

Legend

- ▭ Basin limit
- Annual Rainfall (mm / year)
- Contour

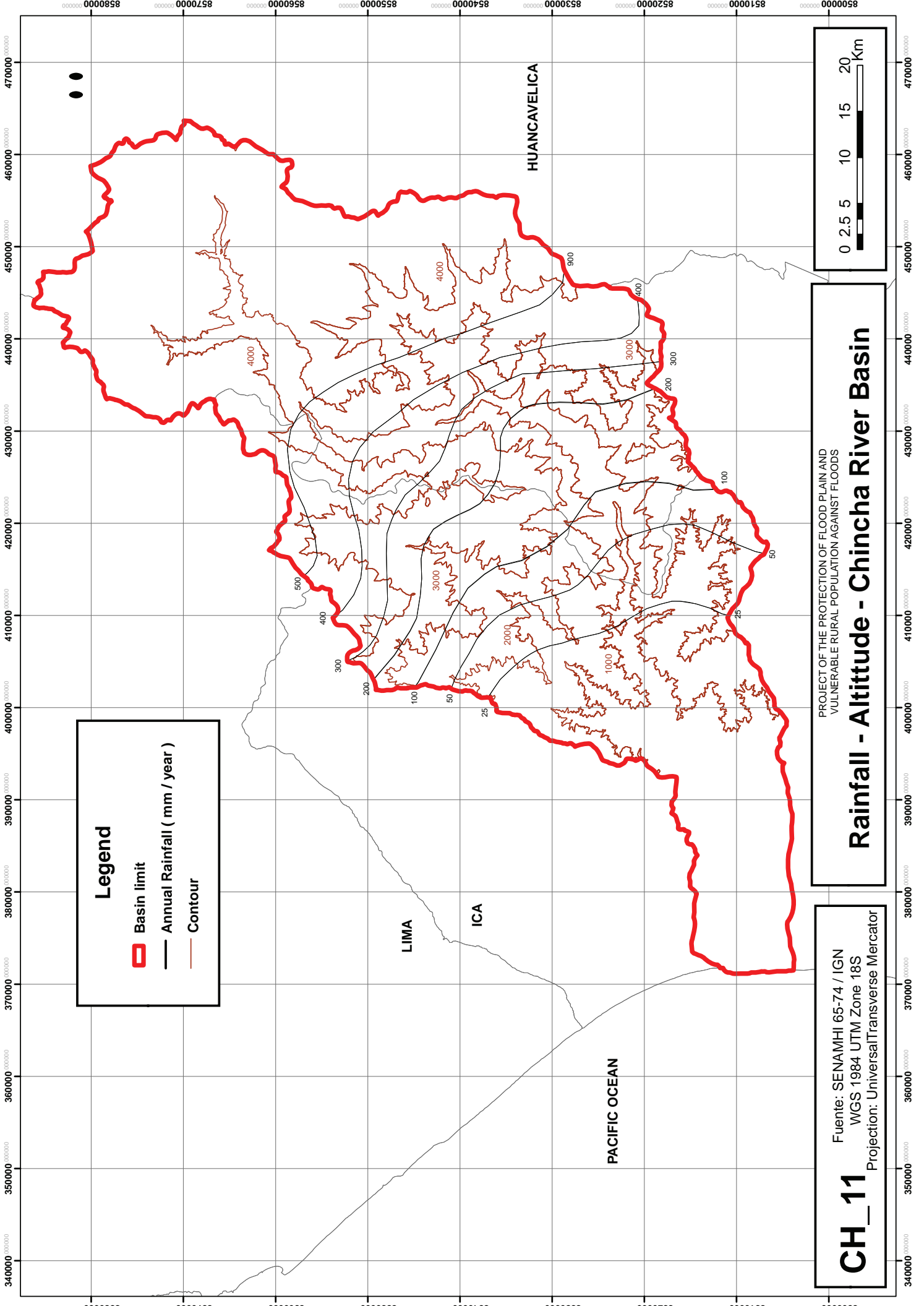
PROJECT OF THE PROTECTION OF FLOOD PLAIN AND
VULNERABLE RURAL POPULATION AGAINST FLOODS

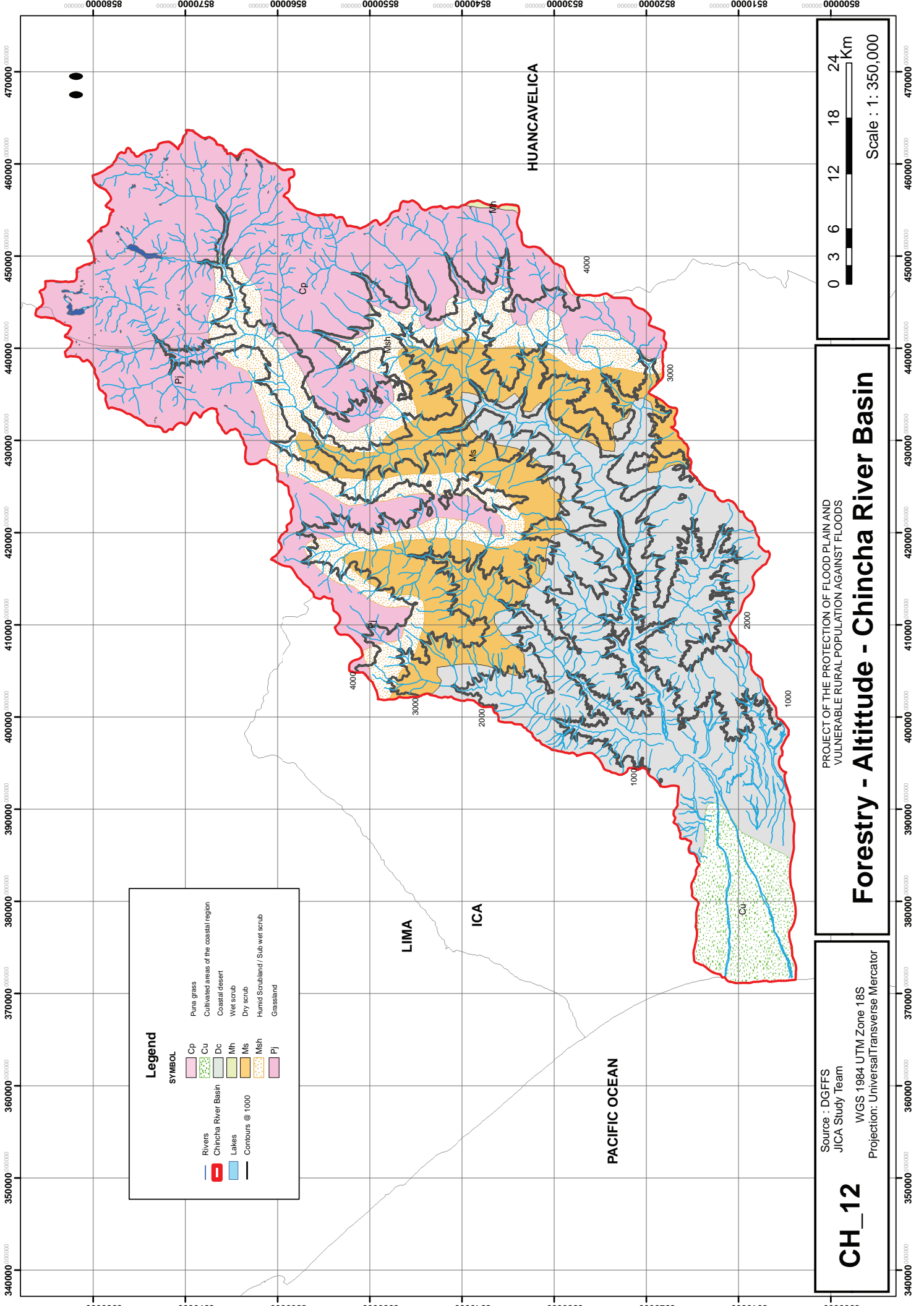
Rainfall - Altitude - Chinchipe River Basin

CH_11

Fuente: SENAMHI 65-74 / IGN
WGS 1984 UTM Zone 18S
Projection: Universal Transverse Mercator

0 2.5 5 10 15 20 Km





Legend

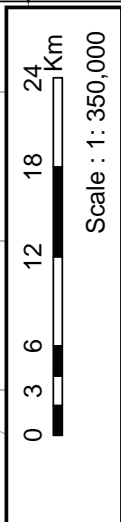
SYMBOL	
	Rivers
	Chincha River Basin
	Lakes
	Contours @ 1000
	Puna grass (Cp)
	Cultivated areas of the coastal region (Cu)
	Coastal desert (Dc)
	Wet scrub (Mh)
	Dry scrub (Ms)
	Humid Scrubland / Sub wet scrub (Msh)
	Grassland (Pj)

