

PERN eLibrary Research Program or Institution

Laboratoire Population-Environnement (LPE)

Le Laboratoire aborde les interrelations entre les dynamiques sociales, environnementales et de développement, à la fois dans ses activités de recherche, de formation à la recherche, d'expertise et de valorisation scientifiques.

Laboratoire Population-Environnement (LPE)

Link(s)

<https://lped.fr/> 

Research Program or Institution

Land-Use and Land-Cover Change in Sonora, Mexico: Trajectories of Agricultural Intensification and Consequences for Non-Agricultural Ecosystems

In this study we are evaluating the causes and consequences of agricultural intensification in the Yaqui Valley, Sonora, Mexico. Using a combination of historical remotely sensed data and ground-based data and information, we are analyzing the links between agricultural policy and agricultural extent and productivity. In addition, we are examining hypotheses regarding the relationships between land use intensification and expansion into new lands outside the agricultural district.

Land-Use and Land-Cover Change in Sonora, Mexico: Trajectories of Agricultural Intensification and Consequences for Non-Agricultural Ecosystems

Link(s)

<https://lcluc.umd.edu/projects/land-use-and-land-cover-change-sonora-mexico%20a...> 

Research Project

Environmental Change and Forced Migration Scenarios (EACH-FOR)

"GOALS of EACH-FOR: Its goal is to support European policies, research and the civil society with 'forced migration' scenarios, and cooperate with other migration and environment degradation related projects and institutions by: 1.) Identifying direct and indirect links contributing to forced migration focusing on the interpretation and integration of existing forced migration research; 2.) Investigating correlations between migration and environmental degradation; 3.) Producing a series of case studies investigating the correlation between environmental degradation and migration patterns; 4.) Analysing, synthesising and forecasting environmental degradation processes as they affect migration; 5.) Developing detailed and

aggregated forced migration scenarios on the basis of interdisciplinary analysis of local and regional environmental, economic, political and social processes. (from website)"

Environmental Change and Forced Migration Scenarios (EACH-FOR).

Link(s)

<http://www.ccema-portal.org/article/read/each-for-project-publications> 

Research Program or Institution

Impact of Rural Inequality on Fertility and Migration, Viewed as Alternative Household Responses to Changing Population-Resource Ratios

The aim of the research is to investigate how the amount and distribution of access to farmland, and to other rural resources affects decisions within a household about fertility and migration; and via results of such decisions and otherwise, how far land / water / vegetative resources are depleted / polluted and maintained or restored. (Taken from Project Website Summary).

Impact of Rural Inequality on Fertility and Migration, Viewed as Alternative Household Responses to Changing Population-Resource Ratios

Link(s)

<https://cordis.europa.eu/project/rcn/40150/en> 

Research Project

Population Growth

The page provides information on the issues of population growth and its impact on the Chesapeake Bay Basin.

Population Growth

Link(s)

<https://www.chesapeakebay.net/issues/threats-to-the-bay/population-growth> 

Research Program or Institution

The World's Water: Information on the World's Freshwater Resources

A site dedicated to providing up-to-date water information, data, and web connections to organizations, institutions, and individuals working on a wide range of global freshwater problems and solutions.

The World's Water: Information on the World's Freshwater Resources

Link(s)

<http://www.worldwater.org/water-data/> , <https://www.worldwater.org/> 

Research Program or Institution

Center for Sustainability and the Global Environment (SAGE)

At the Center for Sustainability and the Global Environment (SAGE), we examine the connections between natural resources, technology, policy, human health, security, and changes in the global environment. Our staff and students conduct cutting-edge research on these critical problems, and disseminate that knowledge through innovative teaching and outreach at the University of Wisconsin-Madison. (from website)

Center for Sustainability and the Global Environment (SAGE). University of Wisconsin-Madison

Link(s)

<https://nelson.wisc.edu/sage/> 

Research Program or Institution

The China Project

The University Committee on Environment's China Project is a multidisciplinary research program on energy use and environment in China and in Sino-American relations. The program explores integrated policy responses to greenhouse gas emissions by the world's two leading national sources, the U.S. and China, and to local air pollution problems of immediate concern in China. Over 50 researchers from the two countries comprise the team, working in disciplines that range across natural, applied, and health sciences, economics, public policy, law, political science, and business. (from project website)

The China Project

Link(s)

<https://chinaproject.harvard.edu/> 

Research Project

Program on the Interactions between Population, Development, and Environment (PRIPODE)

PRIPODE promotes capacity building in developing countries for the research of Population-Environment-Development interactions.

Program on the Interactions between Population, Development, and Environment (PRIPODE). Committee for International Cooperation in National Research in Demography.

Link(s)

<http://pripode.cicred.org/> 

Research Program or Institution

Human-Environment Modeling and Analysis Laboratory

The purpose of the lab is to support research in the area of coupled natural-human systems through the development and use of spatial models. (From homepage)

Human-Environment Modeling and Analysis Laboratory. Department of Forestry and Natural Resources, Purdue University.

Link(s)

<http://ltm.agriculture.purdue.edu/> 

Research Program or Institution

Research Project Database

The Research Project Database is a searchable listing of applied urban climate research projects. Projects are typically added by practitioners who seek the services of researchers. On the other hand, researchers can look through the database to find practitioners in need of their particular skill sets. Students can also use the database to search for thesis, term paper, or other applied term paper projects.

Research Project Database. Urban Climate Change Research Network – North American Hub.

Link(s)

<https://uccrnna.org/what-is-the-research-project-database/> 

Research Project

Year: 2019

The Overpopulation Project

Over the past two centuries Earth's human population has doubled, and doubled again, and nearly doubled yet again, increasing from 1 billion to over 7.6 billion people. This huge increase is at the root of grave global environmental problems, from climate change to mass species extinction. With help from a generous grant from the Global Challenges Foundation, The Overpopulation Project studies the environmental impacts of overpopulation and explores humane policies to end population growth around the world.

The Overpopulation Project. Urban Climate Change Research Network – North American Hub

Link(s)

<https://overpopulation-project.com/> 

Research Project

Year: 2019

The Climate and Migration Coalition

The Climate and Migration Coalition is led by Climate Outreach, a charitable company. The coalition provides a newsletter with well balanced material on issues around climate change and migration. The organization's goal is to ensure a people centered policy response at the national and international level by:

- Building support for policies that allow people to strengthen their survival capacity through migration
- Ensuring adequate assistance and protection for people displaced internally and across borders as a consequence of slow and sudden onset disasters

The Climate and Migration Coalition

Link(s)

<https://climatemigration.org.uk/> 

Research Program or Institution

Year: 2018

Population, Health and Environment Program

"Humans and the environment are inextricably linked. Population size and age, fertility, mobility, settlement patterns, and resource availability and consumption all influence the impact we have on the environment. Solving the complex challenges we face today demands a better understanding of how these aspects of population impact the environment, how environmental change impacts our health and well-being, and what can be done to address these issues. PRB's Population, Health, and Environment (PHE) program aims to: Increase awareness among decisionmakers, professionals, and advocates about population, health, and environment challenges and integrated solutions; Build leadership and capacity to work on and communicate about population, health, and environment linkages; Develop regional networks for information sharing and collaboration; Strengthen journalists' reporting on population, health, and environment topics." (from website)

Population, Health and Environment Program. 2011. Population Reference Bureau (PRB), Washington, DC, USA.

Link(s)

<https://www.prb.org/About/ProgramsProjects/PHE.aspx> 

Research Program or Institution

Year: 2011

Population Geography Research Group (PGRG)

The Population Geography Research Group (PGRG) provides a forum for population geographers to present and discuss the latest findings of research in the sub-discipline, to debate relevant theoretical, philosophical and methodological issues, and to consider policy dimensions. The PGRG also takes a role in bringing postgraduate population geographers in workshops and presentation sessions on their work. Through its conference and publication activities, the PGRG aims to promote the standing of population geography both within the United Kingdom and also on the international stage. (from website)

Population Geography Research Group (PGRG)

Link(s)

<https://popgeog.org/> 

Research Program or Institution

Year: 2009

The Urban Resilience Program

The Urban Resilience program will focus research on the major challenges facing urban systems and the landscapes they comprise. The same questions arise for urban as for regional social-ecological systems: how much and which kinds of disturbances can urban areas absorb without shifting to alternative less desirable system regimes? The first phase of research, to be undertaken over the next 3-5 years, will develop and explore a set of robust propositions or working hypotheses about the dynamics and resilience of urban systems and their landscapes. Organised around four key themes of inquiry - (1) metabolic flows, (2) social dynamics, (3) governance networks, and (4) built environment - this research will be grounded in a select set of comparative urban case studies. It will be led by an established network of urban researchers from CSIRO, Australia, Arizona State University, USA, and Stockholm University, Sweden. (Taken from the website)

The Urban Resilience Program.

Link(s)

<https://uli.org/research/centers-initiatives/urban-resilience-program/> 

Research Program or Institution

Year: 2007

Population and Climate Change (PCC) Program.

The Population and Climate Change (PCC) Program aims to improve integrated assessments of the climate change issue and develop new analyses within three areas: The Demography, Energy,

and Emissions Project investigates the potential influence of demographic change on energy use and greenhouse gas emissions; The Uncertainty and Learning Project develops new approaches to accounting for uncertainty and its potential changes over time in climate change assessments; The Medium-term Strategies Project investigates options for climate change policy over the next 30-50 years.

Population and Climate Change (PCC) Program. International Institute for Applied Systems Analysis (IIASA).

