 20        | Rice      | 6       | Sorghum   | 6          | Rice      | 21        | Beans     | 3       | Rice      | 3          | Rice      | 8         | Rice      | 5         | Bean      | 3         | Rice      | 4            | Soya bean | 7          | Beans      | 7       | Sorghum   | 2         | Rice      | 5         | Beans     | 5         | 7  |   |
|  |   | Crop 3                     | Sorghum   | 2         | Beans     | 2        | Teff      | 15        | Soya bean | 5       | Beans     | 6          | Beans     | 3         | Groundnut | 2       | Sorghum   | 2          | Cowpea    | 4         | Sorghum   | 4         | Wheat     | 2         | Groundnut | 3            | Sunflower | 10         | Soya bean  | 7       | Beans     | 4         | Groundnut | 3         | Soya bean | 6         | 5  | 5 |
|  |   | Crop 4                     | Cowpea    | 2         | Soya bean | 2        | Sorghum   | 16        | Cowpea    | 5       | Cowpea    | 4          | Groundnut | 3         | Soya bean | 2       | Cowpea    | 1          | Soya bean | 2         | Soya bean | 5         | Soya bean | 5         | Millet    | 3            | Wheat     | 9          | Pigeon pea | 4       | Millet    | 2         | Beans     | 1         | Sorghum   | 4         | 4  | 4 |
|  |   | Total (number of breeders) |           | 9         |           | 14       |           | 74        |           | 26      |           | 34         |           | 29        |           | 8       |           | 9          |           | 20        |           | 24        |           | 11        |           | 12           |           | 53         |            | 46      |           | 75        |           | 26        |           | 32        | 27 |   |
| 2                                      | Adequacy of breeders (score out of 100)   | Crop 1                     | Maize     | 80        | Maize     | 70       | Maize     | 75        | Maize     | 83      | Maize     | 61         | Maize     | 66        | Maize     | 71      | Maize     | 68         | Maize     | 90        | Maize     | 58        | Maize     | 67        | Maize     | 17           | Maize     | 84         | Maize      | 63      | Maize     | 72        | Maize     | 64        | Maize     | 84        | 69 |   |
|  |   | Crop 2                     | Rice      | 60        | Rice      | 60       | Wheat     | 100       | Rice      | 70      | Sorghum   | 48         | Rice      | 69        | Beans     | 46      | Rice      | 78         | Rice      | 90        | Rice      | 58        | Bean      | 60        | Rice      | 50           | Soya bean | 88         | Beans      | 54      | Sorghum   | 55        | Rice      | 80        | Beans     | 83        | 66 |   |
|  |   | Crop 3                     | Sorghum   | 80        | Beans     | 77       | Teff      | 56        | Soya bean | 60      | Beans     | 56         | Beans     | 74        | Groundnut | 56      | Sorghum   | 72         | Cowpea    | 63        | Sorghum   | 42        | Wheat     | 86        | Groundnut | 61           | Sunflower | 96         | Soya bean  | 54      | Beans     | 80        | Groundnut | 55        | Soya bean | 93        | 70 |   |
|  |   | Crop 4                     | Cowpea    | 80        | Soya bean | 70       | Sorghum   | 60        | Cowpea    | 80      | Cowpea    | 47         | Groundnut | 73        | Soya bean | 54      | Cowpea    | 75         | Soya bean | 68        | Soya bean | 38        | Soya bean | 67        | Millet    | 25           | Wheat     | 85         | Pigeon pea | 37      | Millet    | 40        | Beans     | 60        | Sorghum   | 83        | 61 |   |
|  |   | Average satisfaction       |           | 75        |           | 69       |           | 70        |           | 73      |           | 53         |           | 70        |           | 58      |           | 73         |           | 77        |           | 52        |           | 73        |           | 38           |           | 88         |            | 57      |           | 69        |           | 66        |           | 86        | 67 |   |
| 3                                      | Number of varieties released in last three years  | Crop 1                     | Maize     | 0         | Maize     | 6        | Maize     | 12        | Maize     | 6       | Maize     | 98         | Maize     | 0         | Maize     | 17      | Maize     | 0          | Maize     | 5         | Maize     | 25        | Maize     | 6         | Maize     | 0            | Maize     | 236        | Maize      | 44      | Maize     | 26        | Maize     | 37        | Maize     | 37        | 34 |   |
