



Identifying High-Potential Indonesian Commodities to Export to Canada

Ananda Fadila



Program undertaken with the financial
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IN PARTNERSHIP WITH





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By Ananda Fadila

With contributions from Trade Facilitation Office (TFO) Canada and TPSA Project gender equality, environment, and trade experts

About the TPSA Project

The Canada–Indonesia Trade and Private Sector Assistance (TPSA) project is a five-year, \$12-million project funded by the Government of Canada through Global Affairs Canada. The project is executed by The Conference Board of Canada, and the primary implementation partner is the Directorate General for National Export Development, Indonesian Ministry of Trade.

TPSA is designed to provide training, research, and technical assistance to Indonesian government agencies, the private sector (particularly small- and medium-sized enterprises (SMEs)), academics, and civil-society organizations on trade-related information, trade policy analysis, regulatory reforms, and trade and investment promotion by Canadian, Indonesian, and other experts from public and private organizations.

The overall objective of TPSA is to support greater sustainable economic growth and reduce poverty in Indonesia through increased trade and trade-enabling investment between Indonesia and Canada. TPSA is intended to increase sustainable and gender-responsive trade and investment opportunities, particularly for Indonesian SMEs, and to increase the use of trade and investment analysis by Indonesian stakeholders for expanded trade and investment partnerships between Indonesia and Canada.

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Introduction

Report Objectives

The aim of the Canada–Indonesia Trade and Private Sector Assistance (TPSA) project—a five-year initiative funded by the Government of Canada through Global Affairs Canada—is to reduce poverty and increase sustainable economic growth in Indonesia through the expansion of Indonesian exports to Canada and the encouragement of Canadian investment in Indonesia. This report seeks to identify those commodities exported by Indonesian SMEs that have a good chance of success in the Canadian market.

Report Overview

The report begins by explaining why the TPSA project has chosen to focus on increasing exports to Canada by Indonesian SMEs as a means of reducing poverty and increasing sustainable growth. This is followed by a brief overview of historical Canada–Indonesia trade patterns. The remainder of the report outlines the results of the methodology TPSA adopted to choose three target sectors in which to focus its project activities.

Background and Rationale

The relationships between increased trade, sustainable economic growth, and poverty reduction are complex. Nevertheless, there is an emerging consensus in the literature that, in the current context of integrative trade and globalization, increased trade raises the incomes of the poor, and the transition costs to a more open economy are generally small, relative to the overall benefits. A 2013 United Nations Development Programme (UNDP) report attributed the lifting of hundreds of millions of men and women from poverty at least in part to openness to trade (UNDP 2013). A 2010 study published by the Organisation for Economic Co-operation and Development (OECD) titled *Trading Out of Poverty: How Aid for Trade Can Help* highlighted trade as a critical tool for countries to generate wealth, sustain growth, and reduce poverty:

"Economic growth is the most powerful tool to reduce poverty. And no country has successfully developed its economy by turning its back on international trade and long-term foreign direct investment. Virtually every country that has achieved sustained economic growth has done so by seizing the opportunity offered by more open world markets." (OECD 2010)

However, the link between trade and poverty reduction is not automatic. The OECD report notes that, while increased trade provides an opportunity to increase wealth, thereby reducing poverty, the ability of the poor to benefit from increased trade depends on a number of factors, including how much of the trade-induced growth occurs in sectors where a large number of the poor are working, how much of that growth leads to job creation and wage increases, and how much access the poor have to the financial and economic infrastructure to take advantage of the new opportunities resulting from trade (OECD 2010).

Thus, trade expansion needs to be supported by a framework of policies and practices that support the inclusion of the poor in the gains from trade and address the constraints that hinder them from doing so. To maximize the poverty-reduction impact of increased trade and investment between Canada and Indonesia, the TPSA project focuses on small- and medium-sized enterprises (SMEs), including those owned or operated by women. SMEs have made an important contribution to Indonesia's employment and economic growth. Project activities also focus on improving policies around trade and investment and removing barriers that hinder SMEs, including those owned or operated by women, from accessing global markets.



The Importance of MSMEs to Indonesia's Economy

Micro-, small-, and medium-sized enterprises (MSMEs) are major employers in Indonesia. (See box "How Are SMEs Defined?") They accounted for approximately 97 per cent of Indonesia's total employment between 2008 and 2013 (Indonesia Ministry of Cooperatives and SMEs 2015). (See Table 1.) Micro-sized enterprises have the largest share, although that share fell from 90.7 per cent in 2008 to 88.9 per cent in 2013. The shares of small- and medium-sized enterprises rose over the same period.

TABLE 1

MSMEs ACCOUNT FOR A LARGE SHARE OF INDONESIA'S TOTAL EMPLOYMENT (SHARE OF TOTAL EMPLOYMENT, PER CENT)

Enterprise Size	2008	2009	2010	2011	2012	2013
Micro	90.73	91.03	90.98	90.77	90.12	88.90
Small	3.64	3.56	3.55	3.75	4.09	4.73
Medium	2.78	2.71	2.70	2.72	2.94	3.36
<i>MSME total</i>	<i>97.15</i>	<i>97.3</i>	<i>97.23</i>	<i>97.24</i>	<i>97.15</i>	<i>96.99</i>
Large	2.85	2.70	2.78	2.76	2.84	3.01

Sources: Indonesia Ministry of Co-operatives and SMEs; The Conference Board of Canada.

How Are SMEs Defined?

Several ways of defining SMEs exist. The Government of Indonesia defines MSMEs by asset values and annual sales as stipulated in Law No. 20/2008.¹ The Government of Canada² and the World Bank³ use the number of employees to define SMEs; however, their ranges differ. The various definitions are compared in the table below. As there is no universal definition of SMEs, this report uses the definition adopted by the Government of Indonesia.

DEFINING SMEs

	GOVERNMENT OF INDONESIA		GOVERNMENT OF CANADA		WORLD BANK
	Asset Value (excludes land and buildings)	Annual Sales	Number of Employees		
Micro	< Rp50 million	< Rp300 million	—	—	
Small	Rp50–500 million	Rp300 million– 2.5 billion	1–99 people	5–19 people	
Medium	Rp500 million– 10 billion	Rp2.5–50 billion	100–499 people	20–99 people	
Large	> Rp10 billion	> Rp50 billion	≥ 500 people	≥ 100 people	

¹ International Finance Corporation 2016, 3.

² Innovation, Science and Economic Development Canada, n.d.

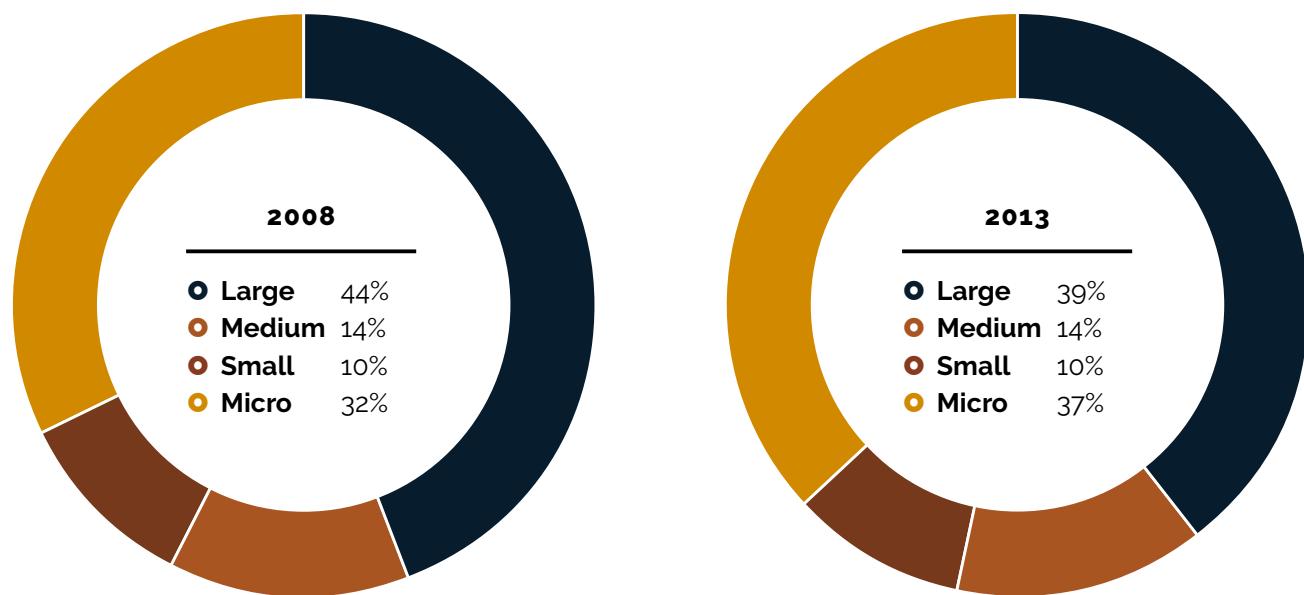
³ Mourougane 2012, 6.



MSMEs also account for a large share of Indonesia's gross domestic product (GDP). In 2013, MSMEs collectively contributed approximately Rp5714 trillion (60 per cent) to Indonesia's total GDP—an increase from Rp2613 trillion (56 per cent) in 2008 (Indonesia Ministry of Cooperatives and SMEs 2015). The increase in the collective share of MSMEs between 2008 and 2013 was driven almost exclusively by the rapid increase in micro-sized enterprises' GDP contributions. (See Chart 1.) Micro-sized enterprises increased their GDP value by more than double and their share of total GDP by five percentage points. Although small- and medium-sized enterprises (SMEs) managed to increase their combined GDP values between 2008 and 2013, their share of Indonesia's total GDP remained the same. Large enterprises, on the other hand, accounted for a smaller portion of the GDP in 2013 compared to 2008, despite their increased GDP value.

CHART 1: MSMEs ACCOUNT FOR MORE THAN HALF OF INDONESIA'S GDP

(per cent of GDP)



Source: Indonesia Ministry of Co-operatives and SMEs.

The important contributions made by MSMEs to Indonesia's employment and economic growth are in line with the findings of previous studies on MSMEs in Indonesia conducted by international organizations. The OECD highlighted MSMEs as the key driver of employment growth in Indonesia in recent years and an important contributor to the subsistence of household income that helped households weather the financial crisis (Mourougane 2012). Similar findings were highlighted by the Asian Development Bank, which emphasized the role of MSMEs in supporting Indonesia's economy, as demonstrated by the continuous increase in their collective contribution to the country's GDP amid weak economic growth since 2011 (ADB 2014).