Link(s)

<http://webarchive.iiasa.ac.at/Research/PCC/> 

Research Program or Institution

Year: 2007

Science Plan. Urbanization and Global Environmental Change

This IHDP core project seeks to provide a better understanding of the interactions and feedbacks between global environmental change and urbanization at the local, regional, and global scales. (from Preface)

Sánchez-Rodríguez, Roberto ; Seto, Karen C.; Simon, David; Solecki, William D.; Kraas, Frauke; Laumann, Gregor. 2005. Science Plan. Urbanization and Global Environmental Change. IHDP Report No. 15., Bonn, Germany.

Link(s)

<http://ccsl.iccip.net/urbanizationscienceplan.pdf> 

Research Project

Year: 2005

Population, Land Use and Health in Frontier Regions.

This interdisciplinary research project seeks to develop standardized methodologies in the area of land use change science. It will synthesize work done by seven independent research teams, develop best practices, and conduct its own analyses using agent-based techniques.

Rindfuss, Ronald R. 2004. Population, Land Use and Health in Frontier Regions. Carolina Population Center, University of North Carolina Chapel Hill. National Institute of Child Health, Health and Human Development.

Link(s)

<http://www.cpc.unc.edu/projects/nangrong/research/roadmap.html> 

Research Project

Year: 2004

Twenty-First Century India Population, Economy, Human Development, and the Environment

The project aims to produce two types of publications: a number of specific outputs to be published as separate research papers, and a more general synthetic study (monograph). Specific papers, all based on original research, will be produced in the following subject areas among others: -Fertility, mortality and migration, Employment, Poverty, health and fertility, Female education, New population projections for India, Prospects for food and agriculture, Population and the environment. The purpose of the project is to try to understand and foresee the results of processes likely to be at work in the many linkages between population growth and economic development in India, with particular reference to issues of the environment and human development. It will also derive policy conclusions emanating from the analysis. It is hoped that the study will contribute to the analysis of population change and its effects both for India and for other poor developing countries, and reach a well-reasoned appreciation of this case that will benefit policy makers in India in particular, and illuminate the population debate in general." PERN summary of author's project description

Dyson, Tim, Cassen, Robert and Leela Visaria. 2004. Twenty-First Century India Population, Economy, Human Development, and the Environment. Oxford University Press.

Link(s)

<https://global.oup.com/academic/product/twenty-first-century-india-9780199283828> 

Research Project

Year: 2004

Settlement Systems within a Dynamic Environment and Economy: Contrasting Northern and Southern Mesopotamian City Regions.

The investigators model human-environment interaction in the growth and decline of Bronze Age settlement systems for both the rain-fed and irrigated zones of Syria and Iraq. The household is a fundamental modeling unit.

Christiansen, John; Gibson, McGuire; Wilkinson, Tony (PI). 2004. Settlement Systems within a Dynamic Environment and Economy: Contrasting Northern and Southern Mesopotamian City Regions. Project proposal submitted to the National Science Foundation by the Oriental Institute of the University of Chicago and Argonne National Laboratory.

Link(s)

<https://citeseerx.ist.psu.edu/viewdoc/download> 

Research Project

Year: 2004

A Guide to World Resources 2002-2004: Decisions for the Earth: Balance, voice, and power.

World Resources 2002-2004 focuses on the importance of good environmental governance. We explore how citizens, government managers, and business owners can foster better environmental decisions -- decisions that meet the needs of both ecosystems and people with equity and balance. A Guide to World Resources 2002-2004 summarizes the preliminary findings and key messages of the report which will be released in February 2003. Copies of the guide will be distributed at the World Summit on Sustainable Development meeting in Johannesburg, South Africa, August 26-September 4, 2002. (from Introduction)

A Guide to World Resources 2002-2004: Decisions for the Earth: Balance, voice, and power.

Link(s)

<https://www.wri.org/research/world-resources-2002-2004> 

Research Project

Year: 2003

The Mountain Voices website

The Mountain Voices website holds transcribed interviews with over 300 people who live in mountain and highland regions throughout the world. The unifying themes are of change and development. However, the transcriptions are well indexed and can be accessed by categories such as culture and customs, education, family life, gender, health, and population.

Mountain Voices

Link(s)

<https://mountainvoices.org/> 

Research Project

Year: 2003

Climate Change, Vulnerable Communities and Adaptation

Growing threat of climate change and climate-related disasters, it's imperative that communities be empowered to reduce their vulnerability. Ecosystems can be a buffer against natural hazards, and can sustain people daily and in times of crisis. Still, their protective value is often ignored. IUCN - The World Conservation Union, the International Institute for Sustainable Development and the Stockholm Environment Institute - Boston Centre are working together to strengthen the role of ecosystem management and restoration in reducing community vulnerability, and to spur adaptation to the growing threat of climate-related disasters. By bringing together climate change action, disaster reduction and environmental management, this initiative is identifying and promoting environmental strategies that reduce community vulnerability to our changing climate. (from Website)

Climate Change, Vulnerable Communities and Adaptation

Link(s)

<https://www.iisd.org/publications/guide/climate-change-vulnerable-communities-an...>,
https://www.iisd.org/system/files/publications/climate_ccvca_brochure.pdf

Research Project

Year: 2002

Lessons learned: The experience of protected areas and development in the Lao People's Democratic Republic

This paper relates a series of lessons in terms of achievements and challenges of protected areas, their management and their role in national and community development in the Lao PDR. (from Introduction)

Lessons learned: The experience of protected areas and development in the Lao People's Democratic Republic

Link(s)

http://www.mekong-protected-areas.org/lao_pdr/docs/lao_lessons.pdf, https://www.mekong-protected-areas.org/lao_pdr/index.htm

Research Project

Year: 2002

Integration of Health, Population and Environment Programs in Madagascar: Midterm Progress Report

The central hypothesis of the ECHO/IP activity is that by integrating health, family planning and natural resource conservation activities in community-based projects, communities will be able to take advantage of synergies that make these interventions more effective and more sustainable than if they were pursued in a vertical, sector specific fashion. The purpose of this activity is to test this hypothesis to determine, through the design and implementation of activities that address these interactions in Madagascar, if such synergistic benefits occur when health and environment activities are integrated. (from Introduction)

Integration of Health, Population and Environment Programs in Madagascar: Midterm Progress Report

Link(s)

https://www.ehproject.org/PDF/Activity_Reports/AR115-Madagascar.pdf,
<https://www.ehproject.org/>

Research Project

Year: 2002

Biodiversity: Its importance to human health. Interim Executive Summary

This report was first conceived ten years ago at the Earth Summit in Rio de Janeiro when the great promise of that event and its ambitious goals for controlling global climate change and conserving the world's biodiversity were first elaborated. What was recognized then, and what is even more widely appreciated now, was that, in contrast to the issue of climate change, there was inadequate attention being paid to the potential consequences for human health resulting from species loss and the disruption of ecosystems. This general neglect of the relationship between biodiversity and human health, it was believed, was a very serious problem. Not only were the full human dimensions of biodiversity loss failing to inform policy decisions, but the general public, lacking an understanding of the health risks involved, was not grasping the magnitude of the biodiversity crisis, and not developing a sense of urgency to address it. Unfortunately, aesthetic, ethical, religious, even economic, arguments had not been enough to convince them.

To address this need, the Center for Health and the Global Environment at Harvard Medical School proposed that it coordinate an international scientific effort to compile what was known about how other species contribute to human health, under the auspices of the World Health Organization (WHO), the United Nations Development Programme (UNDP), and the United Nations Environment Programme (UNEP), and to produce a report on the subject that would be the most comprehensive one available. (From Introduction)

Eric Chivian M.D. (Ed). 2002. Biodiversity: Its importance to human health. Interim Executive Summary. Center for Health and the Global Environment Harvard Medical School

Link(s)

<https://www.dcnanature.org/wp-content/uploads/fundraising/Biodiversity-Importanc...>

Research Project

Year: 2002

Protected areas and development in Vietnam: Lessons learned

The paper outlines some of the basic features of the protected areas system, profiles institutional and policy changes over recent years and then examines some of the underlying issues that shape the way in which protected areas are perceived, established and managed in Vietnam. It reflects on recent achievements in protected areas thinking and planning, and examines what might be learned from these achievements, The paper also highlights some key challenges that must be addressed effectively if protected areas are to contribute to national well-being in its broadest sense. (from introduction)

Protected areas and development in Vietnam: Lessons learned

Link(s)

http://www.mekong-protected-areas.org/vietnam/docs/vietnam_lessons.pdf

<http://www.mekong-protected-areas.org>

Research Project

Year: 2002

Lessons learned: The Cambodia experience of protected areas and development

Past analysis of protected areas (PAs) have been inward looking and concentrated on their conservation management needs i.e. the protection and maintenance of the natural systems. The PAD review is looking outward at the linkages with key economic sectors and with community development. Conservation will best be achieved through integration of PAs with their surrounding economic landscapes so that they are recognised as a critical development strategy requiring adequate investment. This lessons paper is a bridge between a conventional assessment of PA experience focusing on their management and one which explores the relationships between PAs and the economy. (from introduction)

Lessons learned: The Cambodia experience of protected areas and development

Link(s)

<http://www.mekong-protected-areas.org/cambodia/lessons.htm> , <http://www.mekong-protected-areas.org> 

Research Project

Year: 2002

MABEL: Multi Agent-Based Environmental Landscape

MABEL introduces a Distributed Artificial Intelligence (DAI) systemic methodology, which is able to simulate land use and land transformation changes over time and space. Computational Agents are utilized to represent abstract relations between geographic, environmental, human behavior, and socio-economic variables, with respect to land transformation processes. Distributional, interactive, intelligent and knowledge based characteristics can be used to illustrate the dynamic features of MABEL. A multi-agent environment is developed through MABEL in a framework providing task-nonspecific problem-solving abilities; flexibility on achieving goals and representing existing relations observed in real-world scenarios; goal-based efficiency; minimum-scaled instantiation of problems in an individualized form. (excerpt from longer abstract)

MABEL: Multi Agent-Based Environmental Landscape

Link(s)

<http://purl.umn.edu/11549> 

Research Project

Year: 2002

Population Changes and Land Degradation in Xinjiang of China.

