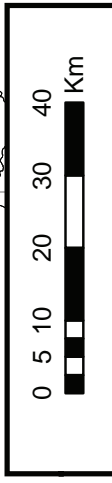


PROJECT OF THE PROTECTION OF FLOOD PLAIN AND
VULNERABLE RURAL POPULATION AGAINST FLOODS

Soils Groups Map Camana - Majes River Basin

CM-10
Source : INRENA
JICA Study Team
WGS 1984 UTM Zone 18S
Projection: UniversalTransverse Mercator



Legend

SYMBOL	Legend
	Camana - Majes River Basin
	Rivers
	Fle-RGe
	LPd-ANu-R
	LPd-ANz
	LPe-KSh-R
	LPq-R
	LPe-R
	SCh-LPe
	SCh-LPe
	Fluviso eutrico - Regoso eutrico
	Lepisol districo - Andisol umblico - Aloramiento litico
	Lepisol districo - Andisol vitrico
	Lepisol eutrico - Kastanozem haplico - Aloramiento litico
	Lepisol litico - Aloramiento litico
	Solchach haplico - Lepisol eutrico

PUNO

AREQUIPA

CUSCO

LPd-ANu-R

LPd-ANz

LPe-KSh-R

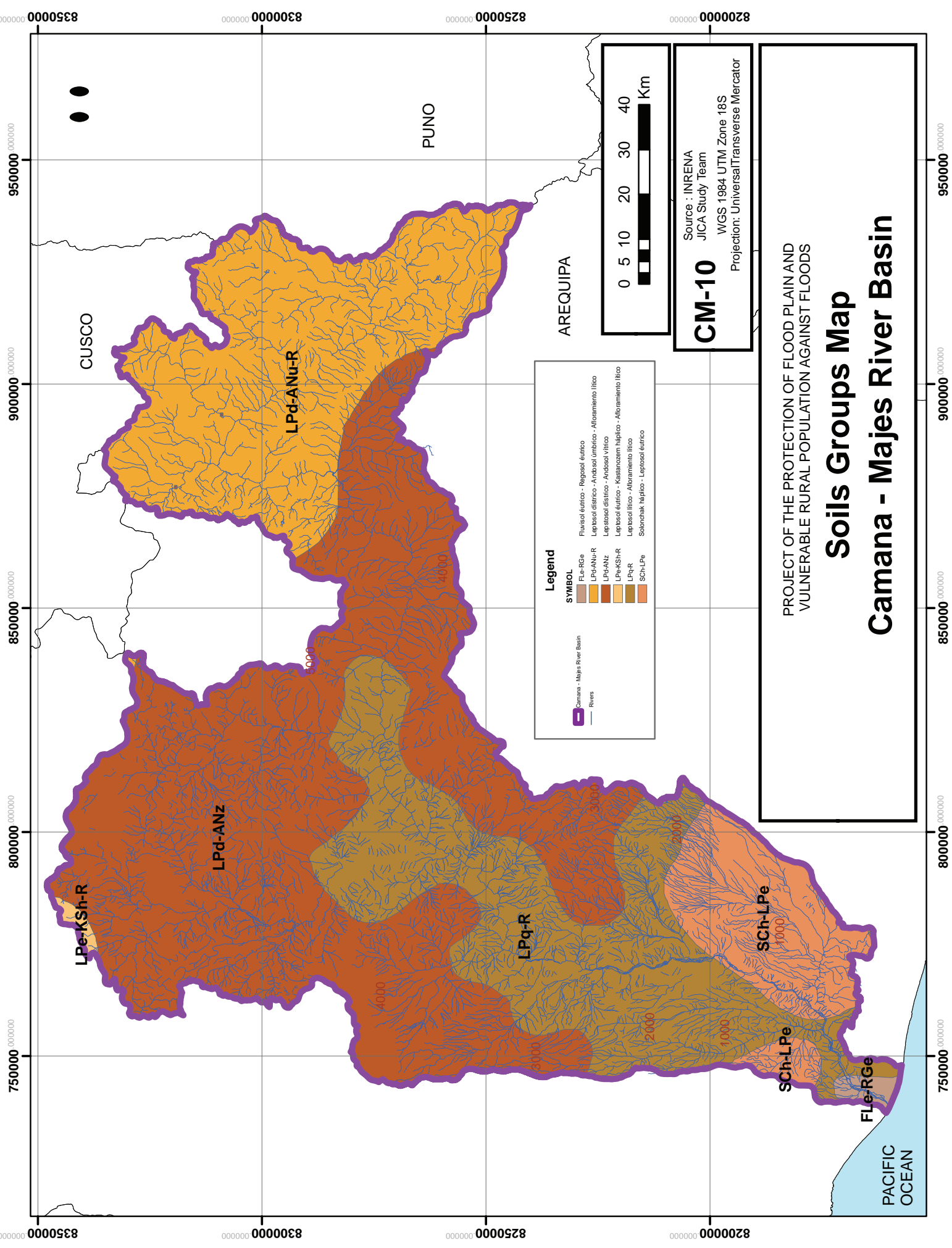
LPq-R

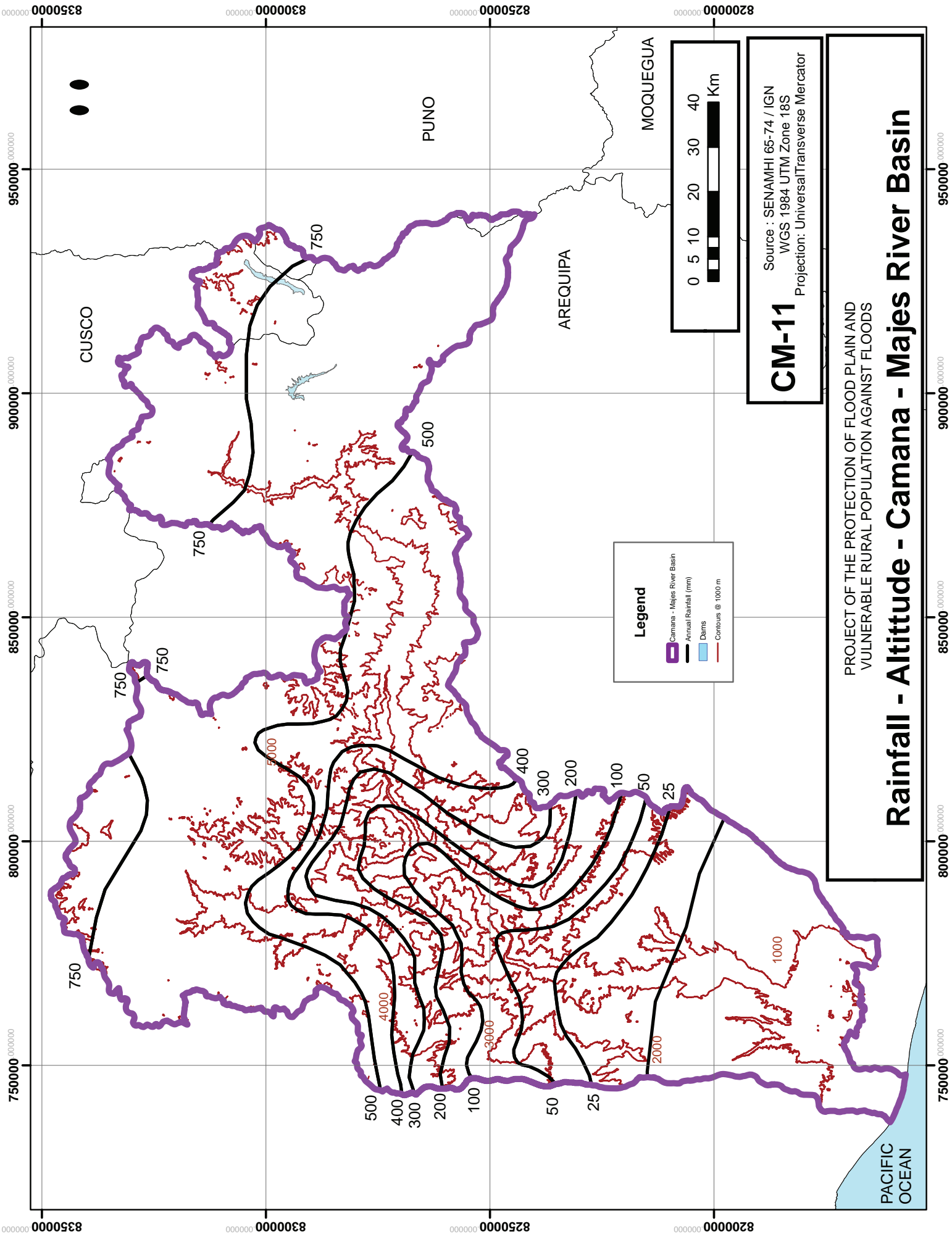
SCh-LPe

SCh-LPe

Fle-RGe

PACIFIC OCEAN





Legend

- Camana - Majes River Basin
- Annual Rainfall (mm)