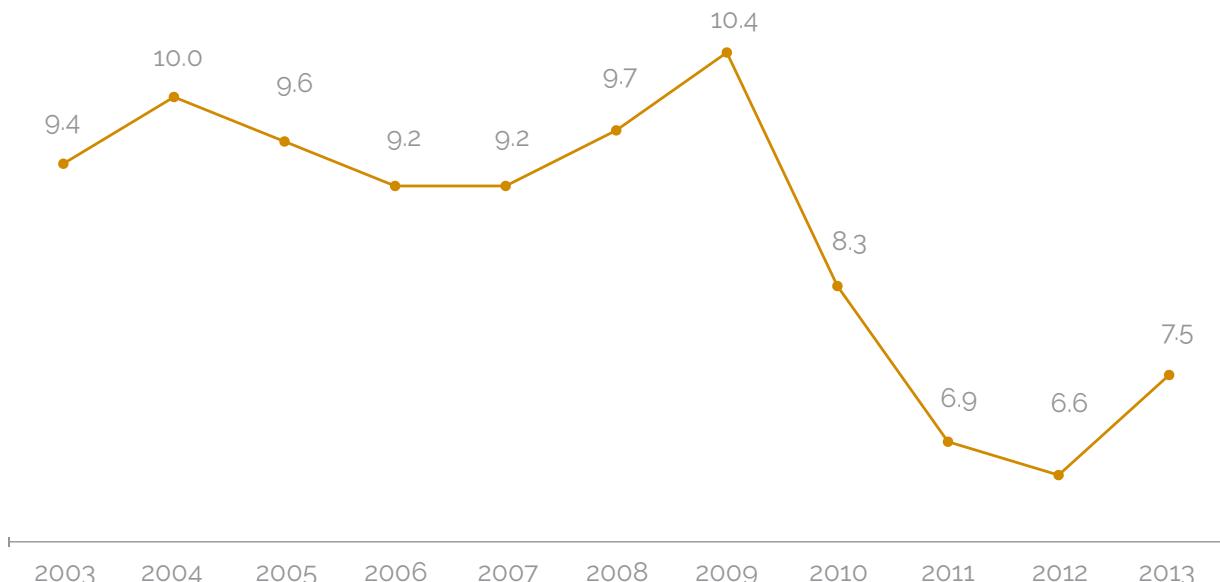
Between 2003 and 2013, the value of MSME exports increased from Rp77 trillion (US\$5.7 billion) to Rp182 trillion (US\$13.6 billion). As a share of total goods exported, however, MSME goods exports declined from 9.4 per cent in 2003 to 7.5 per cent in 2013.¹ (See Chart 2.) The volatility in export performance of MSMEs between 2009 and 2012 was caused by the global financial crisis and subsequent sluggish increases in demand from foreign markets, namely China, Japan, and Europe (ADB 2014). The inability of MSMEs to

¹ According to Indonesia's statistics agency, Badan Pusat Statistik (BPS), MSME export data are based on data in the agricultural sector (agriculture, livestock, forestry, and fishery), manufacturing sector, and mining/quarrying.

respond to sudden and rapid changes in foreign-market demand is just one of the many factors that fundamentally affect their export performance.

CHART 2: CONTRIBUTION BY MSMEs TO TOTAL EXPORTS DECREASED SIGNIFICANTLY DUE TO THE GLOBAL FINANCIAL CRISIS

(per cent of total exports)



Source: Indonesia Statistics Agency (*Badan Pusat Statistik*).

Because the TPSA project aims to reduce poverty and improve sustainable economic growth by helping SMEs increase their exports to Canada, the decline in export share by MSMEs is worrisome. Once the TPSA target commodities have been identified, project activities will be aimed at both training SMEs to increase exports and offering select technical assistance to address barriers to exporting to Canada.

Overview of Canada–Indonesia Trade in Goods

Canada has never been regarded as one of Indonesia's main export destinations. Canada accounts for less than one per cent of Indonesia's total global exports, a share that did not change between 2003 and 2013. However, Canada's imports from Indonesia increased in value from US\$663 million in 2003 to US\$1.3 billion in 2013. (See Chart 3.)

CHART 3: CANADA AND INDONESIA HAD DYNAMIC BILATERAL TRADE IN GOODS BETWEEN 2003 AND 2013

(US\$ millions)



Source: UN Comtrade database.

Chart 3 also shows that, between 2003 and 2006, Indonesia had a trade surplus with Canada. The situation reversed when Indonesian imports from Canada increased from US\$666 million in 2006 to US\$1.06 billion in 2007, outpacing Canada's imports from Indonesia. Except for 2010, Indonesia had a trade deficit with Canada for the remainder of that time period. Between 2003 and 2013, Canada's imports from Indonesia grew at a compound annual growth rate of 7.2 per cent, while Indonesia's imports from Canada grew at 20.4 per cent annually.

Canada has been a small export destination for Indonesian goods in the context of the global market, yet it has been one of Indonesia's main export destinations within the Americas—a region of great importance to Indonesia's trade. Imports from Indonesia into member countries of the Organization of American States (OAS), of which Canada is one, were valued at US\$25 billion in 2013—more than double that in 2003.² OAS countries collectively accounted for approximately 11 per cent of world imports from Indonesia in 2013. Among OAS countries, the United States was the largest market for Indonesian exports. Although U.S. imports from Indonesia steadily increased in value between those years, its share in OAS countries' imports from Indonesia declined from 85 per cent in 2003 to 78 per cent in 2013. This decline was a result of Indonesia's continued diversification of its export destinations within the OAS market to other traditional markets apart from the United States (i.e., Brazil and Mexico) and to smaller markets (i.e., Argentina and Colombia). However, Canada's share in OAS imports from Indonesia remained at approximately 5 per cent between 2003 and 2013, despite increases in the value of imports. Canada's position as Indonesia's

² The OAS consists of 35 member states in the Americas.



second-largest export destination within the OAS market in 2003 shifted in 2009 due to Brazil's growing share. (See Table 2.)

TABLE 2

SHARES OF OAS COUNTRIES' IMPORTS FROM INDONESIA

(per cent of total OAS imports from Indonesia)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Brazil	3	3	3	4	5	5	6	7	7	7	6
Canada	5	5	5	5	5	5	5	5	5	5	5
Mexico	4	4	4	5	5	5	5	5	5	5	5
U.S.	85	84	84	82	81	80	79	77	76	77	78

Source: UN Comtrade database.



Methodology for Choosing Indonesian Target Commodities

The TPSA project focuses on three commodities for its activities supporting Indonesian exports to Canada. The three commodities that have a good chance of success in the Canadian market were determined using the following methodology and sequence:

1. Choose commodities with a positive normalized revealed comparative advantage (NRCA) index.
2. Refine the list using a competitiveness criteria matrix.
3. Exclude commodities not commonly produced by SMEs in Indonesia.
4. Analyze the remaining commodities using six-digit HS codes and apply three criteria.
5. Group similar commodities into broad commodity groups.
6. Exclude commodities with significant social or environmental concerns or that have poor future market prospects.
7. Narrow the list to the final three commodities/commodity groups using eight criteria.

Step 1: Choose Commodities with a Positive Normalized Revealed Comparative Advantage

The first step was to determine whether an Indonesian commodity has a comparative advantage in Canadian imports. The revealed comparative advantage (RCA) index is the most common statistic used to measure comparative advantage. The RCA formula is shown in Exhibit 1. The RCA statistic compares the share of a given commodity in a country's total imports to the same commodity's share of total world imports.³

³ The index usually measures the share of a given commodity in a country's total exports to the same commodity's share of total world exports. But the equation has been adjusted in this report, as Canadian imports from Indonesia are used to represent Indonesia's exports to Canada.

EXHIBIT 1: REVEALED COMPARATIVE ADVANTAGE FORMULA

$$RCA = \frac{M_j^I}{M_t^I} / \frac{M_j^W}{M_t^W}$$

j = commodity j

t = total commodities

I = Indonesia

W = World

M_j^I = Canadian imports of commodity j from Indonesia

M_t^I = Canadian imports of all commodities from Indonesia

M_j^W = Canadian imports of commodity j from the world

M_t^W = Canadian imports of all commodities from the world

Source: Adapted from Sanidas and Shin, Comparison of Revealed Comparative Advantage Indices With Application to Trade Tendencies of East Asian Countries, 12.

If the ratio of the two shares is greater than one, Indonesia is assumed to have a comparative advantage in Canada for that commodity. In the case of footwear, for example, if the share of Canadian footwear imports from Indonesia to Canadian total imports from Indonesia is greater than the share of Canadian imports of footwear from the world to Canadian imports of all commodities from the world, then Indonesia is considered to have a revealed comparative advantage for footwear within Canadian imports.

There are several difficulties with using the simple RCA approach to measuring comparative advantage. One of the most important is the non-symmetrical nature of the estimate. The neutral value of the RCA measure is 1, but RCA index values vary between 0 and infinity, and are thus distributed non-symmetrically around the neutral value (Sanidas and Shin 2010).

A more recent approach to measuring comparative advantage that overcomes the non-symmetry problem is the Normalized Revealed Comparative Advantage (NRCA) index. In this index, Canada's imports of a commodity are compared to the neutral point for that commodity. This neutral point uses the number of imports for that commodity that would result in the RCA index being equal to one, and then subtracts this neutral point from actual imports of that commodity. This figure is then divided (normalized) by Canada's total imports of that commodity. The NRCA method generates values that range from -0.25 to 0.25, with the neutral point being zero when the actual exports of a commodity are the same as would be expected in a simple RCA-neutral world (Sanidas and Shin 2010). If the NRCA value is greater than zero, the country is assumed to have a comparative advantage with respect to the given commodity (Yu, Cai, and Leung 2009).

The advantage of the NRCA is that its values are distributed symmetrically around the neutral point. Another advantage is that the sum of NRCA across all commodities is zero (Sanidas and Shin 2010). This conforms to the notion of zero-sum embedded in comparative advantage: if a country gains comparative

advantage in one commodity, then it must lose comparative advantage in another (Sanidas and Shin 2010). The formula for the NRCA is shown in Exhibit 2.



EXHIBIT 2: NORMALIZED REVEALED COMPARATIVE ADVANTAGE FORMULA

$$NRCA_j^i = \frac{\Delta M_j^i}{M} = \frac{M_j^i}{M} - \frac{M_j M^i}{MM}$$

$NRCA_j^i$ = Normalized revealed comparative advantage of Canadian imports of commodity j from Indonesia

M = Canadian imports of all commodities from the world

M^i = Canadian imports of all commodities from Indonesia

M_j = Canadian imports of commodity j from the world

M_j^i = Canadian imports of commodity j from Indonesia

Source: Adapted from Sanidas and Shin, Comparison of Revealed Comparative Advantage Indices With Application to Trade Tendencies of East Asian Countries, 18.

NRCA indices were calculated for all Indonesian commodities using two-digit Harmonized Commodity Description and Coding System (HS) codes. Each commodity was then ranked from highest to lowest based on the value of the NRCA index. (See Table 3.) Commodities ranked between 1 and 31 have a positive NRCA index value, which means that they have a comparative advantage in Canadian imports. (For information on the data used in the NRCA analysis, see box "About the Data.") A larger positive number indicates a larger comparative advantage. Commodities ranked between 32 and 92 have a negative NRCA index value, which means that they have a comparative disadvantage in Canadian imports. A larger negative number indicates a larger comparative disadvantage in that market. Only those 31 commodities with a positive NRCA move on to step 2.

TABLE 3

COMMODITY RANKING BY NRCA INDEX, 2013

HS Code	Commodity	NRCA Index*	NRCA Rank
40	Rubber and articles thereof	5.05915	1
62	Woven clothing and articles of apparel	2.68482	2
61	Knitted or crocheted clothing and articles of apparel	2.67667	3
64	Footwear	1.40876	4
18	Cocoa and cocoa preparations	0.89755	5
94	Furniture, lighting, signs, prefabricated buildings	0.61523	6



9	Coffee, tea, mate, and spices	0.51867	7
92	Musical instruments	0.46250	8
44	Wood and articles of wood, including wood charcoal	0.39644	9
75	Nickel and articles thereof	0.36410	10
85	Electrical or electronic machinery and equipment	0.34292	11
3	Fish, crustaceans, molluscs, and other aquatic invertebrates	0.33810	12
48	Paper, paperboard, and articles made from these materials	0.32092	13
42	Articles of leather; saddlery and harness, travel goods, handbags, and similar containers	0.28721	14
95	Toys, games, sporting goods, and other goods for amusement	0.26573	15
76	Aluminum and articles thereof	0.26287	16
16	Meat, fish, and seafood preparations	0.24070	17
80	Tin and articles thereof	0.19104	18
55	Man-made staple fibres, staple fibre yarns and fabrics	0.12682	19
52	Cotton, cotton yarns, and cotton fabrics	0.11507	20
67	Bird skin, feathers, artificial flowers, human hair	0.11260	21
54	Man-made filaments	0.08323	22
69	Ceramic products	0.08163	23
63	Other made textile articles and worn clothing	0.08035	24
4	Dairy products, eggs, honey, and other edible animal products	0.06472	25
96	Miscellaneous manufactured articles	0.04428	26
46	Straw and other plaiting materials; basketware and wickerwork	0.04312	27
15	Fats, oils, their cleavage products, and waxes	0.04180	28
31	Fertilizers	0.01772	29
17	Sugars and sugar confectionery	0.01088	30
14	Vegetable plaiting materials and other similar vegetable products	0.00051	31
50	Silk	-0.00061	32



