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# EXPLOITATION OF ENVIRONMENTAL RESOURCES AND RURAL COMMUNITIES BY GLOBAL FOOD COMPANIES

**ABSTRACT.** Globalization is determined by creation and growth of global capital markets for goods and services at international trade and environment level. In year 2013, the total food sales of the top 100 food companies in the world amounted to US\$ 1,332,070 million. The headquarters of these companies are established in 20 different countries in 6 different geographical areas. The food sales comprised of 39 % from North America, 32 % from Europe, 21 % from Eastern Asia, % 3 from South America, 3 % from Nordic, and 2 % from Oceania. Globalization potentially creates monopolies. Most of the literatures on environmental issues indicate that these companies increase their profits in three ways: cheap labour, unethical policies, exploitation of environmental resources.

**KEY WORDS:** Global food companies, strong environmental sustainability, exploitation of environmental resources, rural population

## INTRODUCTION

“Globalization” is one of the most popular terms used recently. Burke [1998: 91] identifies globalisation as “creation and growth of global capital markets for goods and services in terms of international trade and environment level”. Globalisation has advantages and disadvantages. One of the disadvantages of globalisation is monopolies. Vertical or horizontal firm cooperation may cause monopolies [OECD, 1998; Potter, 2011; Shukla, 2004]. For instance Nestlé, a Switzerland company, markets foods such as milk, cereals, baby food, bottled water,

pet food, and ice cream all over the world. Nestlé is also in cooperation with New Zealand’s Fonterra, Dairy Partners of America. France’s Danone [Groupe Danone, 1996], Italy’s Parmalat [Goldberg, 2005], Ireland’s North Kerry Milk Product [Bernardi and White, 2006], and India’s Kohinoor Foods Limited [Malcolm, 2010] are important food companies on the global scale.

These companies operate through “win-win strategies” [Chung and Gillespie, 1998]. However if there is a “winner” with the aim of gaining maximum profit, it means there is also a “loser” somewhere. Kumar and Budin [2006: 743] presented a diagram at the Conference of Global Business showing the food supply process from farming to consumers. The diagram comprised of five steps: Farming, co-op processing, manufacturing, consumer interface, consumers. The chain was considered very important in delivery products to consumers without contamination. However some significant points have been forgotten: The consideration for natural or environmental resources and social side of production such as rural population and brown revolution. For example Kumar and Budin mentioned the use of water at the co-op processing [p. 743] stage but not environmental resources. Interestingly there was not any subject related to either environmental resources or brown revolution at the conference [Global Business, 2006]. It is assumed companies would have taken seriously the ways in which they could profit without having a negative impact on environmental resources and rural population.

### *Environmental resources [ER]*

Marketing researches focus on what consumer wants [Gottfredson and Aspinall, 2005] However global firms do not think what environment wants. Business, management or marketing researches mention explaining of a variety of models: ANDC [Andctor Error Correction] model [Teweldemedhin, 2011], CSR [Corporate Social Responsibility] and Y value system [Prado and Merlo, 2011], WFGM [Want, Find, Get, Manage] [Garcia, 2011], FSE frame model [Food Security Equation] [Pacheco de Carvalho, 2011]. For example there are 4 stages for FSE. One of them is ecological equilibrium. Pacheco de Carvalho [2011:18] tried to explain food balance through an equation but there was not any component related to environmental resources in this equation. Ecological certification was also mentioned in researches [Gomes and Neands, 2011; Padula, Oliveira, Centenaro, Fornazier, Pozas, Steffens, 2011]. Prado and Merlo [2011] explained CSR and Y value system and there were sustainable environmental components in this system. However ecological components were very superficial at these researches.

The annual conference of IFAMA [International Food and Agribusiness Management Association] was held at Frankfurt in 2011. There were 192 oral presentations at the conference. It was seen that environmental subjects were rarely referred at researches [Gomes and Neves, 2011; Neves, 2011; Pacheco de Carvalho, 2011; Padula et al., 2011; Prado and Merlo, 2011,] and these researches had anthropogenic perspective. Neves [2011:5] mentioned the importance of environmental resources for food sector and investment. But the first important subject was governance structure of the investments [for instance money entrance, joint-ventures, vertical integration, franchisees etc] and the second one was environmental protection according to Neves.

