

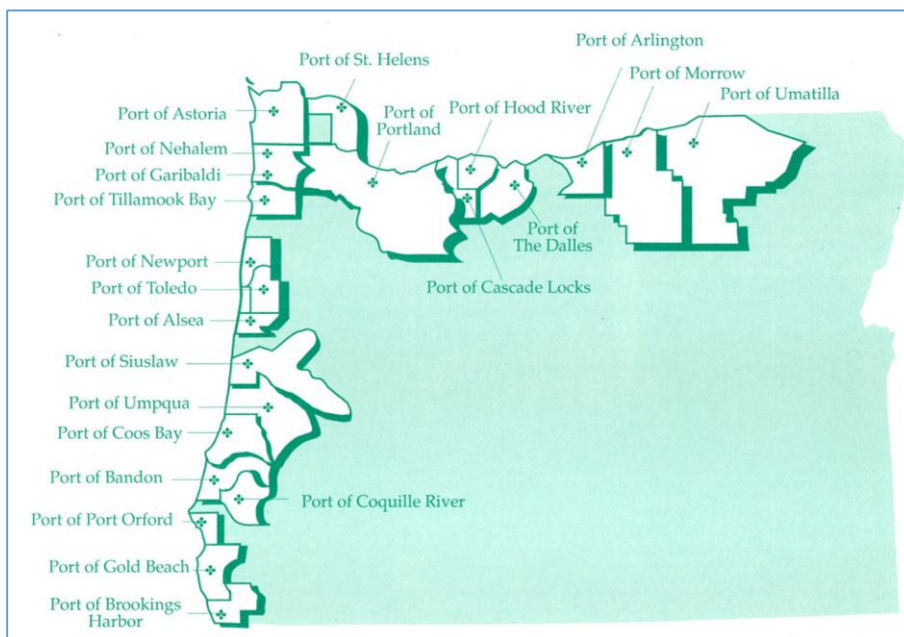
# 1: SUMMARY

## EXECUTIVE SUMMARY<sup>1</sup>

In his 2010 State of the Union Address, President Obama set a goal to dramatically increase American exports. This directive aligned with state- and city-level initiatives around the country, including long-running efforts in Oregon. Historically, Oregon was dependent on its timber, agriculture and fishing industries to generate wealth in the state by exporting products to other states and countries. Since the 1970s, the Oregon economy has shifted more towards high-tech and advanced manufacturing. As Oregon's export mix has changed over the decades, one important constant has been the role that ports continue to play in supporting commerce and the resulting economic activity.

During the Great Recession<sup>2</sup> weakness in markets around the world led to a predictable decrease in Oregon exports. In more recent years, Oregon exports have started to attain pre-recession peak levels. As a whole, Oregon's recovery has been slightly stronger than the nation. However, an uneven geographical recovery and sluggish employment growth, particularly in rural areas of the state now lend added importance to Oregon's 23 public ports (**Figure I-1**), which provide facilities and activities that support businesses in urban and rural economies.<sup>3</sup>

**Figure I-1. Oregon's 23 Port Districts**



<sup>1</sup> This Executive Summary is authored by Tom Potiowsky, Director of Northwest Economic Research Center, and E. Todd Chase, Senior Economist with FCS GROUP.

<sup>2</sup> According to the National Bureau of Economic Research, the Great Recession started in December 2007 and lasted through June 2009; the longest economic contraction since the Great Depression (1929-1933).

<sup>3</sup> The disparity of economic conditions in rural Oregon is noted in recent statistics by the Oregon Office of Economic Analysis available at [http://www.oregonlive.com/politics/index.ssf/2013/12/rural\\_oregons\\_aging\\_population.html#incart\\_river](http://www.oregonlive.com/politics/index.ssf/2013/12/rural_oregons_aging_population.html#incart_river)

Recent studies by the Bookings Institute and other agencies have concluded that Oregon is one of the most trade-dependent states in the nation. Findings from related studies indicate:

There are more than 700,000 freight-related jobs in Oregon in industries like manufacturing, agriculture, construction and retail.<sup>4</sup>

1 in 6 jobs in Oregon are port-related and directly or indirectly tied to cargo, recreation, industrial, commercial and other activities at Oregon's ports, including privately-owned and operated docks which import and export goods (some of which are on port-owned property and others are on private land).<sup>5</sup>

Jobs related to exports pay 20-40% more than average pay for similar jobs with domestic markets.<sup>6</sup> Portland Region ranks 4th in U.S. in export value as share of Metro output in 2012).<sup>7</sup>

## OVERALL ECONOMIC IMPACT OF OREGON'S 23 PORTS

Oregon's ports provide the critical land, infrastructure and resources to link producers (i.e., agriculture, forest and seafood products) and manufacturers (i.e., electronics, food and energy products) with global and domestic markets.