Three year study (starting date 2/2002) of the interactions between rapid populatoin growth , land reclamation, and the serious land degradation in Xinjian Province. The project will begin with a detailed analysis of the data and a GIS mapping of variables and continue in a second phase with population-development-environment modeling. Sponsored by the Wellcome Trust.

Population Changes and Land Degradation in Xinjiang of China.

Link(s)

<http://www.telalink.net/> 

Research Program or Institution

Year: 2002

The Earth from Above

UNESCO supported project by Yann Arthus-Bertrand aiming to provide a survey of the state of the Earth - from deserts to polar lands, coastal regions and cosmopolitan cities... The exhibition consists of more than 120 giant-sized photographs (large-sized print)

The Earth from Above

Link(s)

<http://www.yannarthusbertrand.org/en/exhibitions/earth-from-above> 

Research Project

Year: 2002

Research Project on Population Changes and Land Degradation in Xinjiang of China

Xinjiang in the west China is a typical arid region with a vulnerable ecosystem and deterioration is often irreversible. In the past five decades, its population increased by more than four times, in which migration played a very important role. Population growth and reckless land reclamation, resource exploitation, and water use induced serious problems of land degradation, and seriously affect human wellbeing. Taking the advantage of the existence of high quality data, this research will study the historical pattern of population and land interactions in the region. Firstly, a pilot case study will conduct in Akesu Prefecture, by applying remote sensing and GIS techniques to map the evolution of land degradation and human settlement over time. Combining the remotely sensed data and ground data, the relationships between land degradation, environmental displacement, poverty and human health will be determined by doing a statistical analysis at township level. Secondly, time series data on demographic, socio-economic changes and land degradation will be collected for the whole Xinjiang Region and for sub-regions. Multilevel analysis and time series analysis methods will be utilized to statistically study, at county level, the interactions between population changes, socio-economic development, and aspects of human wellbeing. Furthermore, the principle factors and feedbacks of population changes and land degradation will be included and considered in a population-development-environment

(PDE) framework. Exploiting a system dynamics approach, the population, development and environment modules will be integrated, and the interactions between population changes and land degradation will be systematically and dynamically studied. Using alternative long-term scenarios based on the pilot case study and the whole province of Xinjiang, plausible paths of future changes in population, land degradation and human well being will be simulated. This research will improve our understandings of dynamic process of population and land interactions in general, and in arid regions in particular, and gain insights for informing policy-makers in order to avoid environment disasters and deterioration of human wellbeing. (online description)

Research Project on Population Changes and Land Degradation in Xinjiang of China

Link(s)

<http://www.telalink.net/> 

Research Project

Year: 2002


Lessons learned from protected areas management experience in Thailand: 1992 - 2001

A series of 11 thematic and 4 country lessons papers is being drafted drawing on global experience in linking protected areas and key economic development sectors. This draft Thailand lessons paper contributes to that series by compiling the experiences of more than one hundred senior government officials from various agencies involved in natural resource management, conservation and economic development in Thailand, as well as representatives from respected civil society organizations. (from introduction)

Lessons learned from protected areas management experience in Thailand: 1992 - 2001.

Link(s)

http://www.mekong-protected-areas.org/thailand/docs/thailand_lessons.pdf 

<http://www.mekong-protected-areas.org> 

Research Project

Year: 2002

Sustainable Production and Consumption - from Conceptions of Sustainable Development to Household Strategies for Sustainable Consumption

The current report was commissioned by ProSus as a preliminary position paper for the sub-project iuSUSHOMESId. The purpose of SUSHOMES is to monitor and analyse household consumption so as to determine the potential for change in a more sustainable direction.

Sustainable Production and Consumption - from Conceptions of Sustainable Development to Household Strategies for Sustainable Consumption

Link(s)

http://www.prosus.org/prosusFTP/prosusrep/publications/prosusrep2001_04.pdf 

Research Project

Year: 2001

Gender and Shifting Population Trends in Protected Areas in the Dominican Hinterlands: Implications of Female Out-migration for Conservation in the Cordillera Central

Summary of project on website : 'to investigate the reasons behind skewed sex ratios and patterns of female out-migration in the Hispaniolan Pine ecoregion of the Cordillera Central. The project considered the implications of these patterns for land and resource conservation and the economic status of women in the region. The project was carried out in two rural secciones (counties) in the Hispaniolan Pine Forest, where residents are herders and growers of coffee, potatoes, garlic, cabbage, onions, carrots, and flowers. Production ranges from small-scale family farms to increasingly intensive, industrialized enterprises. Research was conducted using both quantitative and qualitative methods, including semi-structured inter-views; focus groups; an opinion survey; surveys of fertility, technology use, and household composition; and the mapping of resource use according to gender. Data on sex ratios gathered in 1998-1999 by USAID and The Nature Conservancy as part of the Parks in Peril program were also analyzed.

Gender and Shifting Population Trends in Protected Areas in the Dominican Hinterlands: Implications of Female Out-migration for Conservation in the Cordillera Central

Link(s)

<https://biodiversitylinks.org/library/content/tools/biodiversity-conservation-to...> 

Research Project



Year: 2001

Hawata Model Project, Sudan

Established in 1997, the Hawata Model Project set out to demonstrate how UNHCR's Environmental Guidelines (1996) might be applied to actual field situations in eastern Sudan. This region has hosted refugees from Ethiopia and Eritrea for more than 30 years. Considerable environmental damage has been recorded in this region, mainly from the collection of fuelwood and building materials from local forests. The Hawata Model Project was founded on a few essential ideals, primarily cost-effectiveness of support programmes, community (refugee and village) participation, environmental awareness raising and the promotion of energy-efficient stoves. (from text)

Hawata Model Project, Sudan

Link(s)

<https://www.unhcr.org/3c70cce44.html> , <https://www.unhcr.org/en-us/protection/environment/3c70cce44/hawata-model-projec...> 

Research Project

Year: 2001

An Inquiry into the Impact of Globalization on the Potential for "Sustainable Consumption" in Households

(from Summary) This report aims to determine whether and how globalization affects the sustainability of household consumption in industrialized countries. The focus of inquiry arises from the existence of a tremendous gap between references to the influence of globalization on sustainable consumption in political and academic discussions on the one side and empirical evidence on the reality and strength of such an influence on the other. In order to prepare the ground for filling this gap, our paper inquires into the possibilities of a respective empirical study. The specific focus of inquiry is on the three consumption clusters food, mobility, and energy. In pursuit of its objective, the paper reviews the discussion and research evidence on the link between globalization and sustainable household consumption from the sustainable consumption and globalization perspectives.

Fuchs, Doris A.; Lorek, Sylvia. 2001. An Inquiry into the Impact of Globalization on the Potential for "Sustainable Consumption" in Households. Report presented at the Workshop on Sustainable Household Consumption: Impacts, Goals and Indicators for Energy-use, Transport and Food, ProSus/CSTM, Enschede, 17.-19.11.2000

Link(s)

<https://www.utwente.nl:443/bms/cstm/research/articles/Fuchs-Lorek.pdf> 

Research Project

Year: 2001

Millennium Ecosystem Assessment Project

In light of growing human needs and the vast changes humans are making in ecosystems, it is imperative that wise choices be made in the use and conservation of these ecosystems. The challenge of effectively managing Earth's ecosystems and the consequences of failure will continue to increase during the 21st century. To meet this challenge, people must have a better understanding and awareness of the way their lifestyles and activities affect the ecosystem services on which they depend, and decision-makers need much greater access to scientific knowledge in order to make well-informed decisions. The MA is a four-year process that commenced in April 2001, that was designed to improve the management of the world's natural and managed ecosystems by helping to meet the needs of decision-makers and the public for peer-reviewed, policy-relevant scientific information on the condition of ecosystems, consequences of ecosystem change, and options for response. An integrated ecosystem assessment is an analysis of the capacity of an ecosystem to provide goods and services important for human development. '9our0 approach to evaluating the condition of an ecosystem

is to assess separately the capacity of the system to provide each of the various goods and services and then to evaluate the trade-offs among those goods and services...called an "integrated assessment" because it examines not just a single ecosystem product, such as crop production, but an entire array of products that the ecosystem might provide. The principal benefit of an integrated ecosystem assessment is that it provides a framework for examining the interlinkages and trade-offs among various goods and services. ...another difficulty in assessing the condition of an ecosystem is the issue of scale. For any size patch of the earth's surface that we choose to define as an ecosystem, there will be a set of factors external to the ecosystem that influence how it functions and, in turn, there will be flows of material and energy, as well as various goods and services, that extend beyond the ecosystem. indicators include: *pressures on ecosystems, including such factors as population growth, increased resource consumption, pollution, and overharvesting; * extent of ecosystems; production or output of various economically important goods by the system, such as crops, timber, or fisheries production. Each of these indicators is important but collectively they provide only a narrow window on the question of how well ecosystems are being managed ...

