

POPULATION AND ECOLOGY RESEARCH LABORATORY

REPORT 2000 - 2002



POPULATION STUDIES CENTER • INSTITUTE FOR SOCIAL RESEARCH
UNIVERSITY OF MICHIGAN

POPULATION AND ECOLOGY RESEARCH LABORATORY

Aims

PERL was established with the following research, training, and institutional aims.

RESEARCH

To assess the influence of rapid changes in the ecological context on population processes, with a special emphasis on the processes of family formation, migration, urbanization, children's well-being, and population growth.

To assess the influence of changing demographic parameters, particularly related to population growth, migration, and family formation, on the ecological context.

TEACHING

To train Nepalese applied social scientists in state-of-the-art social science research methods.

To train U.S. social science students in research methods appropriate in the context of a developing country.

INSTITUTIONAL

To create and institutionalize technical infrastructure for ongoing social science and demographic research in Nepal, including computing facilities and a survey research staff.

To develop strong institutional links between Nepalese institutions and the University of Michigan that will be the basis for cooperative research projects and training faculty and students at both sites.

Cover photo: Nepalese woman carrying her son, water for the family, and dishes that have been cleaned in the nearby river.



WILLIAM G. AXINN
DIRECTOR



DIRGHA J. GHIMIRE,
ASSOCIATE DIRECTOR

DIRECTOR'S STATEMENT

THE 2000 – 2002 YEARS WERE QUITE productive for the Population and Ecology Research Laboratory (PERL). In PERL's new home at the Population Studies Center of the University of Michigan, research, training, and institution-building activities all experienced rapid acceleration. Despite some political turmoil in Nepal, PERL's ongoing longitudinal data collection activities continued unabated. New support from the Demographic and Behavioral Sciences Program of the U.S. National Institute of Child Health and Human Development launched a series of new ethnographic, survey, geographic, and botanical data collection activities related to population and environmental issues. More than half a dozen PERL researchers were trained in research methods at Michigan's Survey Research Center's Summer Institute; two PERL research affiliates completed PhDs; and three other PERL research affiliates joined doctoral programs in the U.S.

These successes in our training activities continue to be the cornerstone of our research success. Institutional ties to Tribhuvan University and Kathmandu University in Nepal, and to Pennsylvania State University and the University of Florida in the United States also contributed greatly to the success of PERL's research and training activities over this period.

We were extremely fortunate to have appointed Mr. Dirgha J. Ghimire as the Associate Director of PERL in 2000. Mr. Ghimire is a founding member of PERL and a PhD candidate in sociology at the University of Michigan. He has taken on a pivotal role in the management and direction of PERL research, training, and institution-building activities, and his leadership will shape its direction for many years to come.

Throughout 2000, 2001, and 2002, the research, training, and institution-building accomplishments of PERL were a product of contributions from many people at various institutions in the U.S. and Nepal. These individuals and institutions contributed to PERL in various ways, and we owe each of them great thanks for their ongoing contributions to the PERL mission. In addition, we would like to thank the agencies and foundations that have provided generous financial support to PERL during the past three years (see page 28). PERL has also recently expanded its institution-building efforts through a new collaborative relationship with the Institute for Social and Environmental Research (ISER) in Nepal. As you will see in the report that follows, most of our accomplishments are the result of the hard work of a large team.

This report describes the aims and capabilities of PERL, the activities PERL has completed since its inception, and PERL's accomplishments during 2000–2002. We also invite you to view PERL's new website, which can be found through Michigan's Population Studies Center website, at <http://perl.psc.isr.umich.edu>. The website contains more detailed information about PERL, including downloadable versions of many of our research papers and other reports. In many ways, these papers and reports are the ultimate product of PERL's research, training, and institution-building activities. And, of course, we are quite proud of them. So, we invite you to take a closer look.