CEO of Nestlé said that they helped to develop of rural area and low- income

producers [Goldberg, 2005]. According to Sustainability Report of Danone [2011], the company was fairly successful in terms of environmental sustainability [Danone, 2011: 66–67]. It is thought that this is visible side of an iceberg.

### *Brown revolution*

The basic food resource of world is agriculture. One third of the world population is related to agriculture directly or indirectly. The main parts of agriculture are cereal, oil, livestock, fish, and water according to United Nations. Especially population of rural area is interested in agriculture. Unfortunately some wrong national macro policies which of them also related to global firms and international trade cause poverty in rural area and the population of rural area migrates to developed countries as refugee to have more qualified life. [FAO, 2003] This migration is called “brown revolution” [Economist, 2002]. According to United Nations [2014] statistics there are more than 43 million refugee all over the world in 2014; it means nearly 0.6 % of the world population survive as refugees. The urban population was around 3.8 billion and the rural population was around 3.3 billion in June, 2014 [UN, Department of Economic and Social Affairs, 2014]. The urban and rural ration is nearly 1:1 however the urban population is more than the rural population.

This migrant population settles urban area and this massive population also stresses on urban life especially in Asia, Sub-Saharan Africa, Latin America [World Agriculture, 2003]. The rural population is also exposed to nonadaptation in urban social life and a gap is become between expectation and reality. The Economist [2002] says that brown revolution is unstoppable. The World Agriculture report of FAO [2003] says that stopping the brown revolution is not desirable as economically. However it might be slowed. On the other hand World Agricultural Report [2003] report utters that governments should support the rural population life with internal and

external policy. The Economist [2002] calls revival of rural population as “green revolution”. Rural development is now more important than urban development because geographic location is an essential factor for determining the development of rural area and economy [World Agriculture, 2003]. The studies usually focus on supporting of urban development in terms of OECD, developing or undeveloped countries [Cole, 2000; Diesendorf and Hamilton, 1997; FAO, 2003; Goudie, 1982; Mol, 2001; OECD, 1998; World Agriculture, 2003]. But firms or companies are global so global companies cause rural to become underdevelopment.

Is it really true that global firms support rural development? There are a variety of ecological perspective: ecopedagogy [Kahn, 2010], ecocentric dark green environmentalism, light green anthropocentric environmentalism, Eco-Marxism, ecofeminism [Lummis, 2002], ecocentrism, technocentrism [Gough, 1997] etc. The aim of this study is not to explain ecological perspective one by one but technocentrism is a kind of managerial and anthropocentric approach to natural environment. The usage of ER is licit for human development, security, welfare according to technocentrism [Slater, 1991; Gough, 1997]. However it is known that technocentrism promotes weak environmental sustainability [WES] [Cole, 2000].

WES might be occurred by Mickey Mouse [MM] economic model and most of the developing countries use this model. According to MM economy is the biggest part of development [head of mouse]; ER and social components have the second importance [ears of mouse]. [SANZ, 2009] By the way there is a contradiction between Malthus Theory and MM model. Malthus says that increment of human population is related to ER. Human population increases as geometrically while ER increases as linearly [Malthus, 1973]. There is unbalance between population and ER [Seidl and Tisdell, 1998] so it may cause WES. However it is needed strong environmental sustainability because

ER is very limited. [SANZ, 2009]. It is thought that Mickey Mouse economic model is also used by global firms.

Population biology tries to explain Malthus Theory by formula or modelling study [Emmel, 1976; Seidl and Tisdell, 1998; Singh and Uyenoyoma, 2004]. It is thought that human individualism/ selfishness should be also added to formula or modelling study. Allaby [1986: 180] says that some parts of the world produce much more food than the other parts of the world. This situation is probably still same because some researches emphasize that 20 % of world populations consume 80 % or 86 % of the goods and services brought by the global economy [FAO, 2003; Stahel, 1998]. In this perspective the aim of this study is to take attention dangerous of global food companies on environmental sustainability and rural population.

## METHODOLOGY

It was determined firstly which global companies had the most effective profits. Food Engineering [2014] published the “The World’s Top 100 Food & Beverage Companies’ [App. 1]. This list only included company name in terms of rank and food sales [\$ million] according to 2013. The author also determined the headquarters of companies through websites of them and classified the headquarters according to geographical areas. Descriptive analyse was used in order to evaluate Appendix 1.