Millennium Ecosystem Assessment Project

Link(s)

<http://www.millenniumassessment.org/en/Index-2.html> 

Research Program or Institution

Year: 2001

Fighting Air Pollution in Southern California by Scrapping Old Vehicles

From RAND website: This report analyzes the effects of an innovative and controversial program--voluntary accelerated vehicle retirement--that is part of California's plan for complying with federal clean-air standards by the required date of 2010. Under this program, whose implementation is in doubt, during each year from 2001 to 2010 as many as 75,000 light-duty vehicles (LDVs) that are at least 15 years old would be purchased in the greater Los Angeles area and then scrapped. The authors' analysis of program effects accounts for LDV-market responses including increases in used-LDV prices and consequent migration of vehicles into the region where LDVs are scrapped.

Fighting Air Pollution in Southern California by Scrapping Old Vehicles

Link(s)

https://www.rand.org/pubs/monograph_reports/MR1256.html 

Research Project

Year: 2001

E-Vision 2000, Key Issues That Will Shape Our Energy Future: Summary of Proceedings, Scenario Analysis, Expert Elicitation, and Submitted Papers

From RAND website: ...This report documents an initiative by the Office of Energy Efficiency and Renewable Energy (EERE) of the U.S. Department of Energy (DOE) to identify and assess a range of emerging issues that may affect future energy use and supply. ...This report summarizes the issues raised and suggestions made for future research by the participants in and attendees of the E-Vision 2000 conference, October 11-13, 2000, in Washington, D.C... It also summarizes the key insights derived from RAND's scenario analysis and expert elicitation and includes abstracts of papers some of the panelists submitted

E-Vision 2000, Key Issues That Will Shape Our Energy Future: Summary of Proceedings, Scenario Analysis, Expert Elicitation, and Submitted Papers

Link(s)

https://www.rand.org/pubs/conf_proceedings/CF170z1-1.html 

Research Project

Year: 2001

Ecological Footprint

The Ecological Footprint measures what each person consumes of nature's resources. It shows how much productive land and water we occupy to produce all the resources we consume and to take in all the waste we make. (Redefining Progress, 2000). In other words, an ecological footprint represents the average amount of bio-productive land and ocean required to sustain an individual or a community. It has been calculated that "nature provides an average of 5.5 acres of bio-productive space for every person in the world. With a global population of 10 billion for the year 2050, the available space will be reduced to 3 acres. This should also give room for the 25 million other species. Already, humanity's footprint may be over 30 percent larger than what the world has to offer as it consumes more than what nature can provide. The average American uses 30 acres to support his or her current lifestyle. This corresponds to the size of 30 football fields put together. In comparison, the average Canadian lives on a footprint one third less, and the average Italian on 55 percent less.

Ecological Footprint

Link(s)

<https://rprogress.org> 

Research Project

Year: 2001

Research Institute for Humanity and Nature. Inter-University Research Institute, Ministry of Education, Culture, Sports, Science, and Technology, Kyoto, Japan.

This new research institute explores human impacts on the environment through cross-disciplinary research. It seeks integrated approaches to global environmental problems.

Research Institute for Humanity and Nature. Inter-University Research Institute, Ministry of Education, Culture, Sports, Science, and Technology, Kyoto, Japan.

Link(s)

http://www.chikyu.ac.jp/index_e.html 

Research Program or Institution

Year: 2001

Population Growth and Environment in Ethiopia. In- Depth Studies from the 1994 Population and Housing Census in Ethiopia.

The general objective of this research work is to examine the interrelationship between population factors and environmental conditions in Ethiopia taking into consideration differences at regional and zonal levels.

Bielli, Carla; Berhanu, Gezu; Isaias, Amare; Orasi, Arianna. 2001. Population Growth and Environment in Ethiopia. In- Depth Studies from the 1994 Population and Housing Census in Ethiopia. Italian Multi-Bi Research Project ETH/92/P01. Central Statistical Authority (CSA), Addis Ababa, Ethiopia and Institute for Population Research - National Research Council (Irp-Cnr), Roma, Italy.

Link(s)

https://www.irpps.cnr.it/etiopia/pdf/Population_Growth_and_Environment.PDF 

Research Project

Year: 2001

Urbanisation, Industrial Transformation and Environmental Change

'[seeing the] need for a coordinated programme of research to examine the global change aspects of urbanization in the Asia-Pacific region, and in particular try to link the existing social science work already underway to the natural sciences, initial planning for the above programme began in 1999'(excerpt from online description at APN site)

Urbanisation, Industrial Transformation and Environmental Change

Link(s)

<https://www.apn-gcr.org/resources/archive/files/67fc3f81f7da1630827a871e74a53669...> 

<https://www.apn-gcr.org/project/urbanisation-industrial-transformation-and-envir...> 

Research Project

Year: 2001

Climate variability and change and human health in the Pacific Islands: The Cook Islands and Fiji

A Scoping Workshop will be held to develop a project with focus on: increasing the capacity of Pacific Island Countries to address health problems resulting from climate variability and change; adaptation of methods from climatology, public health and the social sciences for use by local governments to assess impacts; and development of recommendations '

Climate variability and change and human health in the Pacific Islands: The Cook Islands and Fiji

Link(s)

<https://www.apn-gcr.org/project/climate-variability-and-change-and-human-health-...>

Research Project

Year: 2001

Symposium: Change and Sustainability of Pastoral Land Use Systems in East and Central Asia

Open Symposium on "Change and Sustainability of Pastoral Land Use Systems in East and Central Asia" will take place in Ulaanbaatar, Mongolia, June 28 - July 1, 2001, organized by Land Use in Temperate East Asia (LUTEA) network and the TEA Regional Committee for START. The objectives of the workshop are: Synthesis of existing knowledge on pastoral land use and cover changes (LUCC), identification of knowledge gaps and vulnerability of the regions to global changes; Review of integrated assessments of land use/cover change and climate change impacts on rangeland ecosystems and pastoral systems and potential adaptation strategies; Enhancing modalities for capacity building and networking among the scientists involved in research on pastoral LUCC studies in the region, and developing synergies for future collaboration.

Change and Sustainability of Pastoral Land Use Systems in East and Central Asia

Link(s)

[Link to pdf](https://www.apn-gcr.org/project/change-and-sustainability-of-pastoral-land-use-...), <https://www.apn-gcr.org/project/change-and-sustainability-of-pastoral-land-use-...>

Research Project

Year: 2001

Biocomplexity in Linked Bioecological-Human Systems: Agent-Based Models of Land-Use Decisions and Emergent Land Use Patterns in Forested Regions of the American Midwest and the Brazilian Amazon

The primary goal of this project is to explain long-term, complex change processes in human-bioecological systems-especially forested regions. We will develop agent-based models to examine how land-use decisions made at one level (a household) affect outcomes at that level and at several higher and lower levels in a hierarchically nested set of systems. We develop two agent-based models to explain land-use patterns in the frontier and post-frontier Midwest of the

United States and the frontier of the Brazilian Amazon" The project uses a dual methodological approach to modeling. Our primary focus is on the development of an innovative empirically parameterized and validated agent-based model of land-use change. This modeling effort will be complemented by the development of a series of econometric models. (excerpts from project website). This is a five year project begun January 2001

Biocomplexity in Linked Bioecological-Human Systems: Agent-Based Models of Land-Use Decisions and Emergent Land Use Patterns in Forested Regions of the American Midwest and the Brazilian Amazon

Link(s)

<https://csiss.org/about-us/> , <https://csiss.org/about-us/> 

Research Project

Year: 2001

Safe Water, Access to Health Care, and Other Factors Affecting Infant and Child Survival among the African and Coloured Populations of South Africa: An Analysis Based on the 1994 October Household Survey.

The factors influencing infant and child survival among African and Coloured children in South Africa are investigated using data from the 1994 October Household survey. Data for 10,008 African children and 2,919 Coloured children who were born since the beginning of 1989 are examined. The dependent variable of interest is whether the child was alive at the survey date. Coloured children live in much more favorable conditions than African children: they are likely to have more educated mothers, less likely to live in a rural area, more likely to have been born in a hospital, and likely to have better sources of water and sanitation. Logistic regression analyses revealed the following. Household socioeconomic characteristics are significant for infant and child death for both the African and Coloured population. When other factors are taken into account, the significance of socioeconomic characteristics of households disappears or is substantially reduced. Distance to a health facility is not important for either group, but medical attendance at the birth is significant for both groups. The environment in which the child lives matters for both African and Coloured children. Among African households, the source of drinking water is the most important factor related to infant and child survival. For Coloured households, almost all of whom have a good source of water, the type of household sanitation is important. This paper is the first step in a larger project that involves analysis of more recent and higher quality data from South Africa

Anderson, Barbara A; Romani, John H.; Phillips, Heston E.; van Zyl, Johan A. 2001. Safe Water, Access to Health Care, and Other Factors Affecting Infant and Child Survival among the African and Coloured Populations of South Africa: An Analysis Based on the 1994 October Household Survey. Population studies Center at the Institute for Social research, University of Michigan. PSC Research Report, Report No. 00-472

Link(s)

<https://psc.isr.umich.edu/pubs/abs/1291> , <https://psc.isr.umich.edu/pubs/pdf/rr01-472.pdf> 

Research Project
Year: 2001

Eco-Footprint Modeling Project

William Rees, an ecologist at UBC, has developed what he has termed the "eco-footprint" concept... It begins with the idea that all consumption of energy, food and materials ultimately relies on solar energy that is transformed on Earth through photosynthesis. Human consumption can ultimately be related to the land area on Earth that is needed to provide the photosynthesis or other ecological services needed to support that consumption. An important, indirect, non-economic measure of consumption is thus the amount of land area required to support a given population at a given level of consumption. It basically uses Vitousek's perspective of appropriated photosynthesis, and focuses on land area as the proxy for photosynthesis. We are using this concept to attempt to model the human consumption levels for a population in an area of the world in terms of the appropriated carrying capacity, or eco-footprint, that it consumes, now and under various scenarios. Eventually we hope to develop functions that relate the extent of carrying capacity extracted from an area to potential ecological degradation (e.g., species extinction, etc.). Hence this is a way to link population and wealth to consumption patterns, and then attempt to link those to ecological constraints locally and globally'. The intent is to develop a framework for calculating the ecological footprint of North America. We plan to divide North America into four sub-regions, rural and urban, north and south. The index will in essence be a non-economic measure of human consumption, that can then later be related to ecological constraints'.

