

# Organics Olympiad 2012:

## Global Indices of Leadership in Organic Agriculture

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### Introduction

Organic agriculture is a 1% solution that aspires to be the 100% solution. If Organic Agriculture was a Fortune 500 corporation, with its annual revenues of US\$9.1 billion, it would rank at number 159.

One hundred and sixty countries now practice organic agriculture. But where are the pockets of excellence? The Organics Olympiad 2012 presents twelve indices of organics leadership with awards medals of gold, silver and bronze in each category.

Australia leads the world with land dedicated to organic agriculture, Finland leads with organic wild hectares, Bangladesh leads in organic aquaculture, and Portugal leads in organic forestry. Germany leads in biodynamic hectares, in membership of the International Federation of Organic Agriculture Movements (IFOAM), and in organics research output. India leads with its number of producers, while the Falkland Islands (Malvinas) leads with the percentage of agricultural land dedicated to organic production. The USA leads with the value of organic sales, and Switzerland takes the lead with the value of per capita consumption. The Faroe Islands leads with its percentage increase in organic agriculture.

Twenty seven countries score medals in the Organics Olympiad 2012. Germany leads with four medals, India takes second position with one gold and one silver, and Switzerland and USA are equal third on the medal tally, each with one gold and one bronze medal.

Winning isn't everything, but losing is nothing at all. The Organics Olympiad is an opportunity to acknowledge leadership and achievement. Each winner has lessons to teach if only those lessons can be discerned.

**Organics Olympiad 2012 Medals**

**Agriculture:** The global total for organically managed agricultural land is 37,041,004 hectares. This includes certified organic and in-conversion organic land. Australia remains the unassailable leader accounting for 32.4% of the world’s organic agriculture land. The three lead countries, Australia, Argentina and USA, together account for 48.9% of the world’s organic agriculture hectares (Table 1).

**Table 1. Organic agriculture hectares (Data source: Willer & Kilcher, 2012).**

| MEDAL  | Country   | Statistic           |
|--------|-----------|---------------------|
| Gold   | Australia | 12,001,724 hectares |
| Silver | Argentina | 4,177,653 hectares  |
| Bronze | USA       | 1,948,946 hectares  |

**Wildculture:** Global organic wildculture accounts for 42,951,748 hectares, and so beats the total of organic agriculture hectares. In wild collection areas, the harvest includes wild berries, wild mushrooms, wild medicinal plants, wild fruits, wild vegetables, honey and seaweed. Finland, accounts for 18.2% of the global total of organic wildculture hectares. The leading three countries, Finland, Brazil and Cameroon, together account for 46.6% of the world’s organic wildculture hectares (Table 2).

**Table 2. Organic wildculture hectares (Data source: Willer & Kilcher, 2012).**

| MEDAL  | Country  | Statistic          |
|--------|----------|--------------------|
| Gold   | Finland  | 7,800,224 hectares |
| Silver | Brazil   | 6,200,380 hectares |
| Bronze | Cameroon | 6,000,000 hectares |

**Aquaculture:** Global organic aquaculture accounts for 23,930 hectares, with Vietnam accounting for 48.7% of the total. Organic aquaculture statistics are reported for only seven countries. The three leading countries, Vietnam, Bangladesh and Brazil, account for 92.2% of the total. There are no current statistics reported for China (Table 3).

**Table 3. Organic aquaculture hectares (Data source: Willer & Kilcher, 2012).**

| MEDAL  | Country    | Statistic       |
|--------|------------|-----------------|
| Gold   | Vietnam    | 11,650 hectares |
| Silver | Bangladesh | 7,717 hectares  |
| Bronze | Brazil     | 2,700 hectares  |

**Forestry:** Global organic forestry hectares are reported at a modest 10,559 hectares. That is an increase of 81.1% over the previous year’s total. Two organic certifiers, Debio and

Naturland, have organic forestry standards, and only four countries have reported organic forestry statistics in the latest data set. Portugal is the leading country and accounts for 94.5% of the global total. Iceland and Malawi report organic forest hectares, and the fourth country reporting organic forest is Azerbaijan (Table 4).

