The United Nations Commodity Trade Statistics Database, or UN Comtrade, is an online database that contains detailed bilateral trade data, published by the UN Statistics Division. It provides export and import data for more than 200 countries according to three international classification systems. This snapshot covers the Harmonized System (HS), the classification system most commonly used by governments for international trade data reporting and trade policymaking.

USAID's Economic Analysis and Data Services (EADS) project has HS data from UN Comtrade available through the Economic and Social Database (ESDB) at https://eads.usaid.gov/esdb.

**What is the Harmonized System?**

The Harmonized System is a goods classification system first implemented in 1988 that is maintained and updated by the World Customs Organization (WCO). According to the WCO, more than 200 countries use the HS to classify exports and imports for the collection of trade statistics.

To maximize consistency among countries, the Harmonized System groups goods primarily by their inherent characteristics (e.g. stage of processing, materials used), but also accounts for market characteristics (e.g. end use) where appropriate.

The HS must be updated regularly to reflect changing trade patterns, consumption patterns, and technologies. New HS editions are released every five years or so. The most recent edition, the fifth, was released in 2012 and is referred to as HS12 or HS2012. Although the UN encourages use of the most recent editions, countries may report trade to the UN in whichever edition and classification system they choose. Developing countries are generally slower to convert to new systems and editions.

**How is the Harmonized System organized?**

The HS has a hierarchical structure. The standard HS nomenclature is divided into 97 Chapters. Each Chapter is given a two-digit code from 01 to 99; data by Chapter is referred to as data at the “two-digit level.” For example, Chapter 10 covers cereals, Chapters 61-63 cover apparel products, and Chapter 87 covers vehicles.

The Chapters are subdivided into two-digit headings (the “four-digit level”), which are themselves subdivided into two-digit subheadings (the “six-digit level”). The global HS nomenclature established by the WCO includes detail out to the six-digit level, but some countries choose to extend the HS classification system to the eight- or ten-digit level to allow for more targeted tariff policies. The United States uses the HS as the foundation for its import and export classification systems, and both systems expand product coverage to the ten-digit level.
How is HS data used? Country Highlight: Zambia

Data available from UN Comtrade can reveal many aspects of a country’s trade patterns, highlighting a country’s comparative advantages, main trading partners, and level of economic diversification, among other things. Because of the versatility of the data and the importance of trade in an increasingly globalized world, Comtrade data can inform development strategies. All of the data in this section was retrieved from UN Comtrade.

Zambia is a major recipient of USAID funding and reports its trade data to the UN under the HS12 system. Comtrade uses concordance tables to translate Zambia’s HS12 data into other classifications and older HS editions. The following charts show some of the ways HS data can be used.

Zambia: By Commodity

Zambia’s exports are highly concentrated in the copper sector; the country exported approximately $6.9 billion in copper and copper products (HS Chapter 74) in 2013. Further investigation at the 4- and 6-digit levels shows that 92 percent of Zambian copper exports are in the form of “refined copper.” In other words, the first stages of raw copper refining are often performed in Zambia, but much of the more advanced manufacturing is done abroad.

On the import side, Zambia is like many developing countries. Its top merchandise imports are manufactured goods such as mechanical and electrical machinery and vehicles. Zambia is also a net importer of fuels and oils.

In agriculture and food production, Zambia is a net exporter of sugars, cereals, and beverages but is a net importer of fats and oils, fish, and dairy products.

Charts 1 and 2 illustrate the top five Zambian exports and imports in 2013 by value according to HS12 Chapter.

![Zambia- Top Exports (2013)](chart1)

![Zambia- Top Imports (2013)](chart2)
Zambia: By Partner

Comtrade also provides data by trading partner. Measured by total trade value, South Africa is Zambia’s largest trading partner. While Zambia runs trade deficits with its top three African trading partners (South Africa, DR Congo, and Kenya), it runs trade surpluses with both Switzerland and China – two countries that have invested heavily in Zambian copper mines. Not surprisingly, copper and copper products make up nearly all of the exports to those two countries, while Zambia’s exports to other African countries are more diversified.

Chart 3 shows Zambia’s exports and imports to its top five trading partners (by total trade value), and Table 1 highlights the top exported and imported goods with each partner.