Eco-Footprint Modeling Project

Link(s)

<http://hdgc.epp.cmu.edu/people/research/mcdaniels-research.html> 

Research Project

Year: 2000

City-Region 2020. Integrated Planning for a Sustainable Environment

City-Region 2020 is one of the most wide-ranging investigations of sustainable development in any city or region in the world. Looking at the long term dynamics of a major conurbation, it follows from the Town & Country Planning Association's 'Planning for a Sustainable Environment', and goes far beyond short term 'greening' to explore fundamental trends and goals for the case study of Greater Manchester. It combines technical scenarios for land, energy and material flows, with lateral thinking on cultural trends and the third sector, and a practical package of methods and tools. The result is published by Earthscan as a demonstration of integrated long term planning, with methods and tools for any city or region in the developed world (author's summary)

Ravetz, Joe. 2000. City-Region 2020. Integrated Planning for a Sustainable Environment. Routledge.

Link(s)

<https://www.routledge.com/City-Region-2020-Integrated-Planning-for-a-Sustainable...> 

Research Project

Year: 2000

Time Series Forest Change, Land Cover/Land Use Conversion and Socioeconomic Driving Forces in the Northern Peten District, Guatemala

From the Nasa website: The three year investigation will analyse time-series Landsat imagery (>20 yrs) for land-use conversion trends and socio-economic driving forces for a 25000 sq. km study area in the northern Peten district of Guatemala. Land-cover types and regeneration age classes will be identified and coded into land use history strata for sampling. Vegetation measurements, GPS readings and household farmer/rancher interviews will be conducted at sample locations. In year two, synthetic aperture radar(SAR) imagery will be processed to test for relationships between SAR backscatter and successional forest age class canopy structure. Aerial videography linked to GPS on the aircraft will be collected each year to supplement field data collection and to improve field sampling efficiency. In year three, we will conduct spatial analysis and fragmentation studies and reconstruct the criteria that slash-and-burn farmers (and ranchers) use to make land-use conversion decisions. Socio-economic and biophysical data will be linked with our time-series GIS and field surveys to analyse driving forces influencing land-use change within the Maya Biosphere Reserve management units and buffer zone. The ultimate goal of the project is to provide better understanding of deforestation processes and address uncertainties or data gaps in existing regional and global climate models. The project is a cooperative effort between the University of Maine - forest management department, Conservation International, and NASA, Stennis and Marshall Space Flight Centers. The research will complement an ongoing sustainable development program administered by Conservation International - ProPeten in Flores, Guatemala with funding support from the U.S. Agency for International Development. (author's abstract)

Time Series Forest Change, Land Cover/Land Use Conversion and Socioeconomic Driving Forces in the Northern Peten District, Guatemala

Link(s)

<http://h912.boku.ac.at/gglatzel/912315/BiodivCons%20Literature%20and%20Reading/C...> 

Research Project

Year: 2000

Misali Ethics Project

Author's abstract: CARE Tanzania's Misali Ethics Project is funded under the MacArthur Foundation's Initiative on Population, Consumption and the Environment to investigate whether

using religious ethics can promote better management of marine resources. This operations research project is aimed at yielding positive results on the lives of fishermen and the resource base and at testing the following hypothesis: The Islamic environmental stewardship ethic is more effective than technical resource use reasoning in promoting community management of marine resources among Islamic coastal communities. This operations research component was developed to assist CARE determine the efficacy of using Islam-based messages for conservation. The idea that Islam could be used to promote conservation developed out of the cultural context of Pemba where community life revolves around Islam, as well as the success of using religious based messages for conservation of other habitats elsewhere in the world. Misali Island is a 1 Km. Sq. Coral Island located off the west coast of Pemba. The whole island, which is covered in forest and coral rag thicket, is surrounded by rich coral reefs, some of which have walls of 60m in depth. The reef surrounding Misali supports 300 species of fish and 42 genera of coral and is known as a world-class snorkeling and diving site. The fishery also supports over 1,600 fishermen and their families or 12,000 people from around Pemba. In 1998 Misali was designated as a Marine Conservation Area to be run by a fishermen's association - the Misali Island Conservation Association (MICA). However the fishery and reef system continue to be threatened by unsustainable fishing methods and increasing population pressure

Misali Ethics Project

Link(s)

<https://www.ifees.org.uk/story-activities-cat68-page298> 

Research Project

Year: 2000

Land-Cover and Land-Use Change in the Southern Yucatan Peninsular Region (LCLUC SYPR): Spatially Explicit Probability Approaches for Modeling and Projecting Deforestation and Land Conversion Linked to Remotely Sensed Imagery

LCLUC-SYPR, a multi-funded, interdisciplinary project, seeks to understand the human and biophysical dynamics of deforestation and agricultural change and to advance spatially explicit modeling of these changes. SYPR economists, ecologists, and geographers investigate these changes since the 1960s that include the addition of major infrastructure, significant population growth, changes in tenure laws, a plethora of development projects, and establishment of a Mexico's largest biosphere reserve and a complementary archaeo-ecotourism program. The project addresses the land changes through a reconstruction of international and national policy shifts affecting the region, a 200+ household survey focused primarily on six villages (ejidos) distributed throughout the region, studies of forest structure and function, including successional dynamics, and a 40-year, remote-sensing based assessment of land-cover change. GPS instrumentation links the surveyed households and other study sites to remotely sensed imagery. Using the data generated and understanding gained from this work, the LCLUC-SYPR project will create a detailed history of change linked to socioeconomic and environmental causes and responses, and develop spatially explicit modeling techniques that explain these changes and project them into the short-term future. Econometric models,

grounded in household decision-making, explore semi-market and -subsistence behavior in explaining land-use/cover change. Markovian-based models use remotely sensed data to calculate land-use/cover change, enhanced by the addition of biophysical and socioeconomic information. Bridging these two approaches is a third spatially explicit, regional, integrated assessment model that draws on recent advances in artificial intelligence to leverage research in decision making, institutional analysis and ecology. The pros and cons of the three modeling approaches under different conditions will be articulated

Land-Cover and Land-Use Change in the Southern Yucatan Peninsular Region (LCLUC SYPR): Spatially Explicit Probability Approaches for Modeling and Projecting Deforestation and Land Conversion Linked to Remotely Sensed Imagery

Link(s)

<http://hdgc.epp.cmu.edu/projects/abstracts/lcluc-sypr.html> 

Research Project

Year: 2000

An acre an hour: Documenting the effects of urban sprawl on a model watershed in Philadelphia, Pennsylvania

The principal objective of this project is to document the effects of urbanization on Valley Creek Watershed, which lies in a rapidly developing area of suburban Philadelphia, Pennsylvania. Valley Creek is a tributary of the Schuylkill River and runs through Valley Forge National Historical Park. The watershed lies in the Piedmont physiographic province, and supports a reproducing brown trout population in its limestone-fed stream. In addition to the common effects of development such as increased surface runoff and sediment loading, the watershed has experienced point-source pollution problems from RCRA and CERCLA hazardous waste sites and dewatering of the aquifer due to quarrying operations and pumping for municipal water supply.

An acre an hour: Documenting the effects of urban sprawl on a model watershed in Philadelphia, Pennsylvania

Link(s)

<https://search.wellspringsoftware.net/research-grant/NSF%3A0001884> 

Research Project

Year: 2000

Asian MetaCentre for Population and Sustainable Development Analysis

With funding from the Wellcome Trust, a consortium of Asia population studies centers and the International Institute for Applied Systems Analysis (IIASA) have established a largely Internet-based "MetaCentre" for Population and Sustainable Development Analysis. A key component of the MetaCentre is an Asian Population Network (APN), currently being developed. The principal

investigators are Brenda Yeoh (Director, Centre for Advanced Studies, National University of Singapore), Vipin Prachuabmoh (Director, College of Population Studies, Chulalongkorn University, Thailand), and Wolfgang Lutz (Leader, Population Project, IIASA, Austria). The MetaCentre is headquartered at the Centre for Advanced Studies at the National University of Singapore. The APN is co-sponsored by the International Union for the Scientific Study of Population (IUSSP). During the MetaCentre's first two-year period (2000-2001), a scientific infrastructure will be established and a series of seminars and training workshops will be held in several Asian countries. In-depth case studies, comparative regional studies, and possibly academic training in international population studies will follow. CPS projects related to population - environment include: The Development and Rehabilitation of Mangrove Forest for the Sustaining Socio-Economic Development of Thailand (ongoing); Interrelationship between Coastal Communities and the Mangrove Ecosystem: Lessons from the Green Carpet Project in Nakhon Si Thammarat Province (ongoing). Man and Biosphere: the Case Study at Nakhon Si Thammarat Province (ongoing), College of Population Studies, Chulalongkorn University.