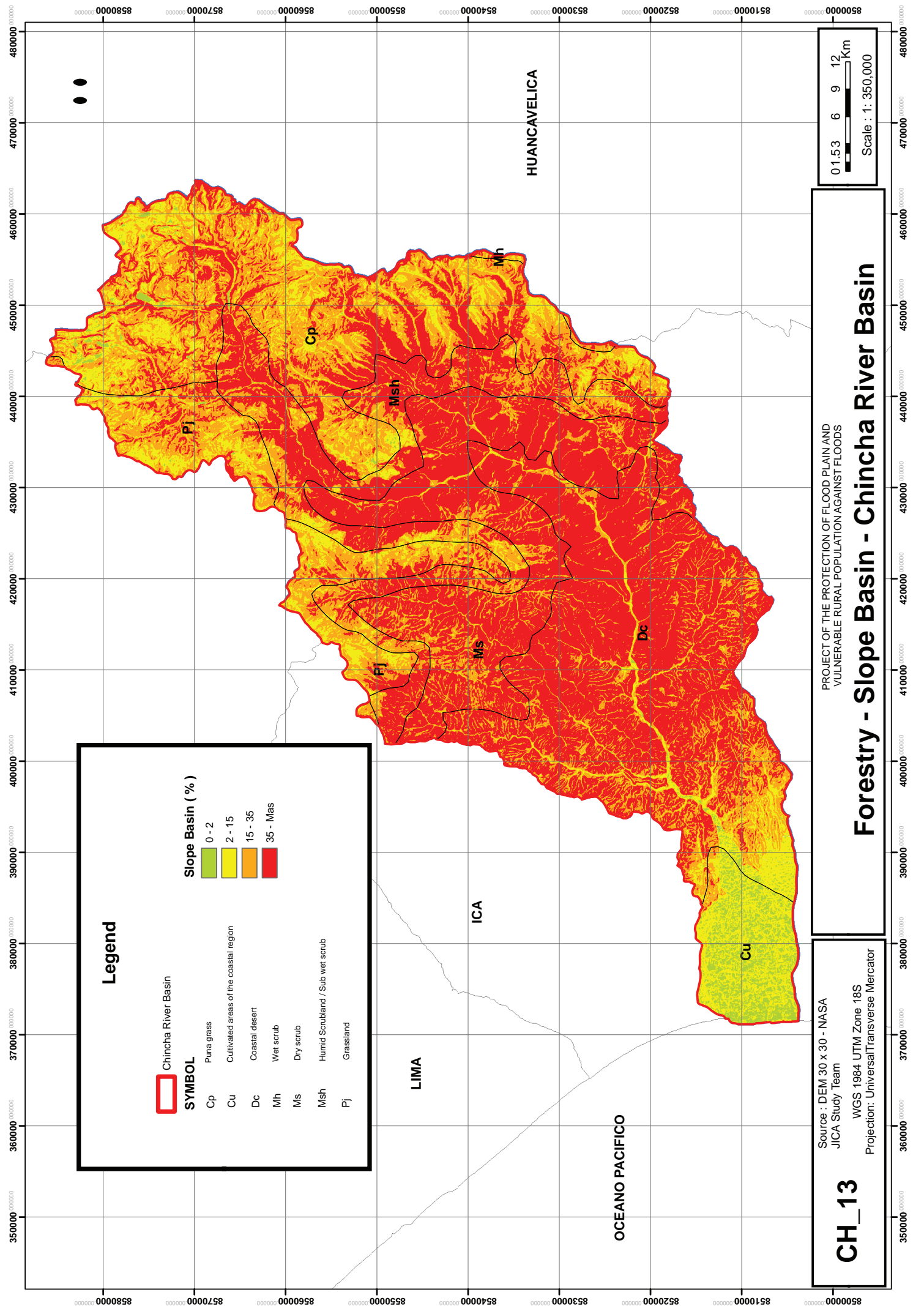
CH_12

Source : DGFFS
 JICA Study Team
 WGS 1984 UTM Zone 18S
 Projection: Universal Transverse Mercator

PROJECT OF THE PROTECTION OF FLOOD PLAIN AND VULNERABLE RURAL POPULATION AGAINST FLOODS

Forestry - Altitude - Chincha River Basin





Legend

Chinchu River Basin

SYMBOL

Cp Puna grass

Cu Cultivated areas of the coastal region

Dc Coastal desert

Mh Wet scrub

Ms Dry scrub

Msh Humid Scrubland / Sub wet scrub

Pj Grasland

Slope Basin (%)

0 - 2

2 - 15

15 - 35

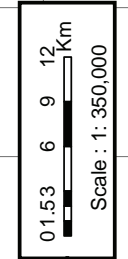
35 - 100

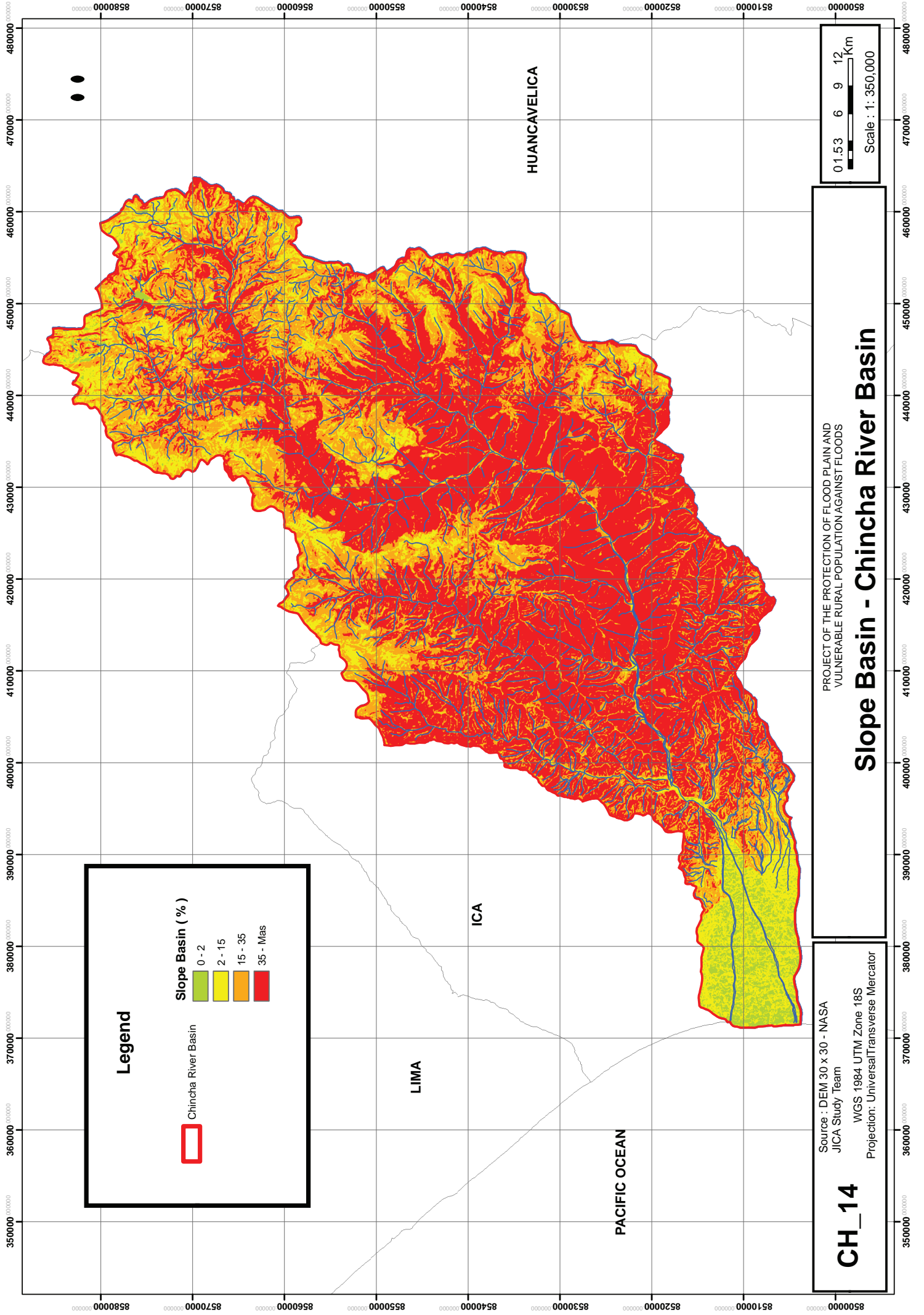
CH_13

Source : DEM 30 x 30 - NASA
 JICA Study Team
 WGS 1984 UTM Zone 18S
 Projection: Universal Transverse Mercator