53	Other vegetable textile fibers, yarns, and fabrics	-0.00121	33
57	Carpets and other textile floor coverings	-0.00174	34
45	Cork and articles of cork	-0.00177	35
5	Products of animal origin not elsewhere specified	-0.00247	36
66	Umbrellas, whips, walking sticks, and similar articles	-0.00298	37
65	Headwear	-0.00368	38
58	Special woven or tufted fabric, lace, trimmings, embroidery, and tapestry	-0.00458	39
41	Raw hides, skins (other than fur skins), and leather	-0.00562	40
51	Wool, animal hair, horsehair yarns, and woven fabrics	-0.00565	41
97	Works of art, collector's pieces, and antiques	-0.00795	42
24	Tobacco and manufactured tobacco substitutes	-0.00796	43
60	Knitted or crocheted fabric	-0.01035	44
13	Lac, gums, resins, and other vegetable saps and extracts	-0.01036	45
1	Live animals	-0.01115	46
11	Milling products, malt, starches, inulin, and wheat gluten	-0.01185	47
12	Oilseed, oleaginous fruits, grain, seed, fruit, not elsewhere specified	-0.01845	48
47	Pulp of wood and the like; waste and scraps of paper or paperboard	-0.01864	49
91	Clocks and watches and parts thereof	-0.02190	50
6	Live trees and other plants (including cut flowers and ornamental foliage)	-0.02302	51
59	Coated, impregnated, covered, or laminated fabrics and industrial textiles	-0.02335	52
43	Fur skins, artificial fur, and related articles of apparel or clothing accessories	-0.02576	53
56	Wadding, felt, non-wovens, yarns, twine, cordage, and related articles	-0.02657	54
93	Arms and ammunition and parts thereof	-0.03442	55
23	Residue and waste from the food industry, and prepared animal fodder	-0.03649	56
74	Copper and articles thereof	-0.04171	57



10	Cereals	-0.04457	58
25	Salt, sulphur, earths, stone, plaster, lime, and cement	-0.05763	59
35	Albuminoidal substances, modified starches, glues, and enzymes	-0.05807	60
20	Preparations of vegetables, fruits, nuts, or other parts of plants	-0.06966	61
86	Railway, tramway locomotives, rolling stock, equipment	-0.06996	62
89	Ships, boats, and other floating structures	-0.07681	63
68	Articles of stone, plaster, cement, asbestos, mica, or similar materials	-0.08555	64
82	Tools, implements, cutlery, of base metal	-0.11569	65
83	Miscellaneous articles of base metal	-0.12355	66
70	Glass and glassware	-0.12502	67
34	Soap, washing and lubricating preparations, waxes, and related articles	-0.13131	68
21	Miscellaneous edible preparations	-0.13260	69
32	Tannins, dyes, pigments, paints, varnishes, inks, putty, and other similar substances	-0.13407	70
19	Preparations of cereals, flour, starch, or milk (including bread and pastry)	-0.13897	71
2	Meat and edible meat offal	-0.14189	72
73	Articles of iron or steel	-0.14211	73
29	Organic chemicals (including vitamins, alkaloids, and antibiotics)	-0.16450	74
7	Edible vegetables and certain roots and tubers	-0.17292	75
33	Essential oils, perfumes, cosmetics, toiletries	-0.17586	76
49	Printed books, newspapers, pictures, manuscripts, and the like	-0.17844	77
26	Ores, slag, and ash	-0.20765	78
90	Optical, medical, photographic, scientific, and technical instrumentation	-0.23096	79
8	Edible fruits and nuts	-0.23347	80
28	Inorganic chemicals and compounds of precious metals and radioactive elements	-0.24453	81



38	Miscellaneous chemical products	-0.27819	82
22	Beverages, spirits, and vinegar	-0.31085	83
88	Aircrafts and spacecraft	-0.40803	84
72	Iron and steel	-0.45483	85
99	Commodities not elsewhere specified	-0.51350	86
71	Pearls, precious stones or metals, coins, and jewellery	-0.66384	87
30	Pharmaceutical products	-0.75756	88
39	Plastics and articles thereof	-0.85212	89
84	Nuclear reactors, boilers, machinery, and mechanical appliances	-2.85487	90
27	Mineral fuels, mineral oils, bituminous substances, and mineral waxes	-3.15502	91
87	Motor vehicles, trailers, bicycles, motorcycles, and other similar vehicles	-4.27685	92
37	Photographic or cinematographic goods	n/a	n/a
79	Zinc and articles thereof	n/a	n/a

* Because the NRCA values are so small, they have been scaled up by a value of 10,000.



About the Data

Data source: Analysis at the global level was conducted using the United Nations Comtrade database on both an import and export basis. The database is a reliable source of trade data and offers the flexibility to obtain annual data by classification of goods over the appropriate period at the level of detail required. Such flexibility was not found in other reliable international trade databases, such as UNCTADStat or WTO Statistics Database.

Classification of goods: The Harmonized Commodity Description and Coding System (HS) was used in the study. The HS is an international system developed by the World Customs Organization that is used to classify traded products using standardized names and numbers. It is used by both Canada and Indonesia to classify the products they export and import.

Level of HS code: There are two levels of HS code used in the study: two-digit (HS2) and six-digit (HS6). More digits in the HS code means greater detail in the description of products. The UN Comtrade database offers trade data up to the six-digit HS level.

Frequency and period of trade data: The study uses annual data. At the time the study was conducted, only data for some products and countries were available for 2014. Thus, 2013 was the most recent year in which trade data for all countries were available. The base year chosen was 2003, which allowed a ten-year period of change to be analyzed.

Trade flow: Import data are generally believed to be more accurate and complete than export data, because imports are checked by each country's customs agency to assess duties and ensure that import restrictions (if applicable) are adhered to. Hence, data on Canadian imports from Indonesia are used to represent data on Indonesian exports to Canada.

Step 2: Refine the List Using a Competitiveness Criteria Matrix

The second step designates each of the 31 commodities as one of four types based on the following two factors:

1. Does Indonesia have an increasing or decreasing share of the Canadian import market for that commodity?
2. Does the commodity have an increasing or decreasing share of Canadian imports?

The answers to these two questions situate each commodity in the matrix in Exhibit 3:

EXHIBIT 3: COMPETITIVENESS MATRIX

	Indonesia's market share for the commodity is increasing	Indonesia's market share for the commodity is decreasing
The commodity has an increasing share of Canadian imports	Rising star	Missed opportunity
	Declining star	Retreat

Source: Adapted from the World Bank, TradeCAN: Database and Software for a Competitiveness Analysis of Nations: User Guide, 28.



- Rising star:** Indonesia is gaining market share in Canadian imports for that commodity AND the overall market for that commodity in Canadian imports is expanding.
- Declining star:** Indonesia is gaining market share of Canadian imports for that commodity BUT the overall market for that commodity in Canadian imports is shrinking.
- Missed opportunity:** Indonesia is losing market share in Canadian imports for that commodity BUT the overall market for that commodity in Canadian imports is expanding.
- Retreat:** Indonesia is losing market share in Canadian imports for that commodity AND the overall market for that commodity in Canadian imports is shrinking.

Details of the calculations to determine the type of each commodity are shown in Exhibit 4.

EXHIBIT 4: CALCULATING COMPETITIVENESS TYPE

Indonesia's market share of a commodity in Canadian total imports of that commodity (i.e., market share)

$$= \frac{\text{Canadian imports of commodity } j \text{ from Indonesia}}{\text{Canadian imports of commodity } j \text{ from the world}}$$

The commodity's share of imports in total Canadian imports (i.e., percentage of imports)

$$= \frac{\text{Canada's imports of commodity } j \text{ from the world}}{\text{Canada's imports of all commodities from the world}}$$

The two indicators are calculated for each of the 31 commodities for the base year (2003) and the most recent year (2013).

Each commodity is then classified using the following criteria:

Percentage of imports 2013 > percentage of imports 2003 AND Market share 2013 > market share 2003	Type →	Rising star
Percentage of imports 2013 < percentage of imports 2003 BUT Market share 2013 > market share 2003	Type →	Declining star
Percentage of imports 2013 > percentage of imports 2003 BUT Market share 2013 < market share 2003	Type →	Missed opportunity
Percentage of imports 2013 < percentage of imports 2003 AND Market share 2013 < market share 2003	Type →	Retreat

Source: Adapted from World Bank, TradeCAN: Database and Software for a Competitiveness Analysis of Nations: User Guide, 28.

Table 4 lists each of the 31 commodities chosen in Step 1 in order of their NRCA rank and identifies each as one of the four types.



TABLE 4

COMMODITY RANKED BY TYPE AND NRCA INDEX 2013

HS Code	Commodity	Type	NRCA Rank, 2013
40	Rubber and articles thereof	Rising star	1
62	Woven clothing and articles of apparel	Missed opportunity	2
61	Knitted or crocheted clothing and articles of apparel	Rising star	3
64	Footwear	Rising star	4
18	Cocoa and cocoa preparations	Rising star	5
94	Furniture, lighting, signs, prefabricated buildings	Missed opportunity	6
9	Coffee, tea, mate, and spices	Missed opportunity	7
92	Musical instruments	Declining star	8
44	Wood and articles of wood, including wood charcoal	Retreat	9
75	Nickel and articles thereof	Rising star	10
85	Electrical or electronic machinery and equipment	Retreat	11
3	Fish, crustaceans, molluscs, and other aquatic invertebrates	Retreat	12
48	Paper, paperboard, and articles made from these materials	Retreat	13
42	Articles of leather; saddlery and harness, travel goods, handbags, and similar containers	Rising star	14
95	Toys, games, sporting goods, and other goods for amusement	Declining star	15
76	Aluminum and articles thereof	Declining star	16
16	Meat, fish, and seafood preparations	Rising star	17
80	Tin and articles thereof	Rising star	18
55	Man-made staple fibres, staple fibre yarns and fabrics	Declining star	19
52	Cotton, cotton yarns, and cotton fabrics	Declining star	20
67	Bird skin, feathers, artificial flowers, human hair	Declining star	21
54	Man-made filaments	Retreat	22
69	Ceramic products	Retreat	23



63	Other made textile articles and worn clothing	Rising star	24
4	Dairy products, eggs, honey, and other edible animal products	Retreat	25
96	Miscellaneous manufactured articles	Declining star	26
46	Straw and other plaiting materials; basketware and wickerwork	Retreat	27
15	Fats, oils, their cleavage products, and waxes	Rising star	28
31	Fertilizers	Missed opportunity	29
17	Sugars and sugar confectionery	Rising star	30
14	Vegetable plaiting materials and other similar vegetable products	Retreat	31

Sources: UN Comtrade database; The Conference Board of Canada.

The TPSA project chose to focus on commodities identified as either rising star or missed opportunity for further consideration as potential TPSA target commodities. Those 15 commodities are listed in Table 5, ranked by their NRCA. Any commodity identified as a declining star or retreat was not considered a potential TPSA target commodity.

TABLE 5

RISING STAR AND MISSED OPPORTUNITY COMMODITIES RANKED BY NRCA INDEX 2013

HS Code	Commodity	Type	NRCA Rank, 2013
40	Rubber and articles thereof	Rising star	1
62	Woven clothing and articles of apparel	Missed opportunity	2
61	Knitted or crocheted clothing and articles of apparel	Rising star	3
64	Footwear	Rising star	4
18	Cocoa and cocoa preparations	Rising star	5
94	Furniture, lighting, signs, prefabricated buildings	Missed opportunity	6
9	Coffee, tea, mate, and spices	Missed opportunity	7
75	Nickel and articles thereof	Rising star	10
42	Articles of leather; saddlery and harness, travel goods, handbags, and similar containers	Rising star	14
16	Meat, fish, and seafood preparations	Rising star	17
80	Tin and articles thereof	Rising star	18
63	Other made textile articles and worn clothing	Rising star	24



15	Fats, oils, their cleavage products, and waxes	Rising star	28
31	Fertilizers	Missed opportunity	29
17	Sugars and sugar confectionery	Rising star	30

Sources: UN Comtrade database; The Conference Board of Canada.