|  |   | Crop 2                     | Rice      | 0         | Rice      | 4        | Wheat     | 15        | Rice      | 2       | Sorghum   | 18         | Rice      | 13        | Beans     | 0       | Rice      | 14         | Rice      | 3         | Rice      | 5         | Bean      | 0         | Rice      | 0            | Soya bean | 71         | Beans      | 2       | Sorghum   | 4         | Rice      | 3         | Beans     | 3         | 10 |   |
|  |   | Crop 3                     | Sorghum   | 0         | Beans     | 10       | Teff      | 3         | Soya bean | 0       | Beans     | 16         | Beans     | 0         | Groundnut | 0       | Sorghum   | 26         | Cowpea    | 0         | Sorghum   | 2         | Wheat     | 4         | Groundnut | 7            | Sunflower | 38         | Soya bean  | 0       | Beans     | 5         | Groundnut | 2         | Soya bean | 3         | 7  |   |
|  |   | Crop 4                     | Cowpea    | 0         | Soya bean | 0        | Sorghum   | 7         | Cowpea    | 0       | Cowpea    | 4          | Groundnut | 0         | Cowpea    | 9       | Soya bean | 0          | Soya bean | 0         | Soya bean | 0         | Wheat     | 0         | Millet    | 0            | Wheat     | 17         | Pigeon pea | 4       | Millet    | 5         | Beans     | 2         | Sorghum   | 1         | 3  |   |
|  |   | Total                      |           | 0k        |           | 20       |           | 37        |           | 8       |           | 136        |           | 13        |           | 17      |           | 49         |           | 8         |           | 32        |           | 10        |           | 7            |           | 362        |            | 50      |           | 40        |           | 44        |           | 44        | 58 |   |
| 4                                      | Availability of foundation seed (score out of 100)  | Crop 1                     | Maize     | 63        | Maize     | 65       | Maize     | 58        | Maize     | 70      | Maize     | 77         | Maize     | 51        | Maize     | 65      | Maize     | 79         | Maize     | 42        | Maize     | 74        | Maize     | 73        | Maize     | 77           | Maize     | 80         | Maize      | 72      | Maize     | 72        | Maize     | 76        | Maize     | 84        | 69 |   |
|  |   | Crop 2                     | Rice      | 67        | Rice      | 61       | Wheat     | 54        | Rice      | 62      | Sorghum   | 76         | Rice      | 62        | Beans     | 49      | Rice      | 70         | Rice      | 85        | Rice      | 72        | Bean      | 73        | Rice      | 74           | Soya bean | 69         | Beans      | 61      | Sorghum   | 55        | Rice      | 68        | Beans     | 76        | 65 |   |
|  |   | Crop 3                     | Sorghum   | 64        | Beans     | 63       | Teff      | 58        | Soya bean | 68      | Beans     | 68         | Beans     | 63        | Groundnut | 58      | Sorghum   | 74         | Cowpea    | 40        | Sorghum   | 70        | Wheat     | 77        | Groundnut | 82           | Sunflower | 46         | Soya bean  | 65      | Beans     | 59        | Groundnut | 40        | Soya bean | 80        | 64 |   |
|  |   | Crop 4                     | Cowpea    | 64        | Soya bean | 62       | Sorghum   | 60        | Cowpea    | 68      | Cowpea    | 65         | Groundnut | 54        | Soya bean | 52      | Cowpea    | 70         | Soya bean | 46        | Soya bean | 71        | Soya bean | 78        | Millet    | 79           | Wheat     | 73         | Pigeon pea | 45      | Millet    | 50        | Beans     | 57        | Sorghum   | 77        | 62 |   |
|  |   | Average satisfaction       |           | 65        |           | 64       |           | 57        |           | 67      |           | 71         |           | 60        |           | 56      |           | 73         |           | 54        |           | 72        |           | 75        |           | 78           |           | 67         |            | 62      |           | 76        |           | 77        |           | 79        | 67 |   |
