

WIAD 2017

LOCAL CONNECTIONS. GLOBAL IMPACT.

BARCELONA, SPAIN

**sergio estella.
founder & chief design officer.
vizzuality.**

iA wide shut open.

**data.
accessible,
understandable,
usable,
dialogue & impact.**

how.

**why forests
are so important?**

A close-up photograph of a barred owl perched on a fallen log. The owl has dark brown feathers with prominent white horizontal bars. It is looking directly at the camera with its large, dark eyes. The background shows a dense forest with green and brown trees, and distant mountains under a clear sky.

no forests.
no species!



**no forests.
no species!
deserts?...**

A dark, atmospheric photograph of a glacier landscape. In the foreground, several large, white icebergs of various sizes are scattered across a dark, reflective surface, likely a lake or a frozen sea. Behind them, a range of mountains rises, their peaks partially obscured by low-hanging clouds or snow. The overall mood is somber and emphasizes the scale of environmental change.

no forests.
no species!
deserts?...
global warming :/

environment.
re-using public data.

*api: application program interface



Global Forest Watch.

deforestation in *near real time*.



WORLD
RESOURCES
INSTITUTE

GLOBAL FOREST WATCH

FOREST CHANGE

LAND COVER

LAND USE

CONSERVATION

PEOPLE

STORIES

COUNTRY DATA

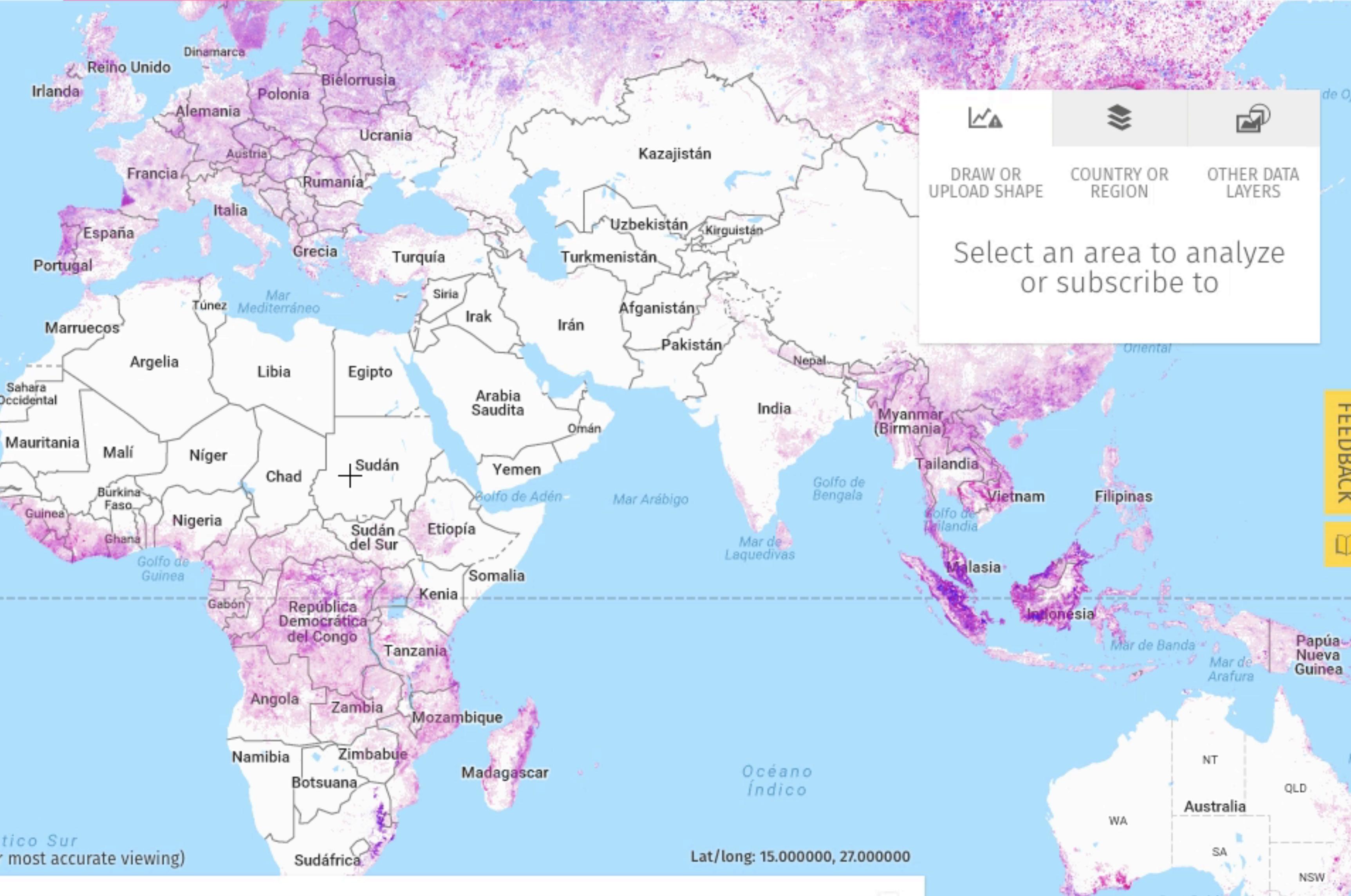
FOREST CHANGE

- Tree cover gain (12 years, 30m, global, Hansen/UMD/Google/USGS/NASA)

- Tree cover loss (annual, 30m, global, Hansen/UMD/Google/USGS/NASA)

Displaying loss with > 30 % canopy density.

Tree cover loss is not always deforestation.



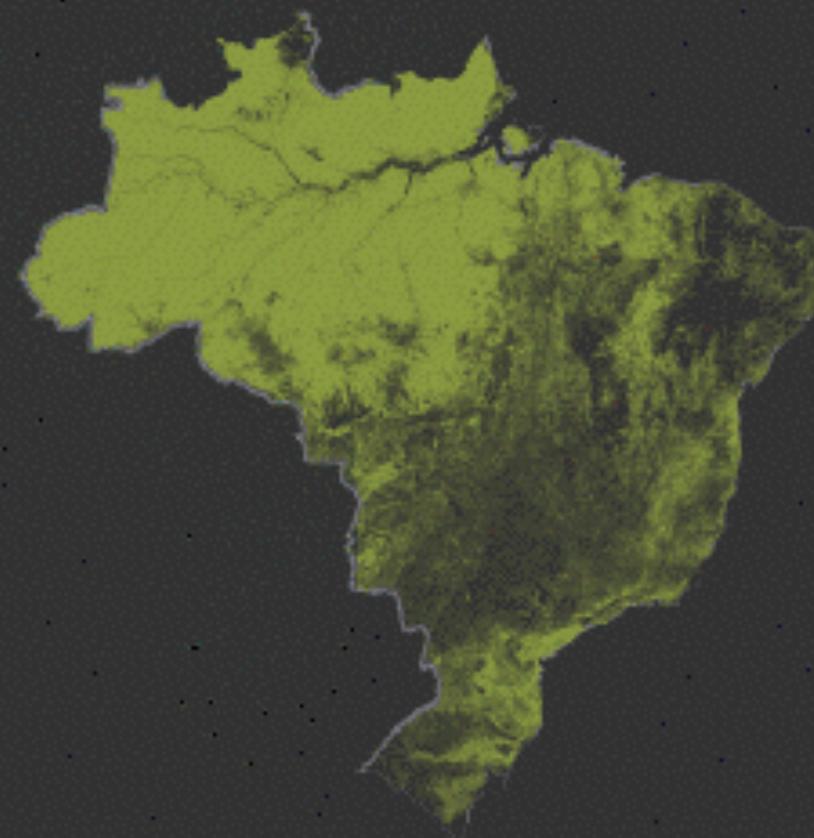
Tree cover loss (zoom in for most accurate viewing)

Lat/long: 15.000000, 27.000000

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Brazil

SELECT JURISDICTION ▾



TREE COVER (2000)

519 MHa

PERCENT TREE COVER (2000)

62 %

TREE COVER LOSS (2001 - 2014)

38,336,733 Ha

TREE COVER LOSS (2001 - 2014)

2,262,241 Ha

TREE COVER GAIN (2001 - 2012)

7,586,752 Ha

Displaying tree cover and loss with >30% canopy density

source: Hansen/UMD/Google/USGS/NASA

NOTE: Tree cover, tree cover loss and gain statistics cannot be compared against each other. [Learn more](#)
 CartoDB attribution

FORMA
CLEARING ALERTSFOREST
TYPEPEOPLE
& ECONOMYTENURE
& LAWS

CLIMATE CHANGE

INTERNATIONAL
AGREEMENTS

FORMA ALERTS



GLOBAL FOREST WATCH

FOREST CHANGE

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BRAZIL DATA

FOREST CHANGE

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(12 years, 30m, global, Hansen/UMD/Google/USGS/NASA)
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Tree cover loss is not always deforestation.



Tree cover loss (zoom in for most accurate viewing)



▶



2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014

Lat/long: 15.000000, 27.000000



◀

Show footer

succes story*.

<http://maaproject.org/2016/united-cacao/>

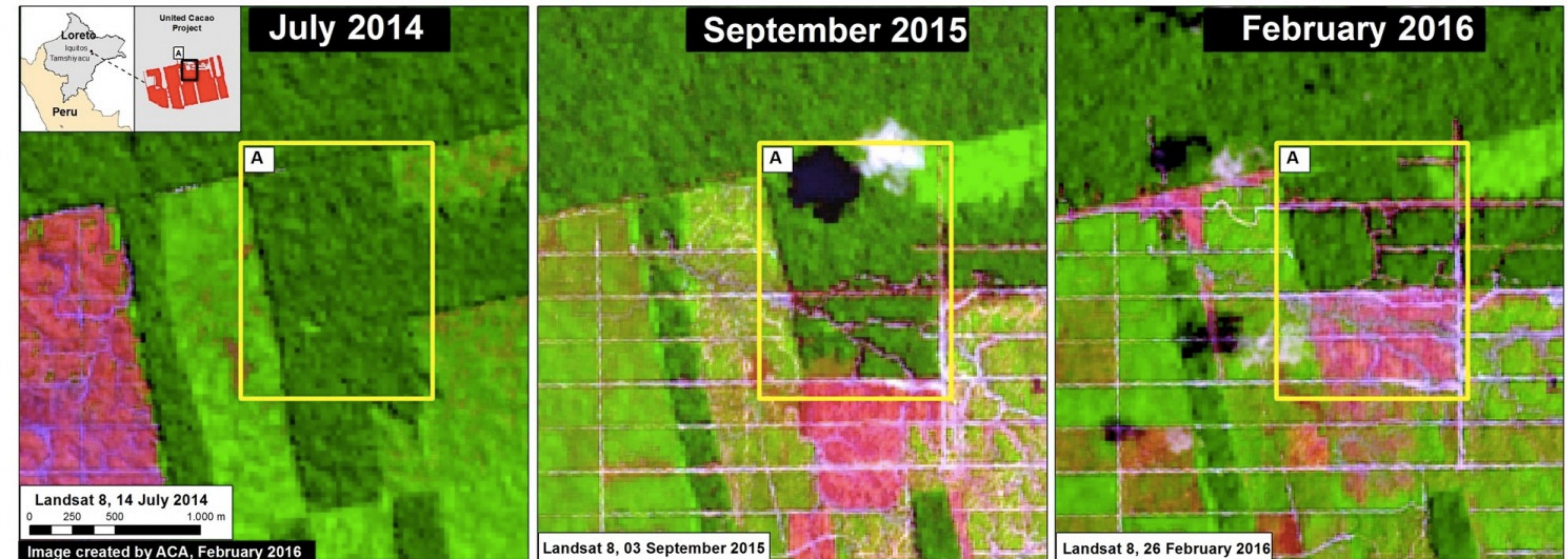
***all images courtesy of MAAP Project**

