

ICPSR 4538

**Chitwan Valley [Nepal] Family  
Study: Changing Social Contexts  
and Family Formation**

Time 1-3 Land Use Data, Restricted-Use, Data  
Collection Instrument

Inter-university Consortium for  
Political and Social Research  
P.O. Box 1248  
Ann Arbor, Michigan 48106  
[www.icpsr.umich.edu](http://www.icpsr.umich.edu)

# **Chitwan Valley [Nepal] Family Study: Changing Social Contexts and Family Formation**

William G. Axinn

*University of Michigan. Population Studies Center*

Arland Thornton

*University of Michigan. Survey Research Center*

Jennifer S. Barber

*University of Michigan. Survey Research Center*

Susan A. Murphy

*University of Michigan. Survey Research Center*

Dirgha Ghimire

*University of Michigan. Population Studies Center*

Thomas Fricke

*University of Michigan. Survey Research Center*

Stephen Matthews

*Pennsylvania State University. Population Research Institute*

Dharma Dangol

*Tribhuvan University (Nepal). Institute of Agriculture and Animal Science*

Lisa Pearce

*University of Michigan. Population Studies Center*

Ann Biddlecom

*University of Michigan. Population Studies Center*

Sundar Shrehtha

*Pennsylvania State University. Population Research Institute*

Douglas Massey

*University of Michigan. Population Studies Center*

# Terms of Use

The terms of use for this study can be found at:  
<http://www.icpsr.umich.edu/cocoon/ICPSR/TERMS/4538.xml>

## Information about Copyrighted Content

Some instruments administered as part of this study may contain in whole or substantially in part contents from copyrighted instruments. Reproductions of the instruments are provided as documentation for the analysis of the data associated with this collection. Restrictions on "fair use" apply to all copyrighted content. More information about the reproduction of copyrighted works by educators and librarians is available from the United States Copyright Office.

### NOTICE

#### WARNING CONCERNING COPYRIGHT RESTRICTIONS

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material. Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

# Data Producer Codebook

## Time 1-3 Land Use

Data Set Name: t123landuse

Unit of observation: neighborhood

Number of observations: 171

Number of variables: 62

Unique identifier: neighid

Response rate: 100%

Data format: sas for windows

Sample: \*

Observation length: 478

File structure: rectangular

Data collection: November 1995 - May 2007

Date: 3/26/09

Related publications:

\*Barber, Jennifer S., Ganesh P. Shivakoti, William G. Axinn, and Kishor Gajurel. 1997. "Sampling Strategies for Rural Settings: A Detailed Example from Chitwan Valley Family Study, Nepal." Nepal Population Journal 6(5):193-203.

## Time 1-3 Land Use

<b>NEIGHID</b>	Neighborhood id	
<b>Neighborhood id</b>	[001-171]	171
<b>FULLID</b>	Full land use id	
<b>Full land use id</b>	[0101001-0310151]	171
<b>SETTLMNT</b>	Settlement id	
<b>Settlement id</b>	[01-10]	171
<b>STRATA</b>	Strata	
<b>Strata</b>	[01-03]	171
<b>BARI1</b>	Land area in square feet	
<b>Bari land in Time 1</b>	[0-2180062]	171
<b>BARI2</b>	Land area in square feet	
<b>Bari land in Time 2</b>	[0-2093317]	171
<b>BARI3</b>	Land area in square feet	
<b>Bari land in Time 3</b>	[0-1849365.5]	171
<b>CANAL1</b>	Land area in square feet	
<b>Canals in Time 1</b>	[0-155906]	171
<b>CANAL2</b>	Land area in square feet	
<b>Canals in Time 2</b>	[0-127056]	171
<b>CANAL3</b>	Land area in square feet	
<b>Canals in Time 3</b>	[0-121229.55]	171
<b>CHAUTHRA</b>	Land area in square feet	
<b>Measured in Time -1 only</b>	[0-1340]	171
<b>GRASSC1</b>	Land area in square feet	
<b>Grassland Common in Time 1</b>	[0-388896]	171
<b>GRASSC2</b>	Land area in square feet	
<b>Grassland Common in Time 2</b>	[0-86913]	171
<b>GRASSC3</b>	Land area in square feet	