A summary of economic benefits attributed to the Port of Portland and other ports along the Columbia River and the Oregon Coast is provided below.

### Port of Portland

The economic recovery has solidified the Portland Metropolitan Region as Oregon's economic engine, with an increasing important role provided by the Port of Portland. The Port of Portland generates regional and statewide economic benefits by facilitating domestic and global trade and passenger air travel. A large majority of Oregon's exports come from: advanced industrial products (such as electronics, machinery and precision instruments); commodities (such as wheat, corn and barley); and autos shipped through the Port of Portland. The Port of Portland and Portland Harbor act as the primary distribution hub for foreign-bound exports from rural Oregon in the form of agricultural and food products (from eastern Oregon) and seafood//wood products (from coastal ports) channeled through Port of Portland containers, terminals, and air cargo shipments.

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<sup>4</sup> *Oregon Freight Plan, 2011*, Oregon Department of Transportation; findings are based on 2008 data from the U.S. Bureau of Economic Analysis, Regional Economic Accounts, State Economic Profiles.

<sup>5</sup> Parsons Brinkerhoff. *Ports 2010, A New Strategic Business Plan for Oregon's Statewide Port System*. Prepared for Oregon Department of Transportation and Business Oregon Infrastructure Finance Authority.

<sup>6</sup> Bookings Institute, 2010 Value of Jobs Study.

<sup>7</sup> Brookings Institute and JPMorgan Chase. *Metro-to-Metro: Global and Domestic Goods Trade in Metropolitan America*. October 2013.

The estimated 2011 regional economic benefits of the Port of Portland and Portland Harbor (includes public and private terminals and tenants at the Port of Portland and Port of Vancouver) are described in Section 4, and includes following total (direct, indirect and induced) impacts:

75,800 jobs (total direct, indirect and induced employment)

\$7.30 billion in annual business revenue (output)

\$3.76 billion in annual labor income

\$346 million in annual state/local tax payments

\$246 million in annual federal tax payments

Every \$1 in local taxes collected by the Port generates more than \$6 in total local tax payments.

Maintaining and enhancing the level of container shipment capacity at the Port of Portland's Terminal 6 is an important factor for businesses located throughout Oregon and the region. Reduced reliance on Terminal 6 container shipments and the use of alternative shipping terminals at Puget Sound ports will result in higher shipping costs to Oregon businesses and lost business income, which would decrease the level of economic benefit attributed to the Port of Portland, Portland Harbor and Columbia River ports<sup>8</sup>.

## Oregon's Columbia River Ports

In addition to the Port of Portland, the other ports on the Columbia River (Port of St. Helens, Port of Cascade Locks, Port of Hood River, Port of The Dalles, Port of Arlington, Port of Morrow, Port of Umatilla) have expanded their role in the regional and state economy. In addition to shipping agricultural commodities, they now host a wide variety of food & beverage processing, industrial, advanced manufacturing, avionics, energy, and recreation activities.

Several ports along the Columbia River play an important role in serving rural areas as a point of collection and distribution for commodities (such as grain, corn, and petroleum products) as well as food products which then utilize large-scale cost-effective freight systems (such as rail or barge) to send goods to the Port of Portland or the Port of St. Helens for export.