Step 3: Exclude Commodities Not Commonly Produced by SMEs in Indonesia

The TPSA project focuses on assisting SMEs to export to Canada. For that reason, commodities usually produced and exported through large-scale operations were dropped from the list of potential TPSA target commodities. By applying this criterion to the 15 commodities that appear in Table 5, four commodities were dropped from consideration: rubber and articles thereof (HS 40), nickel and articles thereof (HS 75), tin and articles thereof (HS 80), and fertilizers (HS 31). The remaining 11 commodities listed in Table 6 were analyzed further.

TABLE 6

RISING STAR AND MISSED OPPORTUNITY COMMODITIES COMMONLY PRODUCED BY SMEs

HS Code	Commodity	Type	NRCA Rank, 2013
62	Woven clothing and articles of apparel	Missed opportunity	2
61	Knitted or crocheted clothing and articles of apparel	Rising star	3
64	Footwear	Rising star	4
18	Cocoa and cocoa preparations	Rising star	5
94	Furniture, lighting, signs, prefabricated buildings	Missed opportunity	6
9	Coffee, tea, maté and spices	Missed opportunity	7
42	Articles of leather; saddlery and harness, travel goods, handbags, and similar containers	Rising star	14
16	Meat, fish, and seafood preparations	Rising star	17
63	Other made textile articles and worn clothing	Rising star	24
15	Fats, oils, their cleavage products, and waxes	Rising star	28
17	Sugars and sugar confectionery	Rising star	30

Sources: UN Comtrade database; The Conference Board of Canada.

Step 4: Analyze Remaining Commodities Using Six-Digit HS Codes; Apply Three Criteria

A more detailed analysis of the 11 commodities listed in Table 6 began by examining their respective six-digit HS codes. At the six-digit level, the list of potential TPSA target commodities was further refined by three criteria:



1. The value of Canadian imports of each commodity at the six-digit HS code was at least US\$1 million in 2013.
2. At the six-digit HS code, each commodity is identified using the TradeCAN matrix as a rising star or missed opportunity.
3. The commodity is generally exported by SMEs in Indonesia.

Table 7 shows a total of 44 commodities at the HS six-digit level that meet all three criteria.⁴ The table is sorted first by TradeCAN type and second by the value of Canadian imports in 2013.

TABLE 7

COMMODITIES AT THE SIX-DIGIT HS CODE LEVEL THAT MEET THE THREE CRITERIA

HS Code	Commodity	Type	Canadian Imports from Indonesia (US\$)	
			2003	2013
620520	Mens/boys shirts (woven of cotton)	Rising star	3,954,701	20,166,993
090111	Coffee, not roasted, not decaffeinated	Rising star	5,882,128	19,818,781
640411	Sports footwear with outer soles of rubber or plastics and uppers of textile materials	Rising star	3,123,466	19,467,547
640299	Footwear with outer soles and uppers of rubber or plastics, not covering the ankle, not sports shoes	Rising star	3,186,752	9,865,612
640391	Footwear with outer soles of rubber, plastics, leather or composition leather and uppers of leather, covering the ankle, not sports shoes	Rising star	2,035,083	9,767,860
610910	T-shirts, singlets, or vests (knitted of cotton)	Rising star	1,024,491	8,738,180
610462	Womens/girls trousers, overalls, and shorts (knitted of cotton)	Rising star	266,273	7,987,868
610463	Womens/girls trousers, overalls, and shorts (knitted of synthetic fibres)	Rising star	462,213	4,913,792
610990	T-shirts, singlets, or vests (knitted of other textile material)	Rising star	485,851	4,688,867
610120	Mens/boys overcoats, ski and wind jackets (knitted of cotton)	Rising star	246,192	4,242,061
610130	Mens/boys overcoats, ski and wind jackets (knitted of man-made fibres)	Rising star	982,788	3,909,833
620311	Mens/boys suits (woven of wool or fine animal hair)	Rising star	68,669	3,445,302
160558	Snails, other than sea snails	Rising star	1,188,154 ⁵	3,120,715

⁴ Each of the 44 HS six-digit commodities is a subset of the 11 two-digit commodities shown in Table 6. No HS six-digit commodity from "Other made textile articles and worn clothing" made the list in Table 7 because their value of imports was less than US\$1 million in 2013.

⁵ At the time of the analysis, the oldest data available for this HS Code was 2012 for both Canadian imports from Indonesia and from the world.

610443	Womens/girls dresses (knitted of synthetic fibres)	Rising star	10,658	3,028,835
610442	Womens/girls dresses (knitted of cotton)	Rising star	29,757	2,738,868
160510	Crab, prepared or preserved	Rising star	953,320	2,690,456
640419	Footwear with outer soles of rubber or plastics and uppers of textile materials—not sports footwear	Rising star	567,891	2,661,846
610220	Womens/girls overcoats, ski and wind jackets (knitted of cotton)	Rising star	737,159	2,547,816
610620	Womens/girls blouses and shirts (knitted of man-made fibres)	Rising star	362,257	2,376,513
940179	Seats with metal frames—not upholstered	Rising star	259,619	2,322,367
170290	Sugar, not elsewhere specified (including inverted sugar)	Rising star	101,594	2,142,640
610444	Womens/girls dresses (knitted of artificial fibres)	Rising star	20,462	1,890,539
610230	Womens/girls overcoats, ski and wind jackets (knitted of man-made fibres)	Rising star	599,703	1,779,315
940320	Metal furniture not for office use	Rising star	575,540	1,673,567
620432	Womens/girls jackets and blazers (woven of cotton)	Rising star	263,442	1,178,828
620433	Womens/girls jackets and blazers (woven of synthetic fibres)	Rising star	216,263	1,169,310
620442	Womens/girls dresses (woven of cotton)	Rising star	249,928	1,134,577
610433	Womens/girls jackets and blazers (knitted of synthetic fibres)	Rising star	493	1,114,705
940360	Wooden furniture for other use	Missed opportunity	15,079,135	22,105,548
940350	Wooden furniture for bedroom use	Missed opportunity	5,361,553	13,272,119
620640	Womens/girls blouses and shirts (woven of man-made fibres)	Missed opportunity	4,509,282	9,144,778
620193	Mens/boys anoraks, ski and wind jackets (woven of man-made fibres)	Missed opportunity	5,355,292	7,837,281
620293	Womens/girls anoraks, ski and wind jackets (woven of man-made fibres)	Missed opportunity	2,519,087	4,803,718
620443	Womens/girls dresses (woven of synthetic fibres)	Missed opportunity	1,670,898	3,923,113
940161	Seats with wooden frames—upholstered	Missed opportunity	1,939,408	3,134,851



180500	Cocoa powder, not containing added sugar or other sweetening	Missed opportunity	1,745,366	1,899,672
090411	Pepper, neither crushed nor ground	Missed opportunity	1,591,170	2,894,264
420292	Golf bags, tool bags, and other containers—plastic or textile surface	Missed opportunity	1,368,473	2,191,495
610520	Mens/boys shirts (knitted of man-made fibres)	Missed opportunity	928,062	2,097,362
090620	Cinnamon and cinnamon-tree flowers—crushed or ground	Missed opportunity	1,654,642	1,167,123
620444	Womens/girls dresses (woven of artificial fibres)	Missed opportunity	596,073	1,125,240
151319	Coconut (copra) oil and its fractions—refined but not chemically modified	Missed opportunity	186,971	1,122,005
620213	Womens/girls overcoats, raincoats, capes, and cloaks (woven of man-made fibres)	Missed opportunity	318,130	1,088,160
620192	Mens/boys anoraks, ski and wind jackets (woven of cotton)	Missed opportunity	710,818	1,070,415

Sources: UN Comtrade database; The Conference Board of Canada.

Step 5: Group Similar Commodities Into Broad Commodity Groups

From the list of 44 commodities in Table 7, 35 could be grouped into broader commodity groups while nine were left ungrouped due to the nature of the product. The latter are:

- HS 090111 Coffee, not roasted, not decaffeinated
- HS 090411 Pepper, neither crushed nor ground
- HS 090620 Cinnamon and cinnamon-tree flowers, crushed or ground
- HS 151319 Coconut (copra) oil or fractions, simply refined
- HS 160510 Crab, prepared or preserved
- HS 160558 Snails, other than sea snails
- HS 170290 Sugar, not elsewhere specified (including inverted sugar)
- HS 180500 Cocoa powder, not containing added sugar or other sweetening
- HS 420292 Golf bags, tool bags, and other containers—plastic or textile surface

After grouping, the 44 commodities form 14 commodities or commodity groups for which Indonesia has relatively high competitiveness in the Canadian market. (See Table 8.)

TABLE 8
INDONESIAN COMMODITIES/COMMODITY GROUPS WITH RELATIVELY HIGH COMPETITIVENESS IN THE CANADIAN MARKET

Commodity or Commodity Group	HS Code	Commodity	Type	Canadian Imports from Indonesia (US\$)	
				2003	2013
Coffee	090111	Coffee, not roasted, not decaffeinated	Rising star	5,882,128	19,818,781
Pepper	090411	Pepper, neither crushed nor ground	Missed opportunity	1,591,170	2,894,264
Cinnamon	090620	Cinnamon and cinnamon-tree flowers, crushed or ground	Missed opportunity	1,654,642	1,167,123
Coconut (copra) oil	151319	Coconut (copra) oil or fractions, simply refined	Missed opportunity	186,971	1,122,005
Crab	160510	Crab, prepared or preserved	Rising star	953,320	2,690,456
Snails	160558	Snails, other than sea snails	Rising star	1,188,154 ⁶	3,120,715
Sugar	170290	Sugar, not elsewhere specified (including inverted sugar)	Rising star	101,594	2,142,640
Cocoa	180500	Cocoa powder, not containing added sugar or other sweetening	Missed opportunity	1,745,366	1,899,672
Golf bags, tool bags, and other containers	420292	Golf bags, tool bags, and other containers—plastic or textile surface	Missed opportunity	1,368,473	2,191,495
Apparel—coats, jackets and blazers (CJB)	610120	Mens/boys overcoats, ski and wind jackets (knitted of cotton)	Rising star	246,192	4,242,061
	610130	Mens/boys overcoats, ski and wind jackets (knitted of man-made fibres)	Rising star	982,788	3,909,833
	620311	Mens/boys suits (woven of wool or fine animal hair)	Rising star	68,669	3,445,302
	610220	Womens/girls overcoats, ski and wind jackets (knitted of cotton)	Rising star	737,159	2,547,816
	610230	Womens/girls overcoats, ski and wind jackets (knitted of man-made fibres)	Rising star	599,703	1,779,315
	620432	Womens/girls jackets and blazers (woven of cotton)	Rising star	263,442	1,178,828

⁶ 2012 was used as the base year due to the unavailability of data prior to that year.



