

Measuring the Size and Scope of the Cooperative Economy:

Results of the 2014 Global Census on Co-operatives

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Overview of the Global Census on Cooperatives

It's very difficult to determine how to support or aid cooperative development without reliable data on the size and impact of cooperatives. Despite having completed the United Nation's International Year of Cooperatives (IYC), clear, concise and reputable data on the number of cooperatives globally and per country, their number of members/clients, turnover, employees and assets did not exist. As a result of leadership from the United Nations Department for Economic and Social Affairs, with support from Rabobank, the first ever Global Census on Cooperatives was completed in 2013-14. As its name suggests, the Census is a count of as many cooperatives, is as many countries as possible regardless of their sector or membership in regional/global associations. This is the first time that a broad-based database on cooperatives has been complied and data contained within it should be considered a start, not the definitive count.

Summary Statistics – 145 countries

2.6 Million Cooperatives have over 1 Billion memberships and clients.

With data from 145 countries in all regionals of the world, this database is the most comprehensive data set on cooperatives. As the first of its kind, there will undoubtedly be improvements to the data over time. While it's tempting to claim (and potentially accurate) that there are over 1 billion people that are members and clients of cooperatives it's more accurate to refer to *memberships* than individuals. For example, in France there are 147 million cooperative clients and memberships in a country with a population of 65 million people. So while it logical to recognize that each person is a member/client of France 2.25 cooperatives on average, the level of detail in the data does not allow for identifying if a person has more than one membership among cooperatives. Nonetheless, cooperative membership/clients relative to the total population in a country does provide an important marker on the outreach of cooperatives in a country.

12.6 Million Employees work in 770,000 Cooperative offices and Outlets

Together cooperatives employ 12,595,501 persons or roughly 0.2% of the world's population. In relative terms this is slightly larger than the entire adult population of Ecuador. It's important to note that the 12.6 million employees do *not* include data from the 982,400 agricultural cooperatives in China as employment data was not available.

US\$20 Trillion in Cooperative Assets generate US\$3 trillion in Annual Revenue

Together cooperatives around the world generated US\$2.98 trillion in annual revenue during the most recent year for which data was available. This is done through the leveraging of their combined asset base of US\$19.6 trillion. Combined the global cooperative economy is

larger than France's economy and places right behind Germany's economy as the 5th largest economic unit if it were a united country.

However, cooperatives are generally locally owned and operated enterprises. At a national level the cooperative economy comprises over 10% of the Gross Domestic Product in 4 countries in the world (New Zealand (20%), Netherlands (18%), France (18%) and Finland (14%)).

Measuring the Economic and Social Impact of Cooperatives

Although the focus of the Global Census on Cooperatives has primarily been about gathering the data so that future research can be conducted on the impact of cooperatives in a country, region, sector or globally, a limited analysis of the economic and social impact of cooperatives was conducted.

This analysis took the form of utilizing three ratios that compared the cooperative system in a given country relative to the country's total population and GDP. These ratios are the membership penetration of cooperatives relative to the total population (i.e., membership /population), employment by cooperatives relative to *total* population (i.e., employment/population) and annual gross revenue or turnover of all cooperatives in a country relative to the country's GDP. The top ten countries for each of these measures are shown below in Table 1.

Table 1: Top Ten Countries

Rank	Memberships & Clients/ Population	Employment/Population	Annual Gross Revenue/GDP		
1	France	New Zealand	New Zealand		
2	Finland	Switzerland	Netherlands		
3	Switzerland	Italy	France		
4	Austria	France	Finland		
5	Dominica	Malta	Luxembourg		
6	Netherlands	Finland	Germany		
7	Ireland	Germany	Ireland		
8	Germany	Netherlands	Italy		
9	Cyprus	Spain	Denmark		

10	Australia	Norway	Poland

Memberships & Clients

The number of memberships/clients in cooperatives relative to the total population provides a measure of cooperative outreach and consumer value. This assumes that cooperatives in a given market are providing value to their members/clients, as has often been shown in studies. While some surveys that include this membership penetration rate rely only on the adult population in a country, because of the presence of educational, social and health cooperatives and the desired to include youth cooperatives we measured memberships/clients relative to the total population not the adult population.