- Dams
- Contours @ 1000 m

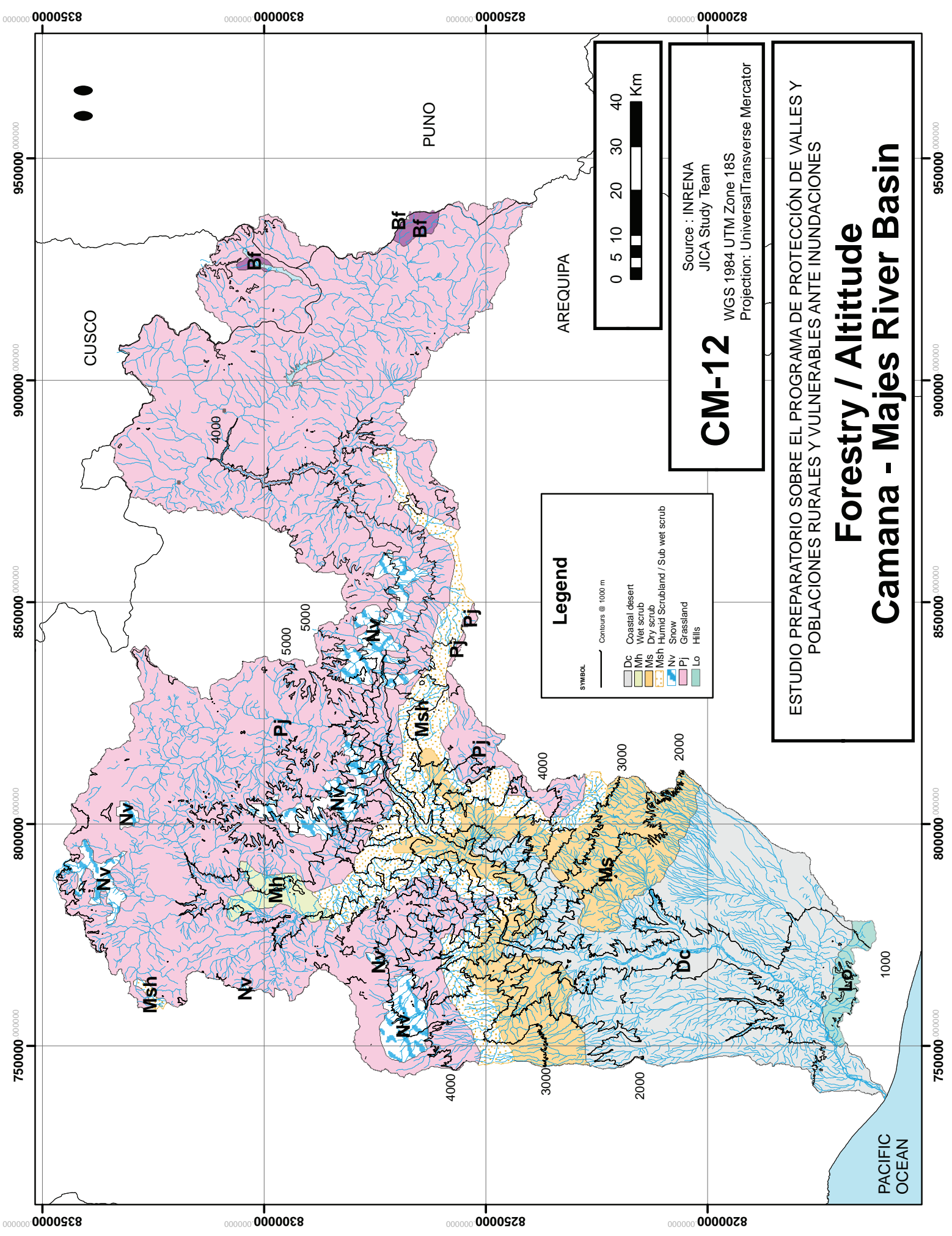
0 5 10 20 30 40 Km

CM-11

Source : SENAMHI 65-74 / IGN
 WGS 1984 UTM Zone 18S
 Projection: UniversalTransverse Mercator

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

Rainfall - Altitude - Camana - Majes River Basin



Legend

SYMBOL

— Contours @ 1000 m

- Dc Coastal desert
- Mh Wet scrub
- Ms Dry scrub
- Mish Humid Scrubland / Sub wet scrub
- NV Snow
- Pj Grassland
- Lo Hills