	620433	Womens/girls jackets and blazers (woven of synthetic fibres)	Rising star	216,263	1,169,310
	610433	Womens/girls jackets and blazers (knitted of synthetic fibres)	Rising star	493	1,114,705
	620193	Mens/boys anoraks, ski and wind jackets (woven of man-made fibres)	Missed opportunity	5,355,292	7,837,281
	620293	Womens/girls anoraks, ski and wind jackets (woven of man-made fibres)	Missed opportunity	2,519,087	4,803,718
	620213	Womens/girls overcoats, raincoats, capes, and cloaks (woven of man-made fibres)	Missed opportunity	318,130	1,088,160
	620192	Mens/boys anoraks, ski and wind jackets (woven of cotton)	Missed opportunity	710,818	1,070,415
Apparel— dresses, shirts, shorts and trousers (DSST)	620520	Mens/boys shirts (woven of cotton)	Rising star	3,954,701	20,166,993
	610910	T-shirts, singlets, or vests (knitted of cotton)	Rising star	1,024,491	8,738,180
	610462	Womens/girls trousers, overalls, and shorts (knitted of cotton)	Rising star	266,273	7,987,868
	610463	Womens/girls trousers, overalls, and shorts (knitted of synthetic fibres)	Rising star	462,213	4,913,792
	610990	T-shirts, singlets, or vests (knitted of other textile material)	Rising star	485,851	4,688,867
	610443	Womens/girls dresses (knitted of synthetic fibres)	Rising star	10,658	3,028,835
	610442	Womens/girls dresses (knitted of cotton)	Rising star	29,757	2,738,868
	610620	Womens/girls blouses and shirts (knitted of man-made fibres)	Rising star	362,257	2,376,513
	610444	Womens/girls dresses (knitted of artificial fibres)	Rising star	20,462	1,890,539
	620442	Womens/girls dresses (woven of cotton)	Rising star	249,928	1,134,577
	620640	Womens/girls blouses and shirts (woven of man-made fibres)	Missed opportunity	4,509,282	9,144,778
	620443	Womens/girls dresses (woven of synthetic fibres)	Missed opportunity	1,670,898	3,923,113



	610520	Mens/boys shirts (knitted of man-made fibres)	Missed opportunity	928,062	2,097,362
	620444	Womens/girls dresses (woven of artificial fibres)	Missed opportunity	596,073	1,125,240
Footwear	640299	Footwear with outer soles and uppers of rubber or plastics, not covering the ankle, not sports shoes	Rising star	3,186,752	9,865,612
	640391	Footwear with outer soles of rubber, plastics, leather or composition leather and uppers of leather, covering the ankle, not sports shoes	Rising star	2,035,083	9,767,860
	640411	Sports footwear with outer soles of rubber or plastics and uppers of textile materials	Rising star	3,123,466	19,467,547
	640419	Footwear with outer soles of rubber or plastics and uppers of textile materials—not sports footwear	Rising star	567,891	2,661,846
Furniture—metal	940179	Seats, with metal frames, not upholstered	Rising star	259,619	2,322,367
	940320	Metal furniture not for office use	Rising star	575,540	1,673,567
Furniture—wooden	940161	Seats with wooden frames—upholstered	Missed opportunity	1,939,408	3,134,851
	940350	Wooden furniture for bedroom use	Missed opportunity	5,361,553	13,272,119
	940360	Wooden furniture for other use	Missed opportunity	15,079,135	22,105,548

Sources: UN Comtrade database; The Conference Board of Canada.

Step 6: Exclude Commodities With Significant Social or Environmental Concerns or That Have Poor Future Market Prospects

The TPSA project engaged Trade Facilitation Office (TFO) Canada to narrow the list further by conducting a desk analysis of the 14 commodities/commodity groups listed in Table 8 based on the following factors:

- market factors that are not evident in the historical trade data—e.g., prospects for the commodity;
- social and environmental sustainability.

Based on TFO's desk analysis, the following six commodities or commodity groups were excluded by the TPSA project from further consideration:

- crab (HS 160510)
- snails (HS 160558)
- cinnamon (HS 090620)
- cocoa (HS 180500)
- golf bags, tool bags, and other containers (HS 420292)
- metal furniture (HS 940320 and HS 940179)



This left the following eight commodities/commodity groups:

- apparel: coats, jackets, and blazers (CJB)
- apparel: dresses, shirts, shorts, and trousers (DSST)
- coconut and palm sugar
- coconut oil
- coffee
- footwear
- pepper
- wooden furniture

Step 7: Narrow List to Final Three Commodities/Commodity Groups Using Eight Criteria

The choice of the final three commodities was based on the evaluation framework described below and was supported by evidence and analysis provided by TFO Canada and gender equality, environment, and trade experts at TPSA. The purpose of the evaluation criteria was to select three commodities that have the highest potential for export to the Canadian market. These three commodities will receive in-depth capacity development and support by the TPSA project to improve their export capacity.

The framework was comprised of the following eight criteria:

1. *Global market growth potential:*
 - Is the world market for the commodity growing?
 - Is the world market share for the commodity growing?
 - Is Indonesia increasing its share in world markets for that commodity?
2. *Canadian market growth potential:*
 - Is the Canadian market for the commodity group growing?
 - Is the commodity increasing its share of total Canadian imports?
 - Are there specific characteristics that make the Canadian import market particularly attractive?
3. *Trade barriers:* The extent to which trade barriers exist for Indonesian exporters to Canada.
4. *Indonesian sector support:* The extent to which the commodity group is a national priority as evidenced by favourable national policies or initiatives.
5. *Poverty impact:* The extent to which project activities in the commodity group will have an impact on poverty reduction.
6. *Job creation:* The extent to which the commodity group will generate stable jobs that pay fair wages.
7. *Gender outcomes:* The extent to which the project can improve gender outcomes in the commodity group.
8. *Environmental outcomes:* The extent to which the common economic practices in the commodity group generate significant adverse environmental effects.

The methodology used to assign points for each criterion is explained in Table 9.



TABLE 9

EVALUATION FRAMEWORK

Criterion	Scoring Notes
Global market growth potential	<ul style="list-style-type: none"> <i>Indicator 1: Is the world market for the commodity growing?</i> Yes = 1 point; No = 0 points <p>Calculated as the compound annual growth rate (CAGR) of the value of total world exports of the commodity between 2006 and 2014.</p> <ul style="list-style-type: none"> <i>Indicator 2: Has the commodity accounted for a larger share of world exports between 2006 and 2014? Yes = 1 point; No = 0 points</i> <p>Calculated as:</p> $\frac{\text{The value of world exports of the commodity}}{\text{The value of world exports of all commodities}}$ <ul style="list-style-type: none"> <i>Indicator 3: Has Indonesia increased its share of world exports for the commodity between 2006 and 2014? Yes – 1 point; No – 0 points</i> <p>Calculated as:</p> $\frac{\text{The value of Indonesia's world exports of the commodity}}{\text{The value of total world exports of the commodity}}$
Canadian market growth potential	<ul style="list-style-type: none"> <i>Indicator 1: Has the value of Canadian imports of the commodity grown between 2006 and 2014? Yes = 1 point; No = 0 points</i> <p>Calculated as the compound annual growth rate (CAGR) of the value of Canadian imports of the commodity between 2006 and 2014.</p> <ul style="list-style-type: none"> <i>Indicator 2: Has the commodity accounted for a larger share of Canada's import market for the commodity between 2006 and 2014? Yes = 1 point; No = 0 points</i> <p>Calculated as:</p> $\frac{\text{The value of Canadian imports from Indonesia of the commodity}}{\text{The value of Canadian imports from the world of the commodity}}$ <ul style="list-style-type: none"> <i>Indicator 3: Are there specific characteristics that make the Canadian import market particularly attractive, e.g. price trends, growth potential, differentiation opportunities? Yes = 1 point; No = 0 points</i> <p>Calculated by expert judgement</p>



Trade barriers	<p><i>How many of the following types of barriers to exporting to Canada does Indonesia face for the commodity:</i></p> <ol style="list-style-type: none">1. Export capacity development constraints2. Regulatory barriers3. Other barriers to exporting (e.g., infrastructure, finance, etc.)
	<p>Calculated as:</p> <ul style="list-style-type: none">– 3 points if there are no important barriers to exporting to Canada;– 2 points if only one type of the above-listed barriers to exporting to Canada exists;– 1 point if two types of the above-listed barriers to exporting to Canada exist;– 0 points if all three types of the above-listed barriers to exporting to Canada exist.
Indonesian sector support	<p><i>Is the commodity/sector a government priority?</i></p>
	<p>Calculated as:</p> <ul style="list-style-type: none">– 3 points if the commodity is a clear national priority as evidenced by a range of national policies and public-/private-level initiatives;– 2 points if the commodity is subject to favourable national policies, yet limited public-/private-level initiatives exist;– 1 point if the commodity is subject to limited favourable national policies and limited public-/private-level initiatives;– 0 points if the commodity is not a national priority, as evidenced by a lack of national policies and/or public-/private-level initiatives for the sector.
Poverty impact	<p><i>How much potential is there for the project to reduce poverty in the sector and the wider community?</i></p> <p>Commodities receive a score between 0 (minimum impact on poverty reduction) and 3 (large impact on poverty reduction). The scores are based on expert evaluation of whether the sector has a large number of poor people and whether there are large numbers of poor people in the commodity supply chain.</p>
Job creation	<p><i>How many and what type of jobs are created by the commodity sector?</i></p> <p>Calculated as:</p> <ul style="list-style-type: none">– 3 points if the commodity sector generates many stable jobs that pay fair wages;– 2 points if the commodity sector generates many jobs, but the employment is short-term, contract-based with little job security, and/or the wages are not fair;– 1 point if the commodity sector generates a moderate number of jobs, and the employment is short-term, contract-based with little job security, and the wages are not fair;– 0 points if the commodity sector generates few jobs.



Gender outcomes *How much potential is there for the project to improve gender outcomes in the sector?*

Calculated as:

- 3 points if there is high potential;
- 2 points if there is moderate potential;
- 1 point if there is limited potential;
- 0 points if there is no potential.

Environmental outcomes *Do the sector's common economic practices generate significant adverse environmental effects?*

Calculated as:

- 3 points if the sector's common economic practices generate minimal adverse environmental effects;
- 2 points if the sector's common economic practices generate moderate adverse environmental effects;
- 1 point if the sector's common economic practices generate significant adverse environmental effects in many areas, but a few good environmental management practices or examples exist;
- 0 points if the sector's common economic practices generate significant adverse environmental effects in many areas, with no examples of good environmental management practices.

Table 10 provides an overview of the final scores for each commodity group examined under the TPSA project. The detailed scoring rationales are presented in Appendix A.



TABLE 10
FINAL SCORES FOR TPSA PROJECT'S EIGHT COMMODITIES/COMMODITY GROUPS

	Global market growth potential	Canadian market growth potential	Trade barriers	Indon- esian sector support	Poverty impact	Job creation	Gender outcomes	Envir- onmental outcomes	Score (%)	Rank
Weighting (out of 100)	5	35	20	5	12.5	12.5	5	5	100	
Footwear	3	2.5	2	3	3	2	2	0.5	77.50	1
Coffee	2	2	2	2	3	2	3	2	72.50	2
Apparel: DSST	3	2.5	1	3	2.5	2	2.5	1	70.42	3
Coconut and palm sugar	3	2	2	2	2	1.5	3	3	69.58	4
Wooden furniture	1	1.5	2	3	3	2	2	2	65.00	5
Apparel: CJB	3	2	1	3	2.5	2	2.5	1	64.58	6
Coconut oil	3	1	2.5	1	2.5	2	2.5	3	62.92	7
Pepper	2	1	2	2	1	1	2	2	46.67	8



Based on the evaluation framework, the three commodity groups recommended for in-depth capacity development and support under the TPSA project are:

1. Footwear
2. Coffee
3. Apparel (DSST—dresses, shirts, shorts, and trousers)

Most importantly, all three commodity groups have seen growth in the Canadian market and opportunity exists for Indonesia to capture a greater share of the Canadian market.

Conclusions

The TPSA project aims to reduce poverty and increase sustainable economic growth in Indonesia by expanding Indonesian exports to Canada and encouraging Canadian investment in Indonesia. To achieve the project's goal of expanding Indonesian exports to Canada, project activities will focus on three commodities exported by Indonesian SMEs that have a good chance of success in the Canadian market. The methodology to select the commodities centred on their comparative advantage, competitiveness type, and whether the commodity is commonly produced by SMEs, as well as analysis of market, social, and environmental factors. Based on the analysis, three commodities rose to the top of the list and were chosen as the project's target commodities: footwear, coffee, and apparel (DSST).