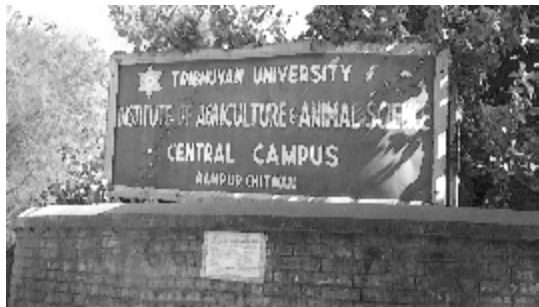
WILLIAM G. AXINN
DIRECTOR

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ASSOCIATE DIRECTOR



INSTITUTIONAL TIES

Michigan’s Population Studies Center is an ideal institutional home for PERL. The Center provides access to both an outstanding research infrastructure and one of the world’s leading international



Main entrance, Institute of Agriculture and Animal Science, Tribhuvan University.

demography research and training programs, supported by a range of funding institutions. Furthermore, as part of the Institute for Social Research, PERL has direct access to another center in the Institute—Michigan’s outstanding Survey Research Center. These alliances provide PERL with unprecedented opportunities to establish state-of-the-art resources and capabilities in Nepal with which to meet its research, training, and institution-building aims.

In addition to its strong institutional base at the Population Studies Center, PERL has expanded its institutional ties in both the U.S. and Nepal. PERL continues to work closely with the Pennsylvania State University, its original institutional home. A number of Pennsylvania State students and faculty continue to be actively involved in advancing PERL’s research, training, and institution-building aims. Furthermore, PERL has developed new institutional ties with the University of Florida, where researchers and students have initiated collaborative activities, including developing a research proposal and bringing Nepalese students to attend graduate programs in Florida.

In Nepal, PERL continues to enjoy collaborative ties with the Institute of Agriculture and Animal Science (IAAS) of Tribhuvan University, as well as with Kathmandu University. To foster new collaborations in Nepal, PERL signed a “Memorandum of Understanding” with the Institute for Social and Environmental Research (ISER) in Nepal. This Institute was created by several of PERL’s trainees after returning to Nepal, as an institutional home for their ongoing research and training activities. Working together with the ISER, we look forward to continued success conducting research on pressing population problems in Nepal, training researchers in state-of-the-art social science methods, and constructing the infrastructure needed to carry out a long-term program of social science research in Nepal.





PERL office in Rampur, Chitwan.

These buildings have offices for project coordinators, faculty associates, research supervisors, and administrative personnel; a computer lab (with a backup energy supply, climate control, and power regulation equipment); space for transportation to facilitate field work and supervision; storage for incoming and outgoing questionnaires; a library; and a modestly furnished guest house for use by research scholars and visitors. In addition, PERL maintains a safe storage facility and communication center in Bharatpur, the nearby district headquarters. Five additional field offices are located throughout the current study areas, and are maintained for effective data collection.

At Michigan, PERL offices are housed in the Population Studies Center and the Survey Research Center, at the Institute for Social Research. The Population Studies Center provides pre-doctoral and post-doctoral training in social demography and research methods to PERL staff, computing support for data cleaning, preparation, and analysis activities, and administrative support for research and training projects. The Survey Research Center gives PERL access to state-of-the-art training in survey research methods.

RESEARCH INFRASTRUCTURE

At the core of PERL's infrastructure are 46 highly qualified, multi-ethnic research staff members; 50% of whom are women. The research staff varies according to the number of projects in the field, but currently includes 28 survey



PERL field staff.

INFRASTRUCTURE

PHYSICAL INFRASTRUCTURE

PERL facilities include two buildings within the campus of the Institute of Agriculture and Animal Science, which is located in the Chitwan Valley of south central Nepal.

interviewers, 3 survey supervisors, and 2 study managers. They are supported by a modest computing staff to assist with large-scale data entry projects, including 4 data entry staff and 1 computer supervisor. An administrative staff, including 1 manager and 7 support staff, provides support for the large-scale survey projects. The PERL staff members are continuously trained in a broad range of research methods to provide state-of-the-art data collection capability for social sciences purposes, including ethnographic and archival data collection, land use mapping, flora and water quality assessments, and global positioning systems (GPS).

Four major types of data collection are currently conducted by PERL: survey, ethnographic and archival, geographic, and environmental.

Survey Research.

