

## Contribution of USFEC West Coast Forage Exports

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California, Washington, and Oregon were responsible for over 90% of the nations forage exports in 2015. West Coast Members of the United States Forage Export Council (USFEC) directly employed 1,063 people and represented nearly \$798 million in total forage export revenues in that same year. This new money in the economy was used to pay for business expenses and employee labor.

Total business activity (indirect output) resulting from USFEC member purchases generated an additional \$639 million in spending. As this spending rippled through the economy it supported an additional 2,381 jobs.

The income generated by USFEC forage exporters and their employees were spent in the economy as well (induced output). This household spending supported another 2,133 jobs and generated nearly \$318 million in additional spending.

Total spending stemming from West Coast USFEC forage exporters amounted to \$1,754 million and over 5,500 jobs supported. These same exporters contributed \$535 million in Gross Regional Output, also known as value added, to the West Coast economies.

**Table 1**

### *Output and employment contributions of USFEC West Coast Forage Exports 2015*

West Coast Forage Exports	\$797,870,550
Indirect Output (earned from business to business transactions)	\$639,127,523
Induced Output (earned from spending for personal activity)	\$317,672,335
<b>TOTAL ECONOMIC OUTPUT</b>	<b>\$1,754,670,408</b>
Direct Employment	1,063
Indirect Employment (off farm jobs supported by exporter business transactions)	2,381
Induced Employment (off farm jobs supported from personal exporter employee purchases)	2,133
<b>TOTAL EMPLOYMENT</b>	<b>5,577</b>

Source: WSU SES IMPACT Center

**Table 2**

### *Percentage of forage exports values by state of origin and year*

State	2012	2013	2014	2015	2016-Nov
California	39.3%	42.4%	42.3%	42.7%	44.3%
Washington	39.3%	37.2%	37.9%	36.3%	31.9%
Oregon	15.6%	14.5%	12.6%	11.1%	12.8%
<i>Subtotal</i>	<i>94.1%</i>	<i>94.0%</i>	<i>92.8%</i>	<i>90.2%</i>	<i>88.9%</i>
Idaho	1.7%	1.6%	0.8%	1.0%	0.1%
<b>All States Combined</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: U.S. Census Bureau Foreign Trade Statistics <http://usatrade.census.gov>

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California is the single largest forage exporting state in the nation at just under 43% of all U.S. forage exports in 2015. California has been growing as the dominate forage exporter, representing 39.3% of all forage exports in 2012 and growing to 44.3% in 2016.

Washington had roughly the same percentage of export values as California in 2012, 39.3% of forage export revenues, but it has lost some ground since then. In 2016 Washington represented 31.9% of all forage export revenues in the nation.

Oregon has lost some ground as well, falling from 15.6% of national forage revenues in 2012 to 12.8% today. Though Idaho is a small forage export state it lost considerable ground during that period.

In 2012 West Coast exports represented 94.1% of U.S. exports. In 2015 the West Coast was responsible for just over 90% of all forage export revenues. That number fell to just under 89% in 2016.

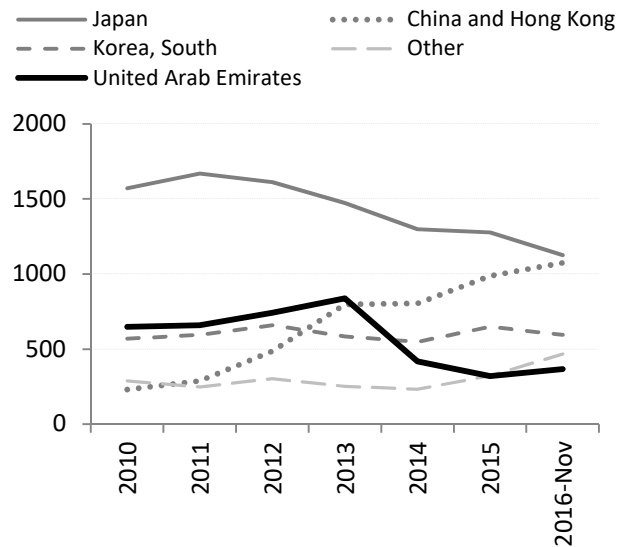
**Table 3**  
**West Coast Regional Multipliers**

	Regional Average	Forage Exporters
Sales Multipliers	\$1.92	\$2.20
Value Added Multipliers	\$2.61	\$6.90
Income Multipliers	\$2.66	\$6.91
Jobs Multipliers	3.01	5.25

Source: WSU SES IMPACT Center and IMPLAN 2014 data

The forage sector out preforms other West Coast industries in terms of the multipliers they generate. For example, jobs supported by an industry extend beyond the direct employment within the industry itself. The output from each full time USFEC job supports an additional 5.25 full time jobs in support industries, such as laboratories and trucking. This exceeds the average jobs multiplier of 3.01. Similarly, all of the forage multipliers exceed those of the average industry on the West Coast: versus other sectors, USFEC members support an additional \$2.20 in sales, \$6.90 in value added, and \$6.91 in income.

**Figure 1**  
**U.S. Forage Export Volume by Destination Country**



Source: U.S. Census Bureau Foreign Trade Statistics <http://usatrade.census.gov>

Markets that West Coast forage exporters have been shipping to have been quite volatile over the past 5 to 6 years. The largest market, Japan, has been in decline since 2011 and though it purchased 36% of all U.S. forage exports in 2015 it has seen a nearly 24% decline in purchased volume since 2011.

China and Hong Kong have trended in the opposite direction from Japan, growing from 231 thousand tons in 2010 to nearly 1 million tons in 2015. That is over 328% growth in 5 years. Today China and Hong Kong represent 28% of all U.S. forage export purchases.

South Korea has remained an integral and stable market for exporters, consistently buying between 550 thousand to 650 thousand tons. They represented 18% of U.S. forage export volume in 2015. The United Arab Emirates was growing market through 2013 when it composed 21% of U.S. purchased volume but saw a drastic decline to only 9% in 2015. Other countries have remained relatively small actors though there are signs of growth there as well.