<table>
<thead>
<tr>
<th>Partner</th>
<th>Largest Export Good (% of total exports to partner)</th>
<th>Largest Import Good (% of total imports from partner)</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>HS-74: Copper and articles thereof (21%)</td>
<td>HS-84: Machinery and mechanical appliances, etc. (20%)</td>
</tr>
<tr>
<td>Switzerland</td>
<td>HS-74: Copper and articles thereof (98%)</td>
<td>HS-25: Salt; sulphur; earths and stone, etc. (64%)</td>
</tr>
<tr>
<td>China (P.R.C.)</td>
<td>HS-74: Copper and articles thereof (93%)</td>
<td>HS-84: Machinery and mechanical appliances, etc. (29%)</td>
</tr>
<tr>
<td>Congo (Kinshasa)</td>
<td>HS-28: Inorganic chemicals, compound of precious metals, etc. (27%)</td>
<td>HS-26: Ores, slag and ash (84%)</td>
</tr>
<tr>
<td>Kenya</td>
<td>HS-84: Machinery and mechanical appliances, etc. (23%)</td>
<td>HS-27: Mineral fuels and oils, etc. (90%)</td>
</tr>
</tbody>
</table>
**Zambia: By Partner and Commodity**

Comtrade also allows for a detailed description of bilateral trade relationships. The United States is Zambia’s thirteenth-largest trading partner, and Zambia has been eligible for trade benefits under the African Growth and Opportunity Act (AGOA) since the Act’s inception in October 2000. From 2000 to 2013, Zambian exports to the United States doubled to $13 million, while Zambian imports have increased six-fold to $240 million.

The composition of bilateral trade has changed as well. In 2000, almost one-third of Zambian exports to the United States were residues and food wastes. In 2013, 78 percent of goods moving that direction were works of art. Machinery and mechanical appliances accounted for 10 percent of Zambian imports ($4.2 million) from the US in 2000, but imports of those goods skyrocketed to 47 percent of imports from the United States ($113.2 million) in 2013.

---

**CHART 4**

**Zambia- Top Exports to the US,**  
**Share of Exports by Commodity, 2000 and 2013**

- **2000** Total: $6.5 million
- **2013** Total: $13.1 million

- Other
- HS-44, Wood and articles of wood, wood charcoal
- HS-71, Pearls, precious stones, metals, coins, etc
- HS-23, Residues, wastes of food industry, animal fodder
- HS-84, Nuclear reactors, boilers, machinery, etc
- HS-97, Works of art, collectors pieces and antiques

---

**CHART 5**

**Zambia- Top Imports from the US,**  
**Share of Imports by Commodity, 2000 and 2013**

- **2000** Total: $41.5 million
- **2013** Total: $240.4 million

- Other
- HS-87, Vehicles other than railway, tramway
- HS-49, Printed books, newspapers, pictures etc
- HS-85, Electrical, electronic equipment
- HS-40, Rubber and articles thereof
- HS-84, Nuclear reactors, boilers, machinery, etc
Zambia: Regional Trade

Zambia is part of a number of regional cooperative agreements, including the 20-member Common Market for Eastern and Southern Africa (COMESA) and the 15-member Southern African Development Community (SADC). Table 2 shows Zambia’s trade within its region, sub-Saharan Africa, and with members of SADC and COMESA.

TABLE 2

<table>
<thead>
<tr>
<th>Partner</th>
<th>Total Trade (% of total trade with world)</th>
<th>Exports to Partner (% of total exports to world)</th>
<th>Imports from Partner (% of total imports from world)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa</td>
<td>$9.2 (45%)</td>
<td>$3.2 (31%)</td>
<td>$6.0 (59%)</td>
</tr>
<tr>
<td>SADC</td>
<td>$8.4 (41%)</td>
<td>$3.1 (29%)</td>
<td>$5.3 (52%)</td>
</tr>
<tr>
<td>COMESA</td>
<td>$4.6 (22%)</td>
<td>$1.8 (17%)</td>
<td>$2.8 (27%)</td>
</tr>
</tbody>
</table>

(All data in $US billions)

Forty-five percent of Zambia’s trade is with other sub-Saharan countries, although more than three-quarters of this trade is with Zambia’s two largest regional partners, South Africa (Sub-Saharan Africa’s largest economy, $384 billion in 2012) and the DR Congo (2012 GDP of $17 billion). DR Congo and South Africa are both members of SADC, and Zambia's trade with those two partners accounts for 78 percent of its trade within the community. Similarly, DR Congo is also a member of COMESA and accounts for 66 percent of Zambia’s trade with COMESA.

Additional Information

For questions or more information, please contact the author, Jeffrey Schlandt, at jschlandt@usaid.gov.

To access the Comtrade dataset, please visit the Economic and Social Database (ESDB) at https://eads.usaid.gov/esdb/. The ESDB contains Comtrade data under both the HS12 (2-digit level) and SITC Rev. 3 (1-digit level) classification systems. For more detailed Comtrade data, please contact EADS at eads@usaid.gov.