CM-12

Source : INRENA
 JICA Study Team

WGS 1984 UTM Zone 18S
 Projection: Universal Transverse Mercator

ESTUDIO PREPARATORIO SOBRE EL PROGRAMA DE PROTECCIÓN DE VALLES Y POBLACIONES RURALES Y VULNERABLES ANTE INUNDACIONES

Forestry / Altitude

Camana - Majes River Basin

8350000 8300000 8250000 8200000

950000 900000 850000 800000 750000

CUSCO

PUNO

AREQUIPA

PACIFIC OCEAN

4000

5000

4000

3000

2000

1000

Mish

NV

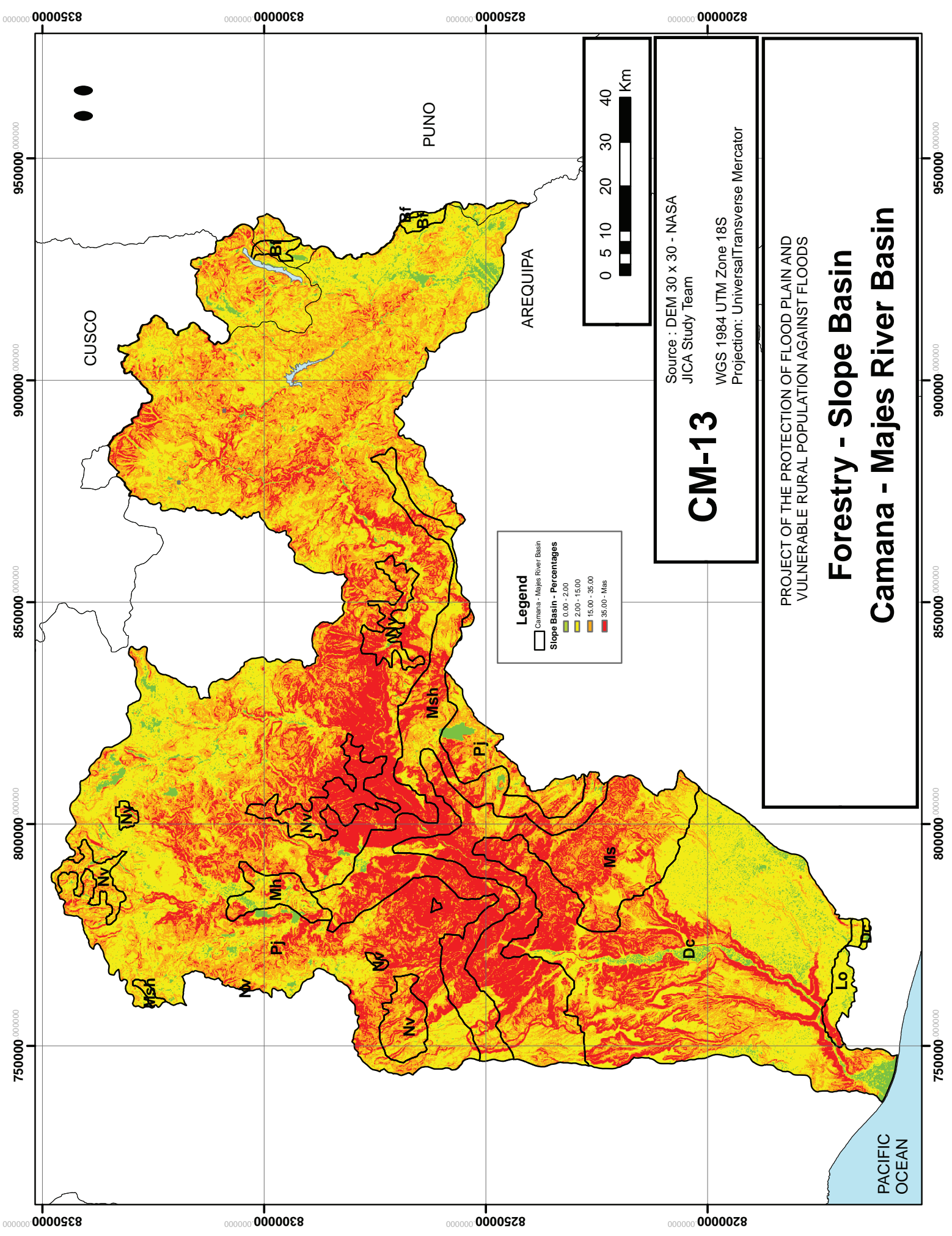
Pj

Dc

Lo

Ms

Bf



Legend
 Camana - Majes River Basin
 Slope Basin - Percentages
 0.00 - 2.00
 2.00 - 15.00
 15.00 - 35.00
 35.00 - Mas



