MAAP #37: Deforestation Hotspot in the central Peruvian Amazon driven by Cattle Pasture

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(https://www.maapprogram.org/wpcontent/uploads/2016/04/MAAP_huanuco_32o_v1_en.jpg)

Image 37a. Data: UMD/GLAD

In the previous MAAP #26 (https://www.maapprogram.org/2016/hotspots2015/), we presented a map of **Deforestation Hotspots** in the Peruvian Amazon during 2015^{*}. This analysis showed that the **highest concentration of deforestation is in the central Peruvian Amazon**.

Here in MAAP #37, we focus on this region, as indicated by Image 37a. Specifically, we analyze the hotspots shown in Insets C and D, located in the eastern section of the department of Huanuco.

(Note that we previously described the hotspots indicated by Insets A and B, located in northwest Ucayali department, in MAAP #26 (https://www.maapprogram.org/2016/hotspots2015/)).

For **2015**, we calculated a **total deforestation of 7,930 hectares** (19,595 acres) in the area indicated by these two insets. The main **deforestation driver is likely cattle pasture** (see below). It is worth noting that the vast majority of the deforested area (87%) is outside of areas zoned for agriculture use.

We calculated an additional deforestation of 16,590 hectares (41,000 acres) in **2013 and 2014**. Again, the vast majority of the forest loss appears to be outside areas zoned for agriculture use.

Deforestation Driver: Cattle Pasture

The predominant land use in the area is **cattle pasture**, so that is likely the leading driver of the documented deforestation.

We took a sample (1,500 hectares) of areas that were deforested in 2014, and found that 76% (1,140 hectares) were converted to cattle pasture in 2015. All sample areas were greater than 5 hectares and had available high-resolution imagery from September 2015. Based on an analysis of the imagery, we estimate that a similar amount of area was being cleared for pasture in 2015.

Below, we show a series of **high-resolution images** of this deforestation (click each image to enlarge).

Inset C Hotspot

Image 37b shows a detailed view of the deforestation inside the area indicated by Inset C.



(https://www.maapprogram.org/wp-content/uploads/2016/04/Huanuco_zoomC_v5.jpg) Image 37b. Data: PNCB/MINAM, UMD/GLAD, MTC

In this area, we documented deforestation of 5,050 hectares in 2015. Of this total, 46% of the deforestation events were small-scale (<5 ha), 43% were medium-scale (5-50 ha), and 12% were large-scale (>50 ha).

We calculated an additional deforestation Of 9,940 hectares in 2013 and 2014.

In **Image 37c** we show, in high resolution, an example of the recent deforestation in this area between August 2014 (left panel) and September 2015 (right panel). See Inset C1 for context.



(https://www.maapprogram.org/wp-content/uploads/2016/04/Huanuco_C1_v5_DG.jpg) Image 37c. Data: WorldView of Digital Globe (NextView).

Inset D Hotspot



(https://www.maapprogram.org/wpcontent/uploads/2016/04/Huanuco_zoomD_v5.jpg) Image 37d shows a detailed view of the deforestation inside the area indicated by Inset D.

In this area, we documented deforestation of 2,883 hectares in 2015. Of this total, 44% of the deforestation events were small-scale (<5 ha), 51% were medium-scale (5-50 ha), and 6% were large-scale (>50 ha).

We calculated an additional deforestation of 6,650 hectares in 2013 and 2014.

In **Images 37e** – **37f**, we show, in high resolution, two examples of the recent deforestation in this area between June (left panel) and September (right panel) of 2015. See Insets D1 and D2 for context.



(https://www.maapprogram.org/wp-content/uploads/2016/04/Huanuco_D1_v3_DG-1.jpg) Image 37e. Data: WorldView of Digital Globe (NextView).



(https://www.maapprogram.org/wp-content/uploads/2016/04/Huanuco_D2_v2_DG-1.jpg) Image 37f. Data: WorldView of Digital Globe (NextView).

References

* Based on the data from the GLAD alerts, produced by the University of Maryland, Google, and Global Forest Watch. http://www.globalforestwatch.org/map/5/-9.31/-75.01/PER/grayscale/umd_as_it_happens

*Hansen, M.C., A. Krylov, A. Tyukavina, P.V. Potapov, S. Turubanova, B. Zutta, S. Ifo, B. Margono, F. Stolle, and R. Moore. Humid tropical forest disturbance alerts using Landsat data. Environ. Res. Lett. 11: 034008.

Citation

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