PROJECT OF THE PROTECTION OF FLOOD PLAIN AND
 VULNERABLE RURAL POPULATION AGAINST FLOODS

Forestry - Slope Basin - Chinchu River Basin





Legend

Chincha River Basin

Slope Basin (%)

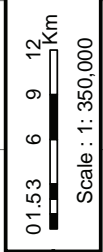
- 0 - 2
- 2 - 15
- 15 - 35
- 35 - Mas

CH_14

Source : DEM 30 x 30 - NASA
 JICA Study Team
 WGS 1984, UTM Zone 18S
 Projection: UniversalTransverse Mercator

PROJECT OF THE PROTECTION OF FLOOD PLAIN AND
 VULNERABLE RURAL POPULATION AGAINST FLOODS

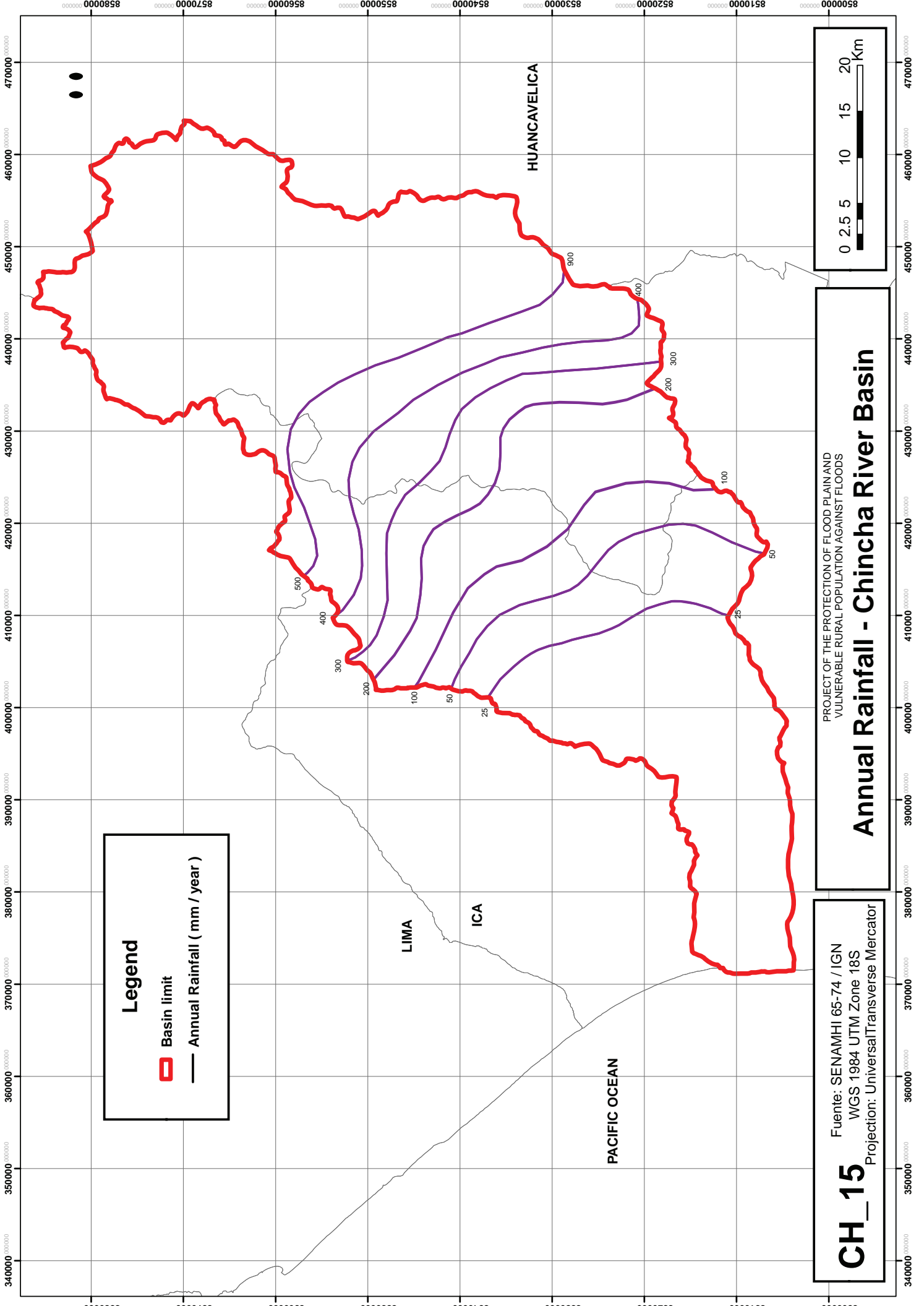
Slope Basin - Chincha River Basin



8500000 8510000 8520000 8530000 8540000 8550000 8560000 8570000 8580000

350000 360000 370000 380000 390000 400000 410000 420000 430000 440000 450000 460000 470000 480000

8500000 8510000 8520000 8530000 8540000 8550000 8560000 8570000 8580000



Legend

-  Basin limit
-  Annual Rainfall (mm / year)

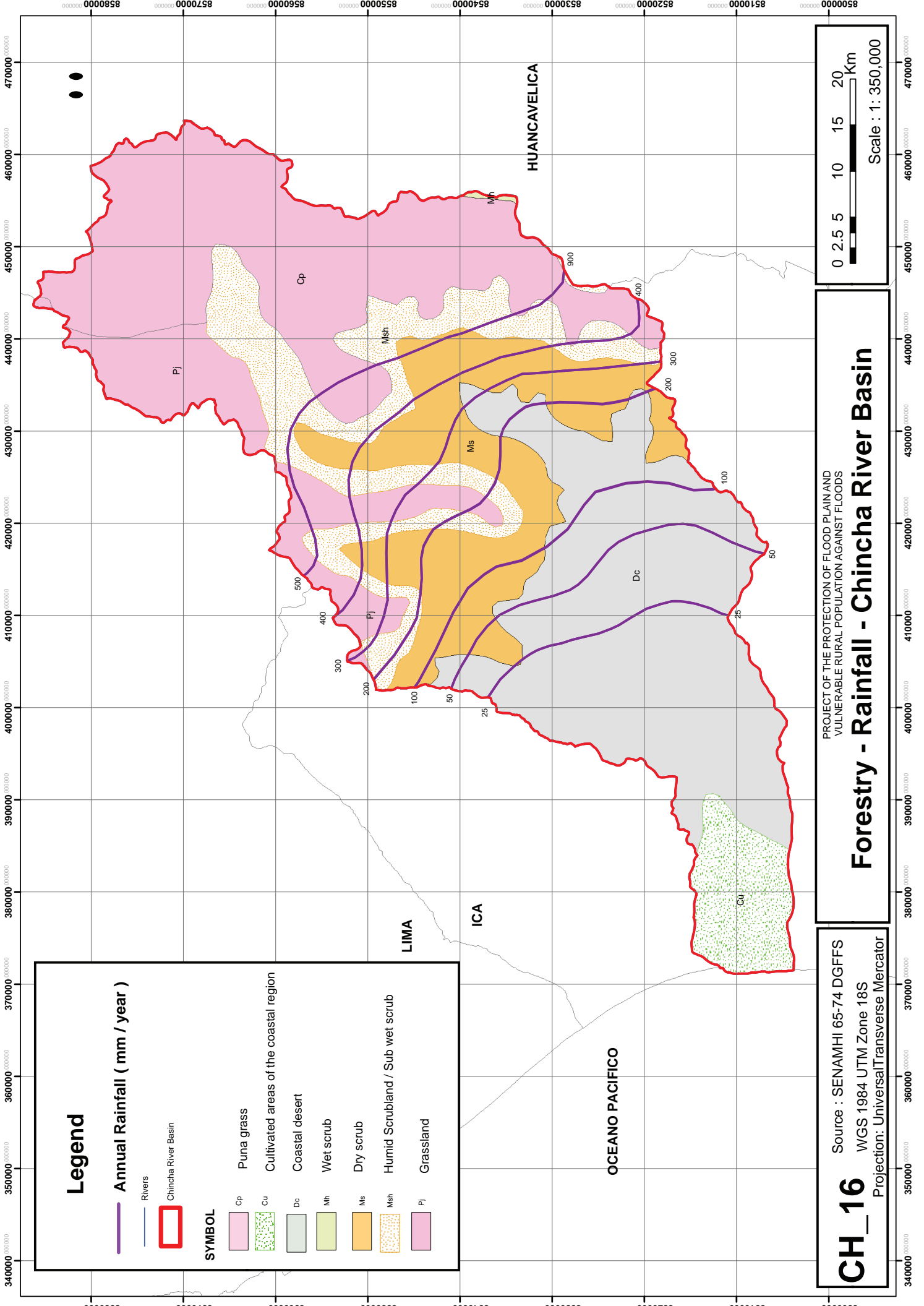
CH_15

Fuente: SENAMHI 65-74 / IGN
WGS 1984 UTM Zone 18S
Projection: Universal Transverse Mercator