Asian MetaCentre for Population and Sustainable Development Analysis

Link(s)

<http://www.telalink.net/> 

Research Program or Institution

Year: 2000

African Centre for Technology Studies (ACTS)

The project will "examine the extent to which natural resource scarcity and ecological stress contribute to political conflicts in Sub-Saharan Africa" Country study research began in May 2001 in Burundi, Ethiopia, and Somalia. ...Other country studies will be commissioned in Eritrea, Sudan, Kenya, Rwanda, and the Democratic Republic of Congo in June and July 2001." The first briefing is available online.

Ecological Sources of Conflicts in Sub-Saharan Africa

Link(s)

<http://www.acts-net.org/> 

Research Project

Year: 2000

City-Region 2020: Integrated Planning for a Sustainable Environment

City-Region 2020 is one of the most wide-ranging investigations of sustainable development in any city or region in the world. Looking at the long term dynamics of a major conurbation, it follows from the Town and Country Planning Association's 'Planning for a Sustainable Environment', and goes far beyond short term 'greening' to explore fundamental trends and goals for the case study of Greater Manchester. It combines technical scenarios for land, energy and

material flows, with lateral thinking on cultural trends and the third sector, and a practical package of methods and tools. The result is published by Earthscan as a demonstration of integrated long term planning, with methods and tools for any city or region in the developed world (author's summary)

City-Region 2020: Integrated Planning for a Sustainable Environment.

Link(s)

<https://www.amazon.com/City-Region-2020-Integrated-Sustainable-Environment/dp/18...> 

Research Project

Year: 2000

Asia-Pacific Network for Global Change Research (APN)

An inter-governmental network whose primary purposes are to foster global environmental change research in the Asia-Pacific region, increase developing country participation in that research, and to strengthen links between the science community and policy makers. It promotes, encourages and supports research activities on long-term global changes in climate, ocean and terrestrial systems, and on related physical, chemical, biological and socio-economic processes. The 21 APN member countries include Australia; Bangladesh; Cambodia; China; Fiji; India; Indonesia; Japan; Korea; Laos; Malaysia; Mongolia; Nepal; New Zealand; Pakistan; Philippines; Russia; Sri Lanka; Thailand; USA and Vietnam. The APN is inviting proposals for funding beginning in the period April 2001 and is able to provide a limited amount of financial support (normally up to US\$100,000 per project per annum) for research and workshop activities that fall within its areas of interest.

Asia-Pacific Network for Global Change Research (APN)

Link(s)

<https://www.apn-gcr.org/> 

Research Program or Institution

Year: 2000

Forest Monitoring and Remote Sensing: Survey of Accomplishments and Opportunities for the Future

From the RAND website and preface: This report surveys the types of forest monitoring currently conducted in the United States and the role of satellite-based remote sensing in these data collection efforts. Of specific note, the report examines how remote sensing is being used in an operational manner in forest monitoring for economic uses and values, ecosystem management, sustainable forestry, and management of climate change in the US. The report also analyzes the extent to which the mix of existing monitoring technologies provide the information about the forest environment called for by federal policy and needed by managers in the field. The project also surveyed the use of remote sensing in forest monitoring by the private sector as

well as its use in other countries that may have significance for policy in the US. The RAND Science and Technology Policy Institute

Forest Monitoring and Remote Sensing: Survey of Accomplishments and Opportunities for the Future

Link(s)

https://www.rand.org/pubs/monograph_reports/MR1111z0.html 

Research Project

Year: 1999

Land Use and Land Degradation in South-Western Niger: Change and Continuity

The Sahelian environment of West Africa has been transformed by social, economic and environmental change. Problems of land degradation, food and water shortage cause frequent hardship and disruption for the indigenous farmers and herders. Non-agricultural income is scarce, and often requires Sahelian people to migrate southwards in search of paid work or trade. These and other aspects of rural poverty are compounded by political and economic crises. This interdisciplinary project is describing and evaluating the relationships between environmental, social and economic change in a Zarma village in the rural hinterland of Niamey, south west Niger. The aim is to build a comprehensive environmental history, alongside data on land degradation and livelihood strategies. The local context is one of unstable politics and inactive local government. Research is showing how the community is coping with this adverse political economy, and land degradation, without direct support from the state or donors. A longer term aim is to provide a multi-disciplinary base-line where change, adaptive strategies, and environmental processes can be monitored. The research builds on a good existing data-set relevant to SW Niger. Working at the field, household, and terroir (village territory) scale, the project team is extending the data, using a Geographical Information System, to include resource mapping, land use changes since the 1950s and agricultural information. Measurements of soil erosion related to soil characteristics in selected fields are being up-scaled to the 100km² terroir over which the community holds land rights. Ethnographic and participatory research, some conducted with local partners, is gauging the significance of migration, off-farm income and a perceived 'withdrawal' from agriculture towards agro-pastoral livelihoods. Gendered access to resources, the history of food shortages, indigenous characterisations of soils and plants, trends in yields, herding and market trading are also being assessed. Particular attention is being given to the economic valuations of land degradation and potable water (author's summary of project)

Land Use and Land Degradation in South-Western Niger: Change and Continuity

Link(s)

https://www.jircas.go.jp/project/africa_dojo/Metadata/grad_research/19.pdf 

Research Project

Year: 1999

The Roviana and Vonavona Lagoons Marine Resource Management Project

The project officially begins in June of 2000 and strives to establish sustainably managed marine areas under customary tenure in the Roviana and Vonavona Lagoons, Solomon Islands. This initiative offers prospective students in anthropology and marine science ample opportunities to get involved in fieldwork in the region. This initiative will require: 1) the study of institutional responses of sea tenure regimes to a transforming socioeconomic and environmental context caused by demographic changes, transforming consumer demands, and coastal and marine fishery commercial developments, 2) the documentation and incorporation of indigenous environmental knowledge, particularly knowledge pertaining to fish spawning aggregations, 3) the study of regional marine foraging strategies, 4) participatory involvement of local communities in conjunction with the Resource Management Section of the Fisheries Division of the Solomon Island Government in developing and implementing an appropriate management plan. (from project webpage)

The Roviana and Vonavona Lagoons Marine Resource Management Project

Link(s)

<http://www.arts.auckland.ac.nz/en/about/schools-in-the-faculty-of-arts/school-of...> 

Research Project

Year: 1999

Integrated Program on Urban, Regional, and Global Air Pollution: Mexico City Case Study

Air pollution is a persistent and pervasive environmental problem that imposes significant health and economic costs on society, and is a growing problem in major cities around the world. MIT has initiated a collaborative research and integrated assessment effort with Harvard University and colleagues in Mexico in order to assist Mexican decision makers in their efforts to improve air quality in Mexico City. Solving the serious problem of air pollution requires not just an understanding of physical and chemical processes, but also an ability to balance economic, social, and technological factors, to make decisions in the face of uncertainty and incomplete data, and to educate and involve the community to ensure public acceptance of pollution control policies. The Mexico City Project is an integrated assessment of urban, regional, and global air pollution that will take into account these broader dimensions of the problem in order to devise and implement more effective pollution control strategies. (quoted from the Project website)

Integrated Program on Urban, Regional, and Global Air Pollution: Mexico City Case Study

Link(s)

https://www.mce2.org/newsletter/nwsltr_3/english/emissions_inventory.html 

Research Project

Year: 1999

State of India's Environment: The Citizens' Fifth Report

Most recent of regular series of 'citizen's reports' on the state of the environment, surveying all major sectors. Minimal attention to specific population variables, more focus on environmental problems.

State of India's Environment: The Citizens' Fifth Report

Link(s)

<http://www.indiaenvironmentportal.org.in/content/253821/the-state-of-indias-envi...> 

Research Program or Institution

Year: 1999

Central Arizona - Phoenix Long Term Ecological Research Project

The Central Arizona–Phoenix Long-Term Ecological Research (CAP LTER) program advances research and education on urban ecology and urban socioecological systems.