PERL's survey research staff was trained following Michigan's Survey Research Center's training protocols. Many explicit steps were taken to insure that PERL survey staff follow the same operating procedures and standards as the Survey Research Center. In 1994, the coordinator of PERL's survey group spent three months as a study manager intern at the Survey Research Center, learning its procedures and training methods. All of PERL's training and supervisory materials are based on the Survey Research Center's materials, and PERL's field operations are designed to mimic the Survey Research Center's. Close institutional ties with the Survey Research Center have enhanced PERL's ability to follow those procedures. PERL survey coordinators and supervisors are trained at the Survey Research Center's Summer Institute in survey methods and Survey Research Center staff provide direct quality control assurance on PERL projects.

PERL's quality control procedures meet or exceed U.S. survey research standards. PERL has a high supervisor-to-interviewer ratio (one supervisor for every six interviewers). Completed interviews are checked two or three times for errors and omissions before data entry. All data are entered twice, and data entry is performed in the field to allow for immediate follow-up on any discrepancies.



PERL interviewer collecting monthly household registry data.



Survey data entry at PERL, Rampur.

PERL staff have completed several large-scale survey data collection projects. The first was a 60-minute household interview with 1,802 families, which was completed in 6 months with a 100% response rate. Second was a 70-minute personal interview with 5,271 adults (including a life history calendar), which was completed in 7 months with a 98% response rate. Third was a 20-minute seasonal agricultural practices survey administered to approximately 1,800 households every 4 months over a period of 3 years, which had less than 2% attrition of the eligible households. The fourth project is an ongoing registry of demographic events, which involves a monthly 10-minute interview with 2,200 households. This registry tracks the migration and demographic behavior (including contraceptive use, if appropriate) of about 15,000 individuals, following them as they move throughout Nepal. PERL staff have collected these interviews for 6 years with less than 3% attrition of the eligible individuals.

Ethnographic and Archival Research. To meet the aims of specific research projects, PERL staff have developed expertise in both ethnographic and archival research methods. They have been trained by Tom Fricke (Associate Professor of Anthropology, University of Michigan) and Lisa Pearce (Assistant Professor of Sociology, University of North Carolina-Chapel Hill), and have taken courses on qualitative data collection at the SRC's Summer Institute. Training has included sessions at PERL as well as practical experience for a small number of PERL supervisors and interviewers. Staff have been trained to be flexible during interview sessions, to follow important themes with useful probes, and to narrow the cultural gap between a foreign researcher and respondent during interviews. PERL's aggressive program of ethnographic and archival data collection has led to a number of methodological innovations, including the Neighborhood History Calendar (Axinn, Barber, and Ghimire 1997) and Systematic Anomalous Case Analysis (Pearce 2002).

Geographic Research. PERL staff members have also received training in survey and mapping techniques using both traditional tools such as compasses and advanced digital technologies such as global positioning systems (GPS). Staff were trained in field mapping and

reporting procedures, as well as data entry procedures and validation checks using programs written in BASIC and QBASIC. The land-use mapping teams gathered geographical data on 171 neighborhoods, including all boundaries on within-neighborhood land parcels, and data on specific point locations (e.g., hospitals, schools, and bus stops).



Land use mapping at study site.

These geographical field data have been linked to data digitized from secondary sources, including topographic and thematic maps of the area, and have been entered into a GIS database maintained by Stephen Matthews and supported by the Geographic Information Core at the Population Research Institute at Pennsylvania State. In addition, the flora teams (see *Environmental Research*, below) were trained in trail-blazing, or course navigation, techniques to enable them to follow paths through difficult terrain in locating sampled flora sites.



Flora biodiversity measured in the field.

Environmental Research. PERL staff have also been trained in multiple methods of environmental data collection. Their activities have included collecting and analyzing 150 water samples and flora species on more than 265 land plots. They performed many tests of water quality, including pH levels, chemical oxygen demand, inorganic nitrogen, inorganic

phosphorus, specific conductivity, total dissolved solids, and total suspended solids. In addition, teams were trained to identify multiple characteristics of wells, including the topography surrounding the well, the diameter and depth of the well, and the lining of the well. Water teams were trained by faculty and staff of the IAAS and water tests were performed at the IAAS laboratories. Flora teams were trained to identify grass, shrub, and tree species. From each of the 265 plots, PERL staff members counted the number of different species (biodiversity), the height and diameter of the largest species of shrub and tree (biomass), and used the Braun Blanquet scale to estimate the proportion of the plot covered by each species (ground cover).





