



WORLD  
RESOURCES  
INSTITUTE

GLOBAL  
FOREST  
WATCH

# GLAD ALERTS AND RISK ASSESSMENT: GLOBAL FOREST WATCH TOOLS FOR TIMBER MONITORING

Mikaela Weisse, World Resources Institute  
TREE meeting – April 8, 2016

El Progreso	1123	0	168400
Escuintla	1124	0	477020
Guatemala	1125	0	219762
Huehuetenango	1126	0	765091
Izabal	1127	0	802700
Jalapa	1128	0	196876
Jutiapa	1129	0	332916
Petun	1130	0	3593573
Quezaltenango	1131	0	213040
Quiché	1132	0	720168
Retalhuleu	1133	0	191135
Sacatepéquez	1134	0	55679
San Marcos	1135	0	354840
Santa Rosa	1136	0	300224
Sololá	1137	0	105674
Suchitepéquez	1138	0	207920
Totonicapán	1139	0	107647
Zacapa	1140	0	271781
	1141	0	8429
Bafatc	1142	0	580432
Biombo	1143	0	68828
Bissau	1144	0	8099
Bolama	1145	0	148583
Cacheu	1146	0	446425
	1147	0	901254
	1148	0	537832
	1149	0	283945
Tombali	1150	0	334268
Vokc	1151	0	3378226
Conarky	1152	0	39658
Faranah	1153	0	3567956
Kankan	1154	0	7138558
Kindia	1155	0	2545685
Labc	1156	0	2270756
Mamou	1157	0	1778338
Nzérékonde	1158	0	3650743
Barima-Waini	1159	0	1944337
Cuyuni-Mazaruni	1160	0	592933
Demerara-Mah	1161	0	326335
East Berbice-Co	1162	0	209948
Essequibo Islai	1163	0	399132
Mahaica-Berbic	1164	0	3511777
Pomeroon-Supe	1165	0	4692906
Potaro-Siparuni	1166	0	1925833
Upper Demerar	1167	0	5639180
Upper Takutu-L	1168	0	1640452
Centre	1169	0	347412
Grand'Anse	1170	0	188365
L'Arifonite	1171	0	48777

**DATA**



**GLOBAL  
FOREST  
WATCH**



**USERS**



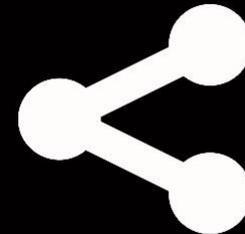
GATHER



ANALYZE



SHARE



# 70+ Partners and Collaborators...

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Liberia Forestry Development Authority  
The Generation Foundation  
Global Witness  
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INDEFOR  
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Rainforest Foundation UK  
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RESOLVE  
Roundtable on Sustainable Palm Oil  
SarVision

UNEP / WCMC  
Unilever  
Wildlife Conservation Society  
Winrock  
Woods Hole Research Center  
Yayasan Puter Indonesia  
Zoological Society of London