**Table 4. Organic forest hectares (Data source: Willer & Kilcher, 2012).**

| <b>MEDAL</b>  | <b>Country</b> | <b>Statistic</b> |
|---------------|----------------|------------------|
| <b>Gold</b>   | Portugal       | 9,977 hectares   |
| <b>Silver</b> | Iceland        | 288 hectares     |
| <b>Bronze</b> | Malawi         | 185 hectares     |

**Biodynamics:** Biodynamic agriculture is a differentiated style of organic agriculture that derives from Rudolf Steiner’s Agriculture Course which he delivered in Koberwitz (Kobierzyce, Poland) in 1924. There are 144,497 biodynamic hectares reported across 48 countries. These totals are underestimates since some countries are unreported. Germany is the leading country and accounts for 45.8% of the global total. The leading three countries, Germany, Italy and France, together account for 56.7% of the world’s biodynamic hectares (Table 5).

**Table 5. Biodynamic hectares (Data source: Demeter, 2012).**

| <b>MEDAL</b>  | <b>Country</b> | <b>Statistic</b> |
|---------------|----------------|------------------|
| <b>Gold</b>   | Germany        | 66,247 hectares  |
| <b>Silver</b> | Italy          | 8,227 hectares   |
| <b>Bronze</b> | France         | 7,500 hectares   |

**Producers:** Global organics producers total 1,578,407 entities. This figure is an underestimate since some countries report farmers, while others report farms and/or agricultural entities. India is the leading country and accounts for 25.4% of the global total. The leading three countries, India, Uganda and Mexico, together account for 45.5% of the world’s producers (Table 6). No data was available for China.

**Table 6. Organic producers (Data source: Willer & Kilcher, 2012).**

| <b>MEDAL</b>  | <b>Country</b> | <b>Statistic</b>  |
|---------------|----------------|-------------------|
| <b>Gold</b>   | India          | 400,551 producers |
| <b>Silver</b> | Uganda         | 188,625 producers |
| <b>Bronze</b> | Mexico         | 128,862 producers |

**Percentage Organic:** The Falkland Islands (Malvinas) is now the standout leader in terms of the percentage of agricultural land devoted to organic, with organics accounting for 35.9% of its total agricultural hectares. Liechtenstein follows with 27.3% of its agricultural land

managed as organic, and this is followed by Austria with 19.7% (Table 7). Australia rates 2.9% on this measure, and the global figure is 0.9%.

**Table 7. Organic share of agricultural land (Data source: Willer & Kilcher, 2012).**

| MEDAL  | Country                     | Statistic |
|--------|-----------------------------|-----------|
| Gold   | Falkland Islands (Malvinas) | 35.9%     |
| Silver | Liechtenstein               | 27.3%     |
| Bronze | Austria                     | 19.7%     |

**Per Capita Consumption:** Global sales of organic food and beverages are estimated at US \$59.1 billion (€44.5 billion). Three European countries lead in the per capita consumption of organics. Switzerland is the world leader with an annual spend of €153 (US\$213) per capita, followed by Denmark and Luxembourg (Table 8).

**Table 8. Organic per capita consumption (Data source: Willer & Kilcher, 2012).**

| MEDAL  | Country     | Statistic      |
|--------|-------------|----------------|
| Gold   | Switzerland | €153 (US\$213) |
| Silver | Denmark     | €142 (US\$198) |
| Bronze | Luxembourg  | €127 (US\$177) |

**Sales:** The USA is the market leader in organics sales and accounts for 45% of the global spend on organics. The three leading countries, USA, Germany, and France account for 67% of global sales (Table 9).

**Table 9. Organics market (Data source: Willer & Kilcher, 2012).**

| MEDAL  | Country | Value                            |
|--------|---------|----------------------------------|
| Gold   | USA     | €20.2 billion (US\$26.7 billion) |
| Silver | Germany | €6.0 billion (US\$8.4 billion)   |
| Bronze | France  | €3.4 billion (US\$4.7 billion)   |

**Percentage Increase:** There have been some dramatic uptakes of organic agriculture with year-on-year percentage increases. The Faroe Islands reports a 2008% increase in organic agriculture hectares (from 12 to 253 hectares). Mauritius and the Democratic Republic of the Congo also report impressive year-on-year increases, although they were also coming off low bases. Globally there was a modest year-on-year decline of 0.5% in total organic agriculture hectares. Two notable and substantial losses were China which reported a year-on-year decline of 25%, and India which reported a decline of 34%. (Table 10).