A mother in Chitwan prepares her children for school.

ONGOING RESEARCH PROJECTS

Research activities in 2000, 2001, and 2002 revolved around two major ongoing research projects. The first project, “Changing Social Contexts and Family Formation,” is commonly called the Chitwan Valley Family Study (CVFS) at the study site. The second project, “Reciprocal Relations between Population and Environment,” is

referred to as the Population and Environment Study and builds directly from the CVFS. The study area for both projects is the western part of the Chitwan Valley in South Central Nepal. It is surrounded by the Royal Chitwan National Park (jungle) in the south, the Rapti River in the west, Nepal’s East-West Highway in the east, and the Narayani River in the north. Both projects were initially funded for five years. The CVFS began in late 1994 and was renewed in 1999 for a second five-year period. The Population and Environment Study, started in 1995, was renewed for five more years beginning in January 2001.

Chitwan Valley Family Study (CVFS). This study is designed to investigate the influence of changing social contexts on the timing of marriage, childbearing, and contraceptive use. The research investigates the extent to which changes in the community produce changes in family formation behavior, and whether the family organization of individual life courses produces these changes in behavior. The study used a combination of ethnographic and survey research methods to gather neighborhood histories from 171 neighborhoods in Western Chitwan. Personal histories were gathered from 5,271 residents (ages 15–59) of these neighborhoods using a semi-structured Life History Calendar and a highly structured survey questionnaire. The sample for this study was chosen to represent the neighborhoods in Western Chitwan, including individuals from the five major ethnic groups inhabiting the area: high caste Hindus, hill Tibeto-burmese (such as Gurung, Tamang, and Magar), indigenous terai Tibeto-burmese (such as Tharu, Darai, and Kumal), Newar, and other caste Hindus.

The individual-level data, gathered from the personal interviews and the life history calendars, are available through the Inter-University

Consortium for Political and Social Research (ICPSR) for public use. The individual interview data pertain to personal experiences and attitudes towards various aspects of social life. The life history calendar data provide a complete history of key life events such as migration, marriage, childbearing, contraceptive use, living arrangements, employment, education, and travel.

Throughout 2000 – 2002, PERL staff focused on the collection of demographic and contraceptive use information through the monthly household registry and contraceptive use surveys, which captured data from about 2,200 households and 7,000 individuals. These data were double entered by two data entry staff members and cross-checked for discrepancies. After being entered and checked, the household demographic and contraceptive use data collected during months 1 through 36 were sent to Michigan for further data cleaning and checking. Discrepancies discovered during the data review in Michigan were sent back to Nepal for checking against the original questionnaires by PERL staff. (The interviews were recorded using paper and pencil.) The data for months 1-36 are being used in preliminary analyses by several researchers in Michigan. The remainder of the information collected during 2000 - 2002 is being entered and checked.

Population and Environment Study. To answer questions posed by the original project, as well as new questions arising during preliminary analysis of the collected data, William Axinn, Jennifer Barber, Ann Biddlecom, and Lisa Pearce applied for and were granted a five-year extension of the project from the National Institute for Child Health and Human Development (NICHD). The grant from NICHD includes funding for analysis of the data collected under the original grant, as well as funding to continue the monthly registry of demographic events originally funded under the Population and Environment grant. The primary aim of the extension project is to continue investigating the following original research questions: 1) To



PERL interviewer conducts household interview.

what extent do marriage timing, household fission, childbearing, and migration influence land use and flora diversity? 2) To what extent do land use and flora diversity influence marriage, household fission, childbearing and migration? 3) To what extent do agricultural and consumption patterns link population processes to environmental outcomes? 4) To what extent are the observed relationships between population processes and the environment produced by exogenous changes in the social, economic and institutional context?