## Time 1-3 Land Use

<b>Grassland Common in Time 3</b>	[0-249969]	171
<b>GRASSP1</b>	Land area in square feet	
<b>Grassland Private in Time 1</b>	[0-243421]	171
<b>GRASSP2</b>	Land area in square feet	
<b>Grassland Private in Time 2</b>	[0-62178]	171
<b>GRASSP3</b>	Land area in square feet	
<b>Grassland Private in Time 3</b>	[0-464462.5]	171
<b>HHRESID1</b>	Land area in square feet	
<b>Household in Time 1</b>	[2729-219436]	171
<b>HHRESID2</b>	Land area in square feet	
<b>Household in Time 2</b>	[1874-230438]	171
<b>HHRESID3</b>	Land area in square feet	
<b>Household in Time 3</b>	[0-214770]	171
<b>IKHET1</b>	Land area in square feet	
<b>Irrigated Khet in Time 1</b>	[0-2974386]	171
<b>IKHET2</b>	Land area in square feet	
<b>Irrigated Khet in Time 2</b>	[0-3008485]	171
<b>IKHET3</b>	Land area in square feet	
<b>Irrigated Khet in Time 3</b>	[0-2999084.01]	171
<b>MILL1</b>	Land area in square feet	
<b>Mill in Time 1</b>	[0-1598]	171
<b>MILL2</b>	Land area in square feet	
<b>Mill in Time 2</b>	[0-4896]	171
<b>MILL3</b>	Land area in square feet	
<b>Mill in Time 3</b>	[0-3974.5]	171
<b>OTRBLD1</b>	Land area in square feet	
<b>Other Building in Time 1</b>	[0-6891]	171

## Time 1-3 Land Use

<b>OTRBLD2</b>	Land area in square feet	
<b>Other Building in Time 2</b>	[0-206458]	171
<b>OTRBLD3</b>	Land area in square feet	
<b>Other Building in Time 3</b>	[0-205181.5]	171
<b>PLANTC1</b>	Land area in square feet	
<b>Plantation Common in Time 1</b>	[0-152199]	171
<b>PLANTC2</b>	Land area in square feet	
<b>Plantation Common in Time 2</b>	[0-191561]	171
<b>PLANTC3</b>	Land area in square feet	
<b>Plantation Common in Time 3</b>	[0-156737]	171
<b>PLANTP1</b>	Land area in square feet	
<b>Plantation Private in Time 1</b>	[0-240796]	171
<b>PLANTP2</b>	Land area in square feet	
<b>Plantation Private in Time 2</b>	[0-199547]	171
<b>PLANTP3</b>	Land area in square feet	
<b>Plantation Private in Time 3</b>	[0-207510]	171
<b>POND1</b>	Land area in square feet	
<b>Ponds in Time 1</b>	[0-61956]	171
<b>POND2</b>	Land area in square feet	
<b>Ponds in Time 2</b>	[0-15153]	171
<b>POND3</b>	Land area in square feet	
<b>Ponds in Time 3</b>	[0-26690]	171
<b>RIVER1</b>	Land area in square feet	
<b>River in Time 1</b>	[0]	171
<b>RIVER2</b>	Land area in square feet	
<b>River in Time 2</b>	[0-722138]	171
<b>RIVER3</b>	Land area in square feet	
<b>River in Time 3</b>	[0-431492.5]	171