With this measure we find that 1 in every 6 people on average in the world has membership or is a client of a cooperative.

Employment

A strong argument could be made that in measuring cooperative employment relative to only the adult population in a country should be used. However, for consistency we also use total population in this measure. It should also be noted that these employment figures are considered formal employment and could be significantly under represent the actual employment. Most notably is that an employment figure for the agricultural cooperatives in China was not available as the it was indicated that many farmers contribute their labor to the cooperative and income is derived from the sale of products through the cooperatives. While these agriculture cooperatives have volunteer labor many also have employees but data was not available. That said we did not find evidence of cooperative employment being near 100 million as the ILO had previously estimated.

Annual Gross Revenue

While many researchers are beginning to use alternative measures besides GDP to measure progress and output in a society, we believe that there is still great value in looking at GDP relative the cooperatives' revenues. This was the least reported on of the six measuring in the Global Census on Cooperatives. As such, these national, sector and global totals should be considered minimums for cooperatives economic contributions to national revenue.

Introduction of the Cooperative Economy Index

While individually these three measures may not be the most robust measures of an industry's economic or social contribution to society, taken together they can be an important signpost for diverse organizations across diverse countries. As with indexes our Cooperative Economy Index benefits from multiple measures that limit the rankings being determined by any single factor.

The memberships, employment and gross revenue ratios are evenly weighted within the Cooperative Economy Index to provide a single measure to determine the most cooperative economies globally. Summary results for the Cooperative Economy Index are below.

Table 2: Cooperative Economy Index

Rank	Cooperative Economy Index				
1	New Zealand				
2	France				
3	Switzerland				
4	Finland				
5	Italy				
6	Netherlands				
7	Germany				
8	Austria				
9	Denmark				
10	Norway				

In compiling our results on the most cooperative economies in the world we were amazed that two-thirds of the countries listed in the top ten most cooperative economies also make up 8 of the top 12 spots on the Social Progress Index (SPI). The SPI has 54 measures and includes items like basic human needs, opportunity and access to knowledge. It has been developed and promoted by the <u>Social Progress Imperative</u>. While it's beyond the scope of this project to determine if there is any cause and effect between cooperative economies and social progress, there does appear to be a high level of correlation among these two lists.

Table 3: Social Progress Index and Cooperative Economy Index

Rank	Social Progress Index Cooperative Economy Index (SPI) (SPI Ranking)		
1	New Zealand	New Zealand (1)	
2	Switzerland	France (20)	
3	Iceland	Switzerland (2)	
4	Netherlands	Finland (7)	
5	Norway	Italy (29)	
6	Sweden	Netherlands (4)	
7	Canada	Germany (12)	
8	Finland	Austria (11)	
9	Denmark	Denmark (9)	
10	Australian	Norway (5)	

Sector Analysis

Within the Global Census on Cooperatives the most common type of cooperative is an agricultural cooperative. This is influenced by large numbers of cooperatives in India and China. In both of these countries the small size of land holdings (0.3 - 0.4 hectors in China,

1.3 hectors in India) makes it important for farmers to work together to gain economies of scale and scope. As such, both of these markets have large numbers of agricultural cooperatives and control significant market share in certain sectors. For example, Indian cooperatives have 36% market share of the fertilizer market. Chinese cooperative have 60% market share in cotton, 68% in agri-processing, 70-80% market share in tea production and >80% market share in fertilizer. In the U.S. there are many agricultural cooperatives but their data is co-mingled with purchasing and marketing cooperatives. In addition, in many countries grocery cooperatives are included in data on agriculture and consumer cooperative