## RESULTS

Common properties take attention among these top companies. These are:

- a. They are global companies
- b. They have agents and sales all over the world
- c. Most of them have wide range of products.
- d. Most of them have environmental sustainability reports [for instance Danone,

**Table 1. Classifying of Global Food Firms According to Country and Geographical Area**

| Geographical area | Country name | Number of company | %   |
|-------------------|--------------|-------------------|-----|
| North America     | USA          | 32                | 39  |
|                   | Mexico       | 3                 |     |
|                   | Canada       | 3                 |     |
|                   | Cuba         | 1                 |     |
| Europe            | France       | 8                 | 32  |
|                   | UK           | 5                 |     |
|                   | Germany      | 5                 |     |
|                   | Netherlands  | 4                 |     |
|                   | Switzerland  | 4                 |     |
|                   | Italy        | 3                 |     |
|                   | Ireland      | 1                 |     |
|                   | Belgium      | 1                 |     |
| Eastern Asia      | Japan        | 17                | 21  |
|                   | China        | 3                 |     |
|                   | Thailand     | 1                 |     |
| South America     | Brazil       | 3                 | 3   |
| Oceania           | Australia    | 1                 | 2   |
|                   | New Zealand  | 1                 |     |
| Nordic            | Denmark      | 3                 | 3   |
|                   | Total        | 20                | 100 |

2011; Nestle, 2011] and these companies are successful in terms of sustainable development or environmental sustainability. The aim of this study is not to cruise these reports one by one but it is thought that report results draw a pink table for human population and future.

In year 2013, the total food sales of the top 100 food companies in the world amounted to US\$ 1,332,070 million. The most food sales is done by Nestle [77,810 million \$, App. 1] but USA has the most of the top global food companies [32]. The headquarters of these companies are established in 20 different countries in 6 different geographical areas. The food sales comprised of 39 % from North America, 32 % from Europe, 21 % from Eastern Asia, % 3 from South America, 3 % from Nordic, and 2 % from Oceania. Globalization potentially creates monopolies. [Table 1]

## DISCUSSION

It is understood that developed and developing countries direct food sector according to Table 1. But the big question is how these companies increase profit every year because companies' annual reports are very positive. It is clear that global companies promote job opportunity, salary etc. Peter Brabeck, CEO of Nestle, says Nestle has around 4.5 million employees directly or indirectly [Wagenhofer, 2005]. How do they earn much more money in spite of having more employees? Do they also have endless ER? World is a close system and ER is very limited.

The author could not find case studies related to profit resources of global food companies in scientific articles or books but there are interesting and significant case studies or examples at documentaries [Francis and Francis, 2006; Garcia, 2004; Sarkar and

Subramanian, 1996; Soechtig and Gibson, 2009; Wagenhofer, 2005;], magazine [National Geographic], and other popular books [King and Lessidrenska, 2009]. Case studies of these resources are coherent each other. It is obvious that global food companies increase their profits by three ways: cheap labour, wrong policy, exploitation of ER.

### *Cheap labour*

Cheap labour helps to increase profit of companies. Cheap labour is obtained by rural population but unjust global competition causes to lose job of rural population [Goldberg, 2005]. Romania is the second agricultural country after France in Europe and daily wage of labourer is 50 cent in Braila area, Romania. Jean Ziegler, UN Special Reporter on the Right of the Food, says that Switzerland has not got any natural resources but banking sector is very developed. Agriculture is efficient but very limited in Switzerland. It imports 4/5 of grain for bread from India despite there is a lot of un-nourished people in India. [Wagenhofer, 2005].

The other weird thing is EU and USA governments subsidize own farmers to go on agricultural production and exportation. People can find easily agricultural products of EU or USA with third one lower of local prices at Sandagar Market where is in Dakar, West Africa. Rural farmers cannot compete with cheap prices so gained up everything and migrate to West countries to find a job. On the other hand, rural farmer De- Souza from Pernambuco/ North- eastern, Brazil says that government does not subsidize little farmers so they are hungry and they cannot survive. However Brazil is one of the richest agrarian countries and the largest soya exporter of the world. [Wagenhofer, 2005; Wallace, 2007].