PROJECT OF THE PROTECTION OF FLOOD PLAIN AND
VULNERABLE RURAL POPULATION AGAINST FLOODS

Annual Rainfall - Chincha River Basin

0 2.5 5 10 15 20 Km



Legend

Annual Rainfall (mm / year)

- Rivers
- Chincha River Basin

SYMBOL

Cp	Puna grass
Cu	Cultivated areas of the coastal region
Dc	Coastal desert
Mh	Wet scrub
Ms	Dry scrub
Mesh	Humid Scrubland / Sub wet scrub
Pi	Grassland

CH_16

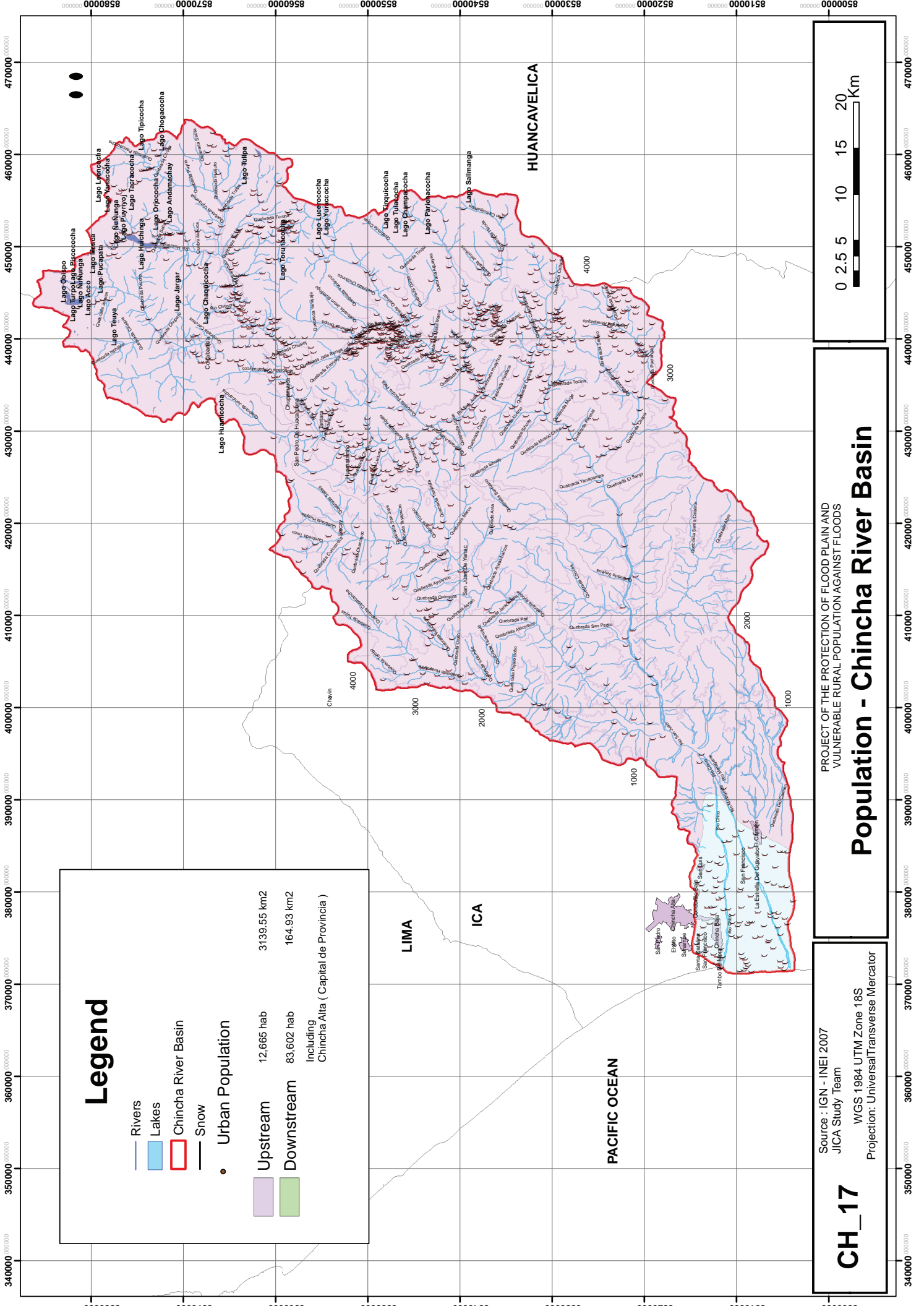
Source : SENAMHI 65-74 DGFFS
 WGS 1984 UTM Zone 18S
 Projection: Universal Transverse Mercator

PROJECT OF THE PROTECTION OF FLOOD PLAIN AND
 VULNERABLE RURAL POPULATION AGAINST FLOODS

Forestry - Rainfall - Chincha River Basin

0 2.5 5 10 15 20 Km

Scale : 1 : 350,000



Legend

- Rivers
- Lakes
- Chincha River Basin
- Snow
- Urban Population

 Upstream	12,665 hab	3139.55 km ²
 Downstream	83,602 hab	164.93 km ²

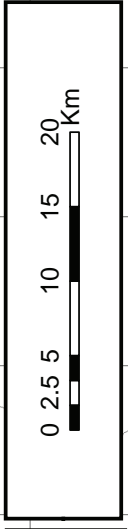
Including Chinchita Alta (Capital de Provincia)

CH_17

Source : IGN - INEI 2007
 JICA Study Team
 WGS 1984 UTM Zone 18S
 Projection: Universal Transverse Mercator