Appendix A: Detailed Scoring and Rationale

GLOBAL MARKET GROWTH POTENTIAL		Pepper	Coconut and palm sugar	Coconut oil	Coffee	
Score: 2 points						Score: 2 points
<i>Indicator 1: 1 point</i> From 2006 to 2014 the global export market for pepper grew at a CAGR of 19.5 per cent.		Score: 3 points	<i>Indicator 1: 1 point</i> From 2006 to 2014 the global export market for coconut and palm sugar grew at a CAGR of 9.4 per cent.	<i>Indicator 2: 1 point</i> Coconut and palm sugar accounted for a larger share of world exports between 2006 (0.004 per cent) and 2014 (0.008 per cent).	<i>Indicator 2: 1 point</i> Coconut oil accounted for a larger share of world exports between 2006 (0.004 per cent) and 2014 (0.008 per cent).	<i>Indicator 1: 1 point</i> From 2006 to 2014 the global export market for coffee grew at a CAGR of 7.4 per cent.
<i>Indicator 2: 1 point</i> Pepper accounted for a larger share of world exports between 2006 (0.004 per cent) and 2014 (0.012 per cent).			<i>Indicator 3: 1 point</i> Indonesia's share of world coconut and palm sugar exports increased from 0.45 per cent in 2006 to 2.61 per cent in 2014.	<i>Indicator 3: 1 point</i> Indonesia's share of world coconut oil exports increased from 17.23 per cent in 2006 to 28.67 per cent in 2014.		<i>Indicator 2: 1 point</i> Coffee accounted for a larger share of world exports between 2006 (0.094 per cent) and 2014 (0.111 per cent).
<i>Indicator 3: 0 points</i> Indonesia's share of world pepper exports decreased from 18.02 per cent in 2006 to 17.37 per cent in 2014.						<i>Indicator 3: 0 points</i> Indonesia's share of world coffee exports decreased from 5.94 per cent in 2006 to 5.46 per cent in 2014.
						Apparel (coats, jackets, and blazers—CJB)
						Score: 3 points
						<i>Indicator 1: 1 point</i> From 2006 to 2014 the global export market for apparel grew at a CAGR of 5.6 per cent.
						<i>Indicator 2: 1 point</i> CJB apparel accounted for a larger share of world exports between 2006 (0.0001823 per cent) and 2014 (0.0001878 per cent).
						<i>Indicator 3: 1 point</i> Indonesia's share of world CJB apparel exports increased from 2.39 per cent in 2006 to 2.83 per cent in 2014.
						Apparel (dresses, shorts, shirts, and trousers—DSST)
						Score: 3 points
						<i>Indicator 1: 1 point</i> From 2006 to 2014 the global export market for DSST apparel grew at a CAGR of 10.4 per cent.
						<i>Indicator 2: 1 point</i> DSST apparel accounted for a larger share of world exports between 2006 (0.00025 per cent) and 2014 (0.00037 per cent).
						<i>Indicator 3: 1 point</i> Indonesia's share of world DSST apparel exports increased from 2.12 per cent in 2006 to 5.30 per cent in 2014.
						Footwear
						Score: 3 points
						<i>Indicator 1: 1 point</i> From 2006 to 2014 the global export market for footwear grew at a CAGR of 10.1 per cent.
						<i>Indicator 2: 1 point</i> Footwear accounted for a larger share of world exports between 2006 (0.00023 per cent) and 2014 (0.00033 per cent).
						<i>Indicator 3: 1 point</i> Indonesia's share of world footwear exports increased from 2.12 per cent in 2006 to 5.30 per cent in 2014.
						Wooden furniture
						Score: 1 point
						<i>Indicator 1: 1 point</i> From 2006 to 2014 the global export market for wooden furniture grew at a CAGR of 2.1 per cent.
						<i>Indicator 2: 0 points</i> Wooden furniture accounted for a smaller share of world exports between 2006 (0.00026 per cent) and 2014 (0.00026 per cent).
						<i>Indicator 3: 0 points</i> Indonesia's share of world wooden furniture exports decreased from 3.41 per cent in 2006 to 2.62 per cent in 2014.



CANADIAN MARKET GROWTH POTENTIAL

Pepper	Coconut and palm sugar	Coconut oil	Coffee
Score: 1 point	Score: 2 points	Score: 1 point	Score: 2 points
<p><i>Indicator 1: 1 point</i> The Canadian import market for pepper grew at a CAGR of 15.2 per cent between 2006 and 2014.</p> <p><i>Indicator 2: 0 points</i> Indonesia's share in the Canadian import market for pepper decreased from 6.96 per cent in 2006 to 6.27 per cent in 2014.</p> <p><i>Indicator 3: 0 points</i> Indonesian pepper is about 15 per cent more expensive compared to prices from two key competitors—India and Vietnam. Pepper imports into Canada are highly concentrated in terms of the number of importers.</p>	<p><i>Indicator 1: 1 point</i> The import data for this commodity are not relevant since it includes sugars that are not palm or coconut (the U.S. imports are mainly derived from corn and are not relevant to this discussion). However, Indonesian exports of palm and coconut sugar have increased substantially from a low base.</p> <p><i>Indicator 2: 1 point</i> Indonesia's share in the Canadian import market for coconut and palm sugar increased from 0.61 per cent in 2006 to 6.09 per cent in 2014.</p> <p><i>Indicator 3: 0 points</i> The overall market is very small for coconut and palm sugar and the number of buyers is limited.</p>	<p><i>Indicator 1: 1 point</i> The Canadian import market for coconut oil grew at a CAGR of 25 per cent between 2006 and 2014.</p> <p><i>Indicator 2: 0 points</i> Indonesia's share in the Canadian import market for coconut oil decreased from 7.22 per cent in 2006 to 4.88 per cent in 2014.</p> <p><i>Indicator 3: 1 point</i> Significant growth opportunities exist, in particular through further exploiting geographic labelling, organic certification, new niches within the market for fair trade and organic products, and shifting consumer preferences such as the rise in single/multi serve K-cup machines. Indonesian coffee commands a premium price in the Canadian import market.</p>	<p><i>Indicator 1: 1 point</i> The Canadian import market for coffee grew at a CAGR of 9.1 per cent between 2006 and 2014.</p> <p><i>Indicator 2: 0 points</i> Indonesia's share in the Canadian import market for coffee decreased from 4.65 per cent in 2006 to 4.07 per cent in 2014.</p> <p><i>Indicator 3: 0 points</i> Significant growth opportunities exist, in particular through further exploiting geographic labelling, organic certification, new niches within the market for fair trade and organic products, and shifting consumer preferences such as the rise in single/multi serve K-cup machines. Indonesian coffee commands a premium price in the Canadian import market.</p>
Wooden furniture	Footwear	Apparel (dresses, shorts, shirts, and trousers—DSST)	Apparel (coats, jackets, and blazers—CJB)
Score: 1.5 points	Score: 2.5 points	Score: 2.5 points	Score: 2 points
<p><i>Indicator 1: 1 point</i> The Canadian import market for wooden furniture grew at a CAGR of 2.9 per cent between 2006 and 2014.</p> <p><i>Indicator 2: 0 points</i> Indonesia's share in the Canadian import market for wooden furniture decreased from 2.10 per cent in 2006 to 1.78 per cent in 2014.</p> <p><i>Indicator 3: 0.5 points</i> Although the value of Indonesian imports is relatively small, Indonesia is price-competitive in certain niche markets, especially teak.</p>	<p><i>Indicator 1: 1 point</i> The Canadian import market for footwear grew at a CAGR of 10.9 per cent between 2006 and 2014.</p> <p><i>Indicator 2: 1 point</i> Indonesia's share in the Canadian import market for footwear increased from 1.25 per cent in 2006 to 4.24 per cent in 2014.</p> <p><i>Indicator 3: 0.5 points</i> Indonesia's prices are very close to its major competitors, but Indonesia lacks brand presence in Canada and suffers from small shipments from SME producers.</p>	<p><i>Indicator 1: 1 point</i> The Canadian import market for DSST apparel grew at a CAGR of 12.6 per cent between 2006 and 2014.</p> <p><i>Indicator 2: 1 point</i> Indonesia's share in the Canadian import market for DSST apparel increased from 2.69 per cent in 2006 to 4.53 per cent in 2014.</p> <p><i>Indicator 3: 0.5 points</i> Indonesian import prices in most sub-segments are close to the average import price in the Canadian market. However, domestic demand for the apparel sector in Canada is growing and Indonesia is expected to continue to make inroads into the Canadian market.</p>	<p><i>Indicator 1: 1 point</i> The Canadian import market for CJB apparel grew at a CAGR of 6.7 per cent between 2006 and 2014.</p> <p><i>Indicator 2: 1 point</i> Indonesia's share in the Canadian import market for CJB apparel increased from 2.21 per cent in 2006 to 3.92 per cent in 2014.</p> <p><i>Indicator 3: 0 points</i> Relative to its competitors, Indonesia is not a major player in CJB apparel.</p>





TRADE BARRIERS	Pepper	Coconut and palm sugar	Coconut oil	Coffee
Score: 2 points	Exporters interviewed by TPSA staff in Jakarta noted that they have no issues finding buyers in the international market. They stated that export processes—taxation, licensing, transportation logistics, and access to finance—are not major constraints for their businesses. Difficulties do exist in meeting technical requirements in destination countries, especially the organic certification, where extra efforts are needed and there is a cost to raising farmer awareness and empowerment.	Score: 2 points As with pepper, there appears to be only one important barrier to exporting—organic certification.	Score: 2.5 points Since the sector has traditionally been linked to production for the domestic market and for an undifferentiated product such as cooking coconut oil, limited investments have been made by the downstream part of the value chain (processors and refiners) to obtain certifications as differentiated products such as organic, sustainable, or other qualities with which to increase the final value of the production. Yet, to market virgin coconut oil abroad, organic certification is a very significant issue. Generally, Indonesian coconuts have not yet been organically processed and certification can proceed only for limited production areas. A related standards issue is that for virgin coconut oil, export quality standards are also very strict. Such standards are not required for cooking coconut oil With no other important barriers to trade, the commodity gets an overall score of 2.5.	Score: 2 points Indonesian exporters interviewed by TPSA staff in Jakarta indicated that problems often encountered in other countries with commodity exports—such as financing, taxation, licensing, or finding foreign markets—were not observed in the coffee export market. However, they found transportation and logistics to be quite challenging.



Wooden furniture	Footwear	Apparel (dresses, shorts, shirts, and trousers—DSST)	Apparel (coats, jackets, and blazers—CJB)
Score: 2 points There is scope for Indonesian exports to diversify to as-yet-untapped markets and reduce the degree to which exports remain concentrated in a few major markets. Exports are concentrated almost fully in the U.S., EU, and Japan. The Indonesia Furniture Industry and Handicraft Association (ASMINDO) is working to support companies to diversify buyers. According to a former ASMINDO representative, the main challenge for SMEs has been marketing and promotion, as capacity is not high in these areas; they are more focused on production. SMEs would benefit from marketing strategies and increased production efficiency. Other challenges include improving quality control, and financial and organizational management for smaller companies. Given these logistical barriers, furniture gets an overall score of 2.	Score: 2 points The footwear industry maintains its good prospects owing to the country's self-sufficiency in terms of raw materials, competitive labour, and, to some extent, modern logistical facilities for this sector. As the world's sixth-largest footwear exporter, Indonesia has not yet consistently entered other markets beyond the U.S. and Europe. Since 2008, footwear has been one of the best-performing export products for Indonesia and its export value continues to grow. While 2013 BPS data indicated that SME businesses are growing, the Indonesian Footwear Association (APRISINDO) has expressed some concern regarding the challenges SMEs face. These challenges include the high cost of logistics and electricity, the inability to respond to peak demands, relatively high input costs (tariffs on imported rubber, components, and leather), and lack of access to components where large manufacturers dominate. SMEs are also affected by rising minimum wages and restrictions relating to a flexible workforce. Given the rising cost of production, the overall score for footwear has been set at 2.	Score: 1 point The key challenges in Indonesia's textile sector include low levels of investment, declining technology, low productivity, high average tariffs, high energy costs, contract labour, empowerment of upstream local industries, and specific challenges for SMEs, particularly in terms of meeting required certifications and export qualifications. Moreover, the Indonesian government has not signed any trade agreements with the U.S. or the EU to allow textile exports to benefit from special tariffs, which affects Indonesia's competitiveness globally.	Score: 1 point The key challenges in Indonesia's textile sector include low levels of investment, declining technology, low productivity, high average tariffs, high energy costs, contract labour, empowerment of upstream local industries, and specific challenges for SMEs, particularly in terms of meeting required certifications and export qualifications. Given the regulatory and logistical barriers, the overall score for this commodity has been set at 1.