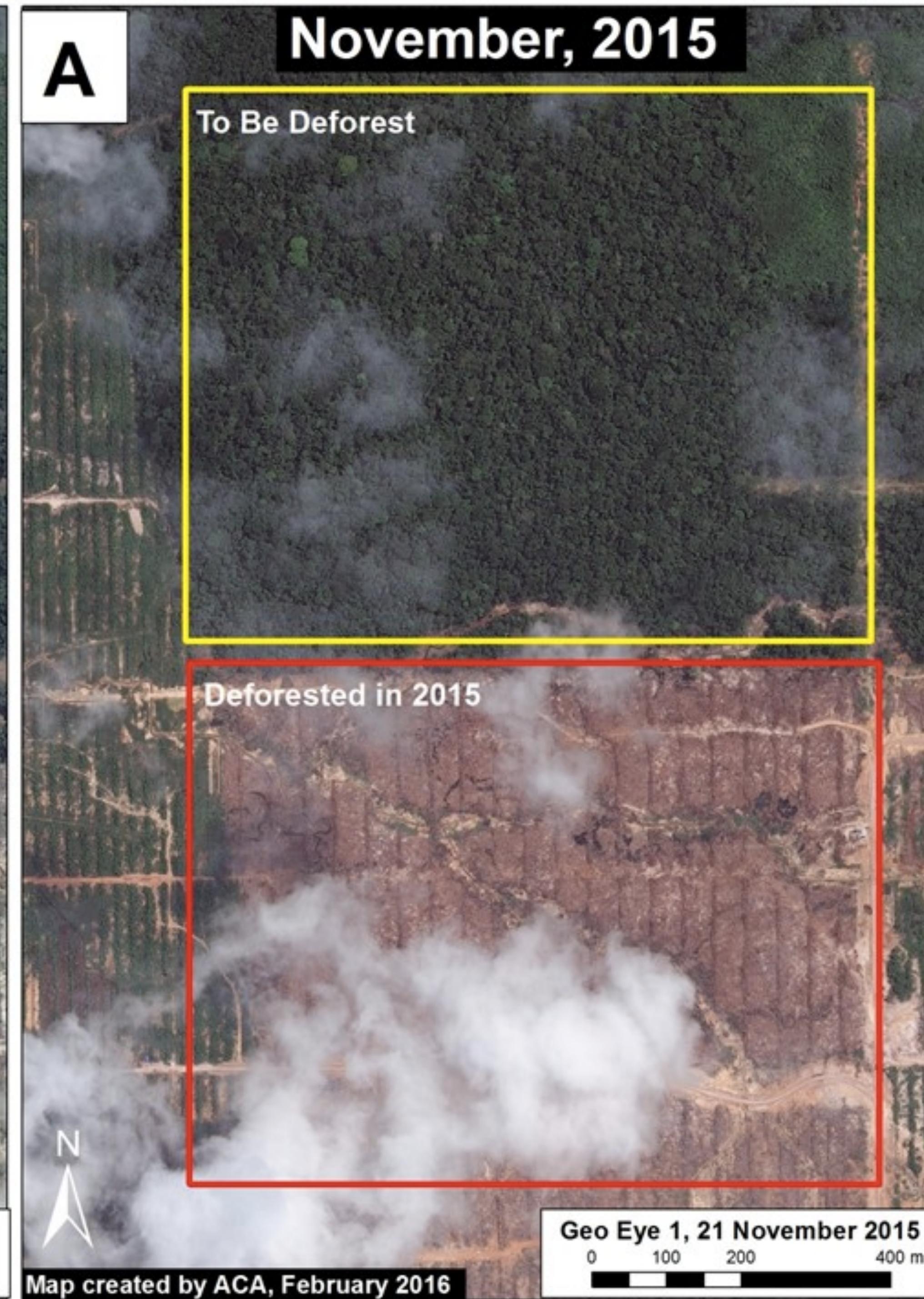


tamshiyacu - peru.

deforestation of 2,380 ha.

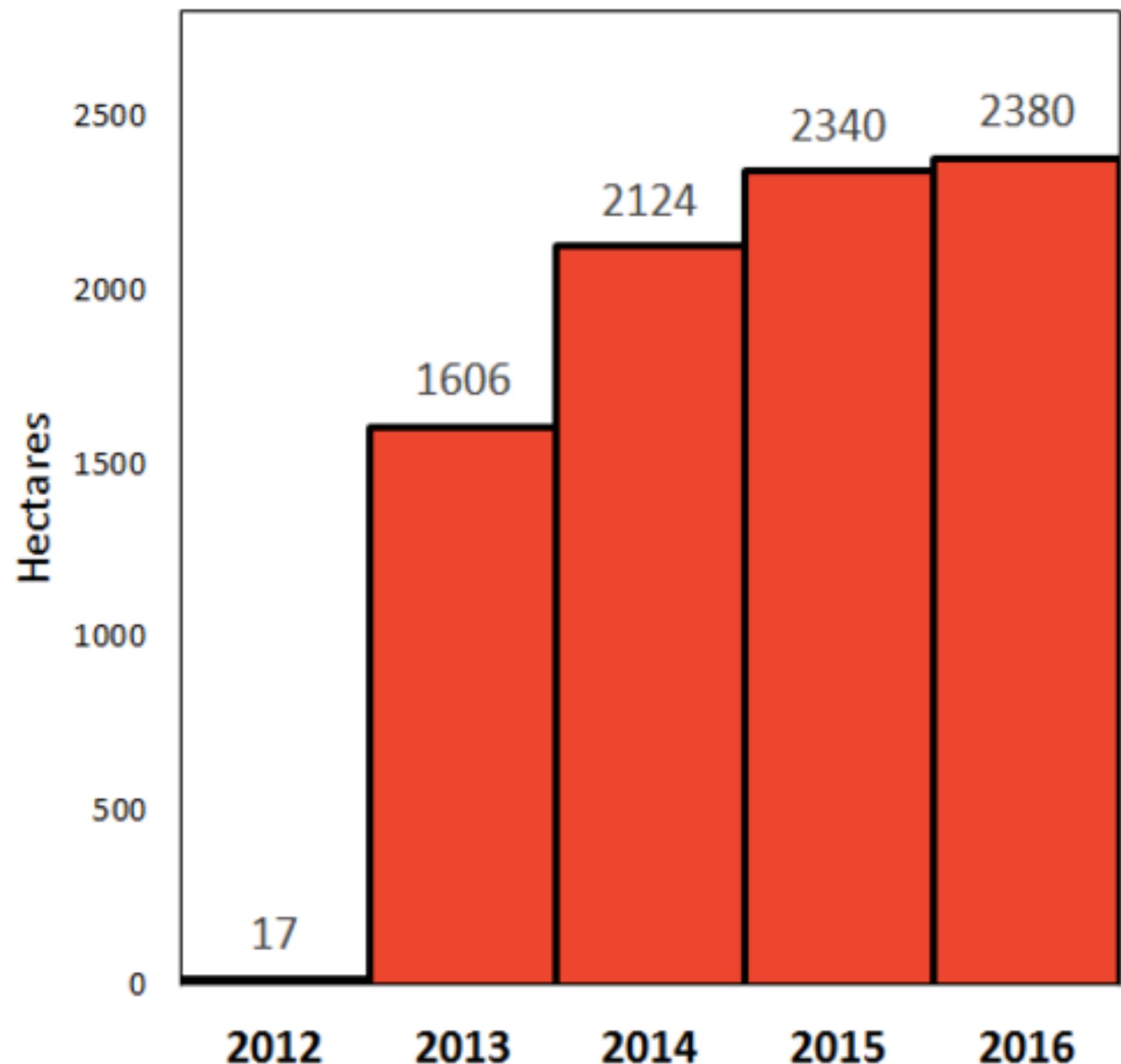
**peruvian ministry of agriculture
ordered the “paralyzation”.**





Deforestation Trend

The graph to the right shows the **trend of accumulated deforestation** in the United Cacao project area between 2012 and February 2016. The company began operations in early 2013, the same year as the large increase in deforestation. Also note that deforestation increased in 2015 despite the Ministry of Agriculture's "paralyzation" order in late 2014.



Data: PNCB/MINAM, Hansen/UMD/Google/USGS/NASA, Hansen et al 2016
(ERL)***

**results:
minds,
creating tools,
country policies,**

...



**resource watch.
7 billion friends.**



5,299 MWh
TOTAL
3,543,422

Forma
WRI, CGD

CSV ★ 7,034

NOT DISPLAYABLE

Population and GDP
World Bank

CSV ★ 1,000

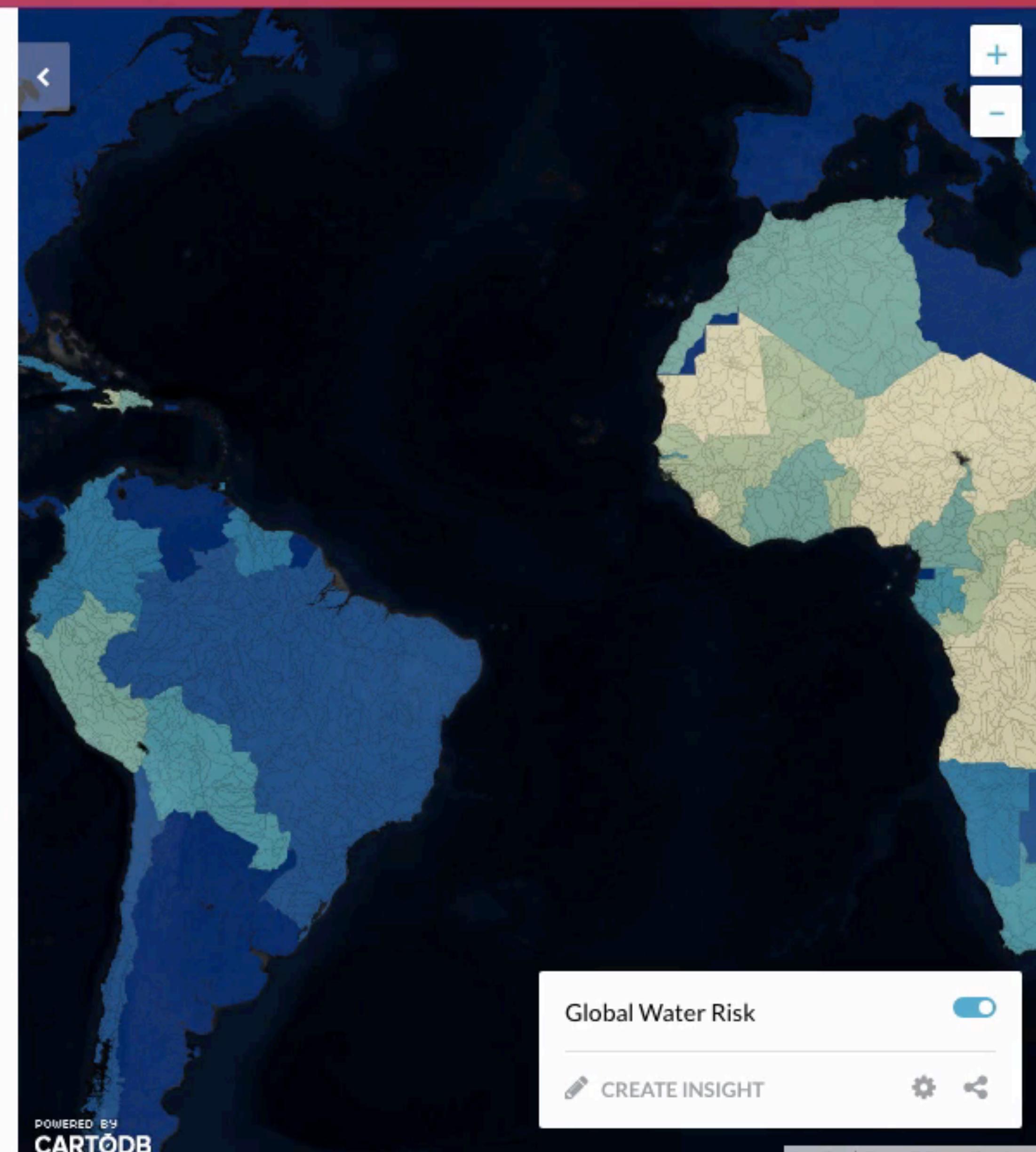
NOT DISPLAYABLE



Population density
CIESIN

CSV ★ 6,777

NOT DISPLAYABLE



Intact Forest Landscapes

WRI

CSV ★ 6,550

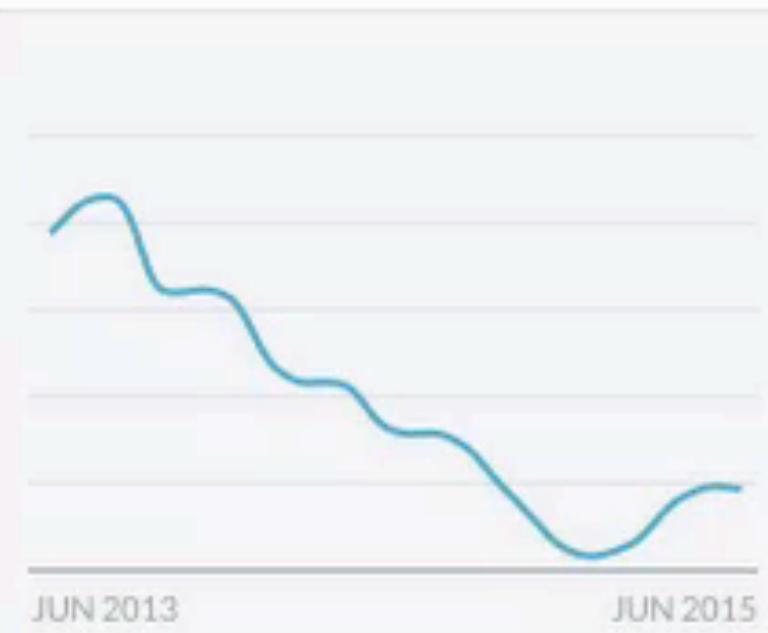
NOT DISPLAYABLE



CARMA: Energy plants
CARMA, CGD

CSV ★ 4,002

ADD TO MAP



Tree cover loss

Hansen, UMD, Google, USGS,
NASA 2013

CSV ★ 12,000

NOT DISPLAYABLE

Global Water Risk

CREATE INSIGHT





A dark, high-contrast silhouette of a large group of people standing outdoors, possibly at a beach or public gathering, under a cloudy sky.

57%
no data.

just the beginning.
prep, sdg 4 data,
aqueduct,
climate watch...
.

commodity trading.
deforestation.
soy.
brazil.

world use of soy.
85% global production.
98% animal feed.

brazil deforestation.