During the initial phase of this project, PERL staff collected information about land use, household agriculture and consumption, flora, and water. In 2000, 2001, and 2002 similar information was collected. Using the same procedure as in 1996, the PERL land use team conducted the land use mapping survey in 171 sample neighborhoods and a flora diversity count in 265 forest, grassland, and common land plots. The agriculture and consumption survey was also repeated, gathering information pertaining to household economic status, including farming (crops grown, mechanization, land holding), livestock (number, management, feeding practices), household possessions, perceptions of environmental change, damage from pests and diseases, and house quality. A total of 2,035 households were interviewed from July to December 2001. Due to the state of emergency in Nepal, 25 of the households interviewed in 1996 that had moved out of Chitwan could not be re-interviewed in 2001.

In addition to collecting data, PERL staff also completed a number of data entry, data cleaning, and data release tasks. During 2000 – 2002 PERL staff completed cross-checking and cleaning all the data collected in the initial phase of the project, including data on land use, flora diversity, water quality, and household agriculture and consumption. Data from the 1996 household agriculture and consumption survey are now available for public use through ICPSR; 2000 – 2002 data have been entered and transferred to the U.S., and are currently being checked and cleaned for public release.



PERL research associate, Lisa Pearce, conducting an interview at the study site.

NEW RESEARCH IN 2000, 2001, AND 2002

Chitwan Healthy Aging Project. In the fall of 2000, Amy Pienta and Jennifer Barber conducted a pilot study that interviewed 103 older adults residing in the Chitwan Valley. This pilot study was undertaken in preparation for a new large-scale project to collect data on mental and physical health from elderly residents in the 171 neighborhoods sampled by the Chitwan Valley Family Study. Measures



conducts an ethnographic interview

of physical functioning, chronic health conditions, lifestyle behaviors, health care utilization, barriers to health care utilization, depression, personal control, and cognition were pretested. This pilot study was an outstanding success. Locating and interviewing elderly respondents proved straightforward. Furthermore, virtually all of the survey questions proved feasible to ask and responses varied in reasonable and predictable ways. Our analyses of these pretest data give us great confidence that a large-scale project can be conducted successfully. Pienta and Barber are currently preparing an R01 proposal to the National Institute of Aging (National Institutes of Health) to fund such a data collection project in Nepal.

Developmental Idealism and Family and Population Dynamics in Nepal. This new pilot project, which has both training and research components, is being led by Arland Thornton. The research component is a collaborative endeavor that will create and test research instruments for measuring developmental idealism, a concept developed by Thornton and presented in his presidential address at the 2001 Annual Meetings of the Population Association of America. The pilot project will collect data from approximately 500 respondents and will evaluate the effectiveness and usefulness of the research instruments and preliminary data. The training component will provide Nepali students and collaborators with training in questionnaire design and practice in translating theoretical concepts into questions for survey administration. Ultimately, the project will yield information concerning developmental idealism and its relationship to family and population dynamics.





Ethnographic methods training seminar conducted by PERL research associate Lisa Pearce.

TRAINING

PERL's training mission is extensive and complex; Nepalese members of the PERL staff are trained in Nepal and in the U.S. and American researchers are trained in Nepal and in the U.S.

There are also multiple training goals, including placing Nepalese students in U.S. degree programs, encouraging and training U.S. students to consider Nepal as a context in which to examine their research interests, and keeping staff members up to date on state-of-the-art data collection techniques. Because these training aims are diverse and inter-related with PERL's institution-building and research aims, many of the training activities are described throughout this report. Here, we provide a brief overview of some of PERL's training activities during 2000 – 2002.

TRAINING IN NEPAL

Lisa Pearce visited Nepal to collect ethnographic data with PERL staff on the formation of family size preferences from September to November 2000, and March to April 2002.

William G. Axinn conducted several training sessions in questionnaire construction, staff management, and survey research management for PERL supervisors and managers in January and February 2001.

Ann Biddlecom provided training in questionnaire construction, and survey research management for PERL supervisors and managers in January and February, 2001.

Paul Schulz provided training in the installation and use of a computer data entry program and computer data entry to the PERL computer supervisor and data entry staff in November 2001.

Dirgha Ghimire conducted refresher training seminars in survey research methods for PERL supervisors and interviewers in April/May 2000, January/February 2001, and October/November 2002.