INDONESIAN SECTOR SUPPORT

Pepper	Coconut and palm sugar	Coconut oil	Coffee
<p>Score: 2 points</p> <p>The government has prioritized the pepper sector in the past. However, it is unclear whether support continues at the same level today.</p> <p>The Indonesian government took several steps to improve the competitiveness of smallholder farmers in the global market, including providing support to smallholders to apply for international standards, namely ISO 9001 (year 2000), ISO 14000, Hazard Analysis and Critical Control Point (HACCP), and Sanitary and Phytosanitary Standards (SPS). In 2010, the Indonesian Agriculture Department set up a program to improve productivity and quality in the pepper sector, including developing upstream added value, empowering farmers, strengthening institutions, and facilitating access to capital. The Association of Indonesian Pepper Exporters (APE) also plays a role. Originally established to provide support for improving cultivation and management practices and supporting pepper exporters, the organization now appears to be playing a smaller role, mainly recording export transactions.</p> <p>In addition to government efforts, bilateral development partners and NGOs have carried out initiatives aimed at improving outcomes in the pepper sector. Of these, the Sustainable Spice Initiative is one of the most prominent.</p>	<p>Score: 2 points</p> <p>Coconut and palm sugars have limited national government technical support in Indonesia, but the Ministry of Trade has provided trade promotion services. They get strong support from select sub-national governments.</p> <p>Coconut sugar is mostly produced for local consumption, either for households or for the food industry (noodles), with the remainder exported. Palm sugar is a much smaller industry, produced almost exclusively for the domestic market.</p> <p>Potential for growth for both types of sugar exists, especially for organic coconut sugar for export, and for palm sugar ethanol for domestic consumption or export. Government has encouraged planting of <i>oren</i> trees (the plant from which palm sugar is largely derived in Indonesia), which would have higher productivity.</p> <p>There are multi-stakeholder and donor-funded initiatives to support the improvement of coconut and palm sugars (the problems are poor hygiene and poor production processes) and improvements in the wages, conditions, rights, gender equality, and economic security of workers in the value chain.</p>	<p>Score: 1 point</p> <p>The coconut-oil sector has been somewhat neglected by policy-makers. This is likely due to a national policy focused on large-scale expansion of the palm-oil sector.</p>	<p>Score: 2 points</p> <p>Indonesia produced an estimated 11 million 60-kilogram bags of coffee in 2015. Of this total, it is estimated that 7.6 million were exported, with the balance consumed domestically. Today, more than 90 per cent of Indonesia's coffee is grown by smallholders. Some of this production is organic and many farmers' cooperatives and exporters are internationally certified to market organic coffee.</p> <p>Notwithstanding limited government support, members of the international development community are working to address challenges in the coffee supply chain in Indonesia. For example, IFC has been working with ECOM Coffee Group for nearly a decade to establish farmer training centers with the aim of improving productivity and sustainable agricultural practices in North Sumatra. Nestlé has been working with the government of Indonesia since 2000 to support research and development efforts related to improving coffee production, and has invested in coffee-tasting training for farmers in the Lampung region since the early 1990s. Several non-governmental organizations and bilateral development partners have also invested in farmer aggregation and strengthening the capacity of cooperatives.</p> <p>According to the Indonesian Coffee Exporters Association (AEKI), Indonesian farmers are planning to expand their coffee plantations while rejuvenating old plantations through intensification programs. By increasing acreage, Indonesia's coffee production in the coming ten years is targeted to reach between 900,000 and 1.2 million tonnes per year.</p>





Wooden furniture	Footwear	Apparel (dresses, shorts, shirts, and trousers—DSST)	Apparel (coats, jackets, and blazers—CJB)
Score: 3 points <p>This industry is labour-intensive and most enterprises are in the SME category. The government has gone to great lengths to support them because they are considered very important not only as a source of foreign currency, but also for job creation and poverty alleviation.</p> <p>In addition, international development partners have supported the industry, particularly in terms of small-scale furniture makers. ASMINDO is also working to support the industry.</p> <p>Government has targeted exports of US\$5 billion over the next five years and is helping to facilitate the opening of non-traditional markets in the Middle East, Mexico, Latin America, and parts of Africa. SMEs are the main beneficiaries.</p> <p>ASMINDO is active in the promotion and marketing of products both internationally and domestically.</p>	Score: 3 points <p>Indonesia's cheap labour force, huge domestic market, and the power of regional integration offer the possibility for resurgence in Indonesia's footwear export sector. There are also positive signs for investment in this sector.</p> <p>In the recent past, the Government of Indonesia has provided dynamic support for shoe-cluster SMEs. The government has been highly supportive of the footwear industry in terms of taxation, technology development, human resources, and quality enhancement. Support to help build capacity in design and production and to improve quality control is also evident.</p> <p>This is a priority economic sector.</p> <p>APRISINDO is active in the promotion and marketing of SME footwear products both internationally and domestically.</p>	Score: 3 points <p>The government has strongly supported the textile industry and gender-sensitive policies.</p> <p>The Ministry of Industry has two main institutions to support the development of all Indonesian industries: the Balai Besar (Balai) and the Balai Riset dan Standardisasi (Baristand). Their aim is to provide different industry sectors with expert services to improve the quality of their products, thereby ensuring compliance with international and national standards.</p>	Score: 3 points <p>The government has strongly supported the textile industry, including batik, and implemented gender-sensitive policies.</p> <p>The Ministry of Industry has two main institutions to support the development of all Indonesian industries: the Balai Besar (Balai) and the Balai Riset dan Standardisasi (Baristand). Their aim is to provide different industry sectors with expert services to improve the quality of their products, thereby ensuring compliance with international and national standards.</p> <p>The Indonesian Ministry of Cooperatives and SMEs was allocated Rp1 trillion in 2012 to support SME export processes. In addition, the Government of Indonesia has given tax breaks in the labour-intensive industries of furniture, textiles and textile products, and toys to support these sectors.</p> <p>There is continued effort from government to increase productivity, financial support, and market access of SMEs.</p>



POVERTY IMPACT	Pepper	Coconut and palm sugar	Coconut oil	Coffee
	Score: 1 point Pepper production is not generally located in the poorest regions of the country, but there is a high percentage of people below the poverty line in pepper-growing regions. Pepper producers are mostly smallholder farmers. Owing to power imbalances in the supply chain, farmers have limited bargaining power to receive fair prices for their product. Their dried product is transported by collectors and sent on to traders who are large business entities and who package and ship pepper in bulk.	Score: 2 points Coconut and palm sugar is largely produced by poor families whose assets are coconut trees on their small acreage. Coconut sugar is mostly produced in Banyumas district, which has a poverty index of 20 per cent, almost double the national average of 12 per cent. It is not the poorest district but the poverty rate is fairly high. Lebak district, the main site for the production of palm sugar, has lower-than-average poverty levels. Farmers' low literacy skills and lack of business skills affect their competitiveness. Farmers of both types of sugar receive a small share of the final price of the goods. The exception are cooperatives. In Kulon Progo District of Yogyakarta, interviews were conducted with three cooperatives, representing 3,250 farmers.	Score: 2.5 points Coconut trees are grown all over Indonesia, especially in rural areas. They are a source of income (although usually a secondary income) for many farmers. These coconut farmers are among the poorest in Indonesia.	Score: 3 points The coffee sector is important to the economic livelihood of nearly 8 million Indonesians, 90 per cent of whom are smallholders. For Arabica coffee, Aceh and Sumatra Utara provinces are the largest producers in the country, followed by Sulawesi. Robusta coffee is grown on the island of Sumatra, with the provinces of Lampung, South Sumatra, and Bengkulu accounting for most production. Coffee is a commodity grown across the archipelago and not all regions are considered poor. Aceh is among the poorest provinces, and the ones in South Sumatra are also very poor. Investments in boosting farm productivity for Robusta coffee could double yields for half a million farmers, increasing farmers' incomes by 70 per cent. Between 12 and 22 per cent of value-added per cup of coffee accrues to the farmer.



Wooden furniture	Footwear	Apparel (dresses, shorts, shirts, and trousers—DSST)	Apparel (coats, jackets, and blazers—CJB)
Score: 3 points Furniture is one of the most labour-intensive manufacturing industries and has been a key source of employment, including for women in rural areas. Most enterprises in furniture industries are SMEs located in well-developed areas of the country. There is limited communication among tree growers, loggers, and furniture producers—intermediaries control the information flows between supply-chain actors.	Score: 3 points Footwear is a major contributor to employment in Indonesia and to helping reduce poverty. The supply chain includes many upstream employment opportunities. Producers exporting footwear are more likely to retain workers than firms selling to the domestic market. However, they are also more likely to keep wage increases low. The industry contributes to local poverty reduction, both directly through employment and indirectly through multiplier effects.	Score: 2.5 points Textiles and garments are labour-intensive manufacturing industries and have been a key source of wage employment across Indonesia. Most enterprises in these industries are SMEs. The industry is located near large population areas contributing to local job opportunities.	Score: 2.5 points Textiles and garments are labour-intensive manufacturing industries and have been a key source of wage employment across Indonesia. Most enterprises in these industries are SMEs. The industry is located near large population areas contributing to local job opportunities.
		 The Indonesian textile industry was liberalized between 1993 and 2002 and poverty rates declined. However, the connection between the two phenomena remains unclear. One study found that increased competitiveness of firms (resulting from lower import tariffs on intermediate goods) was weakly related to increases in manufacturing wages. However, child labor decreased faster in districts relatively more exposed to trade liberalization, showing indirect evidence that this was the result of positive income effects for the poor, summed up by ongoing structural change, reductions in wage inequality, and improvements in labor conditions.	 The Indonesian textile industry was liberalized between 1993 and 2002 and poverty rates declined. However, the connection between the two phenomena remains unclear. One study found that increased competitiveness of firms (resulting from lower import tariffs on intermediate goods) was weakly related to increases in manufacturing wages. However, child labor decreased faster in districts relatively more exposed to trade liberalization, showing indirect evidence that this was the result of positive income effects for the poor, summed up by ongoing structural change, reductions in wage inequality, and improvements in labor conditions.



JOB CREATION			
Pepper	Coconut and palm sugar	Coconut oil	Coffee
Score: 1 point Pepper farming supports job creation, especially in rural areas. However, since pepper is not grown all over Indonesia, the number of jobs created by pepper farming is likely lower than the export-oriented cash crops of coffee, cocoa, and coconut. The latter crops are grown more widely across Indonesia. Pepper may be a secondary-income crop for farmers. Prices received by farmers appear to be unfair. Despite increasing pepper prices globally, farmers report that 1 kilogram of pepper could pay for 80 kilograms of rice in 1980 in Indonesia, while the same amount in 2010 only paid for 4 kilograms of rice. In addition, farmers face disincentives to produce more pepper, such as increased pest attacks, lack of knowledge of pepper cultivation (particularly in terms of pest and disease management), lack of knowledge of food safety and quality, price fluctuations, and competition from other commodities such as coffee, cocoa, rubber, and palm oil.	Score: 1.5 point There are approximately 250,000 coconut sugar farmers, most of whom are in Central Java. Coconut and palm sugar production creates jobs in Indonesia. However, due to the labour-intensive nature of the work and low prices, the industry may be less attractive to a younger workforce. New business models are being used, including plantation farming and cooperatives.	Score: 2 points Many Indonesians make their living from coconuts. There are 3 million hectares farmed. There are 400 manufacturers. Land for coconut farming has increased by 4 percent annually.	Score: 2 points There are an estimated 2 million families working directly in the coffee sector. Most Indonesian coffee is exported as green beans. With local consumption on the rise, there are opportunities downstream in the value chain, such as roasting, blending, packaging and marketing. Domestic processing companies require dependable supplies of consistent quality, which is why efforts to support farmers yield benefits downstream as well. Processing businesses need capital investment to scale up their production, increase export earnings, and fend off competition from re-imports of premium coffee.
Score: 2 points There are an estimated 2 million families working directly in the coffee sector. Most Indonesian coffee is exported as green beans. With local consumption on the rise, there are opportunities downstream in the value chain, such as roasting, blending, packaging and marketing. Domestic processing companies require dependable supplies of consistent quality, which is why efforts to support farmers yield benefits downstream as well. Processing businesses need capital investment to scale up their production, increase export earnings, and fend off competition from re-imports of premium coffee.			