PROJECT OF THE PROTECTION OF FLOOD PLAIN AND VULNERABLE RURAL POPULATION AGAINST FLOODS

Population - Chincha River Basin

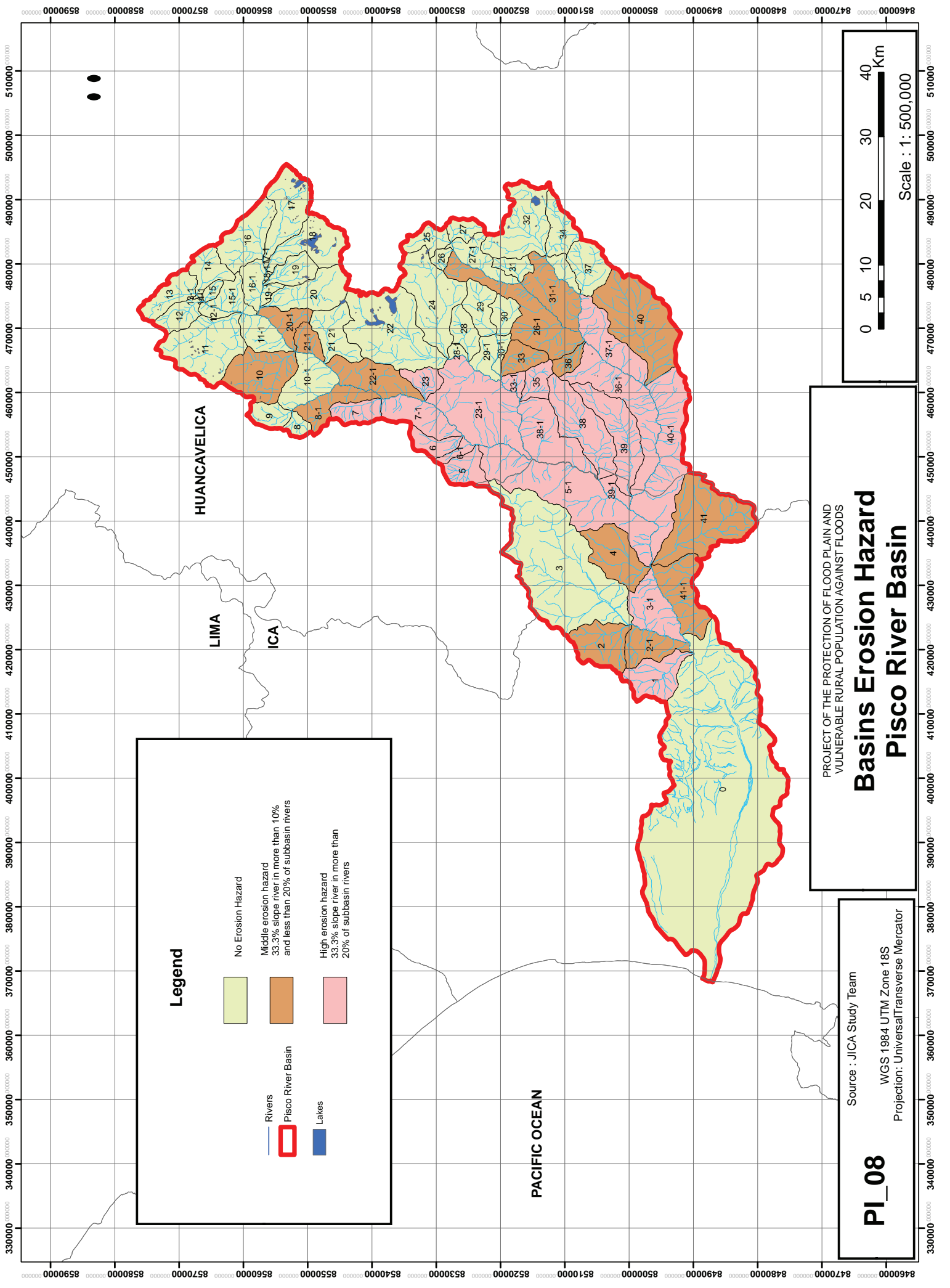


LIMA







ICA

PACIFIC OCEAN

HUANCVELICA



Legend

	No Erosion Hazard
	Middle erosion hazard 33.3% slope river in more than 10% and less than 20% of subbasin rivers
	High erosion hazard 33.3% slope river in more than 20% of subbasin rivers
	Rivers
	Pisco River Basin
	Lakes

PROJECT OF THE PROTECTION OF FLOOD PLAIN AND
VULNERABLE RURAL POPULATION AGAINST FLOODS

Basins Erosion Hazard

Pisco River Basin

PI_08

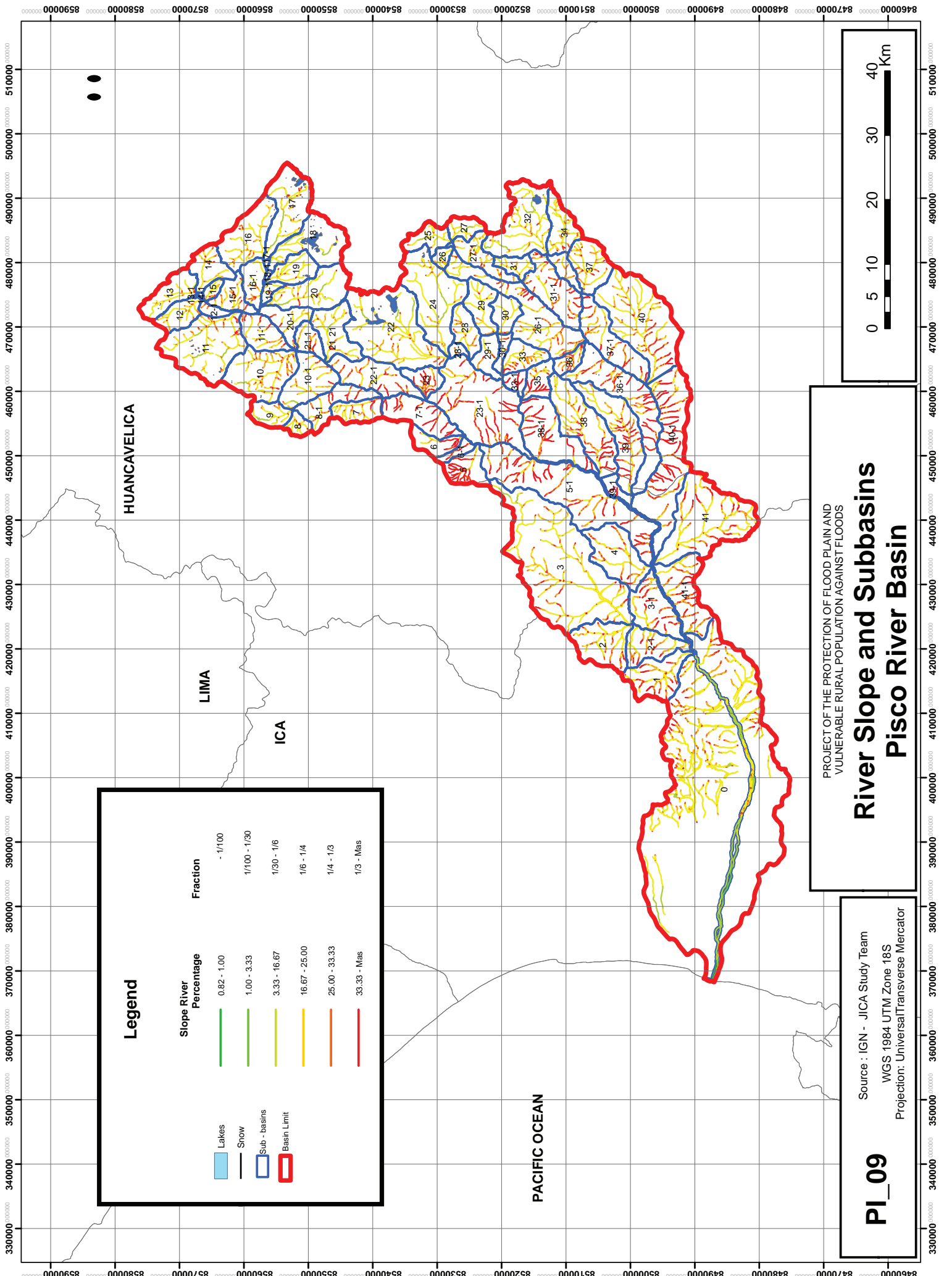
Source : JICA Study Team

WGS 1984 UTM Zone 18S

Projection: UniversalTransverse Mercator

0 5 10 20 30 40 Km

Scale : 1: 500,000



Legend

Slope River Percentage	Fraction
0.82 - 1.00	1/100
1.00 - 3.33	1/100 - 1/30
3.33 - 16.67	1/30 - 1/6
16.67 - 25.00	1/6 - 1/4
25.00 - 33.33	1/4 - 1/3
33.33 - Más	1/3 - Más

Lakes: Blue rectangle
 Snow: Black line
 Sub-basins: Blue outline
 Basin Limit: Red outline

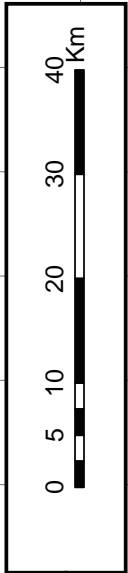
PROJECT OF THE PROTECTION OF FLOOD PLAIN AND VULNERABLE RURAL POPULATION AGAINST FLOODS

River Slope and Subbasins

Pisco River Basin

PI_09

Source : IGN - JICA Study Team
 WGS 1984 UTM Zone 18S
 Projection: Universal Transverse Mercator