Central Arizona - Phoenix Long Term Ecological Research Project

Link(s)

<https://sustainability-innovation.asu.edu/caplter/> 

Research Project

Year: 1999

START, the Global Change SysTem for Analysis, Research and Training

START aims to promote networks of scientists involved in global change. Regional networks for SE Asia, East Asia, Africa, Oceania, Mediterranean. Organizing a conference in Mongolia, June 2001. ..Purpose of START is ...to understand global environmental change and develop appropriate responses, a regional approach to research is necessary since: Regional differences in such characteristics as biogeography, climate and human patterns of development make research difficult to conduct on a global scale alone. In order to develop a truly global perspective regional level research must also be conducted; The goal of a practical predictive capacity for global environmental change requires that such a capacity be developed at regional level where the ability to predict global change is of greatest value to decision makers; In order to meet these challenges, IHDP, IGBP and WCRP have jointly sponsored START. START assists the regional implementation of these global science programmes and helps developing regions to design and implement programmes of regional relevance as well as global significance. '(from project website)

START, the Global Change SysTem for Analysis, Research and Training

Link(s)

<https://start.org/> 

Research Program or Institution

Year: 1999

Land Cover - Land Use Change Program (LCLUC)

Land-Cover and Land-Use Change (LCLUC) is an interdisciplinary scientific theme within NASA's Earth Science Enterprise (ESE). ESE is NASA's enterprise to study the Earth as an integrated system, emphasizing observations made from the unique perspective of space together with underlying laboratory, field, theoretical, and modeling research. ESE will develop a scientific understanding of the Earth system in response to natural and human induced changes and improve prediction capabilities for climate, weather, global air quality, natural hazards and land use. The goal of the ESE LCLUC Program is to further the understanding of the consequences of land-cover and land-use change for continued provision of ecological goods and services. LCLUC will use NASA remote sensing technology to improve understanding of human interaction with the environment, and thus provide a scientific foundation for sustainability, vulnerability and resilience of land systems and their use. A goal of the ESE LCLUC Program is to further the understanding of the consequences of land-cover and land-use change on environmental goods and services, the carbon and water cycles and the management of natural resources. ' CLUC has been designed initially around a series of regional studies that are complemented by several methodological studies exploring the production and validation of particularly important regional remote sensing datasets. The case studies use a combination of space observations, in situ measurements, process studies and numerical modeling to address a combination of forcing factors of change involving climate, ecological and socioeconomic drivers, the processes of change and the responses and consequences of change. (from the introduction at the NASA lcluc website)

Land Cover - Land Use Change Program (LCLUC)

Link(s)

<https://lcluc.umd.edu/> 

Research Program or Institution

Year: 1999

An Integrated Attitude Survey on Live Reef Food Fish Consumption in Hong Kong

In 1999-2000, WWF Hong Kong has conducted the first integrated survey to document and elucidate the attitudes and eating habits of Hong Kong people in relation to the consumption of LRFF, their attitudes towards possible alternatives, and their supportiveness of conservation and regulatory measures. The integrated attitude survey included a telephone survey of 1,604 general public, a face-to-face survey of 321 restaurant customers, and a qualitative survey of 32 LRFF

stakeholders. A report "An Integrated Attitude Survey on Live Reef Food Fish Consumption in Hong Kong" was launched in August 2000.

An Integrated Attitude Survey on Live Reef Food Fish Consumption in Hong Kong.

Link(s)

<http://www.enaca.org/modules/library/permalink.php> ↗,

<https://enaca.org/modules/library/publication.php> ↗

Research Project

Year: 1998

Recovery and management of Yvyraty stream and its affluents

The Municipal Administration of Ypacaraí is in charge of a community of 14,495 inhabitants distributed in 4 urban neighbourhoods and 8 rural settlements. Its administrative structure includes such basic dependencies as needed to qualify for the category of "small municipality".

Ypacaraí is located in the basin of its namesake lake, 39 km away from the capital of the country. Due to its location it serves as a dormitory and transitory city. Within this territory, real estate speculation and the lack of land distribution planing have led to a very much disorganised urban growth, inappropriate use of the territory and inadequate management of natural water and green resources.

The contamination of the Ypacaraí lake caused by several waterways that converge in it, cannot be traced back in time. Different studies have been conducted to this end by several national and international institutions and organisations; their results presented a large number of proposals to solve the contamination problem and the recovery of such an important natural resource. (from Summary)

Recovery and management of Yvyraty stream and its affluents. CEAMSO - Centro de Estudios Ambientales y Sociales

Link(s)

<http://www.chasque.net/sema/english/proyectos/solidaria/c-cuencas/py-ypacarai.ht...> ↗

Research Project

Year: 1998

Gender, biodiversity and local knowledge systems project (LinKS)

The project was launched in 1998 and is now operating in Mozambique, Tanzania and Zimbabwe. Activities in Swaziland will begin this year. The LinKS project is a regional effort in Southern Africa aimed at raising awareness about how rural men and women use and manage biological diversity. The project seeks to help development practitioners recognize that farmers have knowledge, practices and skills that are often highly sustainable and respectful of the

natural ecosystems they depend on for their food and livelihoods. Men and women can have different knowledge about how to use and manage genetic resources that is derived from their different roles and responsibilities in the farming system. The project thus works with a diverse range of local institutions - both governmental and non-governmental - to strengthen their ability to recognize and value this knowledge and to use gender-responsive and participatory approaches in their work. "LinKS" is the acronym for "Local indigenous Knowledge Systems". The project is called LinKS, not only because it is a handy acronym, but, more important, because the project is a vehicle for exploring the linkages between the crucial issues of local knowledge systems, gender roles and relationships, food provision, and the conservation and management of agrobiodiversity. The communication strategy of the project is designed to help partner organizations create linkages at all levels - among themselves, with and between the rural communities, and with decision-makers - to share information about how local knowledge supports food security, livelihoods and the conservation of agrobiodiversity.

Gender, biodiversity and local knowledge systems project (LinKS)

Link(s)

<https://wedo.org/library/fao-links-project-%E2%80%93-gender-biodiversity-and-loc...> 

Research Project

Year: 1998

Land Use/Land Cover Change in Ecuador

This research project combines social science survey methods with environmental modeling and landscape ecology to seek a better understanding of land use/land cover (LULC), land use/land cover change (LULCC) dynamics and the forces influencing deforestation and agricultural practices. The research aims are to: Examine the Human and biophysical dimensions of LULC associated with agricultural colonization; Link remote sensor images showing biophysical gradients with data from a household survey of socio-economic conditions; Assess the rate and nature of LULC using image processing and spatial analysis; Model the effects of LULC, secondary plant succession, and land fragmentation on carbon budgets and assimilation rates for specific landscape strata and study area locations; Estimate the social, biophysical and geographical determinants of farm and community-level LULC; Document the degree of agricultural extensification and intensification as well as rates of deforestation; Determine the roles of natural population growth and in- and out-migration on land clearing and agricultural technology; Make recommendations to the government of Ecuador on how to achieve more sustainable development while preserving as much as possible of the natural ecosystem. (PERN abstract of "Research Aims" and "Research Goals")

Land Use/Land Cover Change in Ecuador

Link(s)

<http://www.cpc.unc.edu/projects/ecuador> 

Research Project

Year: 1998

Modeling and Forecasting Effects of Land Use Change in China Based on Socioeconomic Drivers

Rapid rates of economic growth in the People's Republic of China over the last two decades have led to the widespread conversion of natural ecosystems to farmland and industrial areas. Moreover, economic development has resulted in the replacement of existing agricultural areas by commercial and residential structures. With 20 percent of the global population and an economy which is estimated to become the world's largest within the next decade, economic development and land-use patterns in China will have environmental effects beyond the country's borders. The size and rate of these significant conversions have the potential to affect the earth's climate and biogeochemistry. This project aims to understand and model the socioeconomic forces which drive land-use changes in the Pearl River Delta of Guangdong Province in Southern China. Quantifying this relation will allow us to predict future land-use conversion and its impact on global biogeochemical cycles and biophysical parameters. This study will analyze land-use change in the Pearl River Delta in four steps. First, we will use Landsat images to analyze land-use changes from 1973 to 1996. Land-use will be classified into urban areas, agricultural lands, and natural vegetation. Multitemporal maximum and range NDVI values will be used to identify areas which have been converted to urban areas from agricultural and natural terrains. In the second step, we will build a statistical model that identifies and quantifies the effects of socioeconomic variables on land conversion. Model output will generate land conversion factors, which provide information on the direct, short-term effects of various economic activities on land-use patterns. These conversion factors will be used to calculate the multiplier effects of land conversion, which represent the indirect, long-term effects of economic development on land use. In the third step, these land conversion factors and multiplier coefficients will be combined with scenarios of economic development developed by Project LINK to predict the effect of economic growth on land-use patterns. In the last step, we will use these forecasts of land-use change to estimate the corresponding changes in the biophysical and biogeochemical environment. Understanding the driving forces behind human-induced modifications of terrestrial ecosystems provides crucial information for modeling the rate of larger biophysical and biogeochemical changes. (author's abstract from LULCC site)

Modeling and Forecasting Effects of Land Use Change in China Based on Socioeconomic Drivers

Link(s)

<https://lcluc.umd.edu/documents/modeling-and-forecasting-effects-land-use-change...>,
https://lcluc.umd.edu/sites/default/files/lcluc_documents/2000SigRes-Kaufmann_0...

Research Project

Year: 1998

Impact of rural inequality on fertility and migration, viewed as alternative household responses to changing population-resource ratios

Projects description: The aim of the research is to investigate how the amount and distribution of access to farmland, and to other rural resources affects decisions within a household about fertility and migration; and via results of such decisions and otherwise, how far land, water, vegetative resources are depleted / polluted and maintained or restored.

Impact of rural inequality on fertility and migration, viewed as alternative household responses to changing population-resource ratios

Link(s)

<https://cordis.europa.eu/project/rcn/40150/en> 

Research Project

Year: 1998

Survey form for 1998 study on economic crisis, farming systems and forest cover change in the humid forest zone of Cameroon.

These detailed household questionnaires were originally used in rural Cameroon in 1998.

Lambin, E. F. 1998. Survey form for 1998 study on economic crisis, farming systems and forest cover change in the humid forest zone of Cameroon. Center for International Forestry Research (CIFOR).

Link(s)

http://www2.eastwestcenter.org/environment/lucclink/docs/Lambin_Cameroon.PDF 

<http://www2.eastwestcenter.org/environment/lucclink/papers.htm> 

Research Project

Year: 1998

Mapping and underwater quality diagnosis in Luján

Introduction: The district of Luján occupies one part of the accumulation flatland known as 'pampasia', made up of Quaternary period deposits. The area has a series of geological soils containing the ground aquifers from where drinking water is obtained . They are the Hipopuelche aquifer (non-potable), the Puelche aquifer (where drinking water supplies are extracted) and the Pampeano or Epipuelche aquifer which is the most superficial and provides water for rural areas and household wells. The objectives of this work were: to prepare a map showing the pollution of Pampeano and Puelche aquifers, in the district of Luján, and to help devise alternatives for the management of water resources and, finally, to produce information for the development of preventive steps to improve health.