Similar results also happened in Sri Lanka for planting rice [Sarkar and Subramanian, 1996], in Romania for planting of vegetables [Wagenhofer, 2005], in Ethiopia for planting coffee [Francis and Francis, 2006]. 842 million people in the world suffer from permanent and extreme malnutrition in

2005 [Wagenhofer, 2005]. These people are hungry despite of having job because wrong policy is also affected on rural population.

### *Wrong Policy*

Governmental agriculture policies support technology, industrialisation, and development but side-effects happen at the same time. Market fishing is absolutely industrialized in Europe and most of the fish are wasted during marketing process so small fishing is needed. In this way people can eat fresh fish but EU does not support small fishing. On the other hand a farmer from Germany says that there is decreasing number of farmers since Germany joined to European Union [EU] and most of these people retired or change the job [factory etc]. Farming people now grows up maize in Germany [Wagenhofer, 2005; Wallace, 2007]; plant corn, soybean, and sugar cane in USA and Brazil [Bourne, 2007] for fuel not for feeding. EU does not support agriculture and wants maximum product by minimum farmers and maximum technology. But side effects of technology are again unavoidable.

Lieven Bruneel, who is Agronomist, says Almeria/Southern Spain is capital of winter vegetables agriculture. Agricultural area in Almeria is 25.000 ha but people do not earn much more money since last 10–15 years. Urbanization is also happened around Almeria. Almeria lost agricultural marketing all over the world because soil quality is lower despite of technological agricultural methods, by the way quantity of products decreased. [Wagenhofer, 2005] Similarly farmlands in Haiti [Bourne, 2008], Yunnan Province [China], Loess Plateau [Zizhou Country- China], Grand Valley [Colorado], The Palouse Hills [Washington State], Issa Aminatou of Keita [Niger], Gourcy [Burkina Faso], Amazonia [Brazil] lost their soil quality because of wrong agricultural policies [Mann, 2008].

Karl Otrok, Director of production at Pioneer Romania, says Pioneer is largest seed producers in the world. The company uses hybrid seeds in terms of marketing strategies

but he also warns they cannot use any seed to produce another generations. The taste of hybrid products is not as tasty as natural ones and natural seeds cannot also cope with hybrids seeds. This circulation damages natural life. [Mann, 2008; Wangenhofer, 2005]. Big seed companies want rural farmers to use hybrid seeds. Hybrid seeds are used for tomatoes, potatoes, onion, sun flower, eggplant, soya bean etc. [Garcia, 2004; Wangenhofer, 2005]. It is suspicious that if there is no seed how human would survive in further times. Is technology enough to survive?

### **Exploitation of ER**

Wrong policy and wrong consumer behaviours give rise exploitation of ER. Millions of people have not got enough food but farmers grow maize for fuel not for feeding in Germany now. On the other hand the other farmer says that 2 million kilos bread in a year has gone to waste basket in Germany and similar event happens in Vienna. However Germany imports wheat from other developing or underdeveloped countries. [Wagenhofer, 2005]. Developing and underdeveloped countries destroy natural environment to have more profit. Biolog Vincent Jose Puhl says the largest soya producer of world is Maggi group in Mato Grosso, Brazil. Soya exports to Europe, China, and Japan. Amazonia Rain Forest is destroyed to open farm land since 1975 and one square meter of forest is sold for one cent. Cleared area is used to plant soya but this land is not suitable to grow up soya so farmers use fertilizers. [Wagenhofer, 2005; Wallace, 2007; Mann, 2008].

Peter Brabeck [CEO of Nestle] says social responsibility of a CEO is to have profitable future. He says that people believe everything comes from nature. Nature is pitiless. Human put balance between nature and civilization. Nestle is the biggest bottled water supplier. According to Brabeck, water is not a human right; it is only a foodstuff and it can be sold. [Wagenhofer, 2005].

75 % of world is covered by water but only 1 % of this water is drinkable. Some

of the drinkable water is under ground. [Tundisi & Tundisi, 2012]. On the other hand, Nestle under Poland Spring brand uses water resources of rural areas to produce bottled water in USA and 3.6 billion bottled water sales were done by Nestle in 2008 [Soechtig & Gibson, 2009]. Similarly Coca Cola is drainage the groundwater of India for producing cola and bottled water [King & Lessidrenska, 2009]. This ground water is water resources of rural populations.