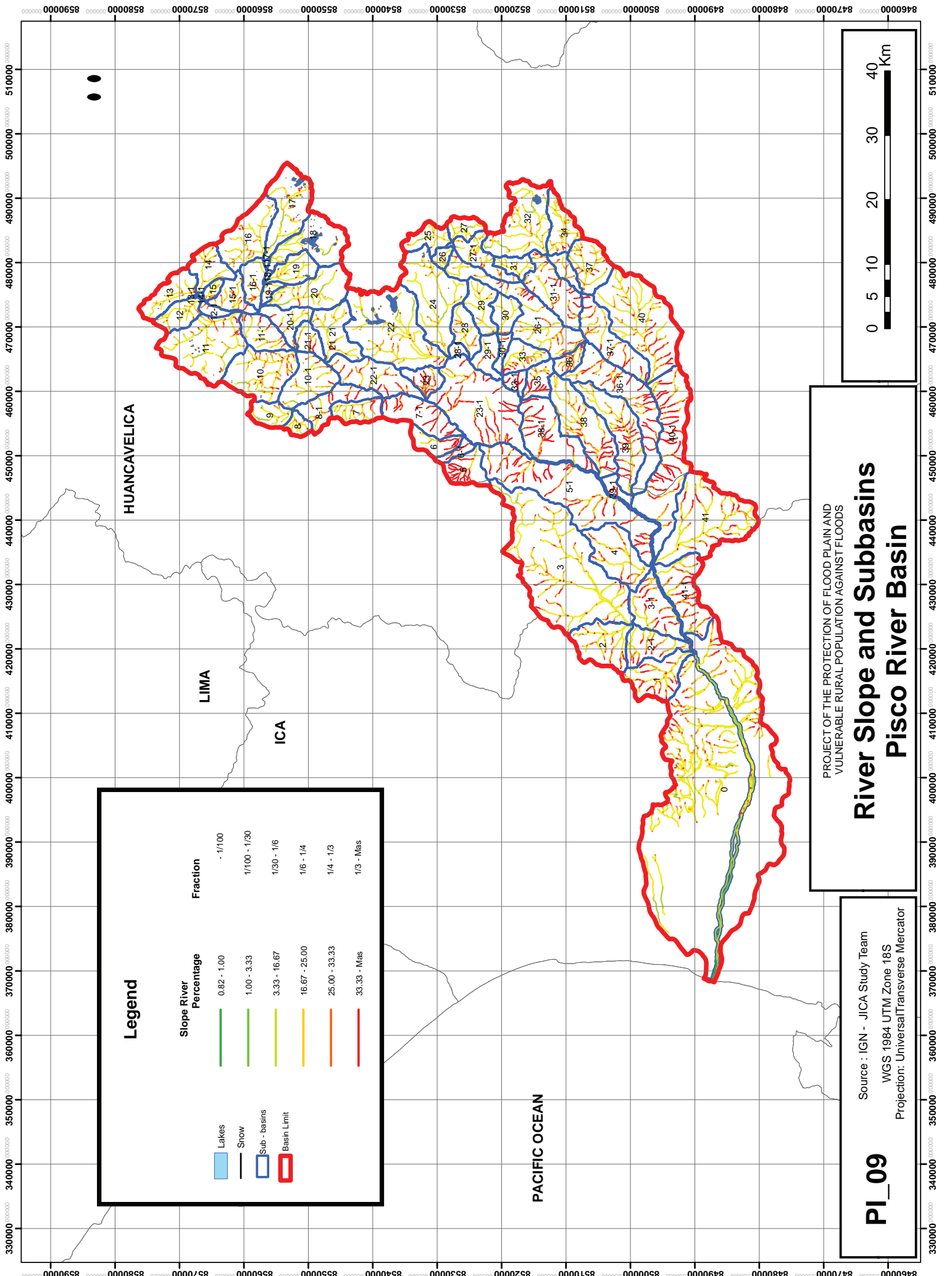


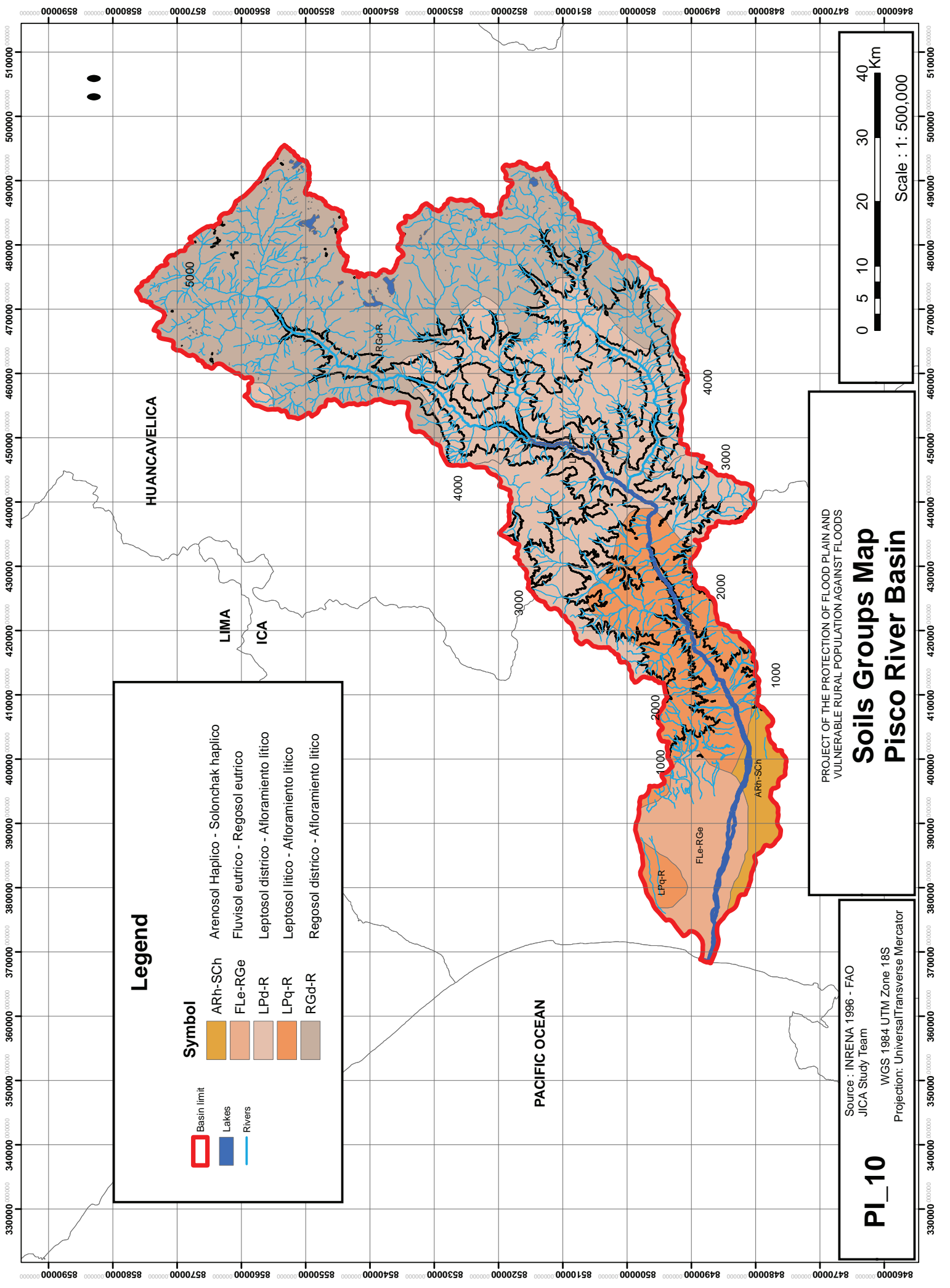
HUANCAVELICA

LIMA









ICA

PACIFIC OCEAN





Legend

	Basin limit		ARh-SCh	Arenosol Haplico - Solonchak haplico
	Lakes		FLe-RGe	Fluvisol eutrico - Regosol eutrico
	Rivers		LPd-R	Leptosol districo - Afloramiento litico
			LPq-R	Leptosol litico - Afloramiento litico
			RGd-R	Regosol districo - Afloramiento litico