Sector Totals	Cooperatives	Members/Clients	Employees	Offices/ Outlets	Assets	Annual Gross Revenue
Banking/Credit Unions	210,559	703,070,123	2,452,130	296,566	11,262,671,499,563	167,413,448,242
Insurance	3,644	248,864	961,409	1,361	7,500,074,558,634	1,219,472,098,520
Agriculture/Grocery	1,224,650	122,120,167	1,181,682	35,386	133,811,867,460	337,705,145,870
Utilities	1,714	19,858,921	94,882	1,015	141,544,317,085	41,944,022,702
Grocery/Consumer	81,437	97,869,940	875,181	100,396	243,888,763,326	154,573,071,133
Worker	84,799	4,369,600	1,218,751	0	1,393,874,620	124,821,200,417
Housing	15,247	16,383,048	102,823	173	52,405,481,487	20,709,518,041
Health	1,700	3,441,221	153,180	51	485,789,252	4,075,077,199
Education & Social	87,998	21,876,052	497,445	13,122	840,678,955	12,305,812,264
Purchasing or Marketing	41,865	26,256,054	3,402,008	320,599	239,000,352,255	736,631,647,399
Other or Undefined	760,985	56,296,177	1,671,257	3,319	31,310,913,789	143,245,072,152
WORLDWIDE TOTALS	2,514,598	1,071,790,167	12,610,748	771,988	19,607,428,096,426	2,962,896,113,938

data is co-mingled with grocery cooperatives. Significant effort was taken to ensure double counting did not occur but there likely is some crossover of in the types of cooperatives in the sector summary in table 4 below.

Table 4: Sectoral Summary

Regional Breakdown

To those that have spent time living or working in Europe it should come as no surprise that Europe leads the regions on several measures related to cooperatives. Potentially important for Europe, and other regions that are seeking to promote economic stability, is that cooperatives in many sectors (i.e., banking) have been shown through academic research and performance in the recent financial crisis to be less volatile than commercial listed organizations. (See Hesse, Heiko and Martin Cihak. *Cooperative Banks and Financial Stability*. International Monetary Fund. Working Paper WP/07/02. 2007.)

Table 5: Regional & Global Summary

About the Data & its Limitations

As a first of its kind exercise the Global Census on Cooperatives is a compilation of the *best available* data on cooperatives. Because data is not listed for cooperatives in a country or sector does not necessarily mean that no cooperatives exist. It could be that the data available on them was older than 2008 and/or no data was available on them. Likewise, because data is available does not necessarily mean that all of cooperatives are active. For example, based on data obtained from the National Cooperative Union of India we report 100,000 housing cooperatives in India in the Census. However, due the difficulties in obtaining land and permits not all of these cooperative groups have housing units. Where reliable estimates on the number of "active" cooperatives were available we utilized these figures. Where such estimates were not available we used the published data.

The most commonly available figure in the data set was the number of cooperatives in a sector/country. This was closely followed by the number of members/clients. Below is a breakdown of the number of observations available in the database by each of six measures. These figures and the sector information are heavily influenced by the prominence of banking and credit union data and what are common measures used in this sector.

Table 6: Reporting in the Census by Measure

	Cooperatives	Members Employees /Clients		Offices/ Outlets	Assets	Annual Gross Revenue	
# of Observations	145	134	104	95	137	83	

Areas for Further Research

The UN's 2012 International Year of Cooperatives served as an important impetus for cooperatives in many countries to measure and assess their size and impact. These activities and the subsequent publication of data on the internet made this work by UN DESA possible to complete. However, there is also limited consistency of the type of data that is measured and gathered. The six indicators used in the Global Census on Cooperatives are relatively common across business types, provide a reasonable level of size, impact and