There are 193 countries in UN [UN, 2012] but top 100 global food companies are in 20 countries. It means 10.36 % of world governs rest of the world in terms of food and it is unfair. It is just like 'Hunger Games'. There is central area, Capitol, in Hunger Games and another 12 districts depend on Capitol. Every district area is specialised to produce something [agriculture or mine] and they have to send most of the production to Capitol. Capitol is very rich but districts are very poor. [Collins, 2008]. Now Capitol is Europe and North America according to Table 1. Rest of the world may be divided 7–8 districts in terms of continentals. There has not happened yet any war for food but most of the scientists warn about water scarcity and water wars [Buu, 2010]. CEO of Nestle Brabeck says water is not a human right; it is only a saleable foodstuff. Similarly Stiglitz [1974] warned about ER was evaluated as capital good in 1974. This perspective is still same. But it is not true. 70 % of human body consist of water and everybody needs it. In terms of Brabeck, rich people may have water or food. What about rest of population?

Human should prefer one of the ways anymore: Best taste and low price marketing or least taste and high price. People should think global and act local because ER is very limited and we do not have any planet to live. All governments should support and subsidize rural agriculture and population; in this way reverse migration should happen to rural area. Gough [1997] says environmental knowledge and life style of rural people are very important to have strong sustainability because they know how to live at own land as peacefully. It

is understood urbanization/ brown revolution is another problem from governments and nobody could this problem yet.

Brown revolution also gives rise to WES. The Economist says urbanisation is not stopped anymore but it is not true. Human needs green revolution. People migrate for surviving. If they could survive own rural area, why would they like to migrate? Also they are happy at their heritage lands. Urbanisation does not give happiness [Passador, Junior, Artoni, Passador, 2011]. This is also a sociological perspective and should be researched. Brown revolution is harmful either environmentally or sociologically. Stahel [1997] says trivets of sustainability are nature conservation, health and safety, reduced flows of materials, social ecology, and cultural ecology. Human need green revolution and it may give us strong environmental sustainability.

## CONCLUSION

There is an idiom at trade: Big fish eats small fish. Who knows what will happen in further times about economy? Big companies may purchase small companies and it may give rise to more monopolies. Economic power should spread out to rural. Now there is drought at West Africa and it is wanted donation by advertisement on TV. Donation is not a solution. It should be taught to fish; not to eat fish. Wrong economic and ecological policies may give rise to drought, such as in Haiti [Bourne, 2008]. The aim of this study is to take attention dangerous of global food companies on

environmental sustainability. The author tries to give a general evaluation about global food companies. They have financial power but money is not enough to have strong sustainability. Stahel [1997: 486] emphasizes "higher resource productivity entails higher economic and ecologic benefits." Every company [App. 1] may be evaluated in terms of own trade activity one by one.

Production and consumption are just like Siamese twins. It is thought that consumer education might be effective on production. West countries might be extravagant [Wagenhofer, 2005] while West Africa needs food [Bourne, 2008]. Doherty and Taplin [2008] undertook the research on relationship between consumer education and being global citizenship. They study with 7–14 years old school children and find that there is positive relationship between consumer education and global citizenship. However they do not explain environmental roots or benefits of consumer education. Global citizenship is related to strong sustainability directly. People may raise awareness about global effect of personal consumer behaviour by formal and informal education. It is thought that remarkable case studies should be explained to have clear understanding about environmental effects of people on natural environment. People—especially Western people—should empathize with other people because responsible consumer behaviour might be effective on responsible production behaviour or strategy. Otherwise Hunger Games might happen in future. ■

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**Emel Okur-Berberoglu** – the theme and experimental sequence of her Ph. D. dissertation constituted a number of research projects related to outdoor environmental education intended for in-service teachers. These projects were funded by TUBITAK (Scientific and Technology Research Council of Turkey) and were within science and society projects. She collaborated with colleagues from different disciplines (Education, Biology, Ecology, Geology, Herpetology, Archaeology, Marine Ecology etc.) within these projects and especially focused on environmental education for sustainable development and globalization.