PROJECT OF THE PROTECTION OF FLOOD PLAIN AND
VULNERABLE RURAL POPULATION AGAINST FLOODS

Soils Groups Map Pisco River Basin

PI_10

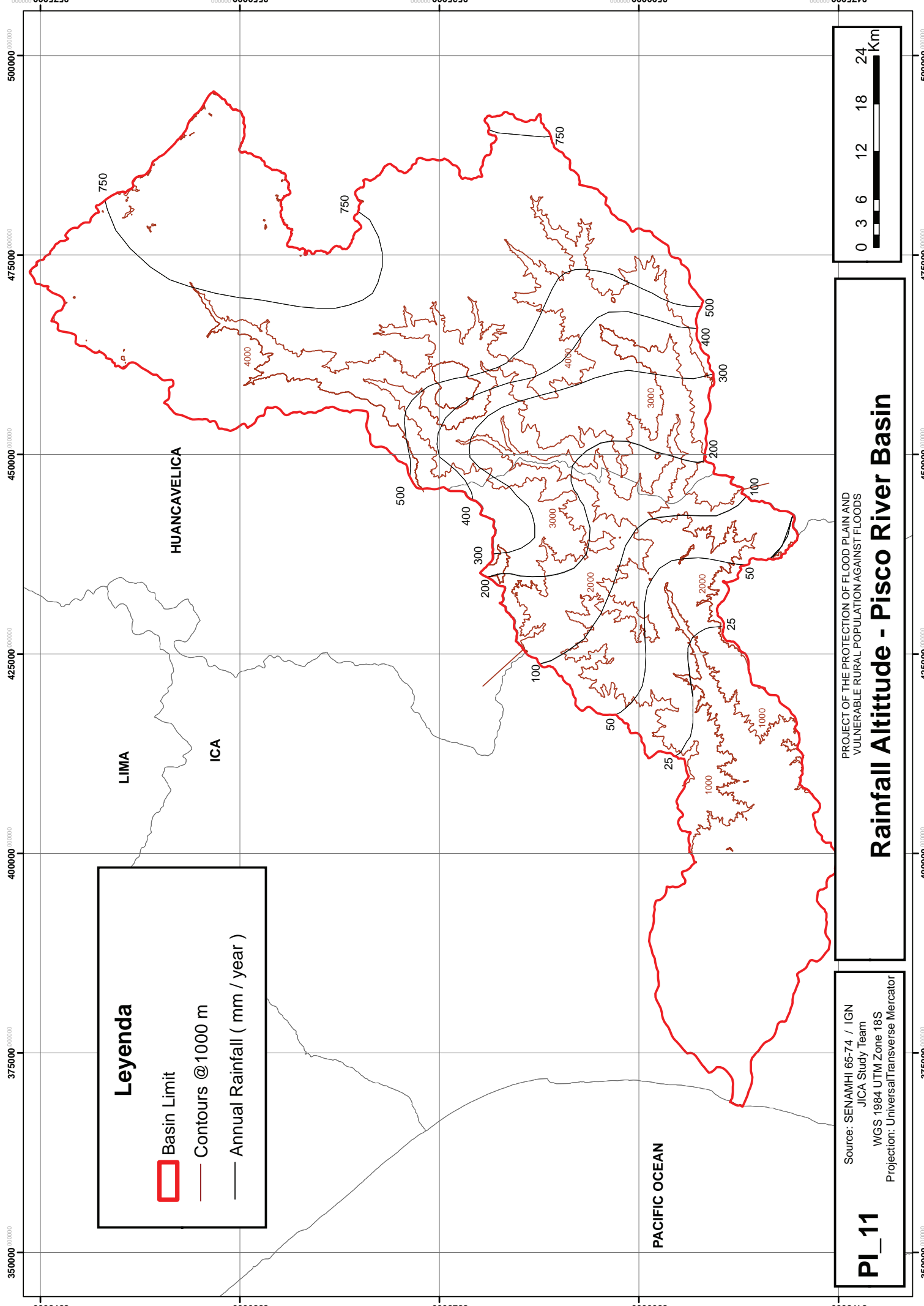
Source : INRENA 1996 - FAO
JICA Study Team
WGS 1984 UTM Zone 18S
Projection: UniversalTransverse Mercator

0 5 10 20 30 40 Km

Scale : 1 : 500,000

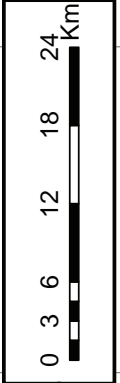
8460000 8470000 8480000 8490000 8500000 8510000 8520000 8530000 8540000 8550000 8560000 8570000 8580000 8590000

330000 340000 350000 360000 370000 380000 390000 400000 410000 420000 430000 440000 450000 460000 470000 480000 490000 500000 510000



Leyenda

- Basin Limit
- Contours @1000 m
- Annual Rainfall (mm / year)



PROJECT OF THE PROTECTION OF FLOOD PLAIN AND
VULNERABLE RURAL POPULATION AGAINST FLOODS

Rainfall Altitude - Pisco River Basin

PI_11

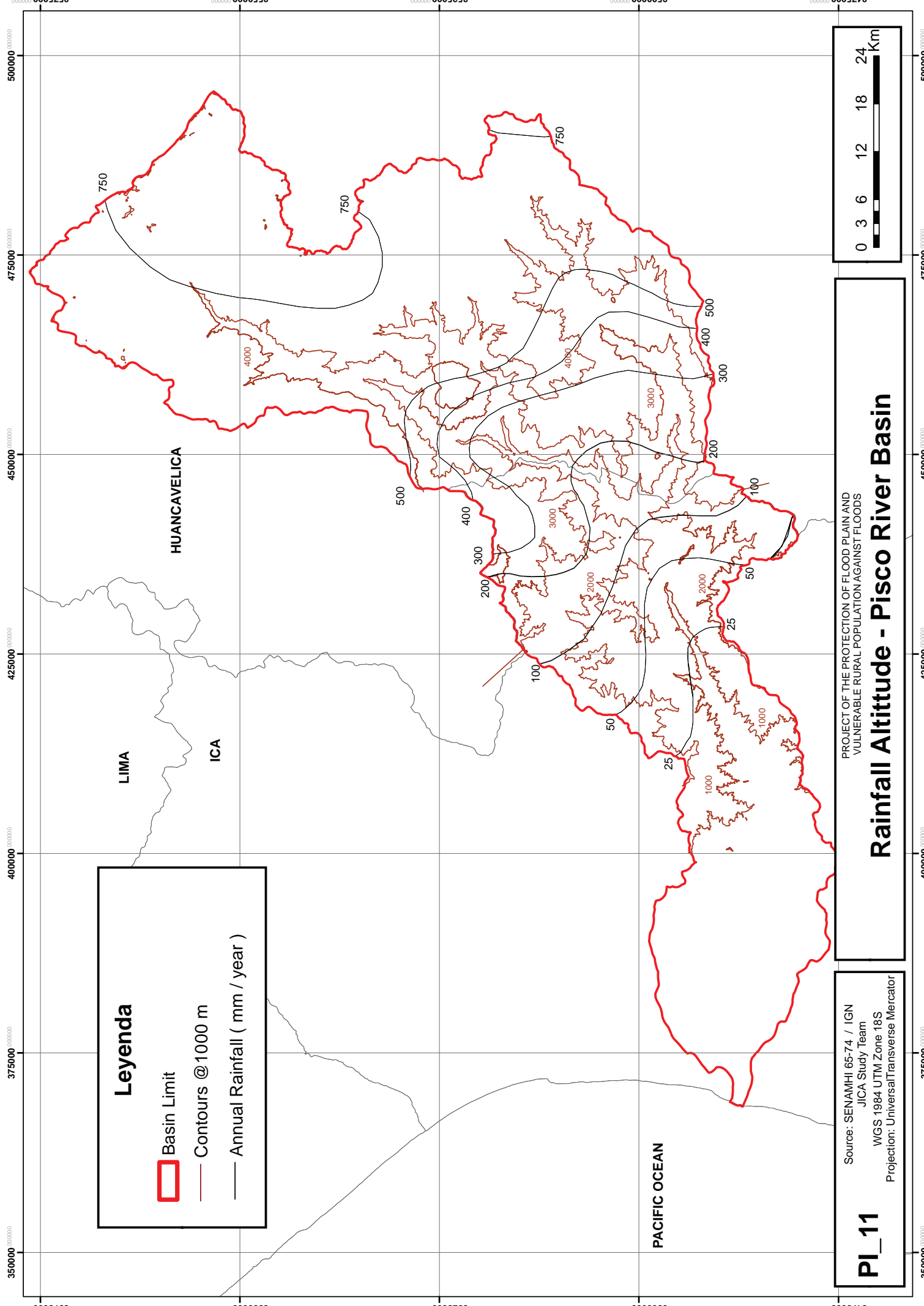
Source: SENAMHI 65-74 / IGN
 JICA Study Team
 WGS 1984 UTM Zone 18S
 Projection: Universal Transverse Mercator