CM-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

Camana - Majes River Basin

PACIFIC OCEAN

CUSCO

AREQUIPA

PUNO

Mish

NV

Pj

NV

NV

NV

NV

Mh

Pj

Ms

DC

Lo

DC

NV

NV

NV

NV

NV

NV

NV

Mish

Pj

Ms

DC

Lo

DC

NV

NV

NV

NV

NV

NV

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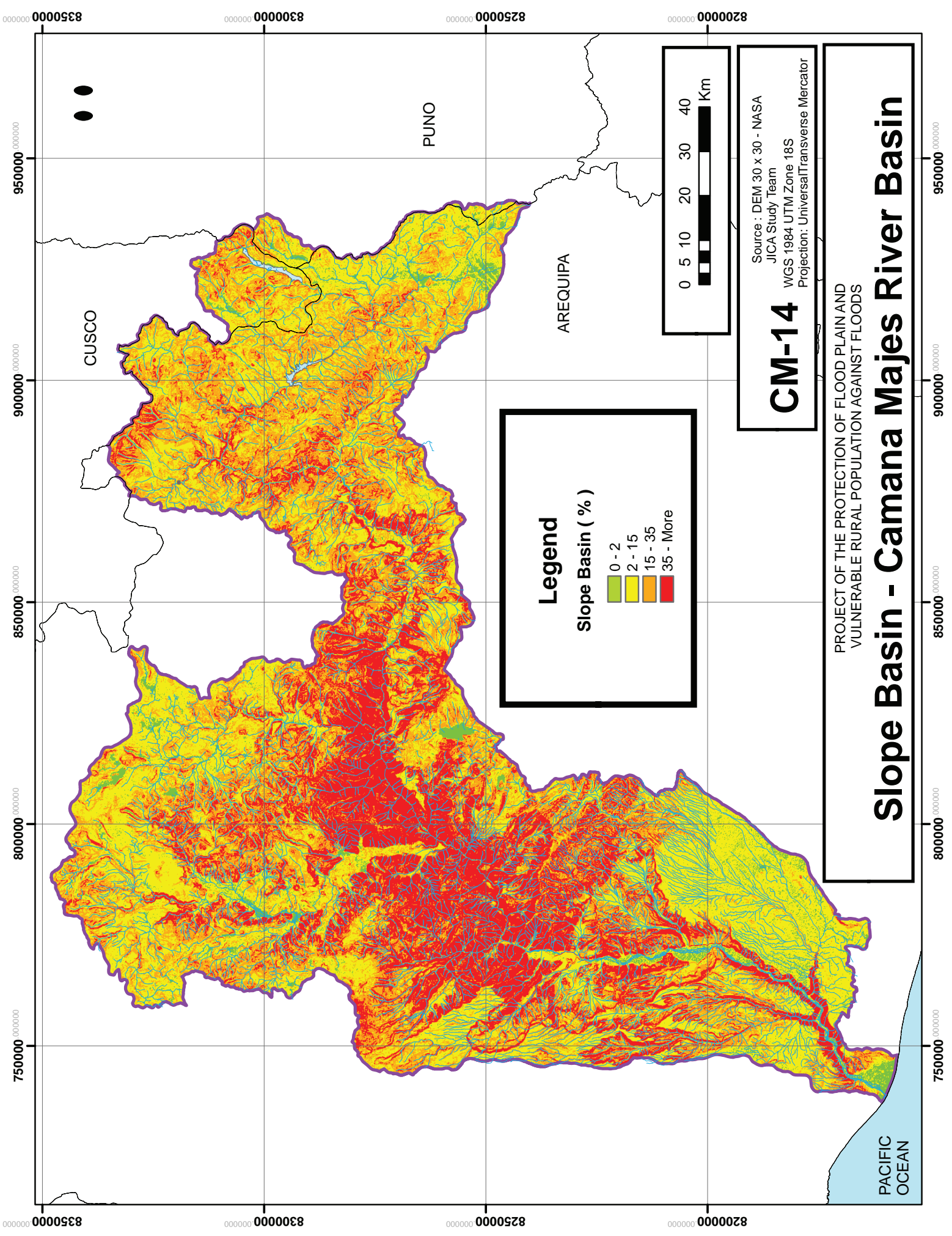
NV

NV

NV

NV

NV

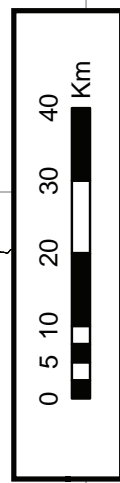


CM-14
 Source : DEM 30 x 30 - NASA
 JICA Study Team
 WGS 1984 UTM Zone 18S
 Projection: Universal Transverse Mercator

Legend

Slope Basin (%)