PERL managers Susan Gurung, Indra Chaudhary, and Krishna Ghimire participated in a two-day “Negotiation Skill and Conflict Management” training course organized by Narayanghat’s Chamber of Commerce. This course enhanced their personnel and financial management skills.



PERL interviewers get refresher training at Rampur.

PERL’s Administration and Finance Manager Krishna Ghimire also participated in a training program organized by the Nepal Charter Accountant Association in Kathmandu to become more familiar with local financial rules and regulations.

NEPALESE STAFF MEMBERS TRAINED AT THE UNIVERSITY OF MICHIGAN

As described above (see *PERL Research Infrastructure*), PERL’s survey research staff is trained at the University of Michigan’s Survey Research Center (SRC). The purpose of this training is twofold: to insure that state-of-the-art survey data collection methods are used in all of PERL’s data collection projects, and to prepare PERL staff for entry into U.S. social science degree programs. During 2000–2002, two PERL managers, two faculty associates, and one computer supervisor participated in the SRC’s summer institute courses in Ann Arbor.

Sundar S. Shrestha took the SRC Summer Institute 2000 courses *Introduction to Survey Methods*, *Questionnaire Design*, and *Introduction to Statistical Analysis I*.

Sujan L. Shrestha took the SRC Summer Institute 2000 courses *Introduction to Survey Methods* and *Qualitative Data Collection Methods—Ethnography*.

Krishna J. Ghimire took the SRC Summer Institute 2000 course *Introduction to Survey Methods* and was also oriented on PSC/ISR account and staff management policy.

Dharma R. Dangol took the SRC Summer Institute 2001 courses *Introduction to Statistical Analysis I*, *Introduction to Survey Methods*, and *Population Research in Developing Countries*.

Bishnu P. Adhikari took the SRC Summer Institute 2001 courses *Introduction to Survey Methods*, and *Population Research in Developing Countries* and also received computer training in Microsoft Access.

HumNath Bhandari took the SRC Summer Institute 2002 courses *Introduction to Survey Research Methods*, *Introduction to Statistical Analysis I and II*, and *Population Research in Developing Countries*.

Kishor Gajurel took the SRC Summer Institute 2002 courses *Introduction to Statistical Analysis I*, *Multilevel Modeling*, and *Population Research in Developing Countries*.

Dil B. Gurung took the SRC Summer Institute 2002 courses *Introduction to Statistical Analysis I and II*, and *Population Research in Developing Countries*.



NEPALESE RESEARCHERS ENROLLED IN PHD PROGRAMS IN THE U.S.

PERL interviewer in the field.

PERL has successfully helped several young Nepalese scholars gain admittance into PhD Programs in the United States. Training activities in the future will include continuing the search for resources to help additional PERL staff members enter into degree programs in the United States, so that they can return to PERL to conduct research.

Prem B. Bhandari is a PhD student in Rural Sociology and Demography at the Pennsylvania State University. Prem is currently working on his dissertation proposal and plans to use data collected by PERL.

Netra Chhetri recently completed an M.A. in Geography and Demography at the Pennsylvania State University, and is currently working toward a PhD in Geography and Demography.

Purandhar Dhital is a PhD student in Agricultural and Extension Education and Demography at the Pennsylvania State University. Purandhar is currently working on his dissertation using data from the Chitwan Valley Family Study.



Dirgha J. Ghimire is a PhD student in the Department of Sociology and the Population Studies Center at the University of Michigan. Dirgha is currently working on his dissertation using multiple data sets from the Chitwan Valley Family Study.

Sundar S. Shrestha is a PhD student in Agriculture Economics and Demography at the Pennsylvania State University. Sundar is currently taking required courses and plans to take the comprehensive exam in 2003.

Sujan L. Shrestha recently completed his prerequisite courses and enrolled in a graduate program at the University of Florida.