## Time 1-3 Land Use

<b>RKHET1</b>	Land area in square feet	
<b>Rainfed Khet in Time 1</b>	[0-638303]	171
<b>RKHET2</b>	Land area in square feet	
<b>Rainfed Khet in Time 2</b>	[0-361525]	171
<b>RKHET3</b>	Land area in square feet	
<b>Rainfed Khet in Time 3</b>	[0-893053.6]	171
<b>ROAD1</b>	Land area in square feet	
<b>Roads in Time 1</b>	[1080-171305]	171
<b>ROAD2</b>	Land area in square feet	
<b>Roads in Time 2</b>	[0-154470]	171
<b>ROAD3</b>	Land area in square feet	
<b>Roads in Time 3</b>	[0-148947.12]	171
<b>SCHOOL1</b>	Land area in square feet	
<b>School in Time 1</b>	[0-809003]	171
<b>SCHOOL2</b>	Land area in square feet	
<b>School in Time 2</b>	[0-791706]	171
<b>SCHOOL3</b>	Land area in square feet	
<b>School in Time 3</b>	[0-1004865.25]	171
<b>SILT1</b>	Land area in square feet	
<b>Uncultivable silt in Time 1</b>	[0-39263]	171
<b>SILT2</b>	Land area in square feet	
<b>Uncultivable silt in Time 2</b>	[0-104229]	171
<b>SILT3</b>	Land area in square feet	
<b>Uncultivable silt in Time 3</b>	[0-105071]	171
<b>TEMPLE1</b>	Land area in square feet	
<b>Temple in Time 1</b>	[0-57302]	171
<b>TEMPLE2</b>	Land area in square feet	

## Time 1-3 Land Use

<b>Temple in Time 2</b>	[0-42401]	171
<b>TEMPLE3</b>	Land area in square feet	
<b>Temple in Time 3</b>	[0-52153]	171
<b>TOTAL1</b>	Land area in square feet	
<b>Total Time 1</b>	[3809-3223438]	171
<b>TOTAL2</b>	Land area in square feet	
<b>Total Time 2</b>	[3705-3226025]	171
<b>TOTAL3</b>	Land area in square feet	
<b>Total Time 3</b>	[3809.5-3252397.4]	171
<b>UNDVP1</b>	Land area in square feet	
<b>Undeveloped Land in Time 1</b>	[0-1207]	171
<b>UNDVP2</b>	Land area in square feet	
<b>Undeveloped Land in Time 2</b>	[0-104229]	171
<b>UNDVP3</b>	Land area in square feet	
<b>Undeveloped Land in Time 3</b>	[0-92799.5]	171

# Instrument

# NEIGHBORHOOD BOUNDARY

Strata #  
Neighborhood Name & ID :  
Boundary Description :  
WESTERN :

Settlement Name:

NORTHERN :

EASTERN :

SOUTHERN :

---

---

---

---

Prepared by:

Verified by :



# Field Notebook

## Neighborhood Mapping

### Chitwan Valley Population and Environment Study

**Date :** \_\_\_\_\_

**Time start :** \_\_\_\_\_

**Mapping team :** 1. \_\_\_\_\_ **(Team leader)**

2. \_\_\_\_\_

3. \_\_\_\_\_

**Settlement name :** \_\_\_\_\_ **ID #** \_\_\_\_\_

**Neighborhood name:** \_\_\_\_\_ **ID #** \_\_\_\_\_

**Weather :** \_\_\_\_\_

**Other comments :** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# NEIGHBORHOOD BOUNDARY

Strata #

VDC Name:

Ward #

Settlement Name:

Settlement #:

Neighborhood Name :

Neighborhood #:

(In over Sampled neighborhood add 'N' for Newar and 'Th' for Tharu)

Boundary: East:

West:

North:

South:

Additional Descriptions:

How to reach:

-----

Map

Ethnic count: Total HH #

.....

Prepared by:

Date :





# Population and Environment Project (PEP)

## Soil Texture Determination in Neighborhood

Strata # .....

Settlement Name & #.....

Neighborhood Name and ID.....

### Record Sheet for Soil Texture by Feel Method

S.N.	Land parcel and ID #	Ribbon Length (Inch)	Predominate wet feel	Soil Textural class	Remarks

**Team Leader :**





NEIGHBORHOOD ID \_\_\_\_\_

Population and Ecology Research Laboratory  
Rampur, Chitwan

Population and Environment Study

Neighborhood Mapping & Land Use  
Survey Form

This form has been designed to organize the information collected on the land parcels within each of the neighborhoods in the Chitwan Valley Family Study and the Population and Environment Research Projects.