38 million Ha deforested in Brazil.

30% comes from Brazil

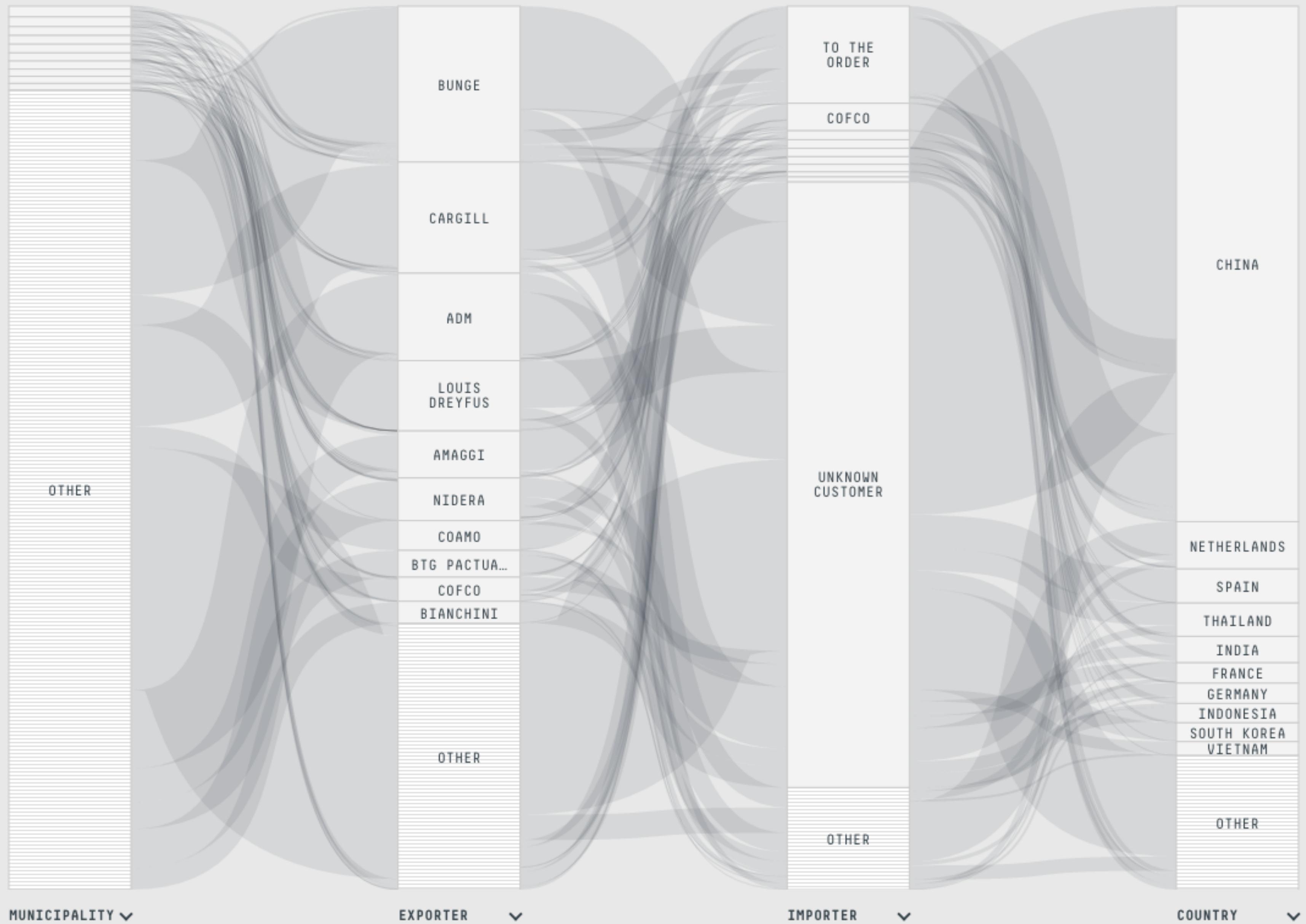
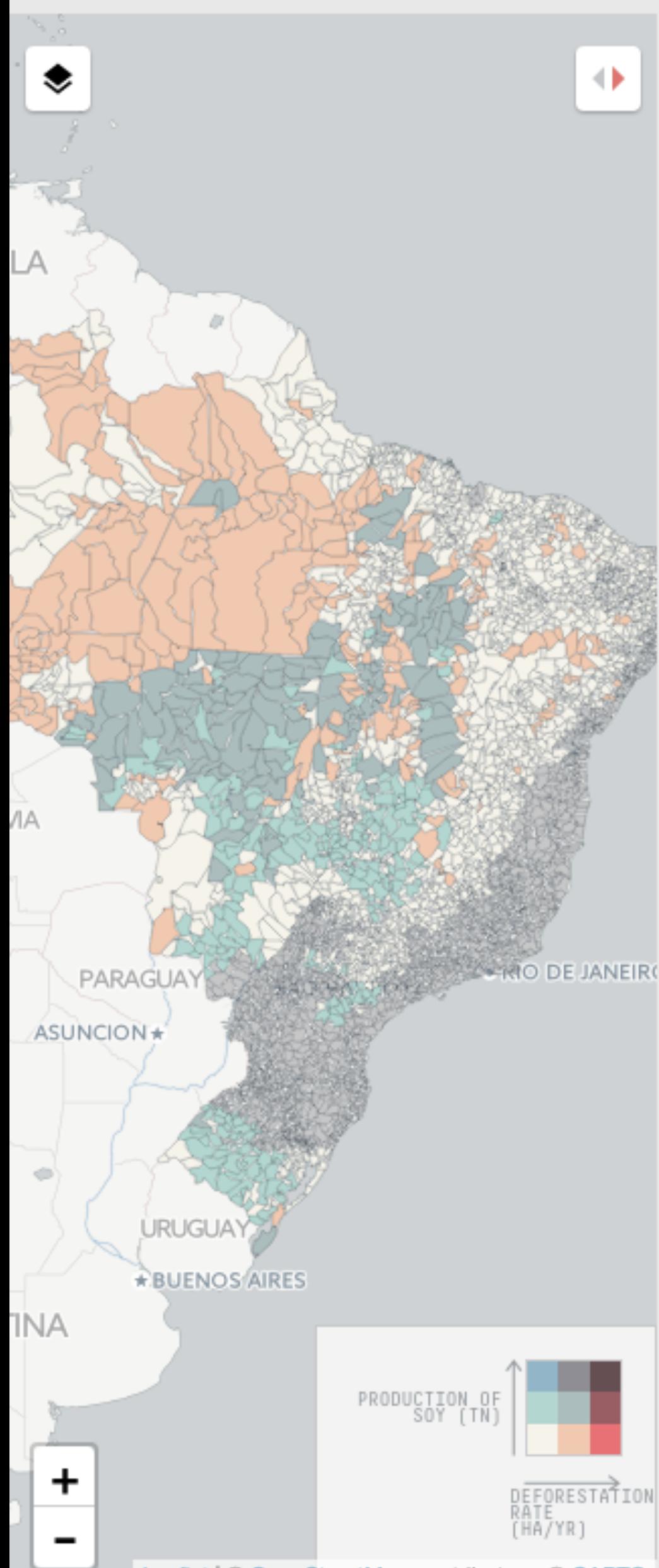
70 M tones in 2015

trase.
radical transparency
'deforestation - free' economy.



Search for:

producer, trader or country of import



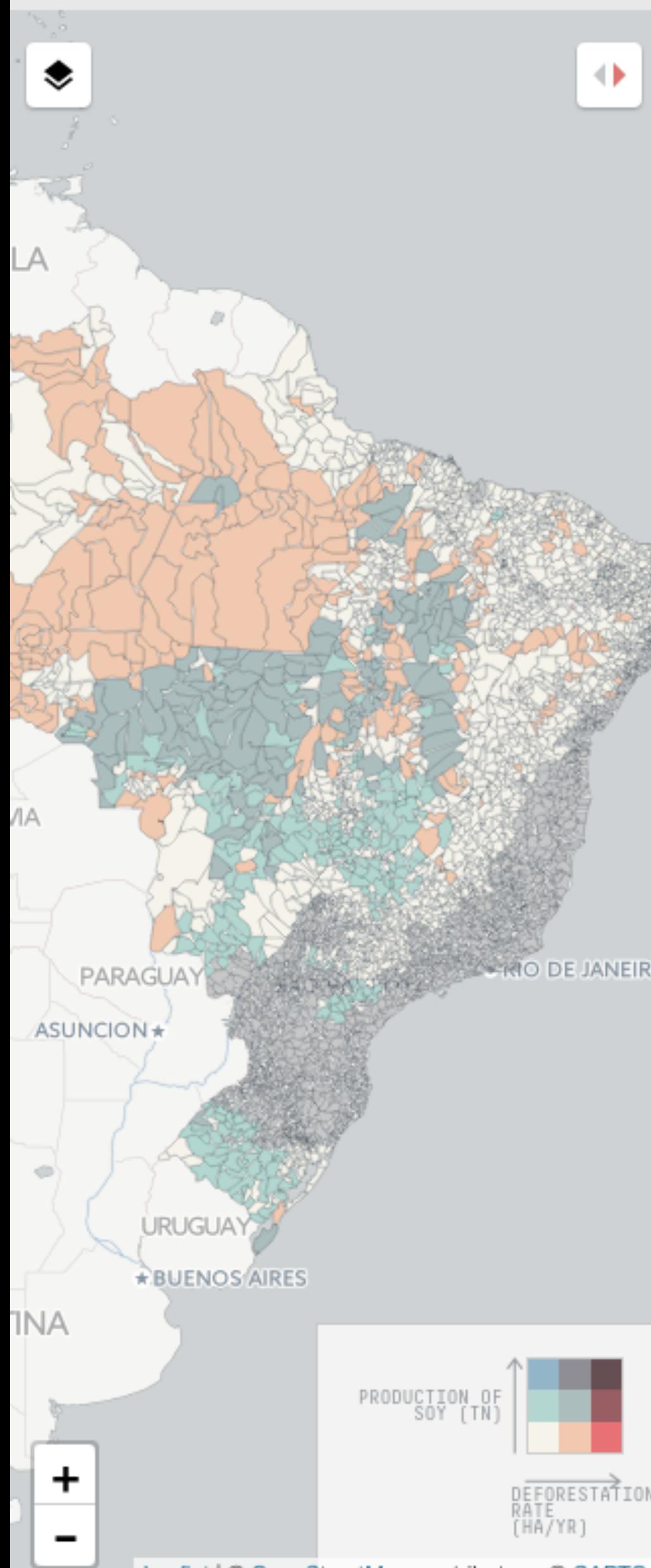


COUNTRY

VOLUME

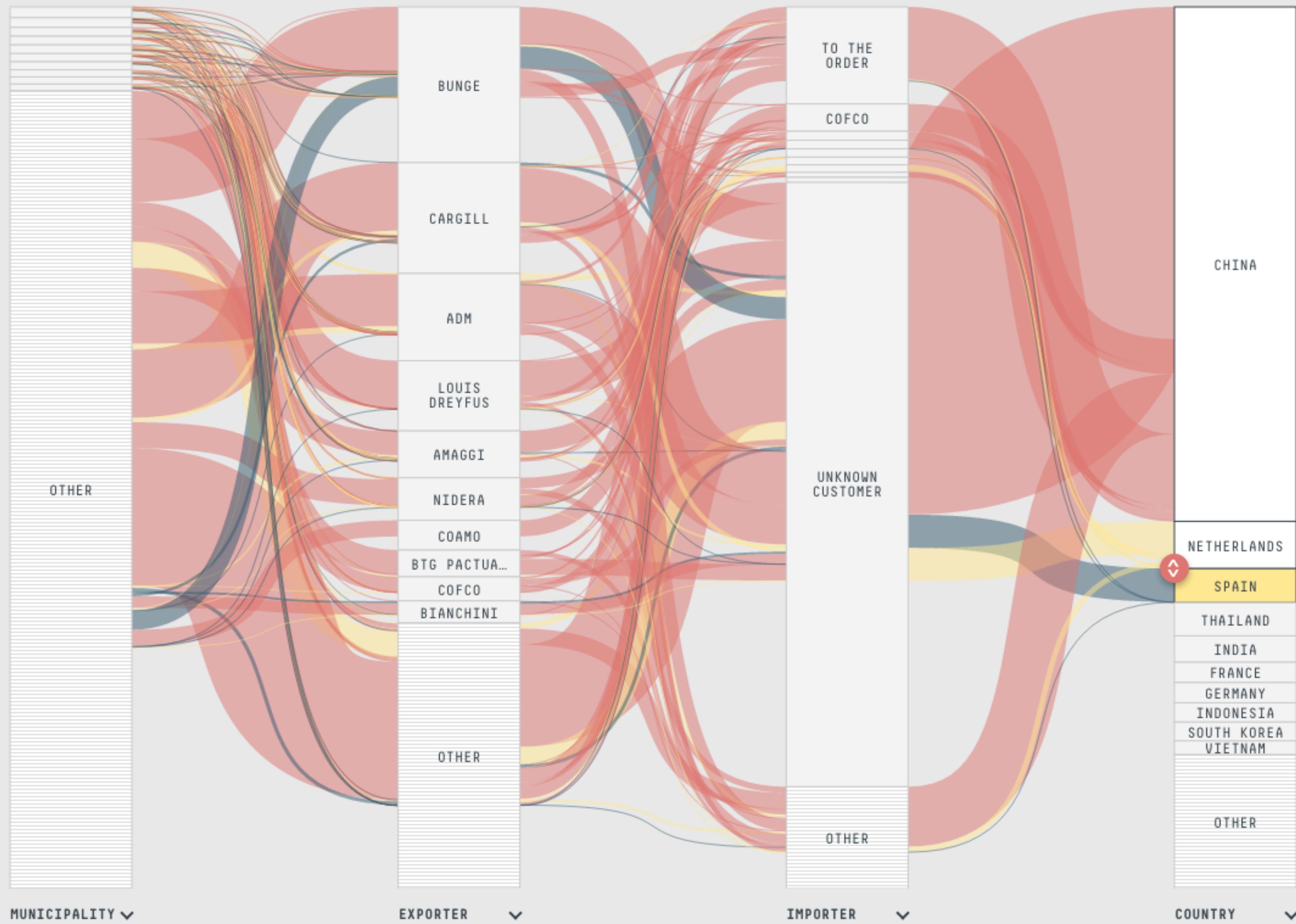
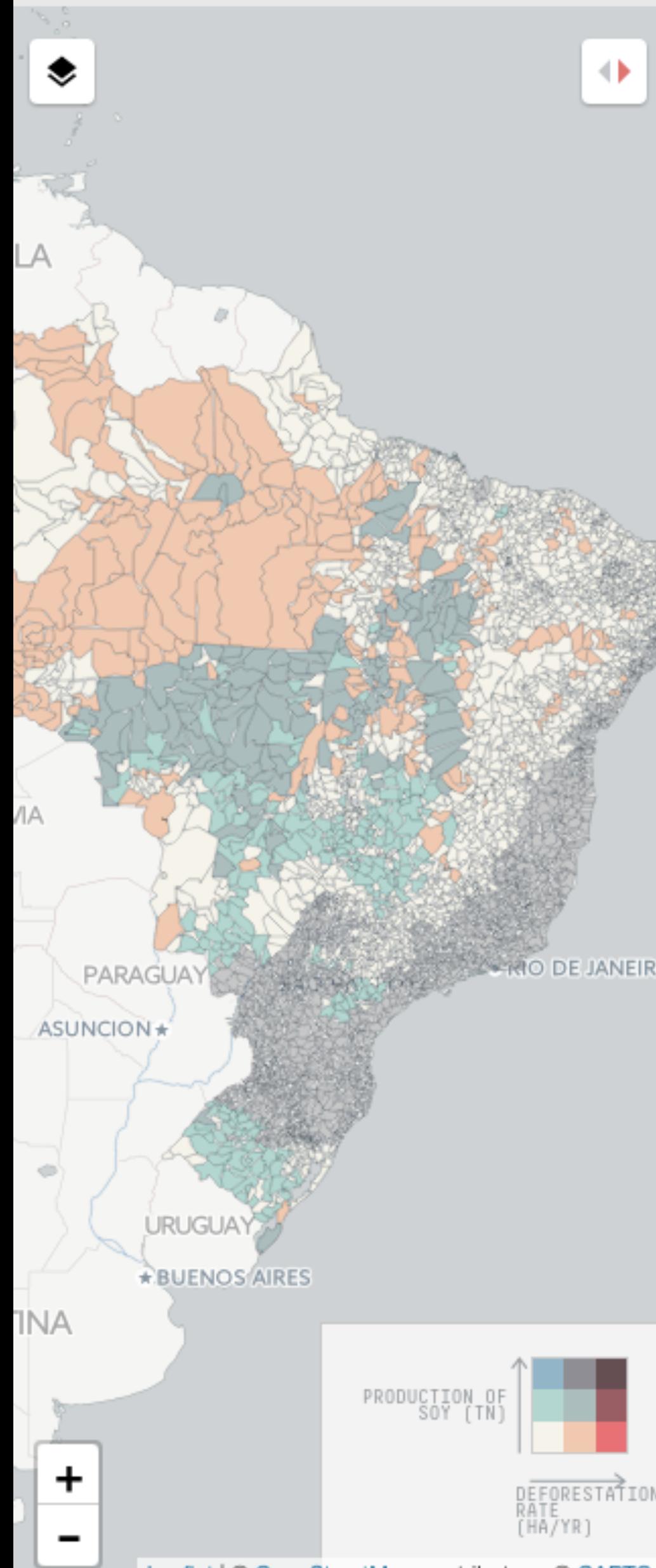
CHINA 43,011,645.9 Tons

DISCARD SELECTION



COUNTRY
SPAINCOUNTRY
NETHERLANDSCOUNTRY
CHINA

DISCARD SELECTION



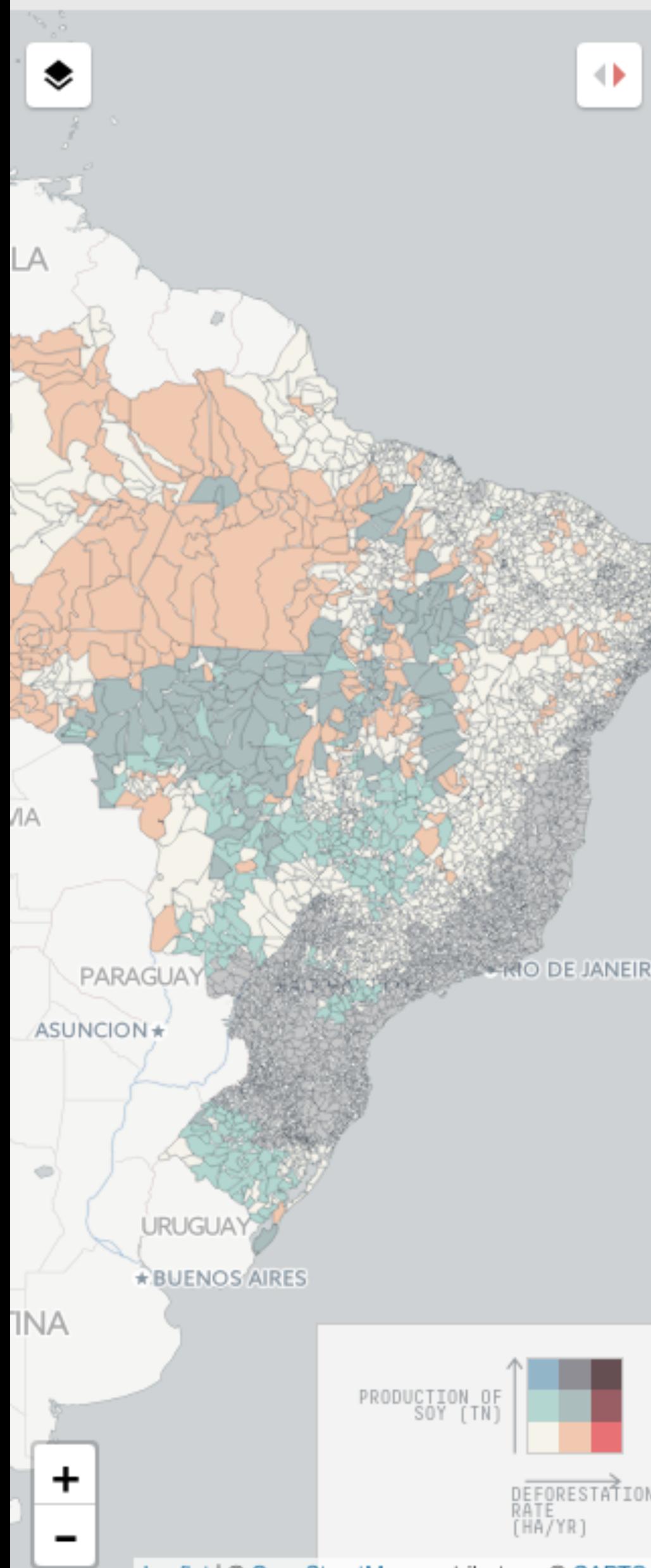


COUNTRY

VOLUME

CHINA 43,011,645.9 Tons

DISCARD SELECTION





IMPORTER

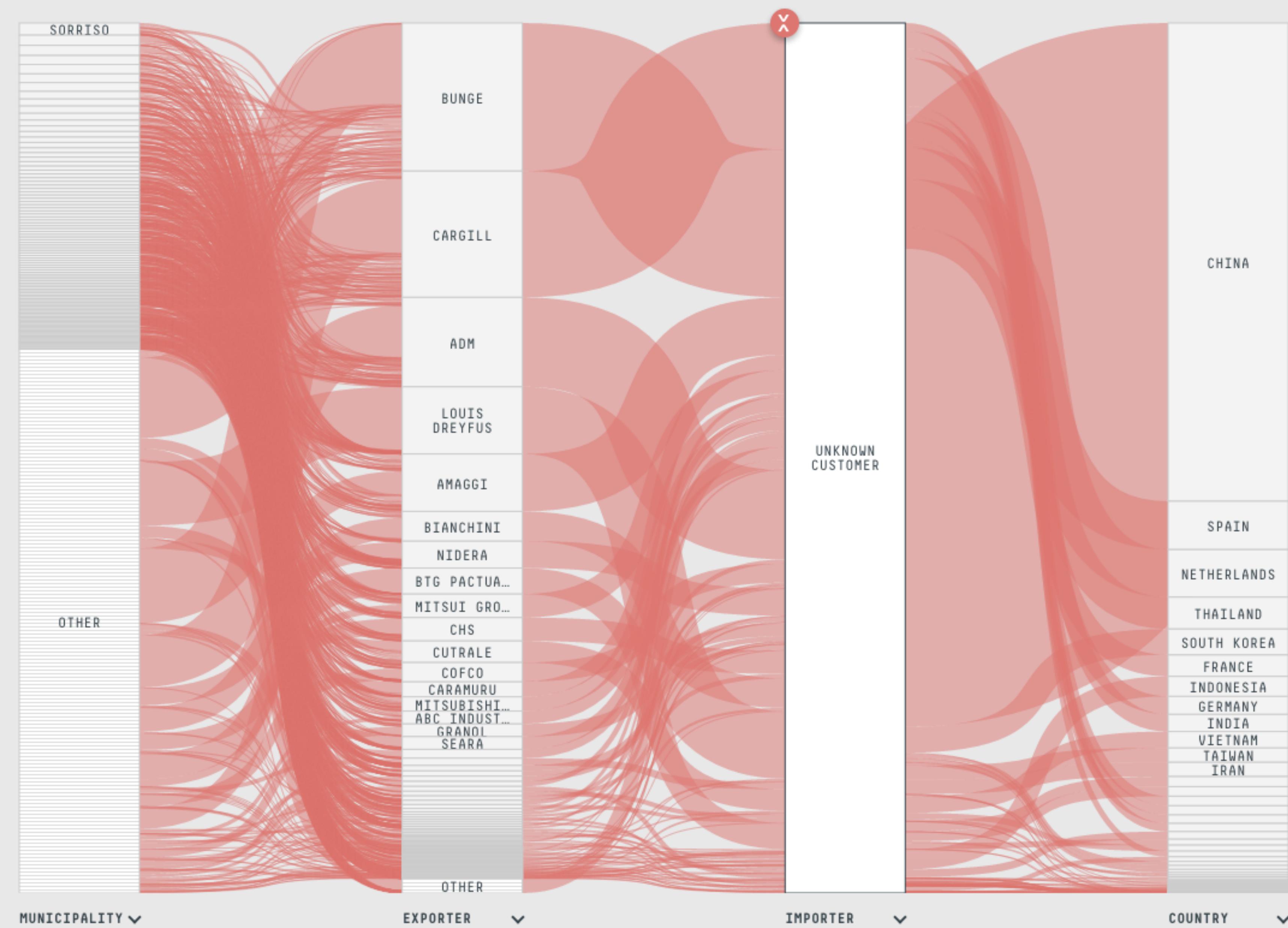
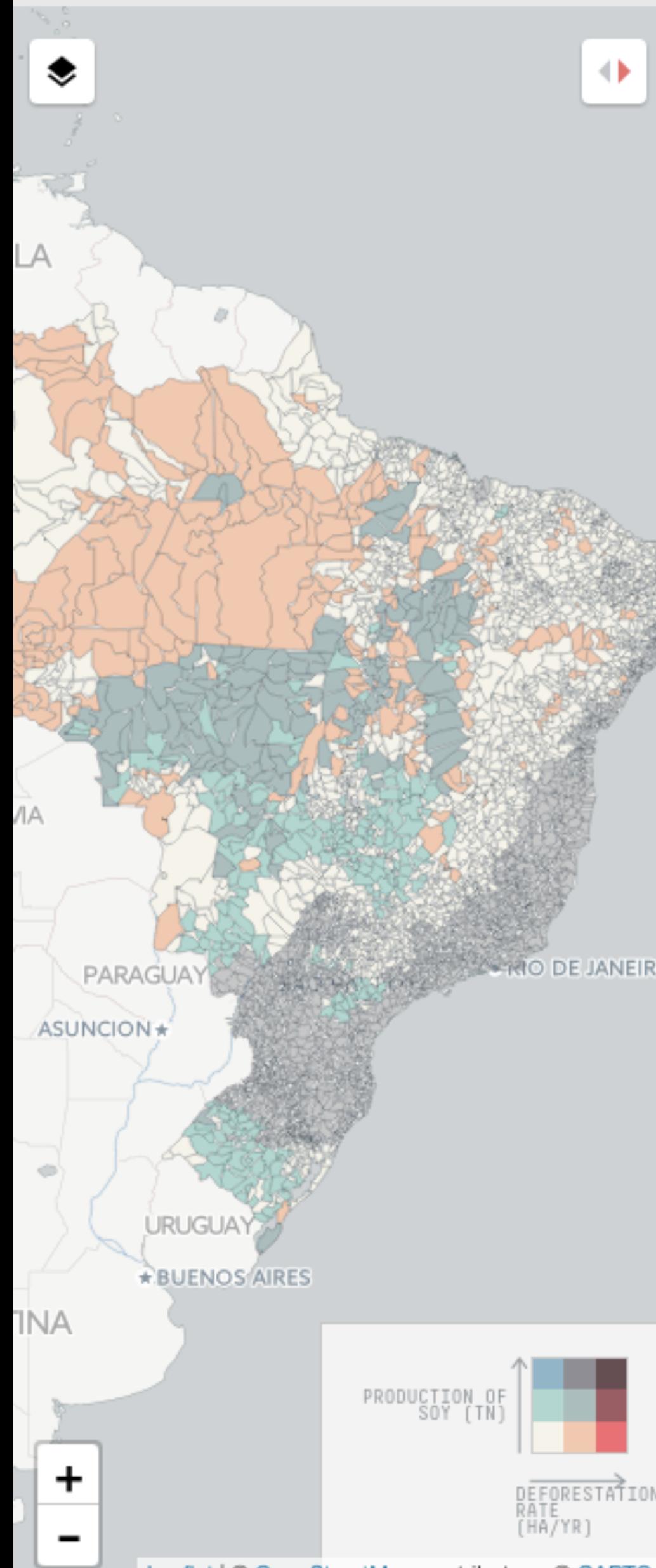
UNKNOWN CUSTOMER