Wooden furniture	Footwear	Apparel (dresses, shorts, shirts, and trousers—DSST)	Apparel (coats, jackets, and blazers—CJB)
Score: 2 points According to ASMINDO, the furniture industry employs around 4 million workers, both directly and indirectly, as of 2008. Roughly 80 per cent of the supplier base is classified as SMEs. The furniture value chain is unbalanced in terms of the value added at each stage. The finishing stage of the furniture production makes the largest contribution to profit margins. However, the bulk of small-scale furniture manufacturers sell unfinished furniture. Workers can receive payments more quickly if they sell their product prior to the finishing stage. This challenge is exacerbated by the nature of the employer-employee relationship. Often workers are non-permanent and small-scale workshop ownership must pay them out in cash, which necessitates quick sales of products to local buyers.	Score: 2 points The footwear industry accounted for 45 per cent of jobs in the manufacturing industry in Indonesia in 2013, employing 400,000 people in direct labour and 210,000 in indirect labour. Employment in footwear does not appear to be expanding. Despite major increases in the minimum wage in the initial post-crisis years, wage growth has been restrained, with real wages in decline since 2003. In fact, hourly labour costs in the manufacturing sector are now less than one-third those in Malaysia and Thailand, two-thirds those in the Philippines, and on par with Vietnam.	Score: 2 points In 2012, the textile and garment industry employed 1.35 per cent of Indonesia's 110.8 million workers, equal to 9.7 per cent of workers in the manufacturing sector. However, it is the unskilled labour-intensive portion of the industry that makes the largest contribution to exports.	Score: 2 points In 2012, the textile and garment industry employed 1.35 per cent of Indonesia's 110.8 million workers, equal to 9.7 per cent of workers in the manufacturing sector. However, it is the unskilled labour-intensive portion of the industry that makes the largest contribution to exports.



GENDER OUTCOMES		Pepper	Coconut and palm sugar	Coconut oil	Coffee
Score: 2 points			Score: 3 points Under the traditional method, women are involved in most (if not all) production, sales, and marketing. Coconut sugar production is managed by women. It is largely concentrated in Central Java, where families have engaged in traditional production for generations. Women-owned businesses exist. However, women are still excluded from further downstream opportunities.	Score: 2.5 points Coconut is a traditional staple of the local economy, and women are engaged in the upstream of the copra/oil value chain and in factories. Within cooperatives and farmers' associations, women are not generally engaged in leadership roles. Government efforts to promote women copra farmers' groups have been oriented more toward production.	Score: 3 points Women engage along the supply chain and women-owned SMEs exist. Coffee is the most-certified commodity and certifications include standards for social responsibility and gender equality.
				 Within factories, men do various jobs and have more opportunity for higher-paid work than women. But for the same job, men and women will receive a similar salary.	 Women are commonly involved in coffee drying. In Indonesia's largest coffee production region (Sumatra) women make up 80 per cent of coffee farm workers and engage in marketing.
					 There are some women-owned farmer cooperatives and women-owned trading companies. There are some progressive women-owned SMEs that export specialty coffee.



Wooden furniture	Footwear	Apparel (dresses, shorts, shirts, and trousers—DSST)	Apparel (coats, jackets, and blazers—CJB)
<p>Score: 2 points</p> <p>Women are integrated into the supply chain and have multiple points of entry. Women workers play an important role in generating revenue, but are often paid less than men for the same hours of work, and are more likely to experience discrimination in employment.</p> <p>Upstream in forest communities, women tend to have less access to land rights, capital, and information.</p> <p>Efforts have been put forward to empower women in the furniture supply chain. Moreover, examples exist of women-owned SMEs and associations that aim to improve their position in the supply chain.</p>	<p>Score: 2 points</p> <p>Women are well represented in this labour-intensive industry which also relies on skill and craft. Sixty-two per cent of permanent employees are women. In footwear, women are represented as workers, but are also in middle- to top-level management and in design. Women are also owners of footwear businesses, including SMEs.</p> <p>A number of labour issues for women exist. A high proportion of women serve as contract workers (up to 50 per cent in smaller firms) and a significant gender gap for wages exists. Women who have families may prefer home-based arrangements because it allows them to balance home care and income-generation activities in a flexible way. Home-based work, however, can be unpredictable and characterized by long hours.</p>	<p>Score: 2.5 points</p> <p>About 44 per cent of full-time workers in the garment industry are women. The upstream and mid-stream of the industry is capital- and semi-capital intensive. Full-time jobs in the downstream garment industry are dominated by young single women. This work represents a new income stream for women and the opportunity for increased independence, empowerment, and promotion (40 per cent of top management positions are occupied by women). However, most downstream jobs are largely unskilled and labour-intensive with limited security.</p> <p>Women and men are not treated equally in this sector. But women are increasingly becoming union leaders, and examples of successful campaigns for pay increases and maternity leave exist.</p>	<p>Score: 2.5 points</p> <p>About 44 per cent of full-time workers in the garment industry are women. The upstream and mid-stream of the industry is capital- and semi-capital intensive. Full-time jobs in the downstream garment industry are dominated by young single women. This work represents a new income stream for women and the opportunity for increased independence, empowerment, and promotion (40 per cent of top management positions are occupied by women). However, most downstream jobs are largely unskilled and labour-intensive with limited security.</p> <p>Women and men are not treated equally in this sector. But women are increasingly becoming union leaders, and examples of successful campaigns for pay increases and maternity leave exist.</p>
			<p>Garment production is a business with low barriers to entry, and it is common for women to start micro/small businesses, home businesses, and internet businesses in this industry. Women-owned home-based businesses offer the flexibility to reconcile work and family, which is often preferred by women. Women-owned SMEs dominate in the growing niche (high-value) markets.</p> <p>Garment production is a business with low barriers to entry, and it is common for women to start micro/small businesses, home businesses, and internet businesses in this industry. Women-owned home-based businesses offer the flexibility to reconcile work and family, which is often preferred by women. Women-owned SMEs dominate in the growing niche (high-value) markets.</p> <p>Women workers on FTCs or short-term contracts complain about job insecurity, lack of training opportunities, lack of promotion, and limited access to benefits and social protection. Illegal practices have been noted, such as the requirement to meet high targets to receive nominal payment (known as <i>skirting</i>) and lack of maternity rights.</p> <p>Large numbers of female home-based workers are potentially not under labour protection. Home-based work can be unpredictable and characterized by long hours.</p>



ENVIRONMENTAL OUTCOMES

Pepper	Coconut and palm sugar	Coconut oil	Coffee
<p>Score: 2 points</p> <p>Pepper farming has negative environmental impacts in some areas. However, examples of good agricultural practices also exist.</p> <p>In some regions of Indonesia, pepper farming involves forest clearing, intensive monoculture, and heavy use of chemical fertilizers and pesticides. The increased use of agro-chemicals is having a number of negative effects, including on biodiversity, water and soil quality, and GHG emissions.</p> <p>In some areas, however, pepper is grown in a poly-culture system with limited use of agro-chemicals. Pepper is not grown all over Indonesia. About 70 per cent of pepper plantations are concentrated in Bangka, Belitung, and Lampung provinces. There have been efforts to improve the sustainability of pepper production. A few areas produce sustainably certified pepper (e.g., organic and Rainforest Alliance certification).</p>	<p>Score: 3 points</p> <p>This sector has overall negligible environmental effects, although fuel wood consumption for sugar production is significant and can drive deforestation and biodiversity loss if harvested from unsustainable sources.</p> <p>The limited use of agro-chemical inputs during the growing period, combined with a long lifespan, make coconut an environmentally preferable crop.</p> <p>With smallholders' predominant <i>aren</i>-based agro-forestry management practices, the harvesting of <i>aren's</i> inflorescence sap is an environmentally friendly livelihood practice. The Indonesian government has indicated interest in the expansion of cultivated areas, given the role of the tree in improving farmers' income and the benefits to ecosystems.</p> <p>Most coconut/palm sugar for export is certified organic.</p>	<p>Score: 3 points</p> <p>Deforestation and biodiversity considerations are not a major concern in coconut production. Most coconut trees in Indonesia have been grown for generations by smallholder farmers.</p> <p>Compared to other perennial crops, such as cocoa and coffee, which have environmental effects resulting from use of synthetic fertilizers and pesticides, coconut tends to have a negligible environmental impact due to limited use of mechanization and agro-chemicals. Most Indonesian smallholders do not use, or use very few, modern inputs (fertilizer and pesticides) in their coconut farm operations.</p>	<p>Score: 2 points</p> <p>Coffee-farming systems in Indonesia include full-sun monoculture, simple inter-cropping (coffee with rice paddies and/or vegetables), shade-grown coffee, and complex agro-forestry systems where coffee grows alongside other perennial and annual species. Some farmers use traditional farming methods without using external inputs, while others use semi-intensive or intensive methods with organic and/or inorganic inputs.</p> <p>In addition, there are a number of efforts underway in the area of certification.</p>



Wooden furniture	Footwear	Apparel (dresses, shorts, shirts, and trousers—DSST)	Apparel (coats, jackets, and blazers—CJB)
Score: 2 points Worldwide concern over Indonesia's massive deforestation and biodiversity loss have made the timber industry, including wood furniture, relatively more responsive to sustainability efforts compared to other manufacturing industries. The government has taken steps to address this issue through policy measures, though further efforts are needed to create a sustainable system to address deforestation concerns.	Score: 0.5 points Key inputs (e.g., leather, rubber, plastics, fabric) in the footwear manufacturing sector have high impacts on deforestation, biodiversity loss, and water and air pollution. The environmental impacts of footwear manufacturing are considered high. There is also low consumer and manufacturer awareness of sustainable footwear, and limited economic incentives to produce eco-friendly footwear in Indonesia. Unlike textiles, there are not many third-party eco-labels for footwear.	Score: 1 point Textiles have significant environmental effects, particularly in terms of resource consumption, waste generation, and air, water, and soil pollution. The environmental impacts of textile production depend on the inputs used. For example, cotton and rayon are derived from plants and biodegradable, while polyester is not. During the processing phase, water contamination, air pollution, and solid waste are significant concerns.	Score: 1 point Textiles have significant environmental effects, particularly in terms of resource consumption, waste generation, and air, water, and soil pollution. The environmental impacts of textile production depend on the inputs used. For example, cotton and rayon are derived from plants and biodegradable, while polyester is not. During the processing phase, water contamination, air pollution, and solid waste are significant concerns.
	 The wood furniture industry has a relatively small environmental impact when compared with other manufacturing industries, particularly where sustainable forestry practices exist. The government of Indonesia has enforced the rule that timber raw material for furniture must possess TLAS/SVLK (Timber Legality Assurance System) certification. The Forest Stewardship Council (FSC) is playing a key role working with the Indonesian Eco-Labeling Institute to promote sustainable forest-management certification in Indonesia. However, more efforts are needed to spread sustainable forest certification.	 Efforts are underway to promote the sustainable production of fibres and textile manufacturing. Several voluntary environmental labels exist. Reducing textiles' environmental impacts in Indonesia is an ongoing struggle. Textiles are still the primary industrial polluter of many major rivers in Indonesia. Although Indonesia has a long-established Environmental Impact Assessment (EIA or AMDAL) law requiring manufacturing companies to have environmental management systems, enforcement is weak. Only a handful of companies have adopted sound environmental management and sustainable textile certification.	 Efforts are underway to promote the sustainable production of fibres and textile manufacturing. Several voluntary environmental labels exist. Reducing textiles' environmental impacts in Indonesia is an ongoing struggle. Textiles are still the primary industrial polluter of many major rivers in Indonesia. Although Indonesia has a long-established Environmental Impact Assessment (EIA or AMDAL) law requiring manufacturing companies to have environmental management systems, enforcement is weak. Only a handful of companies have adopted sound environmental management and sustainable textile certification.



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