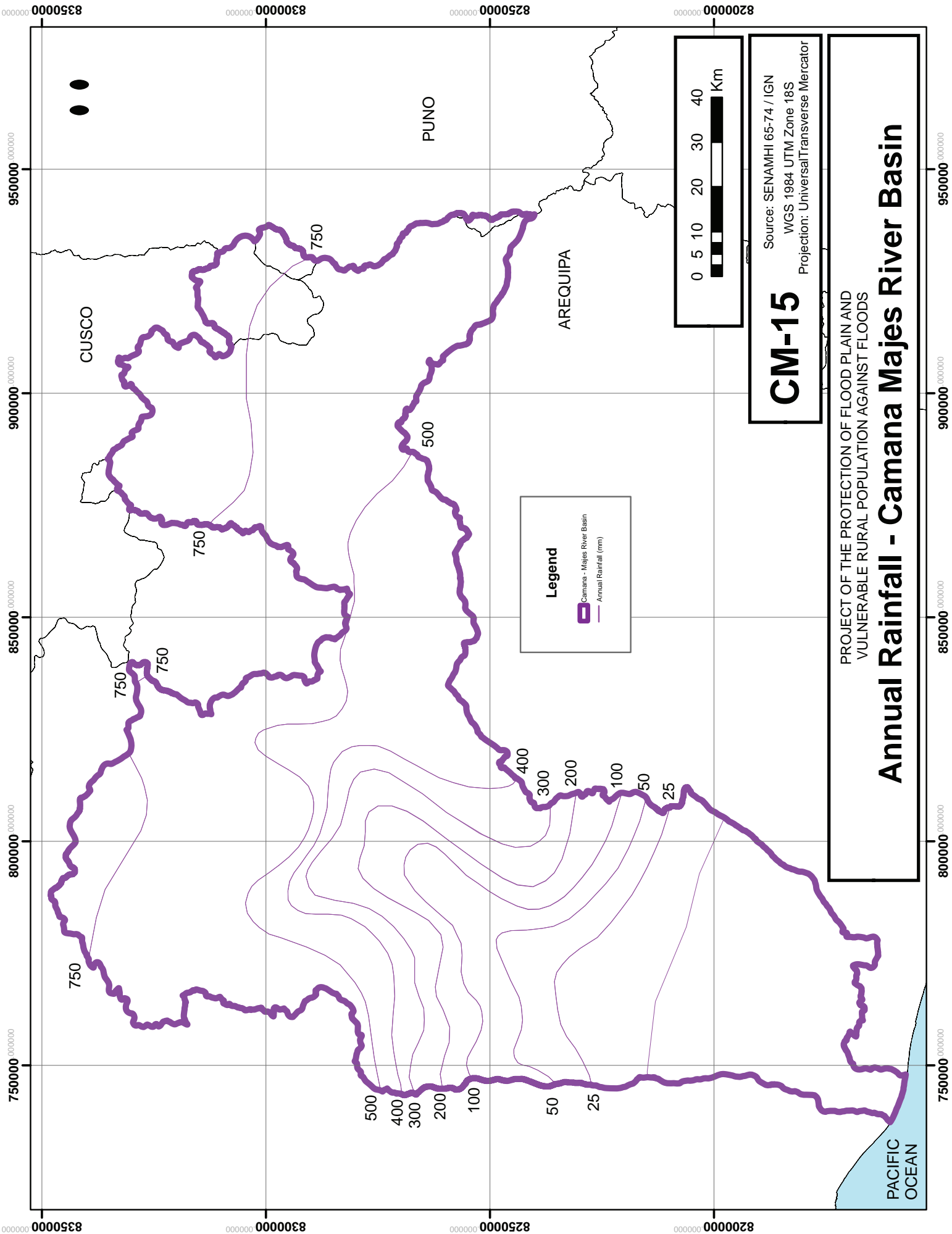
- 0 - 2
- 2 - 15
- 15 - 35
- 35 - More



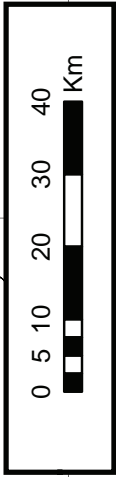
PROJECT OF THE PROTECTION OF FLOOD PLAIN AND
 VULNERABLE RURAL POPULATION AGAINST FLOODS

Slope Basin - Camana Majes River Basin

PACIFIC OCEAN



CM-15
 Source: SENAMHI 65-74 / IGN
 WGS 1984 UTM Zone 18S
 Projection: Universal Transverse Mercator



Legend
 Camana - Majes River Basin
 Annual Rainfall (mm)

PROJECT OF THE PROTECTION OF FLOOD PLAIN AND
 VULNERABLE RURAL POPULATION AGAINST FLOODS
Annual Rainfall - Camana Majes River Basin

8350000 9500000 9000000 8500000 8000000 7500000
 8350000 8300000 8250000 8200000 8150000