**Table 10. Organic agriculture hectares percentage increase year-on-year (2010/2009) (Data source: Willer & Kilcher, 2012).**

| <b>MEDAL</b>  | <b>Country</b>                   | <b>Increase</b> |
|---------------|----------------------------------|-----------------|
| <b>Gold</b>   | Faroe Islands                    | 2008%           |
| <b>Silver</b> | Mauritius                        | 483%            |
| <b>Bronze</b> | Democratic Republic of the Congo | 388%            |

**IFOAM Membership:** The International Federation of Organic Agriculture Movements (IFOAM) is the peak international organisation for the organics sector. It was founded in France in 1972 and is now based in Bonn, Germany. There is a membership of 870 affiliates from 120 countries. The membership includes organic certifiers, research and educational organisations participating in the organics sector, and individuals. Germany leads with a membership (members + associates + supporters) of 104, followed by India, and China. These three countries account for 23% of the membership total (Table 11).

**Table 11. Membership of IFOAM (Data source: IFOAM, 2012).**

| <b>MEDAL</b>  | <b>Country</b> | <b>Statistic</b> |
|---------------|----------------|------------------|
| <b>Gold</b>   | Germany        | 104 affiliates   |
| <b>Silver</b> | India          | 53 affiliates    |
| <b>Bronze</b> | China          | 45 affiliates    |

**Research Output:** Organic Eprints ([www.orgprints.org](http://www.orgprints.org)) is the largest depository of research papers on organics. It is an open access archive, with 12,726 items currently available. This digital archive is a project of the International Centre for Research in Organic Food Systems (ICROFS; [www.icrofs.org](http://www.icrofs.org)). Sixty countries are associated with contributed research papers in this data base. The leading contributor to this archive, based on the country of research affiliation, is Germany with 3325 contributions and accounting for 26% of the total entries. The three lead countries, Germany, Denmark and Switzerland, dominate the orgprints resource, and together account for 65% of the archive (Table 12).

**Table 12. Organics research papers (Data source: ICROFS, 2012).**

| <b>MEDAL</b>  | <b>Country</b> | <b>Statistic</b> |
|---------------|----------------|------------------|
| <b>Gold</b>   | Germany        | 3325 entries     |
| <b>Silver</b> | Denmark        | 3000 entries     |
| <b>Bronze</b> | Switzerland    | 1900 entries     |

### **Organic Olympiad Medals Tally**

The results of Tables 1 to 12 are presented as an aggregated medal tally in Table 13. Twenty seven countries are identified as organics leaders, with each scoring at least a single medal. In this Olympiad, 36 medals are in contention. No country scored more medals than Germany

which achieved a total of four medals (Table 13). Six countries scored more than a single medal.

For each country appearing in the medal tally, a weighted score is presented, with the following weightings applied to medals: Gold = 3; Silver = 2; Bronze = 1. Thus, for this Olympiad, there are a total of 72 points in contention. No country scored more than a weighted score of eleven (Table 13). With a tally of three gold medals and one silver, Germany takes the lead in the Organics Olympiad 2012. India with three medals, gold, silver and bronze, secured the second place, followed by Switzerland in third place with a gold and a bronze medal (Table 13).

**Table 13. Organics Olympiad 2012 medal tally: listing of organic lead countries, ranked by weighted total score (Based on 12 indicators; Tables1-12). \*Countries with equal rankings are tabulated in alphabetical order.**