The permanent annual economic impact of the Oregon Columbia River ports (excluding the Port of Portland) is summarized in **Exhibit 1-1**. Key highlights from this analysis include the following annual benefits:

Total port-related Oregon employment of 10,246 jobs (7,058 direct and 13,748 indirect/induced)

Oregon output (gross sales) of nearly \$3.9 billion

Oregon GDP of over \$1.6 billion

Oregon labor income of \$856.4 million

Annual local and state of Oregon tax revenue/payments of nearly \$162 million (\$48.7 M local and \$113.7 M in state tax revenues)

Annual federal tax revenue/payments by Oregon enterprises and employees of \$198 million

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<sup>8</sup> [http://www.oregonlive.com/business/index.ssf/2013/12/oregon\\_importers\\_exporters\\_bra.html](http://www.oregonlive.com/business/index.ssf/2013/12/oregon_importers_exporters_bra.html)

**Exhibit 1-1 Summary of Annual Permanent Economic Impacts, Oregon Columbia River Ports**  
(excluding Port of Portland)

**Local - County Impact**

Impact Type	Employment	Labor Income	Value Added (GDP)	Output (Sales)
Direct	7,058	\$ 371,483,000	\$ 756,339,000	\$ 2,299,658,000
Indirect & Induced	3,188	\$ 108,607,000	\$ 212,327,000	\$ 403,043,000
<b>Total</b>	<b>10,246</b>	<b>\$ 480,090,000</b>	<b>\$ 968,666,000</b>	<b>\$ 2,702,701,000</b>

**Rest of Oregon Impact**

Impact Type	Employment	Labor Income	Value Added (GDP)	Output (Sales)
Direct	-	-	-	-
Indirect & Induced	10,559	\$ 376,290,000	\$ 600,120,000	\$ 1,189,907,000
<b>Total</b>	<b>10,559</b>	<b>\$ 376,290,000</b>	<b>\$ 600,120,000</b>	<b>\$ 1,189,907,000</b>

**Annual Oregon Impact**

Impact Type	Employment	Labor Income	Value Added (GDP)	Output (Sales)
Direct	7,058	\$ 371,483,000	\$ 756,339,000	\$ 2,299,658,000
Indirect & Induced	13,748	\$ 484,897,000	\$ 812,447,000	\$ 1,592,950,000
<b>Total</b>	<b>20,805</b>	<b>\$ 856,379,585</b>	<b>\$ 1,568,786,048</b>	<b>\$ 3,892,608,164</b>

**Annual Tax Payments**

Oregon State & Local Tax Payments	
Estimated Local Tax Payments	\$ 48,740,000
Estimated State Tax Payments	\$ 113,726,000
<b>Total</b>	<b>\$ 162,466,000</b>
Federal Tax Payments	
by Oregon Enterprises	\$ 198,177,000
<b>Total Tax Payments</b>	<b>\$ 360,643,000</b>

Source: Minnesota IMPLAN Group, Inc. 2011 model; adjusted to 2013 dollars; FCS GROUP.

All ports receive property taxes from residents and businesses within the Port Districts. To better understand tax payer return on investment (ROI), local property tax payments to Columbia River ports are compared with the permanent economic benefits. Based on the preceding findings and as indicated in **Exhibit 1-2**, the key fiscal metrics indicate the following employment and tax benefits:

Each \$1,000 in annual property tax revenues collected by the Columbia River Ports (combined excluding Port of Portland) supports/retains 6.33 jobs in Oregon, of which more than two-thirds are located locally.

Port-related employment (direct/indirect/induced) represents about 1 in 9 jobs in port labor sheds.<sup>9</sup> One port-related job is supported for every \$150 in local property tax revenues collected by the Port. Each dollar in local property tax revenue collected by the Port generates about \$32 in annual local tax revenues and \$74 in state tax revenues.

<sup>9</sup> For analysis purpose, a labor shed is defined in this study as the area within a 45-minute drive of a port location.

**Exhibit 1-2  
Columbia River Ports  
Fiscal Benchmark Metrics**

	Local Impact	Rest of Oregon Impact	Total Oregon Impact
<i>Direct/Indirect Jobs Per \$1000 in Annual Local Property Tax Revenue Collected by Port:</i>	6.7	6.9	13.5
<i>Annual Local Property Tax Collected by Port Per Permanent Direct/Indirect Job:</i>	\$150		
<i>Annual Taxes Generated Per Dollar of Port-related Property Tax Collected:</i>	\$32	\$74*	\$106

*Source: Port financial documents, and IMPLAN model results. FCS GROUP.*

*\*Represents state share of tax revenue (excludes local tax revenues).*

The top 20 port-related industrial sectors for Columbia River Ports (excluding Port of Portland) are summarized in **Exhibit 1-3**. These employment levels reflect total estimated direct, indirect and induced permanent port-related employment levels.