# GLOBAL FOREST WATCH

BETA

EXPLORE

STAY INFORMED

GET INVOLVED

HOW TO

ABOUT

## EXPLORE

EXPLORE FOREST DATA ON THE GFW INTERACTIVE MAP

MORE INFO

SUGGESTIONS FOR GETTING STARTED

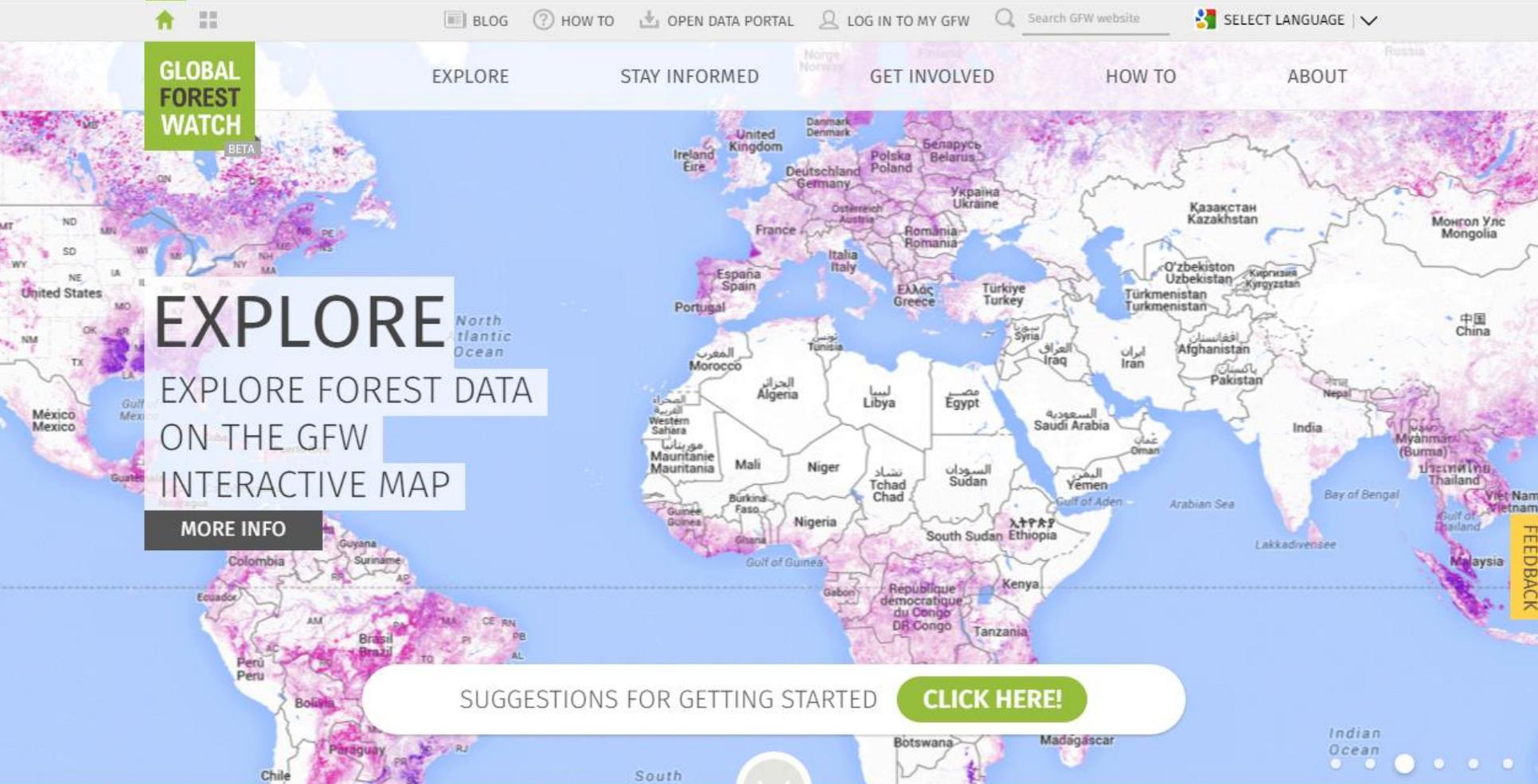
CLICK HERE!



GFW INTERACTIVE MAP



COUNTRY PROFILES & RANKINGS



FEEDBACK

# GLAD alerts

GLOBAL  
FOREST  
WATCH

BETA

FOREST CHANGE

LAND COVER

LAND USE

CONSERVATION

PEOPLE

STORIES

COUNTRY LAYERS



GLAD alerts

Lat/long: -7782949, -75298851

GLAD alerts from

1 Jan 2015

to

23 Mar 2016



# Palm Oil Mill Risk Assessment



# Methodology

Index 1: Historic impacts	Index 2: Potential for future impact
Rate of tree cover loss	Tree cover extent
Tree cover loss on primary forest	Proportion of area in primary forest
Tree cover loss on peat	Proportion of area in peat
Tree cover loss on protected areas	Proportion of area in protected areas
Tree cover loss on carbon dense areas	Proportion of area of high carbon density
Fire activity	Rate of fire activity in previous three years
	Rate of tree cover loss in previous three years