VOLUME

50,524,676.1 Tons

VIEW MORE

DISCARD SELECTION



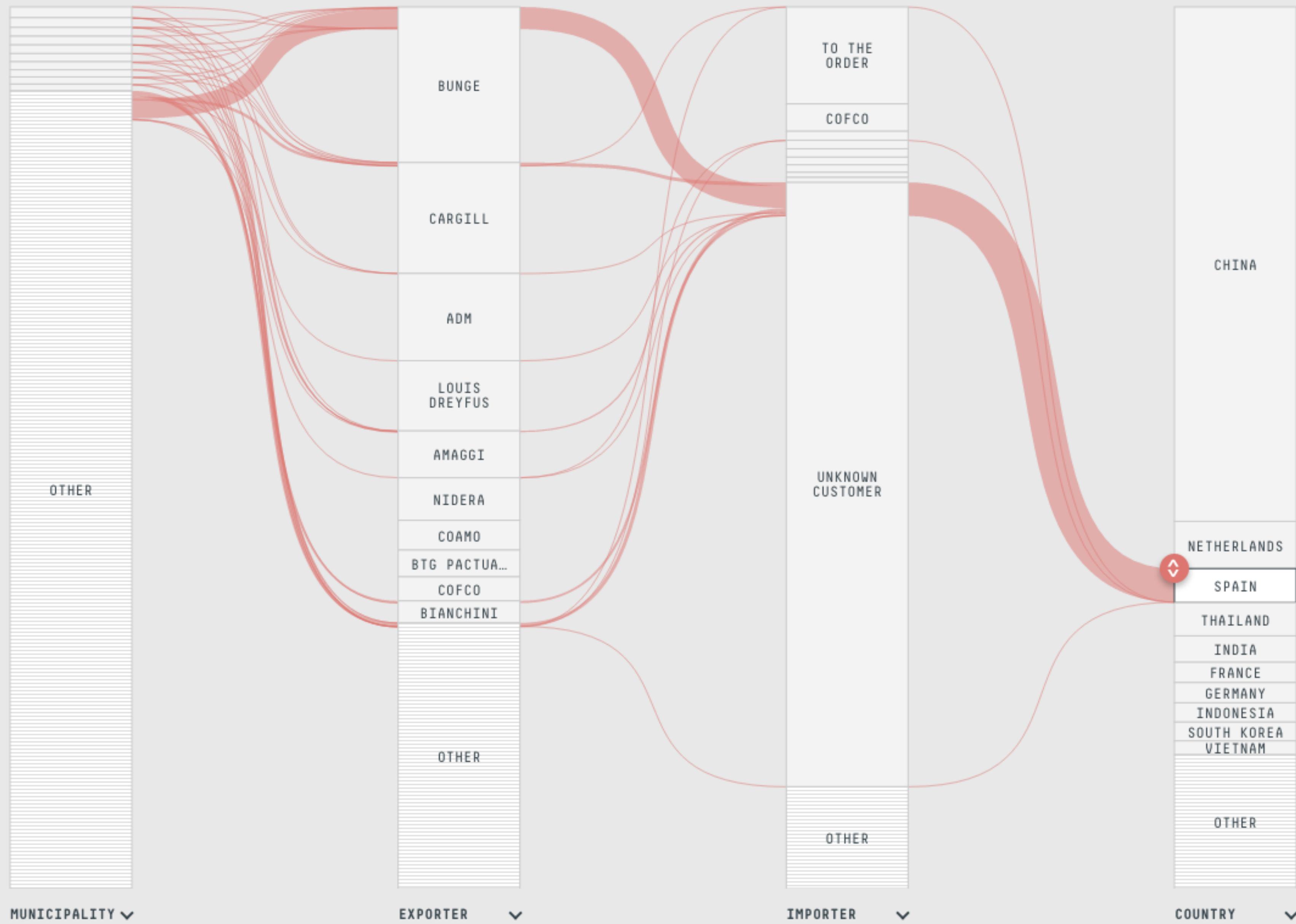
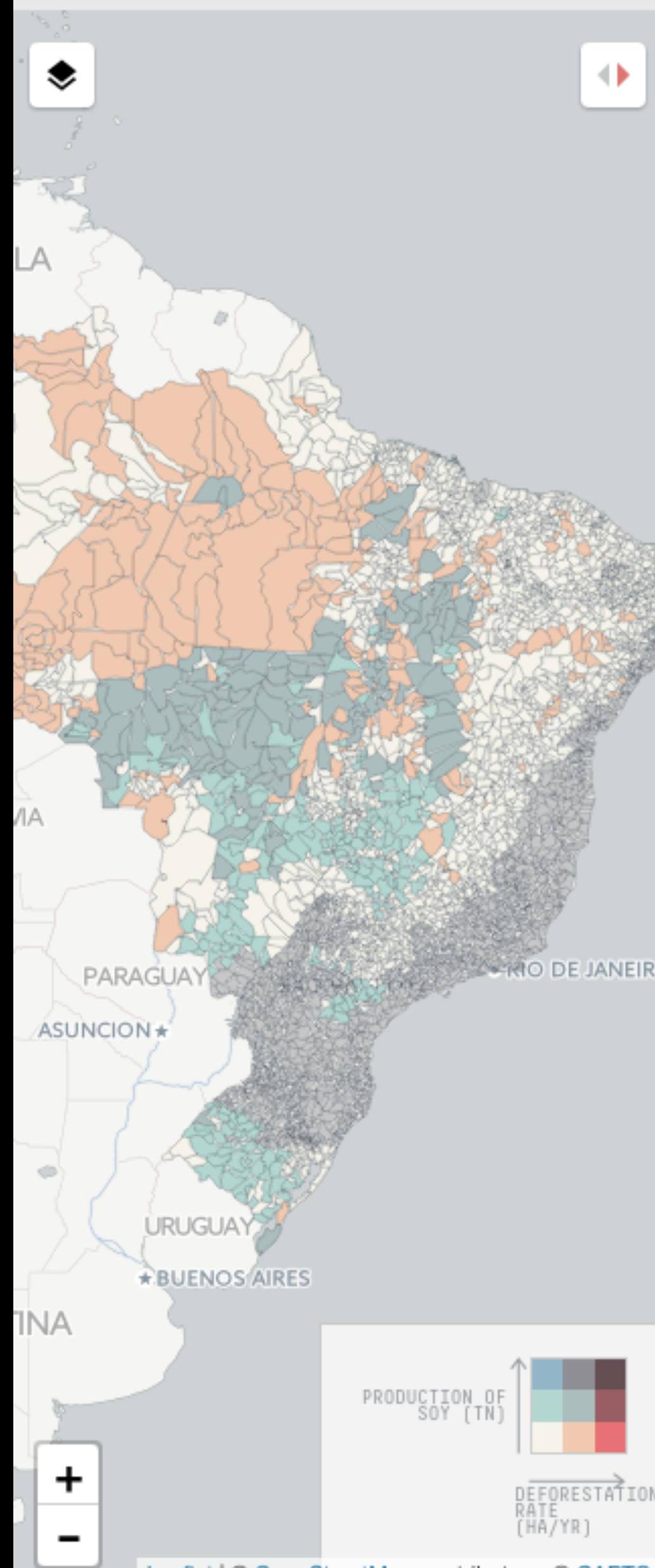


COUNTRY

VOLUME

SPAIN 2,847,527.4 Tons

DISCARD SELECTION





IMPORTER

UNKNOWN CUSTOMER

VOLUME

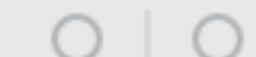
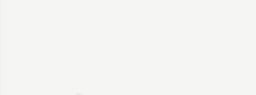
50,524,676.1 Tons

VIEW MORE

DISCARD SELECTION

CHOOSE ONE LAYER ON EACH
COLUMN TO DRAW COMPARISONS

PRODUCTION OF SOY (TN)

% SOY OF TOTAL FARMING LAND
(%)

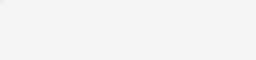
DEFORESTATION RATE (HA/YR)



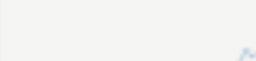
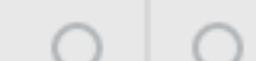
WATER SCARCITY (/7)



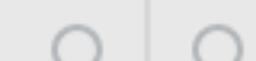
BIODIVERSITY (-)



HUMAN DEVELOPMENT INDEX (/1)



GDP PER CAPITA (USD/CAPITA)



% GDP FROM AGRICULTURE (%)



SMALLHOLDER DOMINANCE (%)

REPORTED CASES OF FORCED
LABOUR (2014) (INDIVIDUALS
WITH LAWSUITS)LAND CONFLICTS (2014) (LAND
CONFLICTS)NUMBER OF ENVIRONMENTAL
EMBARGOS (2015) (FINES &
EMBARGOES)