## Top100 Global Food Companies (2013)

| Company                           | Country     | Geographical Area | 2013 Food Sales |
|-----------------------------------|-------------|-------------------|-----------------|
| 1. Nestlé                         | Switzerland | Europe            | 77,810          |
| 2. PepsiCo, Inc.                  | USA         | North America     | 66,415          |
| 3. The Coca-Cola Company          | USA         | North America     | 46,854          |
| 4. JBS                            | Brazil      | South America     | 44,700          |
| 5. Archer Daniels Midland Company | USA         | North America     | 43,195          |
| 6. Anheuser-Busch InBev           | Belgium     | Europe            | 43,195          |
| 7. Mondelez International         | USA         | North America     | 35,299          |
| 8. SABMiller                      | UK          | Europe            | 34,084          |
| 9. Tyson Foods                    | USA         | North America     | 34,374          |
| 10. Cargill                       | USA         | North America     | 33,500          |
| 11. Mars                          | USA         | North America     | 33,000          |
| 12. Unilever                      | UK-Germany  | Europe            | 31,685          |
| 13. Danone                        | France      | Europe            | 29,605          |
| 14. Heineken                      | Netherlands | Europe            | 26,692          |
| 15. Lactalis                      | France      | Europe            | 22,240          |
| 16. Kirin Holdings                | Japan       | Eastern Asia      | 21,246          |
| 17. Asahi Breweries               | Japan       | Eastern Asia      | 19,195          |
| 18. Suntory                       | Japan       | Eastern Asia      | 19,193          |
| 19. Kraft Foods                   | USA         | North America     | 18,218          |
| 20. Diageo                        | UK          | Europe            | 18,180          |
| 21. General Mills Inc.            | USA         | North America     | 17,774          |
| 22. Royal FrieslandCampina        | Netherlands | Europe            | 15,870          |
| 23. Fonterra                      | New Zealand | Oceania           | 11,260          |
| 24. ConAgra Foods Inc.            | USA         | North America     | 15,491          |
| 25. BRF Brasil Foods              | Brazil      | South America     | 15,260          |
| 26. CHS Inc.                      | USA         | North America     | 14,900          |
| 27. Kellogg Company               | USA         | North America     | 14,792          |
| 28. Arla Foods                    | Denmark     | Nordic            | 13,505          |
| 29. Grupo Bimbo [Mexico]          | Mexico      | North America     | 13,466          |
| 30. Smithfield Foods Inc.         | USA         | North America     | 13,221          |
| 31. NH Foods                      | Japan       | East Asia         | 12,405          |
| 32. Associated British Foods      | UK          | Europe            | 12,135          |
| 33. Pernod Ricard                 | France      | Europe            | 11,920          |
| 34. Femsa                         | Mexico      | North America     | 11,920          |
| 35. Carlsberg                     | Denmark     | Nordic            | 11,810          |
| 36. Meiji Holdings                | Japan       | Eastern Asia      | 11,565          |
| 37. HJ Heinz Company              | USA         | North America     | 11,529          |
| 38. Ferrero                       | Italy       | Europe            | 11,260          |
| 39. Bunge                         | USA         | North America     | 11,177          |
| 40. Vion                          | Netherlands | Europe            | 10,975          |