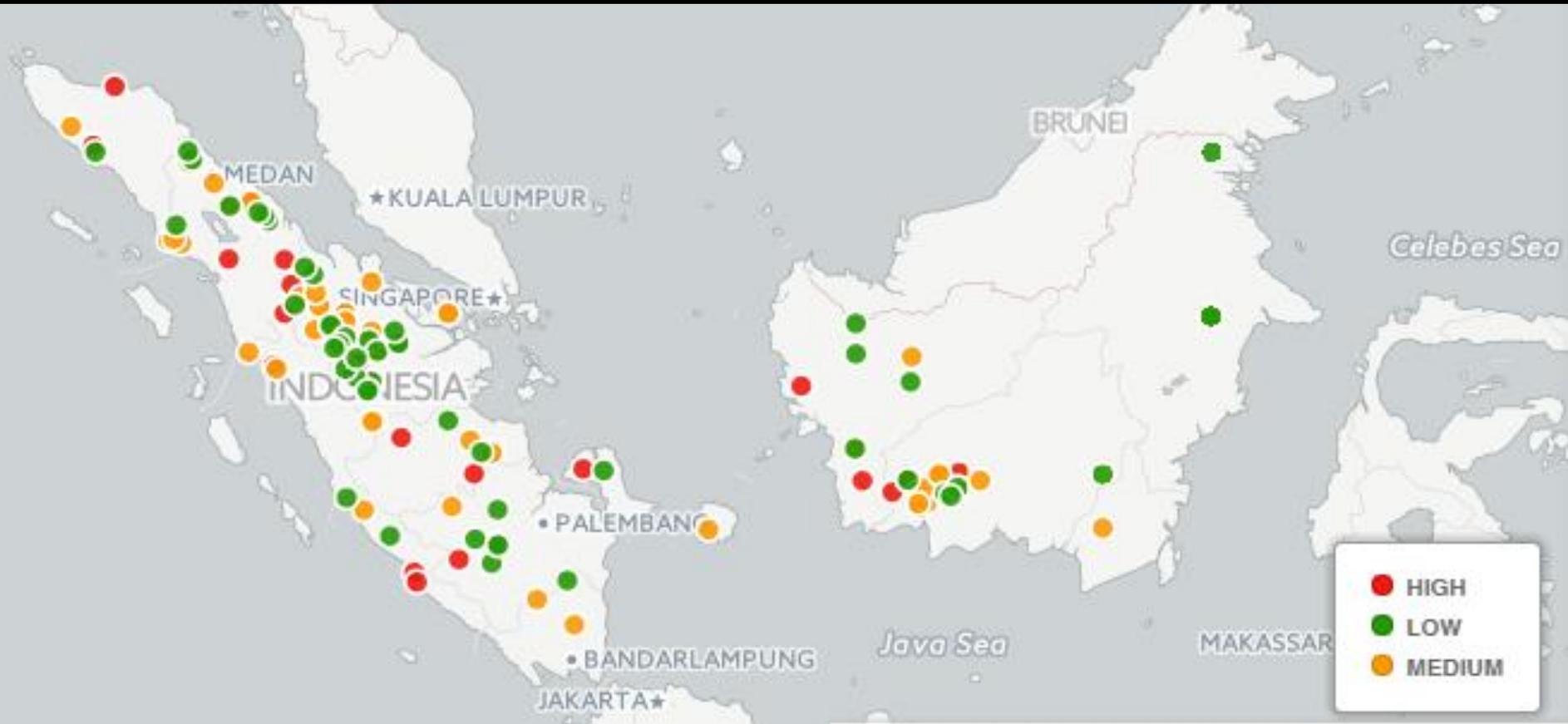
# Sample Results

## Palm Oil Mill Risk Assessment

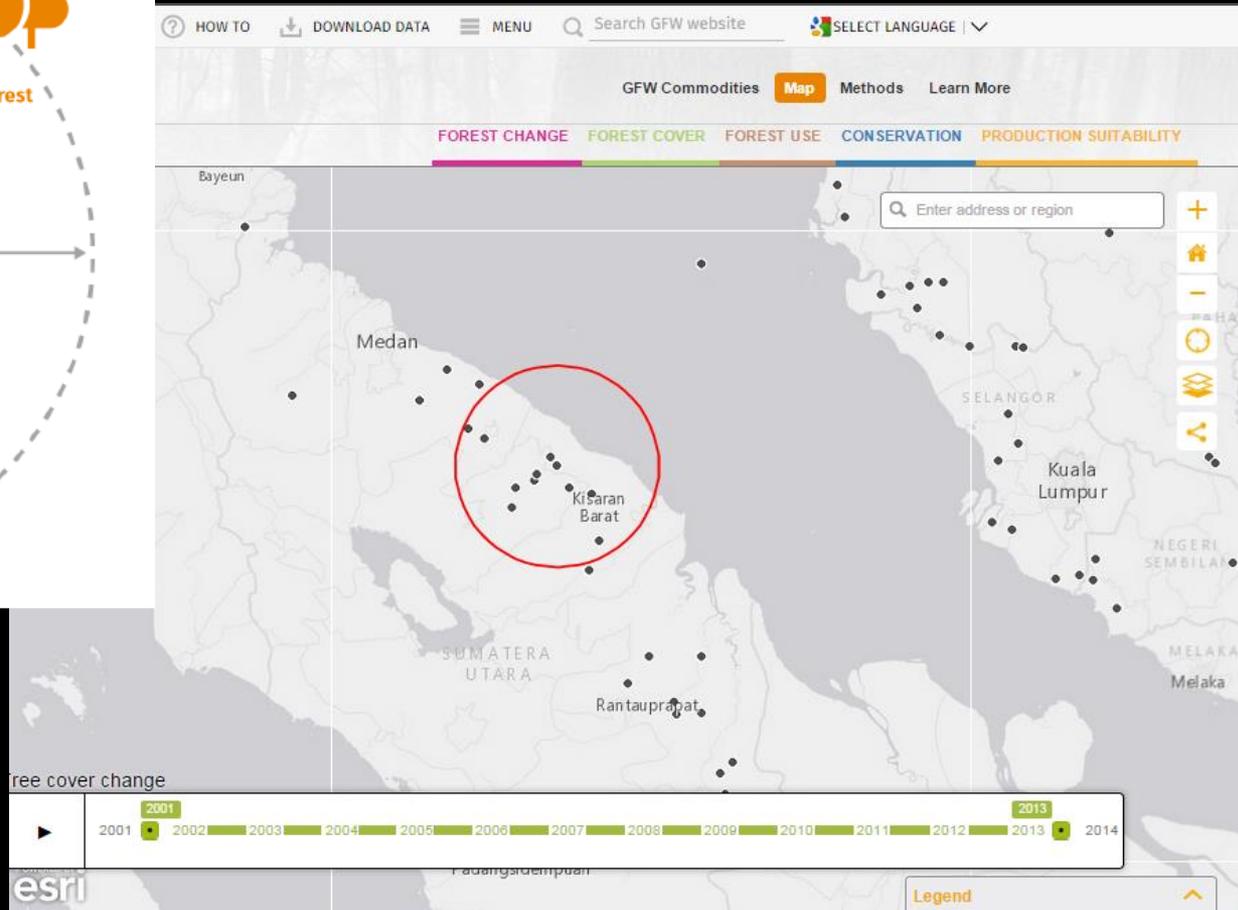
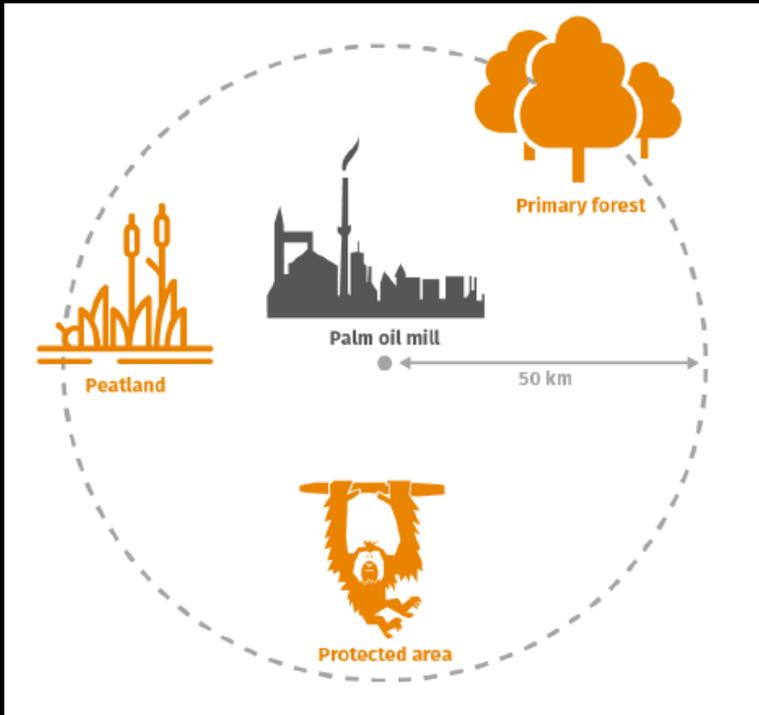
	Overall Priority Level	Historic Behavior	Future Potential Loss
Keningau Palm Oil Mill	● low	● medium ● high	● medium ● high
Kerdau Palm Oil Mill	● low	● medium ● high	● medium ● high
Kilang Isi Sawit (Felda)	● high	● medium ● high	● medium
Kilang Kelapa Sawit Alaf	● high	● medium ● high	● medium ● high
Kechau	● low	● medium	● medium ● high