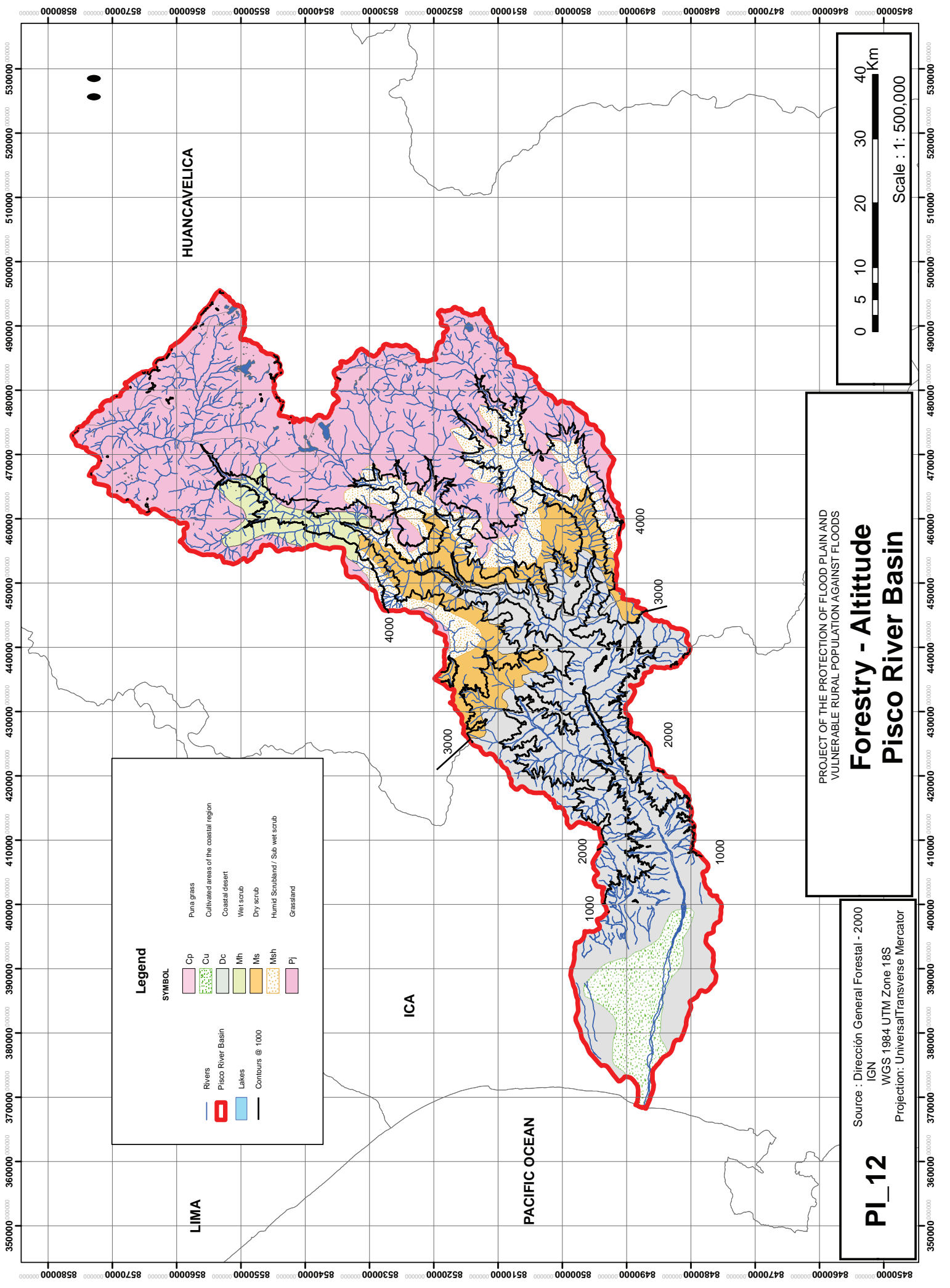
LIMA

ICA

HUANCAVELICA

PACIFIC OCEAN





Legend

SYMBOL	
	Puna grass
	Cultivated areas of the coastal region
	Coastal desert
	Wet scrub
	Dry scrub
	Humid Scrubland / Sub wet scrub
	Grassland
	Rivers
	Pisco River Basin
	Lakes
	Contours @ 1000
	Cp
	Cu
	Dc
	Mh
	Ms
	Msh
	Pj

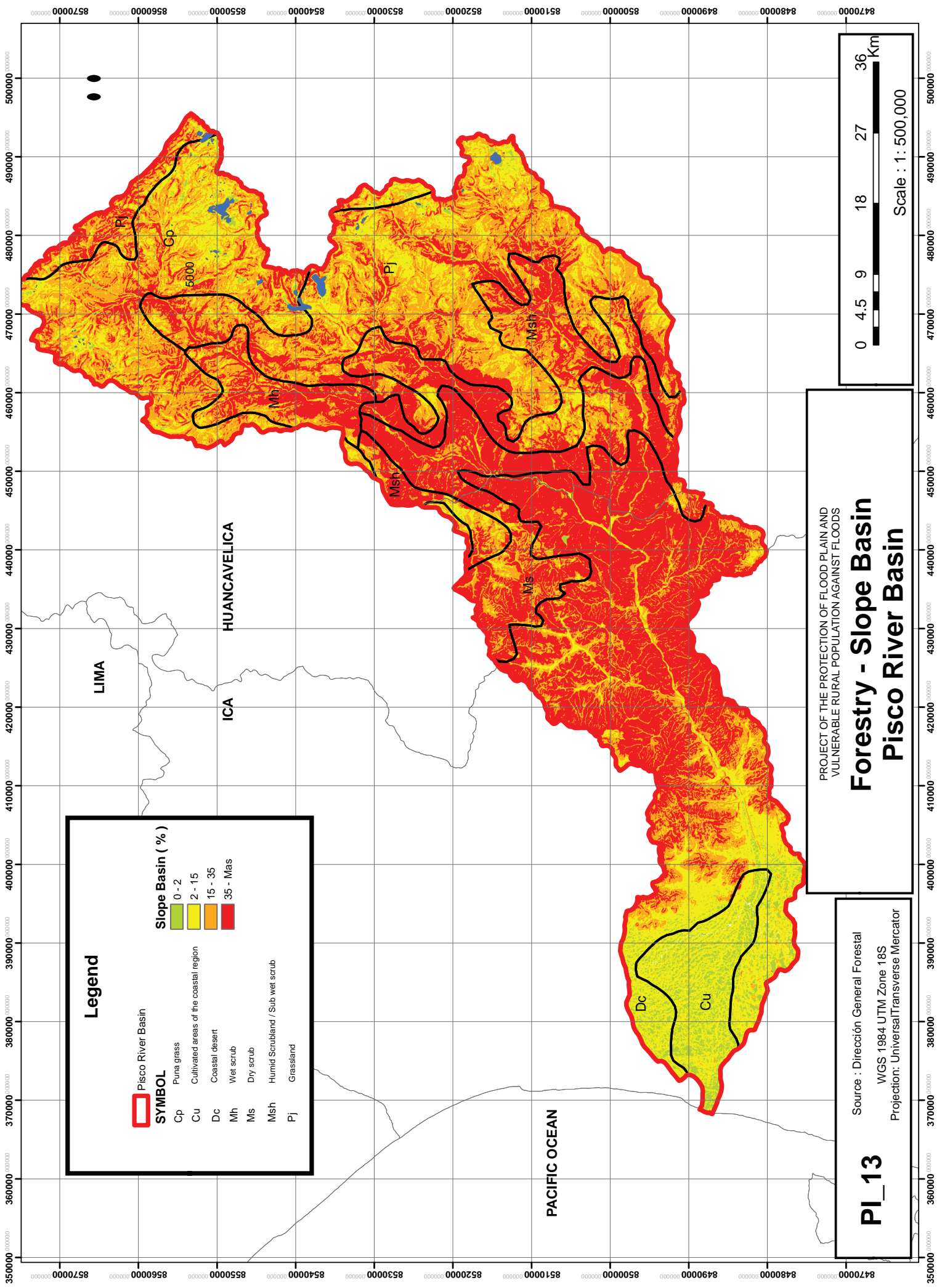
PROJECT OF THE PROTECTION OF FLOOD PLAIN AND VULNERABLE RURAL POPULATION AGAINST FLOODS

Forestry - Altitude

Pisco River Basin

PI_12

Source : Dirección General Forestal - 2000
IGN
WGS 1984 UTM Zone 18S
Projection: UniversalTransverse Mercator



Legend

Pisco River Basin

SYMBOL

Cp	Puna grass
Cu	Cultivated areas of the coastal region
Dc	Coastal desert
Mh	Wet scrub
Ms	Dry scrub
Msh	Humid Scrubland / Sub wet scrub
Pj	Grassland

	Slope Basin (%)
	0 - 2
	2 - 15
	15 - 35
	35 - Más

PROJECT OF THE PROTECTION OF FLOOD PLAIN AND
VULNERABLE RURAL POPULATION AGAINST FLOODS

Forestry - Slope Basin Pisco River Basin

PI_13

Source : Dirección General Forestal
WGS 1984 UTM Zone 18S
Projection: Universal Transverse Mercator