9500000 9000000 8500000 8000000 7500000

CUSCO

PUNO

AREQUIPA

PACIFIC OCEAN

750

750

750

750

750

500

500

400

300

200

100

50

25

400

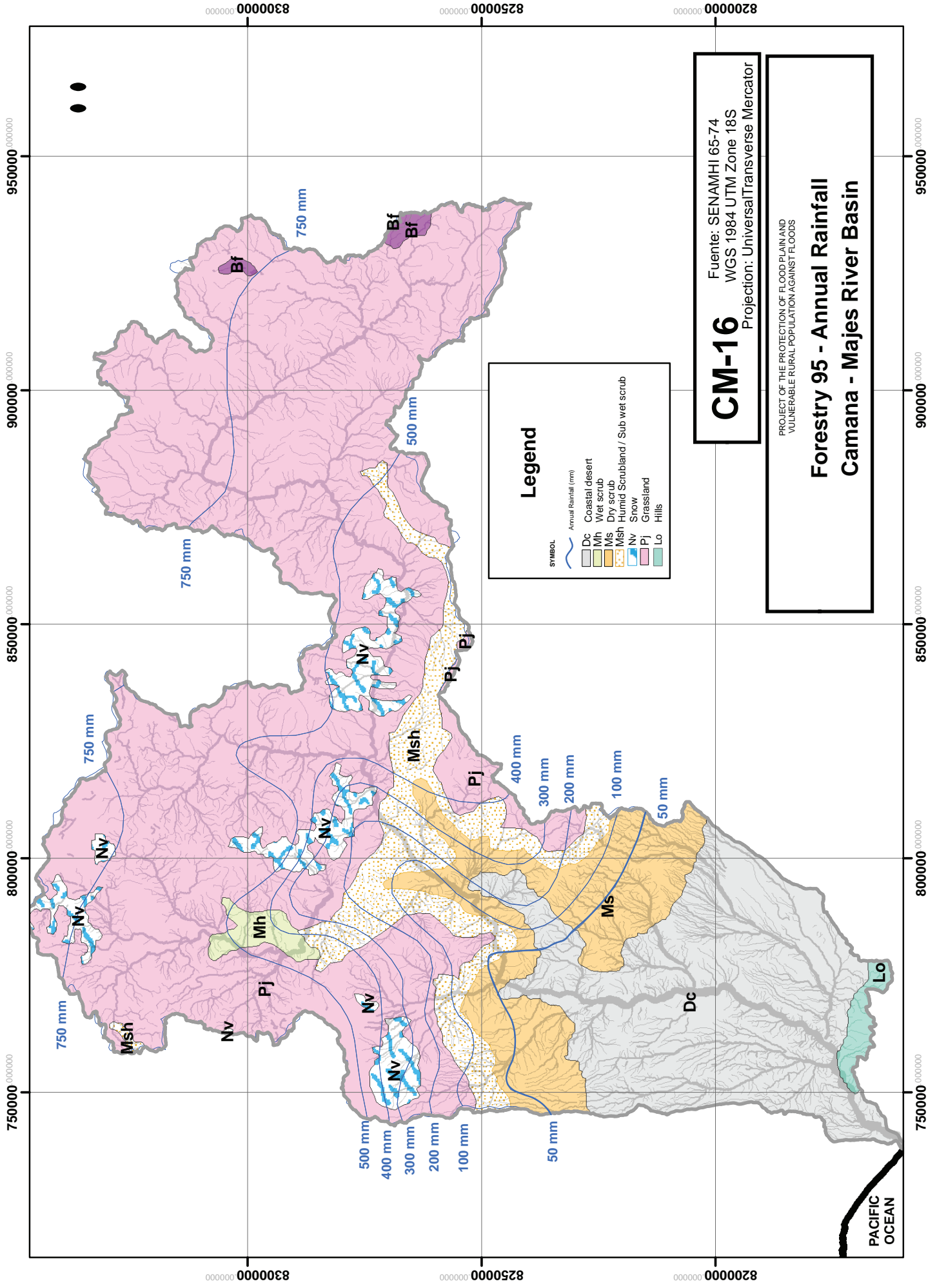
300

200

100

50

25



Legend

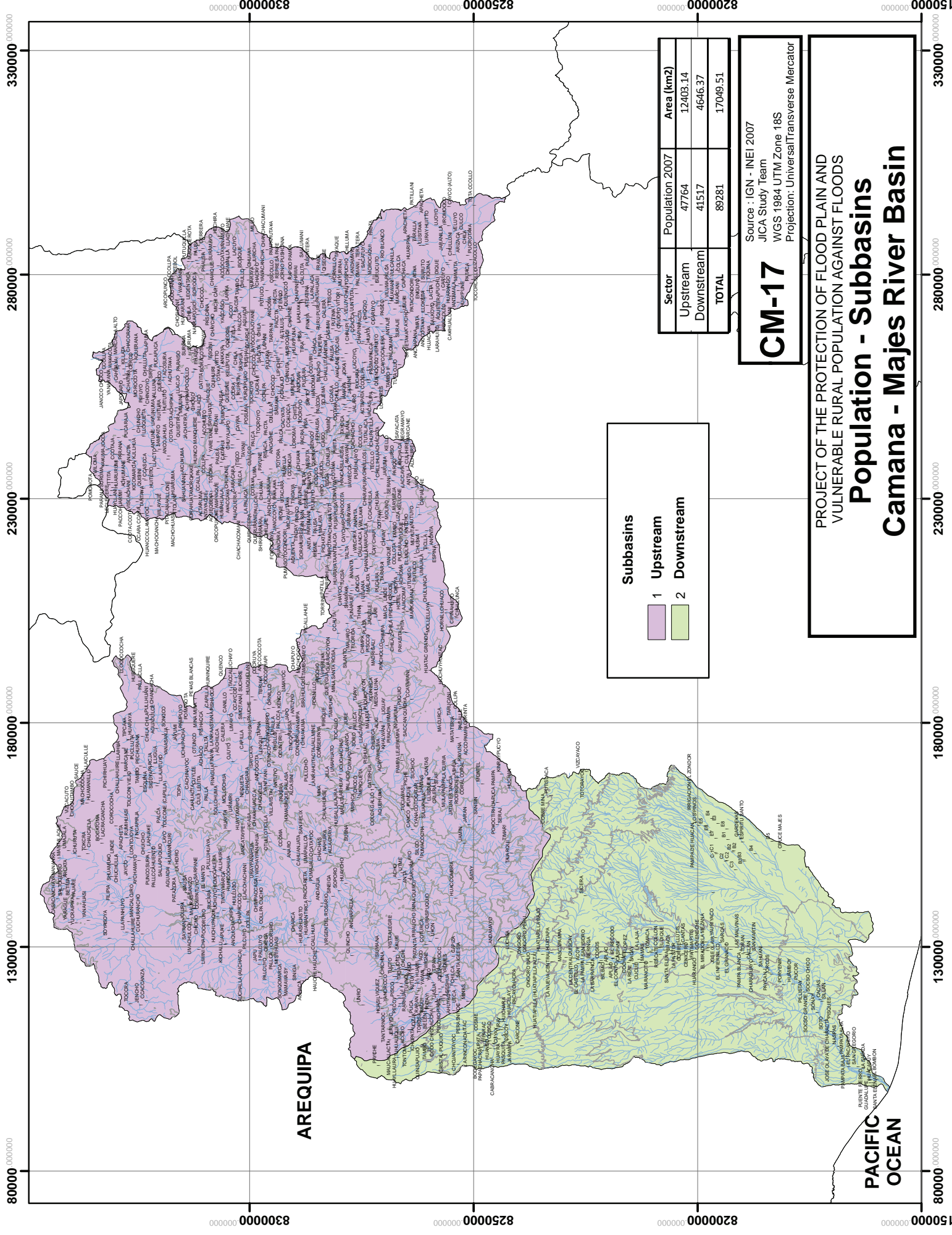
SYMBOL	Annual Rainfall (mm)
[Blue line]	500 mm
[Blue line]	400 mm
[Blue line]	300 mm
[Blue line]	200 mm
[Blue line]	100 mm
[Blue line]	50 mm
[Grey box]	Dc Coastal desert
[Green box]	Mh Wet scrub
[Yellow box]	Ms Dry scrub
[Orange box]	Msh Humid Scrubland / Sub wet scrub
[Blue box]	Nv Snow
[Pink box]	Pj Grassland
[Light green box]	Lo Hills

CM-16
 Fuente: SENAMHI 65-74
 WGS 1984 UTM Zone 18S
 Projection: Universal Transverse Mercator

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

Forestry 95 - Annual Rainfall
Camana - Majes River Basin

PACIFIC OCEAN



Sector	Population 2007	Area (km2)
Upstream	47764	12403.14
Downstream	41517	4646.37
TOTAL	89281	17049.51

CM-17
 Source : IGN - INEI 2007
 JICA Study Team
 WGS 1984 UTM Zone 18S
 Projection: UniversalTransverse Mercator

PROJECT OF THE PROTECTION OF FLOOD PLAIN AND
 VULNERABLE RURAL POPULATION AGAINST FLOODS
Population - Subbasins
Camana - Majes River Basin

Subbasins

- 1 Upstream
- 2 Downstream

AREQUIPA

PACIFIC OCEAN