| Ranking* | COUNTRY                     | Gold      | Silver    | Bronze    | Medal Tally | Weighted Score |
|----------|-----------------------------|-----------|-----------|-----------|-------------|----------------|
| 1        | Germany                     | 3         | 1         | 0         | 4           | 11             |
| 2        | India                       | 1         | 1         | 0         | 2           | 5              |
| 3        | Switzerland                 | 1         | 0         | 1         | 2           | 4              |
| 3        | USA                         | 1         | 0         | 1         | 2           | 4              |
| 5        | Australia                   | 1         | 0         | 0         | 1           | 3              |
| 5        | Falkland Islands (Malvinas) | 1         | 0         | 0         | 1           | 3              |
| 5        | Faroe Islands               | 1         | 0         | 0         | 1           | 3              |
| 5        | Finland                     | 1         | 0         | 0         | 1           | 3              |
| 5        | Portugal                    | 1         | 0         | 0         | 1           | 3              |
| 5        | Vietnam                     | 1         | 0         | 0         | 1           | 3              |
| 11       | Denmark                     | 0         | 2         | 0         | 2           | 4              |
| 12       | Brazil                      | 0         | 1         | 1         | 2           | 3              |
| 13       | Bangladesh                  | 0         | 1         | 0         | 1           | 2              |
| 13       | Argentina                   | 0         | 1         | 0         | 1           | 2              |
| 13       | Iceland                     | 0         | 1         | 0         | 1           | 2              |
| 13       | Italy                       | 0         | 1         | 0         | 1           | 2              |
| 13       | Liechtenstein               | 0         | 1         | 0         | 1           | 2              |
| 13       | Mauritius                   | 0         | 1         | 0         | 1           | 2              |
| 13       | Uganda                      | 0         | 1         | 0         | 1           | 2              |
| 20       | France                      | 0         | 0         | 2         | 2           | 2              |
| 21       | Austria                     | 0         | 0         | 1         | 1           | 1              |
| 21       | Cameroon                    | 0         | 0         | 1         | 1           | 1              |
| 21       | China                       | 0         | 0         | 1         | 1           | 1              |
| 21       | DR Congo                    | 0         | 0         | 1         | 1           | 1              |
| 21       | Luxembourg                  | 0         | 0         | 1         | 1           | 1              |
| 21       | Malawi                      | 0         | 0         | 1         | 1           | 1              |
| 21       | Mexico                      | 0         | 0         | 1         | 1           | 1              |
|          | <b>TOTALS</b>               | <b>12</b> | <b>12</b> | <b>12</b> | <b>36</b>   | <b>72</b>      |

With 36 awards in contention in this Organics Olympiad, there are 27 winners with the majority of these (N=20) scoring a single medal, and the remainder scoring multiple medals, two medals (N=6), or four (N=1) (Table 13).

The diversity of the reigning champions bodes well for the organics sector. Countries that have medalled include those geographically large and tiny, populous and sparsely populated, developed and developing, as well as rich and poor.

The 27 countries are well distributed around the globe with representation from Europe (N=12, including Iceland and Faroe Islands), Africa (N=5, including Mauritius), Asia (N=4), South America (N=3, including Falklands/Malvinas), Central America (N=1), North America (N=1), and Oceania (N=1).

Island states are well-represented (N=5), with Australia, the Falklands/Malvinas, Faroe Islands, Iceland, and Mauritius scoring Organics Olympiad medals. Land-locked states are also well represented (N=6), with Austria, Liechtenstein, Luxembourg, Malawi, Switzerland, and Uganda all scoring medals.

Germany benefits from a long and enduring presence of organics and biodynamics in the country, as well as government support for both production and research. Switzerland benefits from the vigorous research activity of the Research Institute of Organic Agriculture (FiBL), along with the skilled advocacy of its director, Dr Urs Niggli, based at Frick, Switzerland. Despite little or no such government support for organic production or research, Australia nevertheless leads the world in terms of organic hectares.

With just 0.9% of the world's agricultural land currently managed organically, there are great opportunities for growth of the sector. The Olympiad's reigning champions offer exemplars worthy of emulation, they raise the bar for setting aspirations and future achievements, and they can ignite a spirit of competition.

The real challenge was articulated as a contest of "organic versus chemical farming" by Lord Northbourne in 1940, and that remains the enduring challenge. If organic agriculture is to deliver on its implicit promise, and its real potential, to feed the world, and if it is to escape the tiny niche that it currently occupies, then it needs all the champions, and all the success stories, that it can muster.

The task ahead for the organics sector is to find out what the winners do - and do that. In the words adopted by Baron Pierre de Coubertin as the Olympic motto: "citius, altius, fortius" - faster, higher, stronger.

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