DATA USERS WORKSHOP

To facilitate the use of the data collected during the past seven years, PERL organized a four-day Nepal Data Users Workshop at the University of Michigan's Population Studies Center. This workshop was designed to introduce the complex data structures and provide hands-on experiences using appropriate analytical tools to analyze these data. Research scholars, research staff, and students of different Universities and research institutions from Nepal and the United States participated in the workshop, which was supported by the Population Studies Center. The ten participants included the following:



Data Users Workshop, May 2002

Dr. Humnath Bhandari, Lecturer, Department of Agriculture Economics, Institute of Agriculture and Animal Science (IAAS), Tribhuvan University, Rampur, Chitwan, Nepal.

Mr. Prem B. Bhandari, Lecturer, Department of Agriculture Economics, Institute of Agriculture and Animal Science (IAAS), Tribhuvan University, Rampur, Chitwan, Nepal and PhD student, Department of Agriculture Economics and Rural Sociology, the Pennsylvania State University, University Park, PA USA.

Dr. Kishor P. Gajurel, Lecturer, Department of Agriculture Extension and Rural Sociology, Institute of Agriculture and Animal Science (IAAS), Tribhuvan University, Rampur, Chitwan, Nepal.

Dirgha J. Ghimire, PhD candidate, Department of Sociology, Population Studies Center, University of Michigan.

Mr. Dil B. Gurung, Lecturer, Department of Mathematics, Kathmandu University, Nepal.

Miss Bina Guvaju, PhD student, Department of Sociology, Population Research Institute, the Pennsylvania State University, University Park, PA USA.

Dr. Kristi Jenkins, Post-doctoral fellow, Population Studies Center, University of Michigan.

Mr. Keith Robinson, PhD student, Department of Sociology, Population Studies Center, University of Michigan.

Mr. Shyam Sundar Shrestha, Lecturer, Department of Agriculture Economics, Institute of Agriculture and Animal Science (IAAS), Tribhuvan University, Rampur, Chitwan, Nepal and PhD student at Department of Agriculture Economics and Rural Sociology, the Pennsylvania State University, University Park, PA USA.

Mr. Anga Timalisina, Doctoral fellow, RAND Corporation, California.

RESEARCH ENRICHMENT IN NEPAL

Another of PERL's primary aims is to train U.S. scholars to apply their research expertise in developing countries like Nepal. To that end, several U.S. scholars received hands-on research experience in Nepal during 2000 – 2002.

Ann Biddlecom visited PERL in January and February 2001 to supervise ongoing collaborative research with PERL staff using the household demographic surveillance system, the household agriculture and consumption survey, and the contraceptive use survey in Nepal.

Lisa Pearce visited Nepal to collect ethnographic data on fertility preferences with PERL staff from September to November 2000, and March to April 2002.

Keith Robinson, a PhD student at the University of Michigan, visited PERL in October 2002 to deepen his understanding of the research setting and to conduct several in-depth interviews for his ongoing research on fertility attitudes and contraceptive use.

RETURNING SCHOLAR

Kishor Gajurel has returned to Nepal after completing his PhD in Rural Sociology and Demography at the Pennsylvania State University. He is currently working with PERL to develop a new research proposal in close collaboration with scholars at Penn State and the University of Michigan. Kishor's dissertation used data from the Chitwan Valley Family Study and the Population and Environment Project.





PERL staff gather in Chitwan with research affiliates Scott Yabiku, William Axinn, and Jennifer Barber.

DISSEMINATION OF RESEARCH RESULTS

The findings of most academic research are made available to the scholarly world through peer-reviewed journals, presentations in professional association meetings, seminars and workshops, and through the dissertations of students. As a result, academic research is heavily criticized for not reaching beyond this world of scholars. Others who could use research findings, such as local and national policymakers, and the general public from whom the information was collected, are often unaware of research findings. With this in mind, PERL is committed to disseminating its research findings to every section of society. Although we do make our research findings available through the usual scholarly outlets, we are also using less conventional approaches to make this information available to broader sections of society. These new initiatives to disseminate our research findings include Respondent Reports and Research Briefs. These publications have been distributed in print copies and are available on the PERL website at <http://perl.psc.isr.umich.edu>.

RESPONDENT REPORTS

These are intended to provide very basic findings from the information we collected. The reports are written in simple Nepali language and target ordinary people who participated in the various studies. We have published two of these reports – in 1999 and 2001 – and distributed 2,000 copies of each report to participating households and other people in the study area.