| 5                                      | Average age of varieties sold (years)   | Crop 1                     | Maize     | 17.0      | Maize     | 17.6     | Maize     | 5.4       | Maize     | 12.5    | Maize     | 12.6       | Maize     | 24.0      | Maize     | 5.7     | Maize     | 10.0       | Maize     | 11.0      | Maize     | 7.0       | Maize     | 10.0      | Maize     | 19.0         | Maize     | 4.0        | Maize      | 10.0    | Maize     | 6.7       | Maize     | 10.0      | Maize     | 8.5       | 11 |   |
|  |   | Crop 2                     | Rice      | 16.0      | Rice      | 16.5     | Wheat     | 4.8       | Rice      | 5.0     | Sorghum   | 24.0       | Rice      | 19.0      | Beans     | 11.0    | Rice      | 17.0       | Rice      | 2.0       | Rice      | 14.0      | Bean      | 7.0       | Rice      | 17.0         | Soya bean | 4.0        | Beans      | 18.0    | Sorghum   | 12.4      | Rice      | 4.0       | Beans     | 5.6       | 12 |   |
|  |   | Crop 3                     | Sorghum   | 16.0      | Beans     | 22.0     | Teff      | 6.7       | Soya bean | 8.5     | Beans     | 14.3       | Beans     | 18.0      | Groundnut | 18.0    | Sorghum   | 10.0       | Cowpea    | 21.0      | Sorghum   | 31.0      | Wheat     | 12.0      | Groundnut | 20.0         | Sunflower | 5.0        | Soya bean  | 10.0    | Beans     | 11.0      | Groundnut | 29.0      | Soya bean | 8.2       | 16 |   |
|  |   | Crop 4                     | Cowpea    | 12.0      | Soya bean | 18.0     | Sorghum   | 6.0       | Cowpea    | 14.0    | Cowpea    | 16.8       | Groundnut | 51.0      | Soya bean | 8.0     | Cowpea    | 17.0       | Soya bean | 5.0       | Soya bean | 12.0      | Soya bean | 13.0      | Millet    | 16.0         | Wheat     | 7.0        | Pigeon pea | 14.0    | Millet    | 16.0      | Beans     | 12.0      | Sorghum   | 12.0      | 15 |   |
|  |   | Total                      |           | 11        |           | 12       |           | 20        |           | 37      |           | 8          |           | 136       |           | 13      |           | 49         |           | 8         |           | 32        |           | 10        |           | 7            |           | 362        |            | 50      |           | 40        |           | 44        |           | 44        | 58 |   |
| 6                                      | Number of varieties sold  | Crop 1                     | Maize     | 12        | Maize     | 41       | Maize     | 23        | Maize     | 18      | Maize     | 65         | Maize     | 13        | Maize     | 29      | Maize     | 17         | Maize     | 11        | Maize     | 31        | Maize     | 18        | Maize     | 3            | Maize     | MD         | Maize      | 44      | Maize     | 41        | Maize     | 88        | Maize     | 59        | 33 |   |
|  |   | Crop 2                     | Rice      | 8         | Rice      | 20       | Wheat     | 31        | Rice      | 16      | Sorghum   | 11         | Rice      | 84        | Beans     | 3       | Rice      | 18         | Rice      | 3         | Rice      | 10        | Bean      | 3         | Rice      | 24           | Soya bean | MD         | Beans      | 8       | Sorghum   | 8         | Rice      | 2         | Beans     | 14        | 18 |   |
|  |   | Crop 3                     | Sorghum   | 17        | Beans     | 16       | Teff      | 10        | Soya bean | 10      | Beans     | 30         | Beans     | 9         | Groundnut | 3       | Sorghum   | 12         | Cowpea    | 2         | Sorghum   | 7         | Wheat     | 4         | Groundnut | 6            | Sunflower | MD         | Soya bean  | 4       | Beans     | 13        | Groundnut | 13        | Soya bean | 10        | 11 |   |
|  |   | Crop 4                     | Cowpea    | 11        | Soya bean | 12       | Sorghum   | 9         | Cowpea    | 5       | Cowpea    | 9          | Groundnut | 5         | Soya bean | 6       | Cowpea    | 9          | Soya bean | 8         | Soya bean | 11        | Soya bean | 3         | Millet    | 2            | Wheat     | MD         | Pigeon pea | 2       | Millet    | 6         | Beans     | 17        | Sorghum   | 12        | 8  |   |
|  |   | Total                      |           | 48        |           | 89       |           | 73        |           | 49      |           | 115        |           | 111       |           | 46      |           | 56         |           | 24        |           | 59        |           | 28        |           | 35           |           | 58         |            | 68      |           |           |           |           |           |           |    |   |