CONTEXTUAL LAYERS

LAND COVER



WATER SCARCITY



INDIGENOUS AREAS



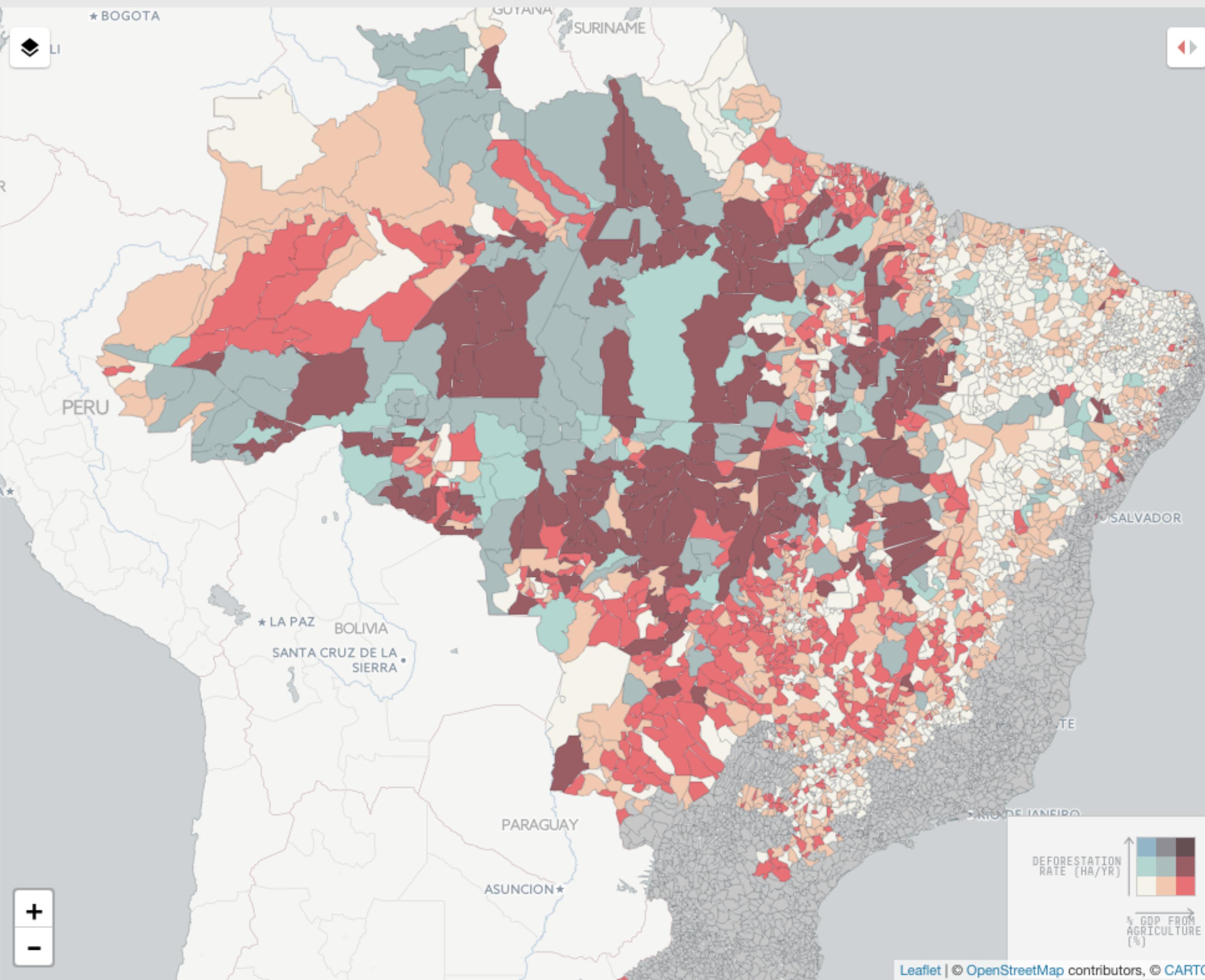
BRAZIL PROTECTED AREAS



SILOS



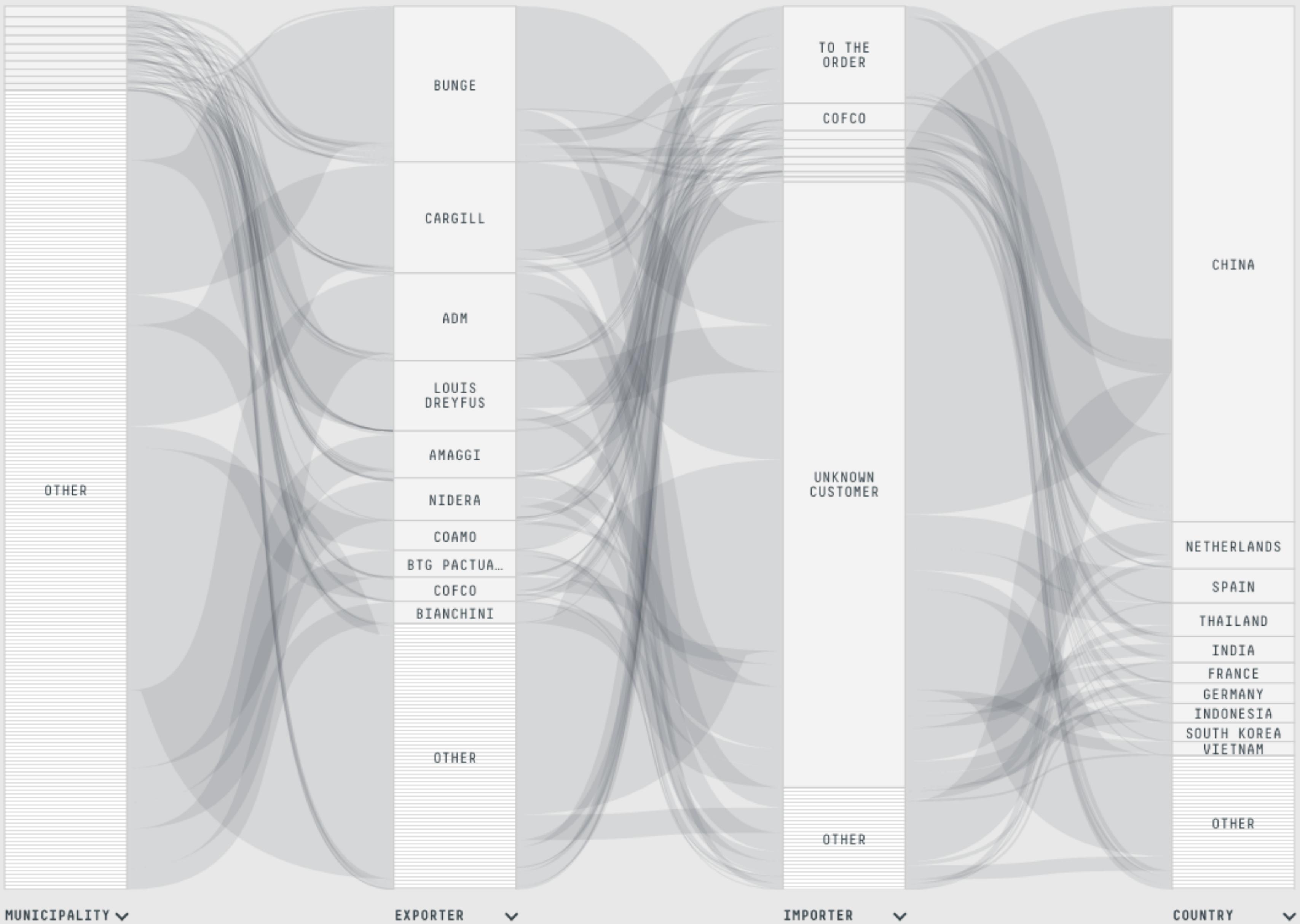
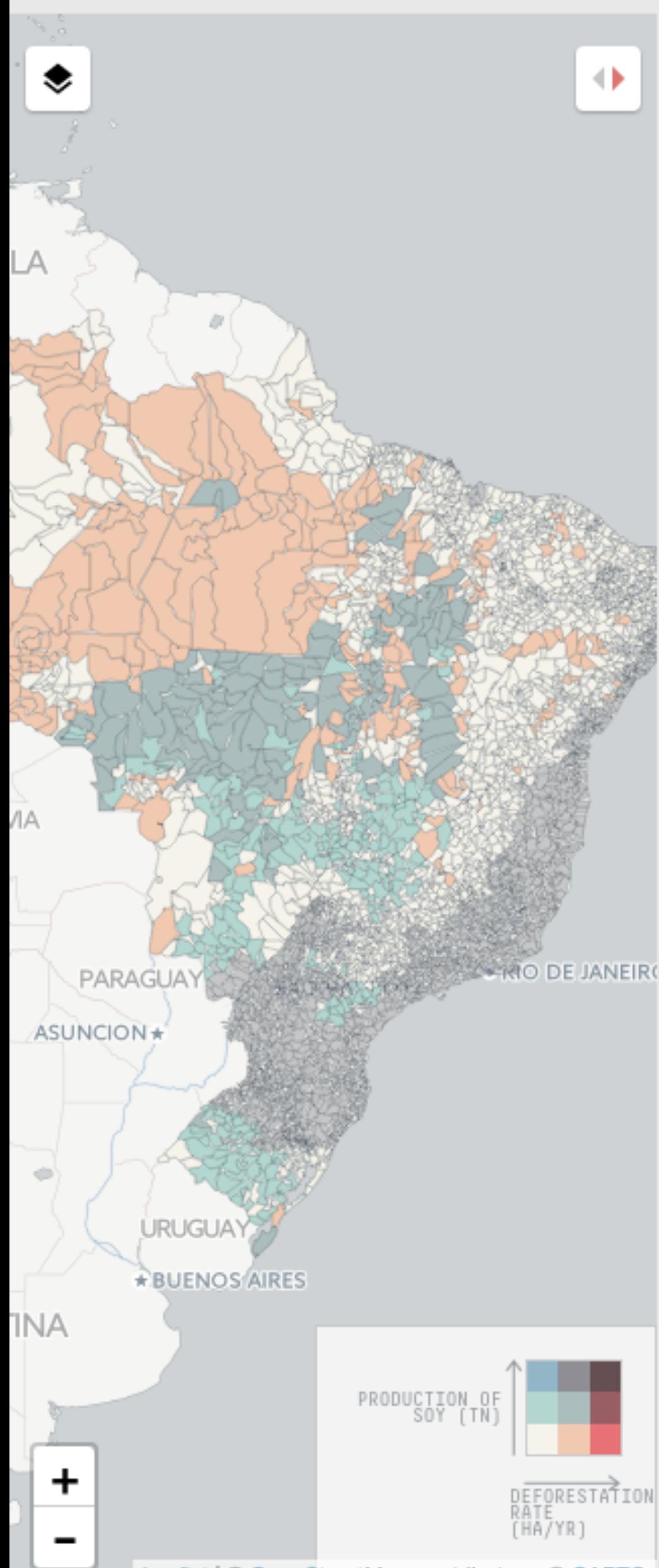
DEFORESTATION ALERTS





Search for:

producer, trader or country of import



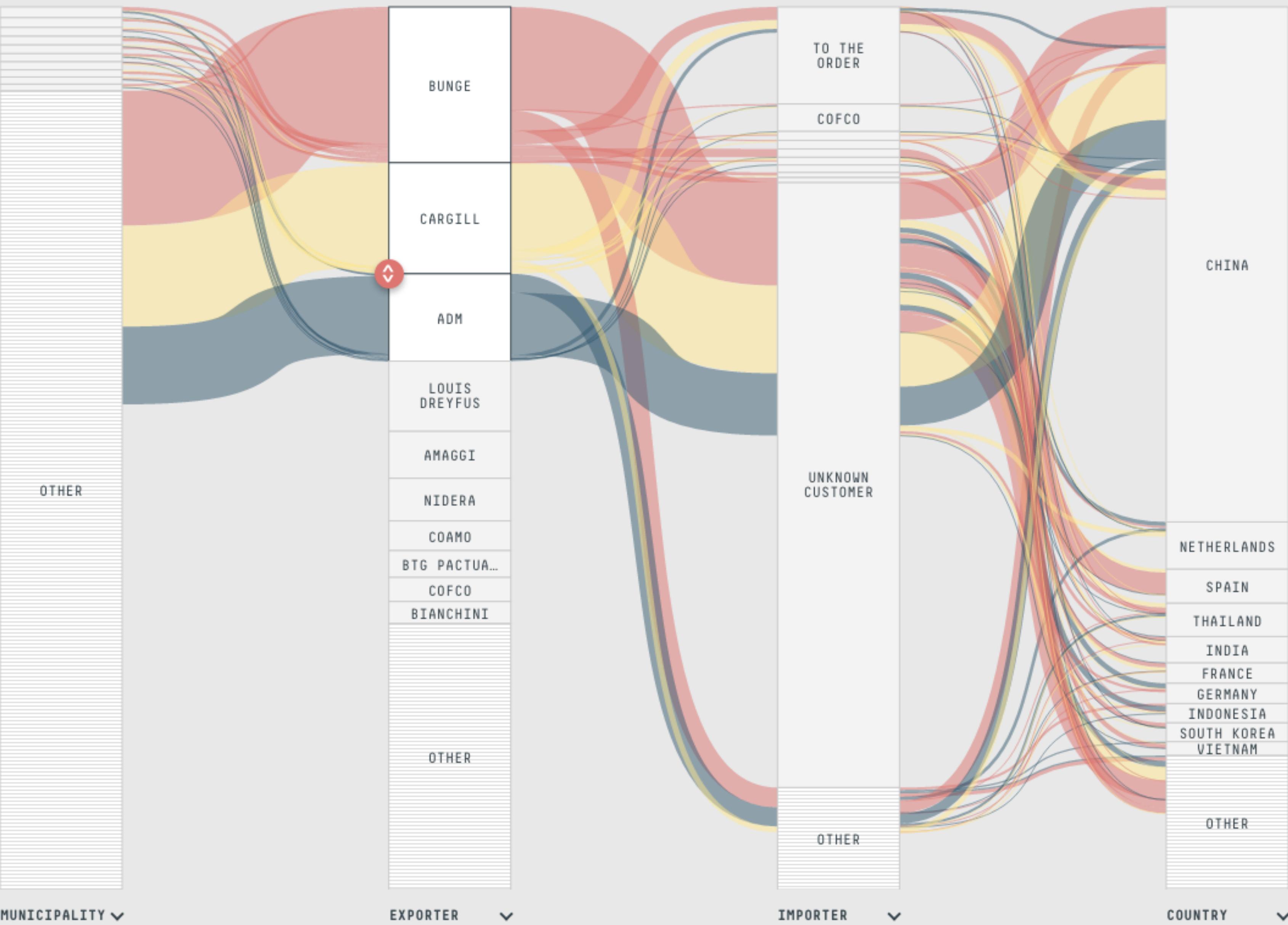
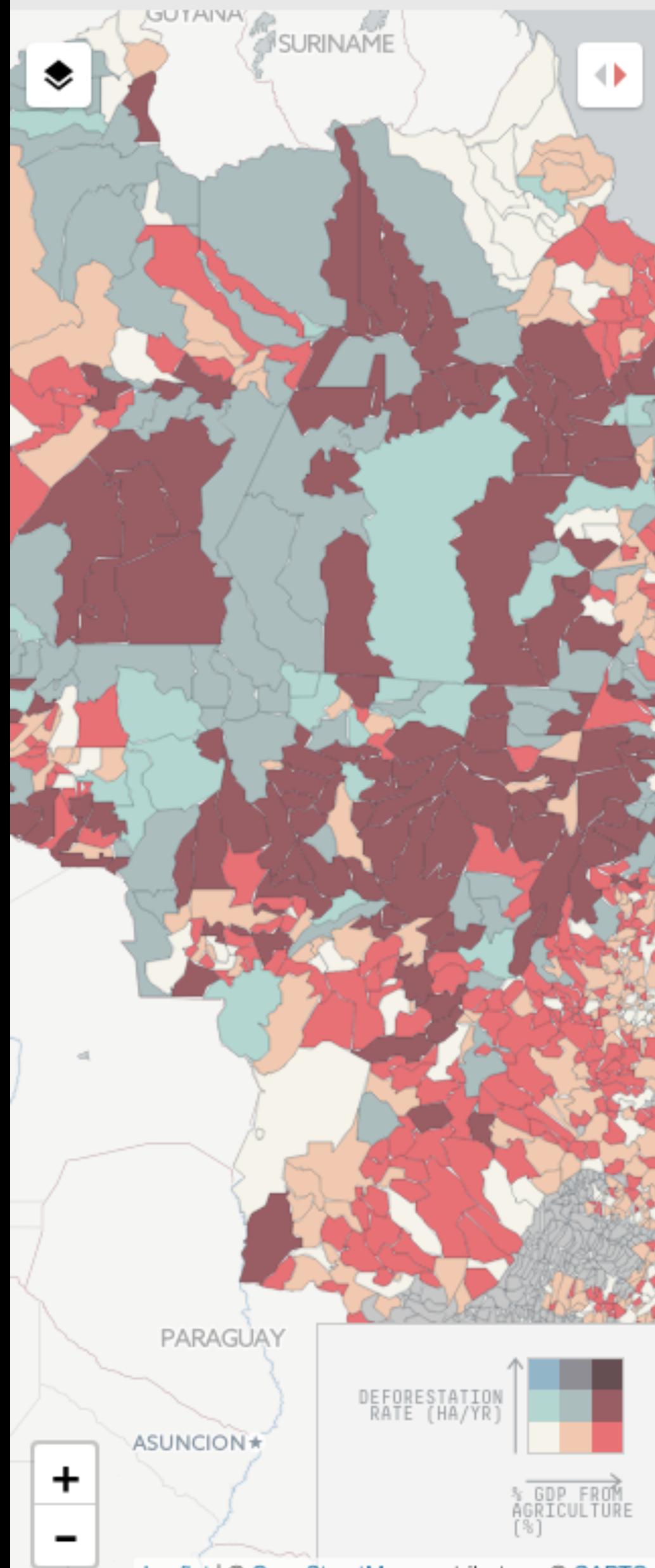