**Exhibit 1-3 Top 20 Industry Sectors by total estimated port-related employment,  
Oregon Columbia River Ports (excludes Port of Portland)**

Port-related Industry Sector	Employment
Dairy cattle and milk production	1,686
Vegetable and melon farming	1,271
Support activities for agriculture and forestry	1,167
Cattle ranching and farming	1,012
Wholesale trade businesses	912
Frozen food manufacturing	893
Food services and drinking places	867
Real estate establishments	620
All other crop farming	497
Travel trailer and camper manufacturing	455
Transport by truck	361
Fruit and vegetable canning, pickling, and drying	272
Employment services	131
Other computer related services, including facilities management	126
Maintenance and repair construction of nonresidential structures	115
Management of companies and enterprises	112
Lime and gypsum product manufacturing	106
Breweries	102
Ornamental and architectural metal products manufacturing	100
Architectural, engineering, and related services	100

*Source: based on this study's findings.*

## Oregon's North Coast Ports

Oregon's North Coast ports were not immune from the Great Recession, but in a relative sense, did not suffer as much as other parts of the state. The North Coast economy is slowly growing at a pace that is echoed across Oregon.

The North Coast ports (Port of Astoria, Port of Alsea, Port of Garibaldi, Port of Nehalem, Port of Newport, Port of Tillamook, Port of Toledo and Port of Siuslaw) continue to rely on commercial fishing, forestry and logging, but as these industries have been curtailed, the North Coast ports are expanding into general manufacturing, seafood processing, energy and recreational and tourism activities. From RV parks to whale watching and charter fishing, the North Coast ports are exploring ways to expand beyond the former resource based economic uses. And to this changing trend is added marine science and marine education at the Port of Newport.

The permanent annual economic impact of the Oregon North Coast ports is summarized in **Exhibit 1-4**. Key highlights from this analysis include the following annual benefits:

Total port-related Oregon employment of 9,585 jobs (5,194 direct and 4,392 indirect/induced)

Oregon output (gross sales) of nearly \$1.3 billion

Oregon GDP of nearly \$605 million

Oregon labor income of \$384 million

Annual local and state of Oregon tax revenue/payments of \$58 million (\$17.5 M local and \$40.8 M in state tax revenues)

Annual federal tax revenue/payments by Oregon enterprises and employees of \$82.5 million

Based on this study's findings and as indicated in **Exhibit 1-5**, the key fiscal metrics for the North Coast Ports indicate the following employment and tax benefits:

Each \$1,000 in annual property tax revenues collected by the Oregon's North Coast Ports (combined) supports/retains 4.7 jobs in Oregon, of which 3.7 are located in Port Districts and 1.0 is located elsewhere in the State of Oregon.

Port-related employment (direct/indirect/induced) represents about 1 in 9 jobs in port labor sheds.

One port-related job is supported for every \$273 in local property tax revenues collected by the Ports.

Each dollar in local property tax revenue collected by the Ports generates about \$9 in annual local tax revenues and \$20 in state tax revenues.

**Exhibit 1-4 Summary of Annual Permanent Economic Impacts, Oregon North Coast Ports**  
**North Oregon Coast Ports**  
**Summary of Annual Economic Impact**

**Local - County Impact**

Impact Type	Employment	Labor Income	Value Added (GDP)	Output (Sales)
Direct	5,194	\$ 215,375,000	\$ 315,617,000	\$ 728,902,000
Indirect & Induced	2,341	\$ 67,226,000	\$ 137,391,000	\$ 251,086,000
<b>Total</b>	<b>7,535</b>	<b>\$ 282,601,000</b>	<b>\$ 453,008,000</b>	<b>\$ 979,988,000</b>

**Rest of Oregon Impact**

Impact Type	Employment	Labor Income	Value Added (GDP)	Output (Sales)
Direct	-	-	-	-
Indirect & Induced	2,051	\$ 101,251,000	\$ 151,957,000	\$ 278,724,000
<b>Total</b>	<b>2,051</b>	<b>\$ 101,251,000</b>	<b>\$ 151,957,000</b>	<b>\$ 278,724,000</b>