| Company                         | Country     | Geographical Area | 2013 Food Sales |
|---------------------------------|-------------|-------------------|-----------------|
| 41. Sudzucker                   | Germany     | Europe            | 10,750          |
| 42. Danish Crown                | Denmark     | Nordic            | 10,675          |
| 43. Yamazaki Baking             | Japan       | Eastern Asia      | 10,210          |
| 44. Coca Cola HBC               | Switzerland | Europe            | 9,555           |
| 45. Maruha Nichiro Holdings     | Japan       | Eastern Asia      | 9,530           |
| 46. Marfrig Group               | Brazil      | South America     | 9,400           |
| 47. Saputo                      | Canada      | North America     | 9,050           |
| 48. Dean Foods Company          | USA         | North America     | 9,016           |
| 49. Hormel Foods Corporation    | USA         | North America     | 8,752           |
| 50. Coca Cola Enterprises       | USA         | North America     | 8,212           |
| 51. Kerry Group                 | Ireland     | Europe            | 8,115           |
| 52. Campbell Soup Company       | USA         | North America     | 8,052           |
| 53. Yili Group                  | China       | Eastern Asia      | 7,585           |
| 54. Parmalat                    | Italy       | Europe            | 7,436           |
| 55. DMK Deutsches Milchkontor   | Germany     | Europe            | 7,365           |
| 56. Ajinomoto                   | Japan       | Eastern Asia      | 7,185           |
| 57. The Hershey Company         | USA         | North America     | 7,146           |
| 58. Oetker Group                | Germany     | Europe            | 7,100           |
| 59. Red Bull                    | Austria     | Europe            | 7,005           |
| 60. Sodial                      | France      | Europe            | 6,950           |
| 61. China Mengniu Dairy Company | China       | Eastern Asia      | 6,885           |
| 62. McCain Foods Ltd            | France      | Europe            | 6,860           |
| 63. Morinaga Milk Industry      | Japan       | Eastern Asia      | 6,825           |
| 64. Muller Group                | Germany     | Europe            | 6,810           |
| 65. Grupo Modelo [Mexico]       | Mexico      | North America     | 6,776           |
| 66. Ingredion Inc.              | USA         | North America     | 6,653           |
| 67. Nissui                      | Japan       | Eastern Asia      | 6,145           |
| 68. Bongrain                    | France      | Europe            | 6,128           |
| 69. Dr Pepper Snapple Group     | USA         | North America     | 5,997           |
| 70. LVMH                        | France      | Europe            | 5,820           |
| 71. McCormick Corporation       | USA         | North America     | 5,730           |
| 72. The JM Smucker Company      | USA         | North America     | 5,611           |
| 73. Bacardi                     | Cuba        | North America     | 5,600           |
| 74. Nisshin Seifun Group        | Japan       | Eastern Asia      | 5,390           |
| 75. Itoham Foods                | Japan       | Eastern Asia      | 5,280           |
| 76. Sapporo Holdings            | Japan       | Eastern Asia      | 5,170           |
| 77. Tate & Lyle                 | UK          | Europe            | 5,003           |
| 78. Ito En                      | Japan       | Eastern Asia      | 4,985           |
| 79. Barilla                     | Italy       | Europe            | 4,915           |
| 80. ThaiBev                     | Thailand    | Eastern Asia      | 4,850           |

| Company                          | Country     | Geographical Area | 2013 Food Sales |
|----------------------------------|-------------|-------------------|-----------------|
| 81. Maxingvest/Tchibo            | Germany     | Europe            | 4,810           |
| 82. Nissin Food Products         | Japan       | Eastern Asia      | 4,757           |
| 83. Barry Callebaut              | Switzerland | Europe            | 4,696           |
| 84. Coca-Cola Amatil             | Australia   | Oceania           | 4,620           |
| 85. Schreiber Foods              | USA         | North America     | 4,500           |
| 86. Land O'Lakes Inc.            | USA         | North America     | 4,498           |
| 87. Coca Cola West               | Japan       | Eastern Asia      | 4,495           |
| 88. QP Corporation               | Japan       | Eastern Asia      | 4,475           |
| 89. Tsingtao Brewery             | China       | Eastern Asia      | 4,408           |
| 90. Maple Leaf Foods             | Canada      | North America     | 4,292           |
| 91. Dole Food Company, Inc.      | USA         | North America     | 4,247           |
| 92. Molson Coors Brewing Company | USA         | North America     | 4,206           |
| 93. J R Simplot                  | USA         | North America     | 4,100           |
| 94. Japan Tobacco International  | Switzerland | Europe            | 4,035           |
| 95. Hillshire Brands             | USA         | North America     | 3,920           |
| 96. Del Monte Foods Company      | USA         | North America     | 3,819           |
| 97. Groupe Bel                   | France      | Europe            | 3,780           |
| 98. Agropur Cooperative          | Canada      | North America     | 3,770           |
| 99. DE Master Blenders 1753      | Netherlands | Europe            | 3,605           |
| 100. E. & J. Gallo Winery        | USA         | North America     | 3,600           |
| <b>Total</b>                     |             |                   | 1,332,070       |