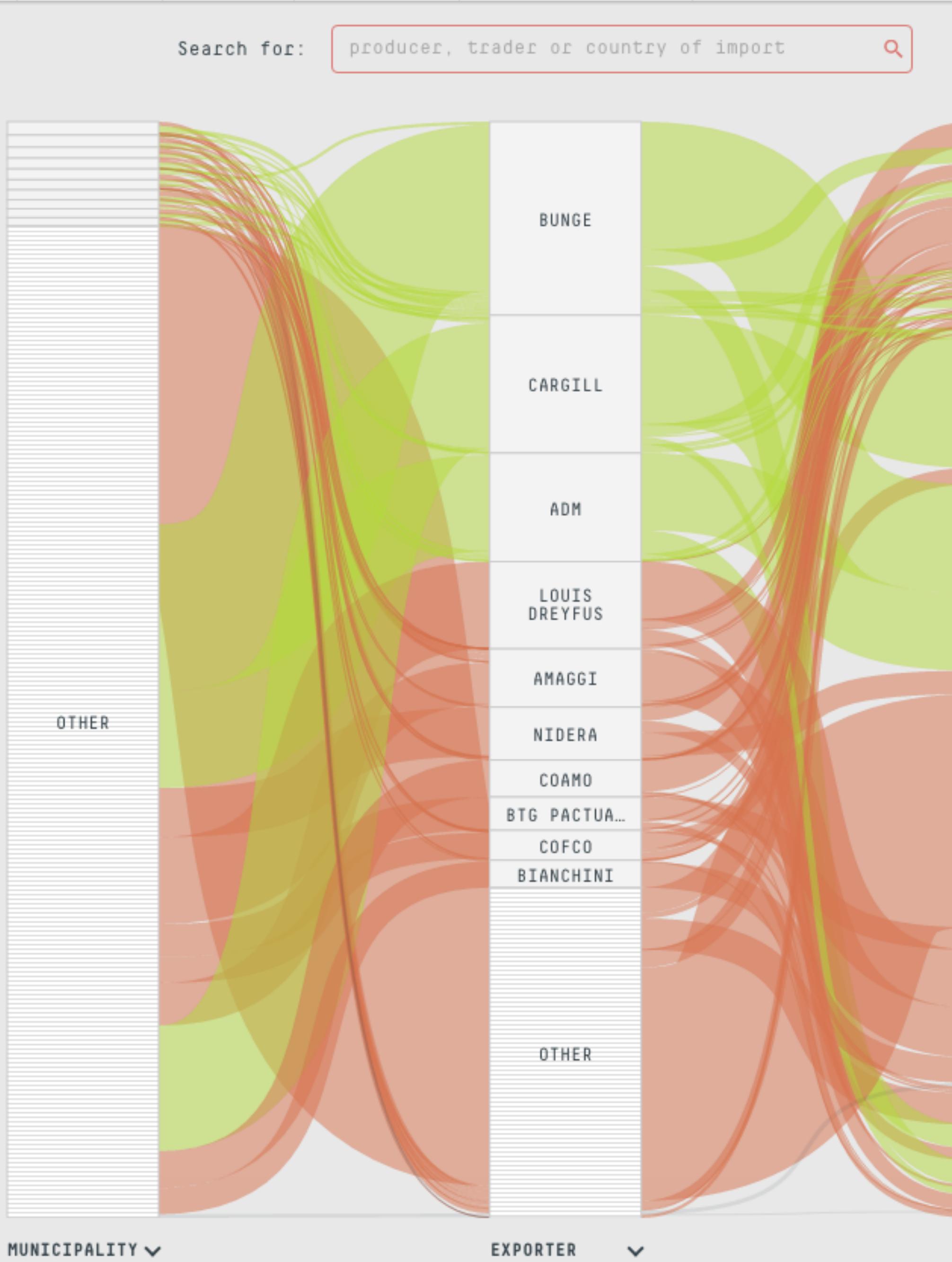
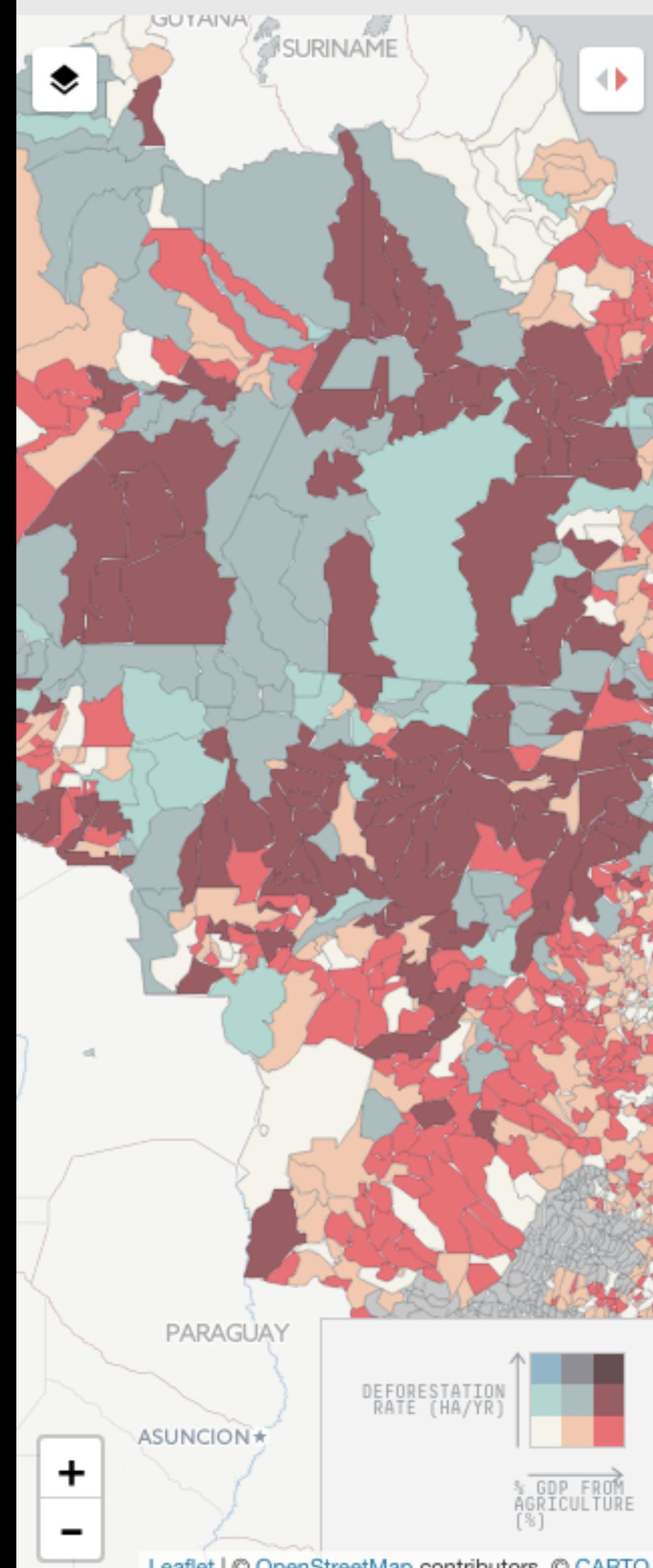
EXPORTER

EXPORTER

EXPORTER

ADM CARGILL BUNGE





Node selection

#1 #2 #3

Biome

AMAZONIA CERRADO
MATA ATLANTICA CAATINGA
PAMPA PANTANAL

F500 Score

★ ★ ★ ★ ★

Soy zero-deforestation commitment

YES NO

Water Scarcity

1 7

Family farming dominance

0% 100%

Rural registry compliance (CAR)