5 ranking levels: Low; Medium Low; Medium; Medium High; High

# Spatial Distribution of Risk



# Applicability to Timber





Get in touch. Learn more.

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[www.globalforestwatch.org](http://www.globalforestwatch.org)  
[@globalforests](https://twitter.com/globalforests)

[mweisse@wri.org](mailto:mweisse@wri.org)

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PERU DATA

LAND USE

Peru forest concessions

- Timber
- Reforestation
- Conservation
- Ecotourism
- Non-timber forest products
- Wildlife

Peru permanent production forests

GLOBAL DATA



Tree cover loss (zoom in for most accurate viewing)



View country data

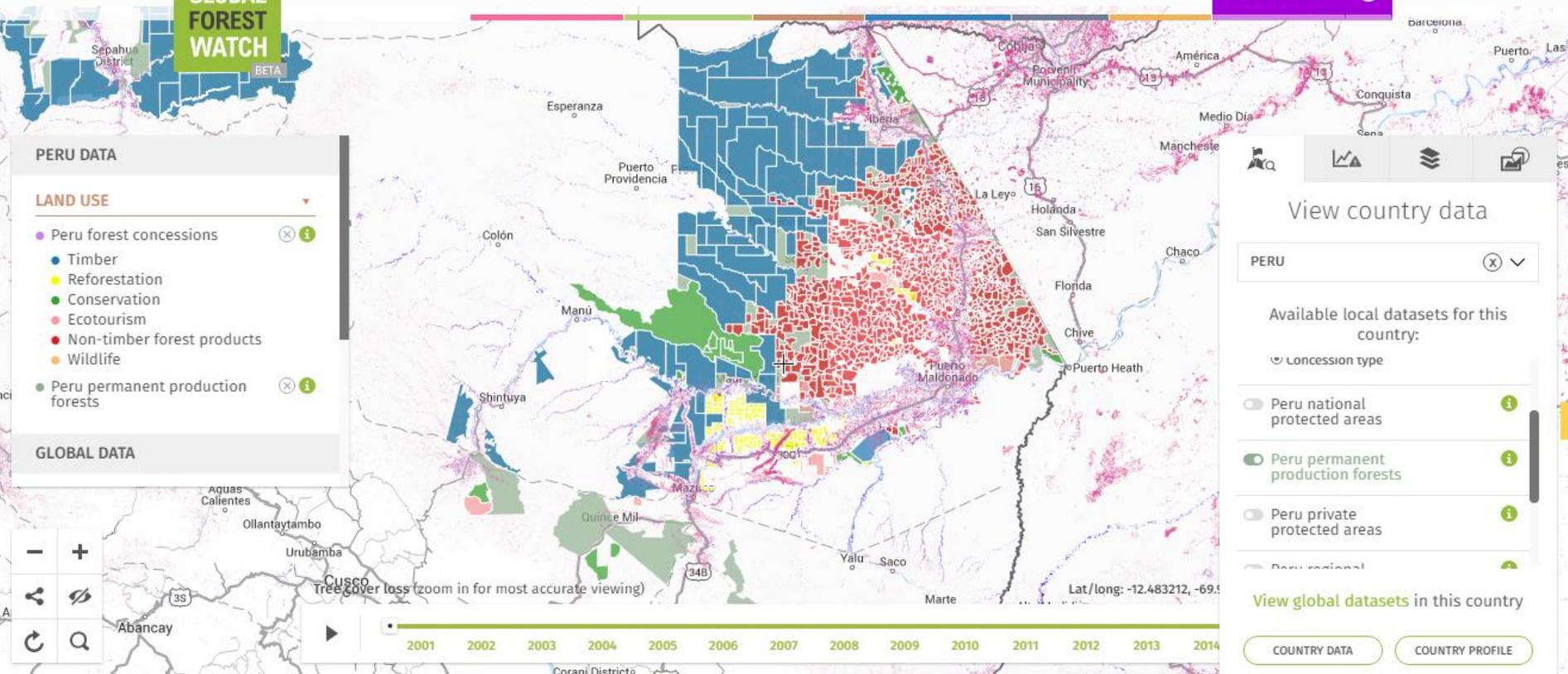
PERU

Available local datasets for this country:

- Concession type
- Peru national protected areas
- Peru permanent production forests
- Peru private protected areas
- Peru regional