All land use and neighborhood data must be entered on this form while visiting the neighborhood sites. Begin each land parcel on a new "Neighborhood Mapping Recording Sheet" Please always carry extra copies of the sheet as the sheets included in this form may not be enough for all of the neighborhoods.

Research ID: PERL-POPENV

Site ID: \_\_\_\_\_

Name of person(s) filling out this form: \_\_\_\_\_

Other members of the team \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_





# Neighborhood Land Use Summary Sheet

**Neighborhood ID** \_\_\_\_\_  
**Team Supervisor** \_\_\_\_\_

**Date** \_\_\_\_\_  
**Sheet #** \_\_\_ **of** \_\_\_

Use only information on the NEIGHBORHOOD MAPPING SUMMARY SHEET to complete this form.

Land Use category	Area in Square Feet	Percent of Total Area
Household - residences		
Schools (building and property)		
Temple (building and property)		
Mill (building and property)		
Other Buildings - Developed Land		
Other Undeveloped Land		
Roads (all paved, gravel, dirt)		
Irrigated Khet/ghol - Fallow		
Irrigated Khet/ghol - Cultivated		
Rainfed Khet - Fallow		
Rainfed Khet - Cultivated		
Cultivated Bari		
Fallow Bari		
Private Grassland/Forest		
Common Grassland/Forest		
Sand and Silt		
Plantation - Private		
Plantation - Community		
Irrigation Canals		
Ponds and water areas (except rivers)		
Rivers		
<b>TOTAL</b>		

The total area of this Neighborhood is = \_\_\_\_\_

Total Area of the Neighborhood Reported at Time 1 = \_\_\_\_\_

Difference in Area between Time 1 and Time 2 = \_\_\_\_\_

**Neighborhood Time 2 Sketch Map**

Please draw the neighborhood in the most convenient orientation. And mark on the map the north arrow.



**Time 2 Sketch Map for Land Parcel**

Name of the Land Parcel (and Number):





## Neighborhood Mapping - Data Recording Sheet

S.N.	Land Category	Length	Width		Area	Remarks
			Reading	Average		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						



# Neighborhood Land Use - Summary Sheet

Neighborhood ID \_\_\_\_\_ Date \_\_\_\_\_

Team Supervisor \_\_\_\_\_

Use only information on the NEIGHBORHOOD MAPPING SUMMARY SHEET to complete this form.

Land Parcel Category	Area in Square Feet	Precision
<b>Household - Residence</b>		
<b>Schools (Building and Property)</b>		
<b>Temple (Building and Property)</b>		
<b>Mill (Building and Property)</b>		
<b>Other Buildings - Developed Land</b>		
<b>Other Undeveloped Land</b>		
<b>Roads (All paved, gravel, dirt)</b>		
<b>Irrigated Khet/ghol - Fallow</b>		
<b>Irrigated Khet/ghol - Cultivated</b>		
<b>Rainfed Khet - Fallow</b>		
<b>Rainfed Khet - Cultivated</b>		
<b>Cultivated Bari</b>		
<b>Fallow Bari</b>		
<b>Private Grassland/Forest</b>		
<b>Common Grassland/Forest</b>		
<b>Sand and Silt</b>		
<b>Plantation - Private</b>		
<b>Plantation - Community</b>		
<b>Irrigation Canals</b>		
<b>Ponds and Water Areas (Except Rivers)</b>		
<b>Rivers</b>		
<b>Total</b>		

The total area of this Neighborhood is (Time3) \_\_\_\_\_

Total Area of the Neighborhood Reported at Time 1 \_\_\_\_\_

Total Area of the Neighborhood Reported at Time 2 \_\_\_\_\_

Difference in Area between Time 1 and Time 3 \_\_\_\_\_

Difference Percentage between Time 1 and Time 3 \_\_\_\_\_

## **Neighborhood Time 3 Sketch Map**

Please draw the neighborhood in the most convenient orientation. And mark on the map the north arrow.

### **Time 3 Sketch Map for Land Parcel**

**Name of the Land Parcel (and Number):**