0% 100%

CHINA

NETHERLANDS

SPAIN

THAILAND

INDIA

FRANCE

GERMANY

INDONESIA

SOUTH KOREA

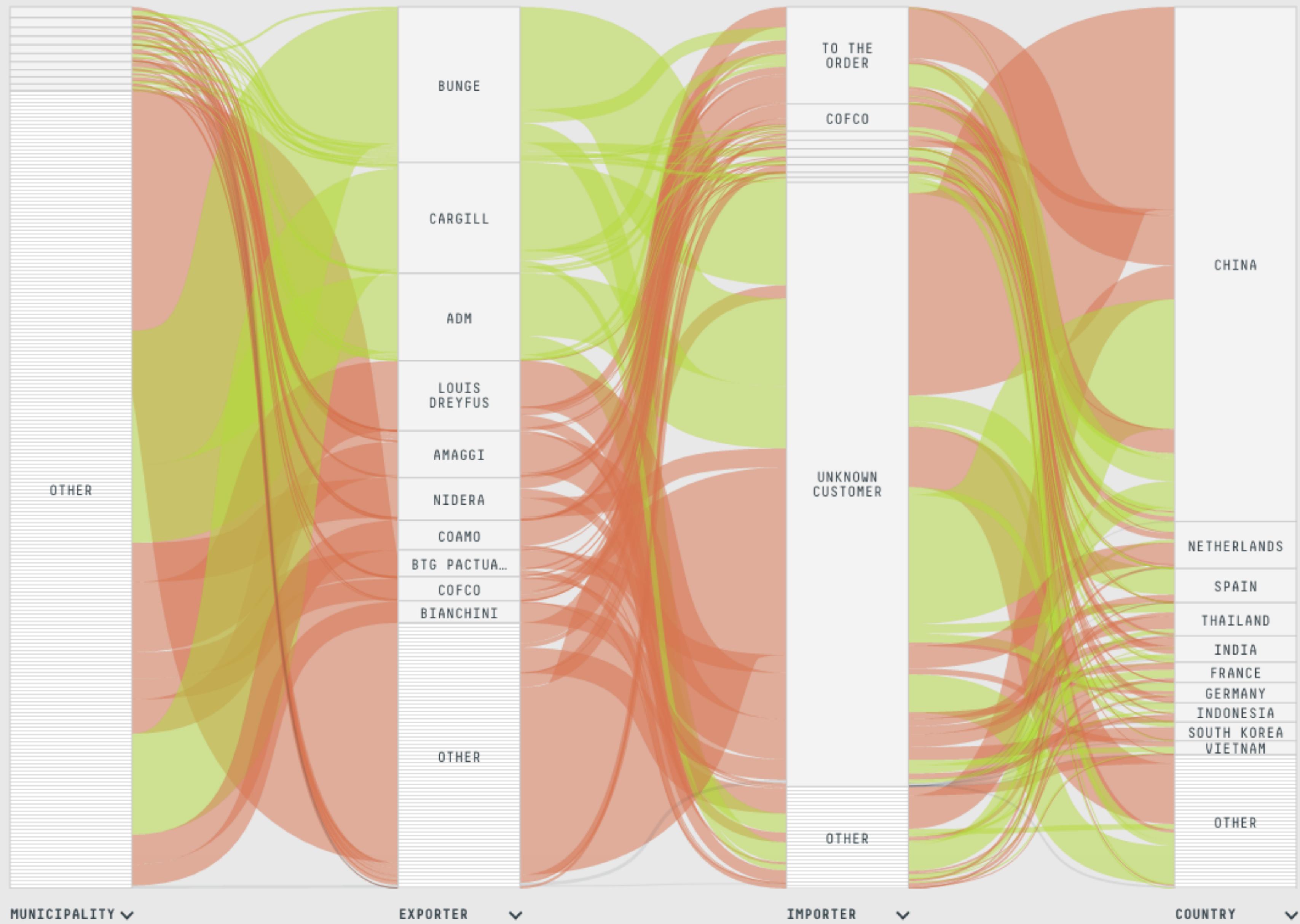
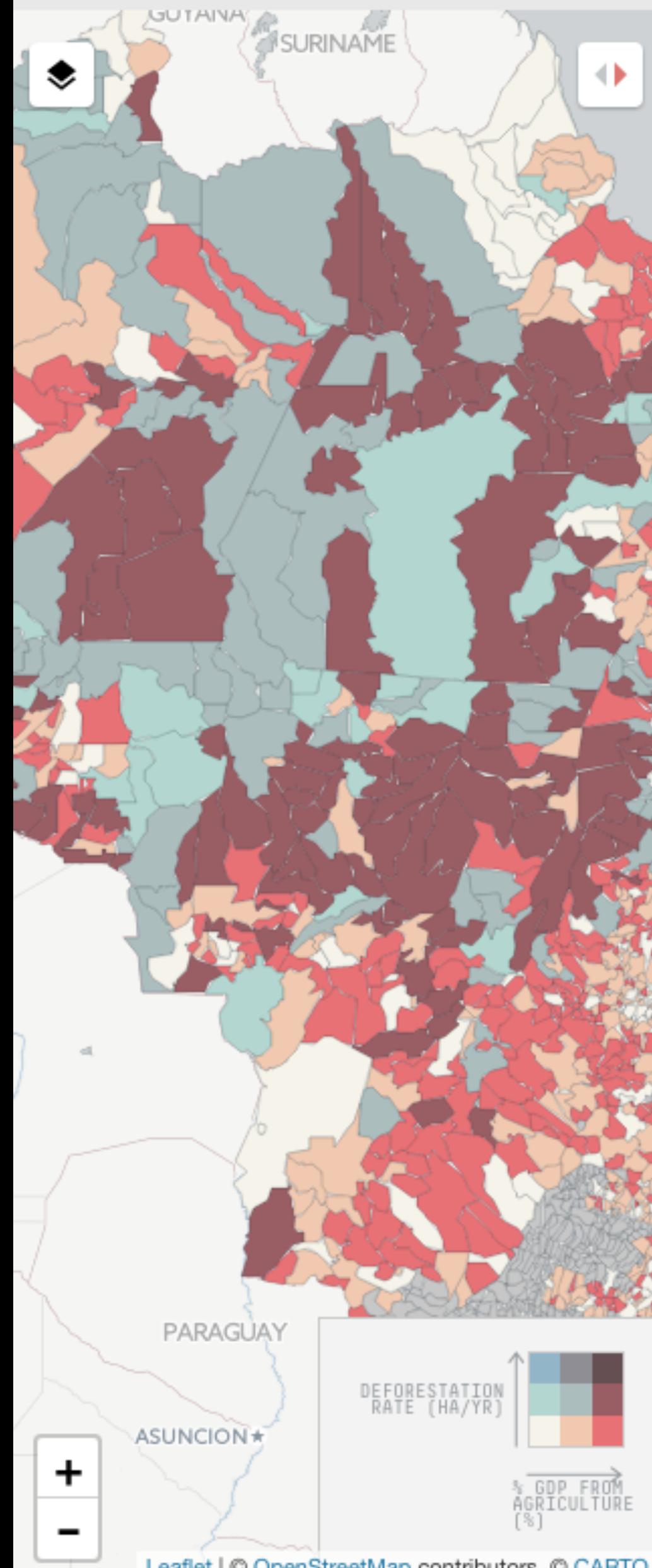
VIETNAM

OTHER

COUNTRY



Search for: producer, trader or country of import





EXPORTER

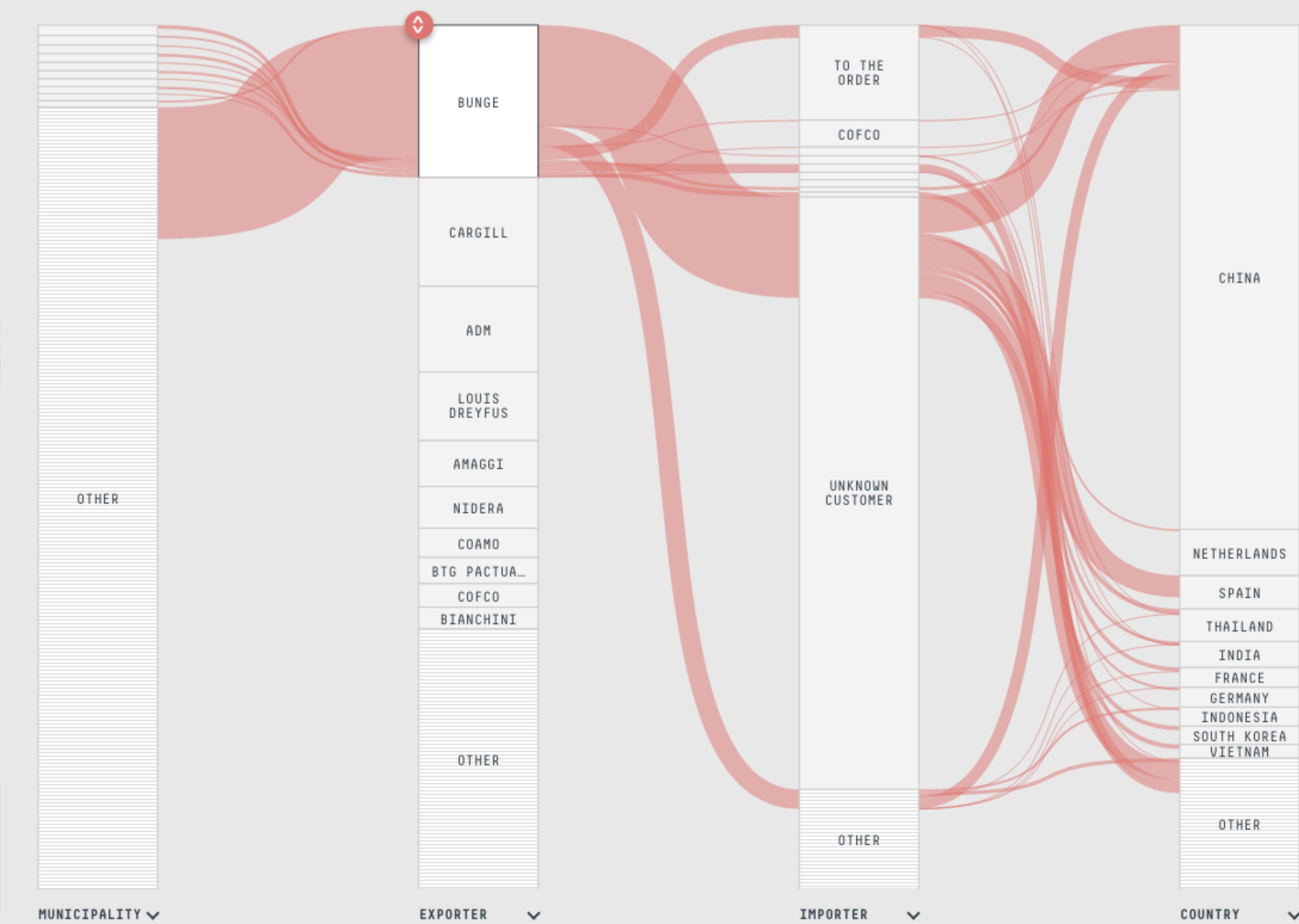
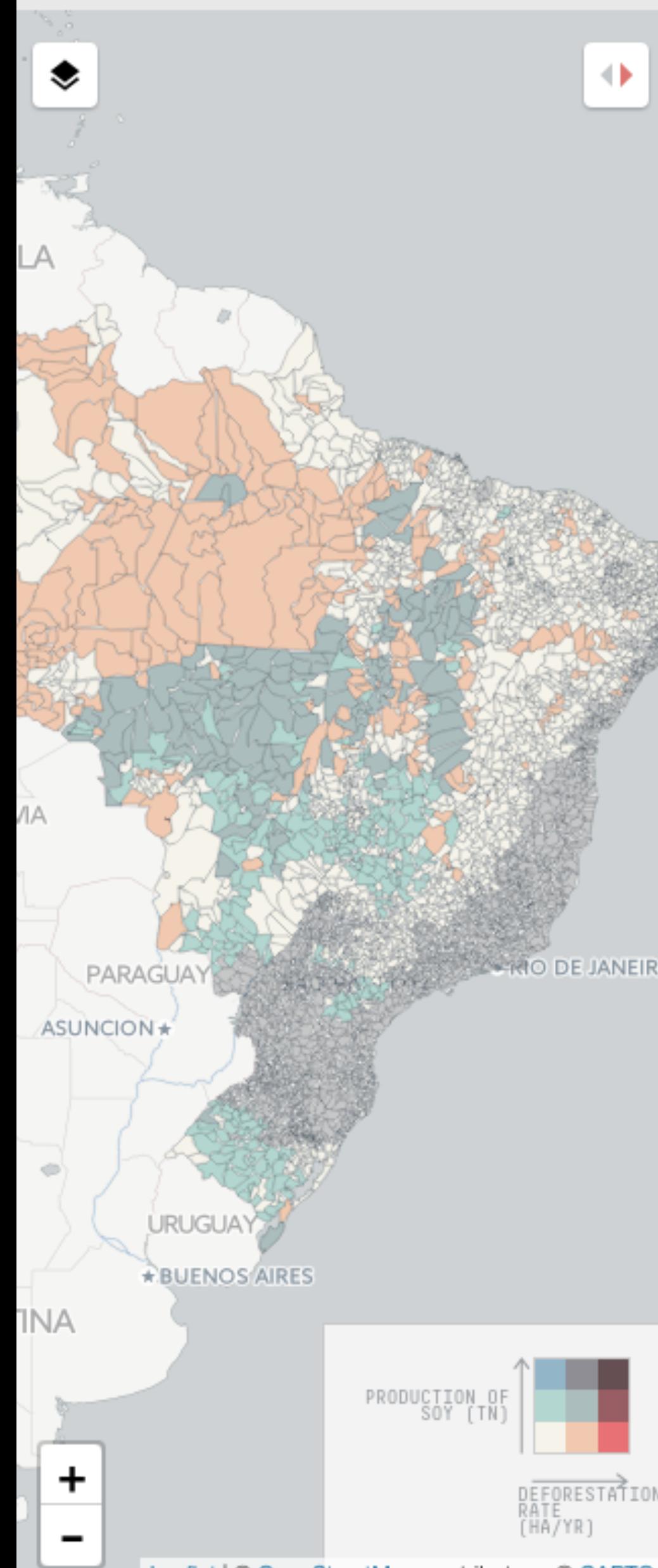
VOLUME

BUNGE

13,008,720.2 Tons

VIEW MORE

DISCARD SELECTION





Tool

Factsheets

FAQ

About

EXPORTER

COMMODITY

Bunge**Soy** ▾

ZERO DEFORESTATION COMMITMENT

 Yes

FOREST 500 SCORE



TOP SOURCE MUNICIPALITIES IN 2015

1. PRIMAVERA DO LESTE ⓘ
2. CAMPO VERDE ⓘ
3. NOVA MUTUM ⓘ
4. CACHOEIRA DO SUL ⓘ
5. ITIQUIRA ⓘ
6. DIAMANTINO ⓘ
7. SORRISO ⓘ
8. QUERENCIA ⓘ
9. SANTO ANTONIO DO LESTE ⓘ
10. SAO DESIDERIO ⓘ

TOP DESTINATION COUNTRIES IN 2015

1. CHINA	5,578,685.3
2. SPAIN	1,850,621.6
3. PERU	1,144,566.2
4. THAILAND	480,756.4
5. IRAN	424,496.5
6. PORTUGAL	400,383.1
7. FRANCE	381,705.6
8. VIETNAM	376,570.4
9. SOUTH KOREA	358,766.4
10. INDIA	347,600.7

SUSTAINABILITY OF SOURCE MUNICIPALITIES IN 2015

MUNICIPALITY	POTENTIAL SOY-RELATED DEFORESTATION	SOY-RELATED DEFORESTATION	BIODIVERSITY LOSS
SAO DESIDERIO	1,738.5ha	311.2ha	0.04
FELIZ NATAL	1,450.0	N/A	N/A

future.

2017: data releases.

2020: 70% of Tradding.

Long: much more to come!

**data.
accessible,
understandable,
usable,
dialogue & impact.**

from matters
of fact,
to matters
of concern.

Bruno Latour

conclusion.
open eyes,
unveil information,
transparency.

our dream!

thank you!

sergio.estella@vizzuality.com