View global datasets in this country

COUNTRY DATA COUNTRY PROFILE



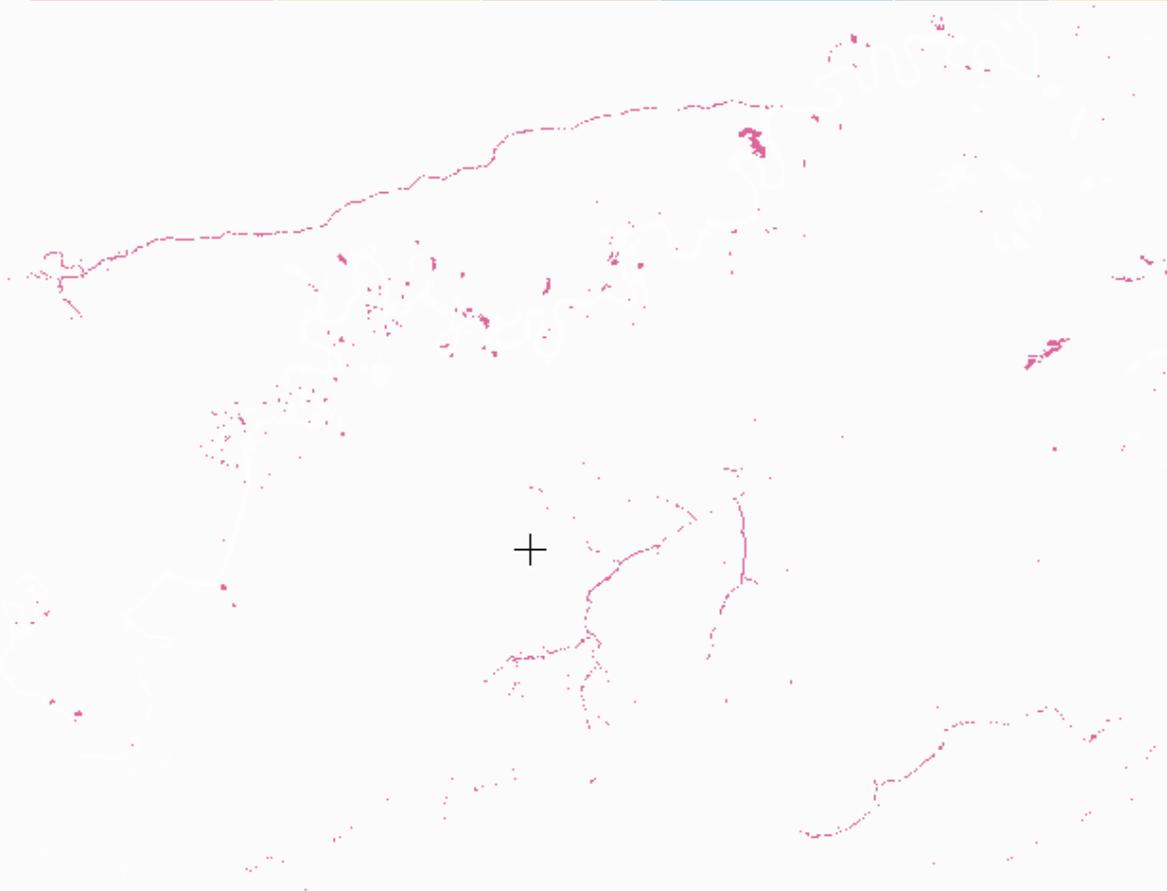
## FOREST CHANGE

### ● GLAD alerts

(weekly, 30m, select countries, UMD/GLAD)

### ● Recent alerts

Geographic coverage



GLAD alerts

Lat/long: -7.879744, -75.265683

GLAD alerts from

1 Jan 2015

to

23 Mar 2016



-	+
🔗	🗑️
🔄	🔍

# GLAD Alerts Detect Illegal Roads in Peru National park

**GLOBAL  
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FOREST CHANGE

LAND COVER

LAND USE

CONSERVATION

PEOPLE

STORIES

 Cordillera Azul  
buffer zone

 GLAD alerts  
(UMD/GLAD)

June



Lat/long: -7.870000, -75.260000

# WATCH

BETA

## FOREST CHANGE

### ● GLAD alerts

(weekly, 30m, select countries, UMD/GLAD)

#### ● Recent alerts

Geographic coverage

## HIGH RESOLUTION IMAGERY

### ● Urthecast

Renderer: RGB (Red Green Blue)

Sensor: All sensors

Map navigation controls: zoom in (+), zoom out (-), pan, and search (magnifying glass).

©GLAD alerts

Lat/long: -7.09953, -75.400270

GLAD alerts from 1 Jan 2015 to 23 Mar 2016

Timeline slider with play button and progress indicator.

# FOREST WATCH

BETA

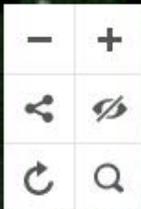
## HIGH RESOLUTION IMAGERY

● Urthecast



Renderer: RGB (Red Green Blue)

Sensor: All sensors





FOREST CHANGE

- GLAD alerts (weekly, 30m, select countries, UMD/GLAD)
- Recent alerts
- Geographic coverage



GLAD alerts

Lat/long: -7.788763, -75.423440

GLAD alerts from 1 Jan 2015 to 23 Mar 2016



DRAW OR UPLOAD SHAPE

COUNTRY OR REGION

OTHER DATA LAYERS

TOTAL SELECTED AREA  
**6,018 ha**

GLAD TREE COVER LOSS ALERTS:  
**353**

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DOWNLOAD AND EXPORT DATA

DISCARD ANALYSIS