RESEARCH BRIEFS

Research Briefs are summaries of published material intended for non-academic professionals such as national and local planners, policy makers, and implementation agents. They summarize key findings and policy implications. During 2000 – 2002 we published two Research Briefs and distributed copies to national and local agencies in Nepal.

ACADEMIC PUBLICATIONS AND PRESENTATIONS (THROUGH 2002)

Family Change and Fertility

- Axinn, William G. and Jennifer S. Barber. 2001. "Mass Education and Fertility Transition." *American Sociological Review* 66(4):481-505.
- Axinn, William G. and Scott T. Yabiku. 2001. "Social Change, the Social Organization of Families, and Fertility Limitation." *American Journal of Sociology* 106(5):1219-61.
- Barber, Jennifer S. 2001. "Communities and Attitudes: The Influence of Non-family Institutions and Experiences on Dispositions Toward Marriage." Paper presented at the annual meetings of the American Sociological Association, August 6-10, Chicago.
- Barber, Jennifer S., Lisa D. Pearce, Indra Chaudhury, and Susan Gurung. 2001. "Voluntary Associations and Fertility Limitation." *Social Forces* 80 (2): 1369-1401.
- Beutel, Ann and William G. Axinn. Forthcoming. "Social Change, Gender, and Educational Attainment." *Economic Development and Cultural Change*.
- Bhandari, Prem. 2002. "Determinants of Individual Attitudes Toward Contraceptive Use in an Agricultural Society." Poster presented at the 8th Annual College of Agricultural Sciences Graduate and Undergraduate Research Exhibition, March 20-21, The Pennsylvania State University.
- Dhital, P., J.S. Thomson, and C.A. Flanagan. 2001. "Extra-parental Education and Educational Participation of Primary School Age Children, Chitwan, Nepal." Proceedings of the AIAEE Conference, Baton Rouge, Louisiana, April 4-7, p. 309-406.
- Dhital, P., J.S. Thomson, and C.A. Flanagan. 2001. "Extended Household Education and Educational Participation of Primary School Age Children, Chitwan, Nepal." Poster presented at 17th Annual Graduate Research Exhibition, The Pennsylvania State University.



Rice harvesting in the PERL study site.

- Dhital, P., J.S. Thomson, and C.A. Flanagan. 2001. "Educational Participation of Early Adolescents, Chitwan, Nepal." Poster Presented at Social Research on Adolescents Biennial Meeting, New Orleans.
- Gajurel, Kishor and Stephen Matthews. 1998. "Family Planning Service Availability in Nepal: The Case of Chitwan District." Poster presented at the annual meetings of the Population Association of America, April 2-4, Chicago, IL.
- Gajurel, Kishor. 1999. "Women and Family Size Norm: Does Women's Participation in Non-formal Institutions Limit Their Desire for Children?" Paper presented at the 1999 Annual Meetings of the Population Association of America, New York, Sponsored by Population Reference Bureau of America.
- Gajurel, Kishor, L. Jensen, and C.S. Stokes. 2000. "Land-holding and Fertility Motives: The Case of Nepal." Poster presented at the 2000 Annual Meetings of the Population Association of America, Los Angeles, March 23-25.
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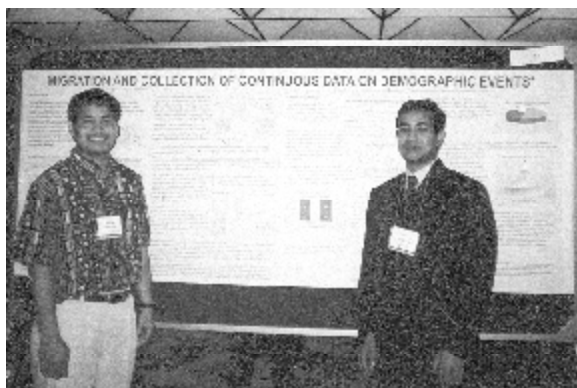


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PERL Community 2000 – 2002

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PERL staff meeting at Rampur.



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