**Annual Oregon Impact**

Impact Type	Employment	Labor Income	Value Added (GDP)	Output (Sales)
Direct	5,194	\$ 215,375,000	\$ 315,617,000	\$ 728,902,000
Indirect & Induced	4,392	\$ 168,477,000	\$ 289,348,000	\$ 529,810,000
<b>Total</b>	<b>9,585</b>	<b>\$ 383,851,648</b>	<b>\$ 604,965,032</b>	<b>\$ 1,258,711,792</b>

**Annual Tax Payments**

Oregon State & Local Tax Payments	
Estimated Local Tax Payments	\$ 17,498,000
Estimated State Tax Payments	\$ 40,828,000
<b>Total</b>	<b>\$ 58,326,000</b>
Federal Tax Payments	
by Oregon Enterprises	\$ 82,506,000
<b>Total Tax Payments</b>	<b>\$ 140,832,000</b>

Source: Minnesota IMPLAN Group, Inc. 2011 model; adjusted to 2013 dollars; FCS GROUP.

**Exhibit 1-5**

**North Oregon Coast Ports**  
**Fiscal Benchmark Metrics**

	Local Impact	Rest of Oregon Impact	Total Oregon Impact
<i>Direct/Indirect Jobs Per \$1000 in Annual Local Property Tax Revenue Collected by Port:</i>	3.7	1.0	4.7
<i>Annual Local Property Tax Collected by Port Per Permanent Direct/Indirect Job:</i>	\$273		
<i>Annual Taxes Generated Per Dollar of Port-related Property Tax Collected:</i>	\$9	\$20*	\$29

Source: Port financial documents and IMPLAN model results. FCS GROUP.

\*Represents state share of tax revenue (excludes local tax revenues).

The top 20 port-related industrial sectors for Oregon’s North Coast Ports are summarized in **Exhibit 1-6**. These employment levels reflect total estimated direct, indirect and induced permanent port-related employment levels.

**Exhibit 1-6 Top 20 Industry Sectors by total estimated port-related employment, Oregon North Coast Ports**

<b>Port-related Industry Sector</b>	<b>Employment</b>
Commercial Fishing	1,436
Food services and drinking places	729
Seafood product preparation and packaging	532
Other state and local government enterprises	402
Wholesale trade businesses	288
Other amusement and recreation industries	275
Federal Government (includes Coast Guard, etc.)	239
Other Federal Government enterprises	238
Real estate establishments	217
Retail Stores - Miscellaneous	213
Animal production, except cattle and poultry and eggs	197
Maintenance and repair construction of nonresidential structures	194
Scenic and sightseeing transportation and support activities for transportation	170
Retail Stores - Food and beverage	156
Sawmills and wood preservation	81
Retail Stores - Motor vehicle and parts	75
Waste management and remediation services	74
Animal (except poultry) slaughtering, rendering, and processing	70
Architectural, engineering, and related services	48

*Source: based on this study’s findings.*

## Oregon's South Coast Ports

The South Coast region has been hit especially hard by the decline in the timber industry. During the recent recession, South Coast counties had some of the highest rates of unemployment and foreclosure in the state. In the short term, the economic health of this region depends on its ability to adapt to the changing demographics and re-engage with its export markets.

Oregon’s South Coast ports (Port of Bandon, Port of Bookings Harbor, Port of Coos Bay, Port of Coquille, Port of Port Orford, Port of Umpqua/Salmon Harbor) now play a key role in diversifying the regional economy by providing land/buildings for industrial and business activities and attracting tourism and recreation. The permanent annual economic impact of the Oregon South Coast ports is summarized in **Exhibit 1-7**.



Key highlights from this analysis include the following annual benefits:

Total port-related Oregon employment of 5,673 jobs (3,296 direct and 2,377 indirect/induced)

Oregon output (gross sales) of nearly \$666 million

Oregon GDP of nearly \$299 million

Oregon labor income of \$195 million

Annual local and state of Oregon tax revenue/payments of \$30.16 million (\$9.0 M local and \$21.1 M in state tax revenues)

Annual federal tax revenue/payments by Oregon enterprises and employees of \$41.2 million