Region	Coops	Membership & Clients	% Pop. Coop Member	Employee	% of Pop. Employed in Coops	Offices of Coops	Total Assets in US Dollars	Annual Gross Revenue in US Dollars	Gross Rev % of GDP
Africa- Sub	ОСОРС	G CHOILE		p.cycc	СССРС	СССРС	oo Domailo	oo Domaro	33 .
Sahara	85,260	18,509,605	2.73%	10.914	0.00%	5.844	10,847,166,275	851,640,000	0.08%
Asia	1,933,299	484,105,695	12.68%	4,306,521	0.11%	481,871	3,847,329,029,490	653,629,184,870	3.25%
Caribbean	1,049	3,583,511	12.94%	54,569	0.20%	462	5,934,856,987	182,714,007	0.13%
Europe	356,380	368,006,463	45.55%	5,248,852	0.65%	224,593	11,688,164,988,277	1,482,481,568,728	7.08%
Latin									
America	42,765	44,179,104	7.81%	816,122	0.14%	14,913	83,886,544,610	18,360,221,538	0.33%
MENA	162,779	4,537,084	1.57%	37,714	0.01%	1,095	31,681,636,000	3,619,358,000	0.27%
North									
America	31,078	134,725,891	38.63%	1,675,778	0.48%	41,750	3,825,837,112,751	744,228,134,380	4.12%
Oceania	1,988	14,142,814	37.80%	460,278	1.23%	1,460	113,746,762,037	59,543,292,416	3.46%
WORLD	2,614,598	1,071,790,167	16.31%	12,610,748	0.19%	771,988	19,607,428,096,426	2,962,896,113,938	4.30%

scope of an enterprise and are items commonly available in the course of business.

As has been the case with initiatives around global remittances flows and access to financial services, the hope is that this data will be a first step to help future researchers in their work on cooperatives and play a catalyst role in understanding key drivers to cooperative development. Until the scope and potential of cooperatives can be better understood research on smart policies to promote cooperatives will be hamstrung.

Methodology and Scope of the Census

The first source of data for the Global Census on Cooperatives was national level surveys that were sent to national associations and/or governmental agencies responsible for cooperatives. Prior to the survey instrument being deployed it was field tested in the Caribbean and Africa with government and private sector organizations. Augmenting these national-level survey responses were responses from regional or sector-based organizations (i.e., insurance, banking, credit unions, consumer, service, fisheries) and international cooperative associations. The surveys were conducted in English, French and Spanish. To continue to fill in the gaps, reports by governments and/or associations of cooperatives were utilized as part of the desk research.

Consultations with government agencies responsible for cooperative development, national committees from the International Year of Cooperatives, the International Cooperative Alliance (ICA), International Co-operative and Mutual Insurance Federation (ICMIF), World Council of Credit Unions, European Association of Cooperative Banks and others was instrumental in gathering the most complete data possible.

The Census includes data on all cooperatives and mutuals which are owned by their members/customers and adhere to the spirit of the cooperative principles. Although the focus is global in nature, special attention was given to countries with large populations and known cooperative movements which have been largely omitted from past data exercises. Only verifiable estimated data from government ministries and/or cooperative associations from 2008 or more recently was accepted.

Although surveys and desk research were the primary methods for gathering information, the size and scope of the Chinese and Indian cooperative systems are so large and complex that a decision was made by UN DESA to conducted additional field research on cooperatives in these two countries as part of the Global Census.

Timeframe

The Global Census on Cooperatives as conducted between August 2013 – March 2014. The project was sponsored by the Division for Social Policy and Development of the Department of Economic and Social Affairs at the United Nations.

About the Author & Acknowledgements

Dave Grace & Associates, a boutique consulting firm specializing in cooperative development and financial inclusion and conducted the Global Census on Cooperatives. The principals of Dave Grace & Associates have 14 years of experience conducting similar type surveys on financial cooperatives and have worked in over 65 countries. Special acknowledgement is given to the staff of the UN DESA's Division for Social Policy and Development for their assistance with this undertaking and Maria Elena Chavez Hertig, an independent consultant and cooperative expert for her helpful support.