### Exhibit 1-7 Summary of Annual Permanent Economic Impacts, Oregon South Coast Ports

#### Local - County Impact

Impact Type	Employment	Labor Income	Value Added (GDP)	Output (Sales)
Direct	3,296	\$ 99,212,000	\$ 138,456,000	\$ 379,102,000
Indirect & Induced	1,422	\$ 45,678,000	\$ 81,467,000	\$ 151,633,000
<b>Total</b>	<b>4,718</b>	<b>\$ 144,890,000</b>	<b>\$ 219,923,000</b>	<b>\$ 530,735,000</b>

#### Rest of Oregon Impact

Impact Type	Employment	Labor Income	Value Added (GDP)	Output (Sales)
Direct	-	-	-	-
Indirect & Induced	955	\$ 50,217,000	\$ 78,922,000	\$ 135,052,000
<b>Total</b>	<b>955</b>	<b>\$ 50,217,000</b>	<b>\$ 78,922,000</b>	<b>\$ 135,052,000</b>

#### Annual Oregon Impact

Impact Type	Employment	Labor Income	Value Added (GDP)	Output (Sales)
Direct	3,296	\$ 99,212,000	\$ 138,456,000	\$ 379,102,000
Indirect & Induced	2,377	\$ 95,895,000	\$ 160,389,000	\$ 286,685,000
<b>Total</b>	<b>5,673</b>	<b>\$ 195,107,393</b>	<b>\$ 298,844,874</b>	<b>\$ 665,786,503</b>

#### Annual Tax Payments

Oregon State & Local Tax Payments	
Estimated Local Tax Payments	\$ 9,048,000
Estimated State Tax Payments	\$ 21,112,000
<b>Total</b>	<b>\$ 30,160,000</b>
Federal Tax Payments	
by Oregon Enterprises	\$ 41,205,000
<b>Total Tax Payments</b>	<b>\$ 71,365,000</b>

Source: Minnesota IMPLAN Group, Inc. 2011 model; adjusted to 2013 dollars; FCS GROUP.

Based on this study's findings and as indicated in **Exhibit 1-8**, the key fiscal metrics for the South Coast Ports indicate the following employment and tax benefits:

Each \$1,000 in annual property tax revenues collected by the Oregon's South Coast Ports (combined) supports/retains 2.1 jobs in Oregon, of which 1.7 are located in Port Districts and 0.4 jobs are located elsewhere in the State of Oregon.

Port-related employment (direct/indirect/induced) represents about 1 in 9 jobs in port labor sheds.

One port-related job is supported for every \$572 in local property tax revenues collected by the Ports.

Each dollar in local property tax revenue collected by the Ports generates about \$3.35 in annual local tax revenues and \$7.83 in state tax revenues.

## Exhibit 1-8

### South Oregon Coast Ports Fiscal Benchmark Metrics

	Local Impact	Rest of Oregon Impact	Total Oregon Impact
<i>Direct/Indirect Jobs Per \$1000 in Annual Local Property Tax Revenue Collected by Port:</i>	1.7	0.4	2.1
<i>Annual Local Property Tax Collected by Port Per Permanent Direct/Indirect Job:</i>	\$572		
<i>Annual Taxes Generated Per Dollar of Port-related Property Tax Collected:</i>	\$3.35	\$7.83*	\$11.18

Source: Port financial documents and IMPLAN model results. FCS GROUP.

\*Represents state share of tax revenue (excludes local tax revenues).

The top 20 port-related industrial sectors for Oregon's South Coast Ports are summarized in **Exhibit 1-9**. These employment levels reflect total estimated direct, indirect and induced permanent port-related employment levels.

### Exhibit 1-9 Top 20 Industry Sectors by total estimated port-related employment, Oregon South Coast Ports

Port-related Industry Sector	Employment
Commercial Fishing	944
Food services and drinking places	816
Seafood product preparation and packaging	306
Animal production, except cattle and poultry and eggs	156
Charter boats and related services	152
Other amusement and recreation industries	151
Wholesale trade businesses	131
Retail Stores - Food and beverage	116
Retail Stores - Miscellaneous	111
Real estate establishments	108
Hotels and motels, including casino hotels	95
Ornamental and architectural metal products manufacturing	91
Maintenance and repair construction of nonresidential structures	91
Boat building	76
Sawmills and wood preservation	74
Retail Stores - Sporting goods, hobby, book and music	59
Federal Government (includes U.S. Coast Guard)	57
Personal and household goods repair and maintenance	46
Support activities for agriculture and forestry	45

Source: based on this study's findings.