Mapping and underwater quality diagnosis in Luján

Link(s)

<http://www.chasque.net/sema/english/proyectos/solidaria/c-cuencas/ar-lujan.html> 

Research Project
Year: 1998

Deforestation and Degradation in Southern and Central African Savannas

An integrated land degradation and deforestation detection system will be developed for the Southern African Development Community (SADC) region plus southern Zaire. The scale for the inventory and monitoring will be 1 km². Using our past experience with degradation studies in Africa, the analysis of very large volumes of Landsat data, socio-economics of land and fuelwood, and inference of biophysical variables for large areas from remotely sensed measurements, we will map land cover and biophysical properties of the land surface related to degradation, thus moving beyond classification of land cover to monitor the processes involved. Socio-economic drivers of land cover change as well as biophysical factors will be employed to select processes that can be expected to cause degradation and to choose representative study areas. Radar and optical methods will be implemented to measure biomass. Primary productivity of crops, rangelands and forests will be monitored using models driven by remotely sensed data. Soil moisture and runoff will be derived from surface water and energy balance models also driven with remotely sensed data. Finally biophysical, socio-economic and cultural variables will be combined to create empirical models that we hope will identify leading indicators of environmental degradation. The 15 year archive of Advanced Very High Resolution Radiometer data constitutes a baseline having an appropriate temporal scale for this purpose. Up to ten detailed study sites will be selected in which representative degradation processes are known to occur. Landsat (1972-present) and synthetic aperture radar data will be acquired where higher spatial resolution is needed to understand the mechanisms of land cover change that are taking place. The aim of the study will be to develop a prototype degradation early warning system (DEWS) that can be applied to the whole of southern and central Africa and provide a pattern for similar areas worldwide.(author's abstract)

Deforestation and Degradation in Southern and Central African Savannas

Link(s)

https://lcluc.umd.edu/Documents/PR_Abstracts/1997-2005_Reports/PrgRep-Prince99.p...,
<http://lcluc.gsfc.nasa.gov/products/pdfs/Abstract-CenSoAf-Prince.pdf>

Research Project

Year: 1998

CRES project to monitor development trends in the Northern Mountain region.

This detailed household questionnaires were originally used in rural Vietnam.

Fox, J., Rambo, T., Cuc, L. T., Giambelluca, T., Ziegler, A., Donovan, D., Plondke, D., Vien, T. D., Leisz, S., Troung, D. M. and Tuyen, N. P. 1998. CRES project to monitor development trends in the Northern Mountain region.

Link(s)

http://www2.eastwestcenter.org/environment/lucclink/docs/Fox_etal_survey.PDF ↗,

<http://www2.eastwestcenter.org/environment/lucclink/papers.htm> ↗

Research Project

Year: 1998

LCLUC in the Southern Yucatan Peninsular Region

NASA funded long term study of population dynamics and deforestation in the Yucatan. The project seeks to improve understanding of global land-use/cover change through a study of the southern Yucatán peninsular region (SYPR). SYPR contains one of the largest expanses and oldest tropical forest in the Americas outside Amazonia. Akin to the Amazonia frontier, SYPR has witnessed significant changes in its land uses and land covers over the past 30 years registered in a boom-bust pattern. Following the international science plan on Land-Use/Cover Change (LUCC) of the IGBP-IHDP, this project seeks to contribute to NASA's LCLUC program specifically by: (i) identifying the regional dynamics and their linkages that are driving land-use/cover change in SYPR, both documenting in detail and modeling the land-use changes; and (ii) extending these findings to the land-cover changes that have occurred there, leading to new versions of probability (e.g., Markov-chain) analysis for near- to mid-term projections of land-use and land-cover change (from the original abstract). (Project findings are summarized at the project website and the NASA LCLUC site)

LCLUC in the Southern Yucatan Peninsular Region

Link(s)

<http://earth.clarku.edu/lcluc/> ↗

Research Project

Year: 1998

Human and Physical Dimensions of Land Use/Cover Change in Amazonia: Forest Regeneration and Landscape Structure

Building on 25 years of research experience in the Eastern Amazon, this study advances our understanding of land use and land cover change. It is developing a Spectral Library that will serve the research community and assist in testing of a new generation of sensors (e.g. TM7). This project builds on a seven-region study, along the LBA transects, supported for the past six years by NSF and NIGEC, and encompassing a sample of 100+ sites. We use a nested-georeferenced approach that included soil analysis, vegetation stand structure and composition, land use histories, institutional analyses, demography of households, and land cover classification using Landsat TM multitemporal data to understand the rates of growth of secondary vegetation. The seven regions' study provides a wide array of land uses and land cover along an east-to-west transect extending from the Amazon estuary and Bragançola region east of Belém near the Atlantic coast, all the way to the Tapajós/Santarem region with a Rondônia site

now also being added. This 160,000 km² area will be examined for land cover changes and their relation to past patterns of land use for a minimum of no less than 25 years.

Human and Physical Dimensions of Land Use/Cover Change in Amazonia: Forest Regeneration and Landscape Structure

Link(s)

<https://lcluc.umd.edu/projects/human-and-physical-dimensions-land-usecover-chang...>,
http://lcluc.umd.edu/sites/default/files/lcluc_documents/Present-Moran2000_0.pdf

Research Project

Year: 1998

Comprehensive study of water management in the Junín Municipality, urban-agricultural municipality in the province of Buenos Aires, Argentina

Summary: The water problem in Argentina has been considered by a series of different analyses and reports as the greatest environmental conflict in the country. The case of the Municipality of Junín, in the Province of Buenos Aires, can be deemed a prototype as it involves several questions due to problems related to pollution, non-potable water, floods, as well as demand for access to this resource. This project elaborated a multi-phase and multi-disciplinary diagnosis of this issue in the Municipality of Junín. It can be perceived as the first input in terms of the integrated management of this resource, in order to encourage participatory projects to determine multiple use programmes for a natural resource shared by different social actors. The work consisted of a brief characterization of the region and its problems, followed by a presentation of studies on water quality undertaken by the Municipality and then studies on opinion and perception on water issues. Finally, this work concludes with a legal and administrative analysis of the issue

Comprehensive study of water management in the Junín Municipality, urban-agricultural municipality in the province of Buenos Aires, Argentina

Link(s)

<http://www.chasque.net/sema/english/proyectos/solidaria/c-cuencas/ar-junin.html>

Research Project

Year: 1998

Diagnosis of hydrographical basins in the Municipality of Viamao for an integrated management programme of micro-basins

The main objective of the Diagnostic Project on Hydrographic Basins in the Municipality of Viamao for an Integrated Management of Micro-basins is to gather information in cartographic databases that can be used by the Municipality as tools to plan and manage, by considering hydrographic micro-basins as basic working units...According to the growing demand for information generated, this work has been highly accepted and acknowledged, and has

demonstrated it can be an essential tool in municipal public administration decision-making processes and in involving the community through dissemination of knowledge on natural resources of the Municipality and their condition

Diagnosis of hydrographical basins in the Municipality of Viamao for an integrated management programme of micro-basins

Link(s)

<http://www.chasque.net/sema/english/proyectos/solidaria/c-cuencas/br-viamao.html> 

Research Project

Year: 1998

The Miombo Network: Framework for a Terrestrial Transect Study of Land-Use and Land-Cover Change in the Miombo Ecosystems of Central Africa

The Miombo Network was formed to create a regional network for global change research on the dominant biome of Southern Africa: the Miombo Woodlands, and to design a project based on the IGBP Transects framework (IGBP Report 36) and the LUCC Core Project. The report provides the framework for research activities aimed at understanding how land use is affecting land cover and associated ecosystem processes; assessing what contribution these changes are making to global change; and predicting what effects global change in turn could have on land use dynamics and ecosystem structure and function. (from Background)

Desanker, P.V., P.G.H. Frost, C.O. Frost, C.O. Justice, and R.J. Scholes, (eds.). 1997. The Miombo Network: Framework for a Terrestrial Transect Study of Land-Use and Land-Cover Change in the Miombo Ecosystems of Central Africa, IGBP Report 41, The International Geosphere-Biosphere Programme (IGBP), Stockholm, Sweden, 109 pp.

Link(s)

<https://digital.library.unt.edu/ark:/67531/metadc11998/> 

https://digital.library.unt.edu/ark:/67531/metadc11998/m2/1/high_res_d/report-41... 

Research Program or Institution

Year: 1997

Population, Consumption, and Environment: a Tourist Spot Scenario

This study examined the inter-relations between population, consumption and the environment, using coastal tourism as a prism. It studied the influence of tourism induced migration on coastal ecosystems of selected villages of Goa. Tourism induced migration was categorized into temporary migrants (tourists) and permanent migrants (workers). The coastal ecosystems under consideration were sand dunes, mangroves, and khazan lands. The study covered 5 villages in Goa. It had four main research questions:-1) How are population movements in a tourism area responsible for ecosystem changes in the coastal belt? 2) What are the socio-cultural and institutional factors that underlie these ecosystem changes? 3) What are the possible policy

interventions? 4) What lessons does the study have for other developing regions where the tourism industry is still in its infancy or being considered as a development option? The study addresses the above four research questions through an integrated approach comprising three components- statistical, spatial, and ethnographic. The study suggested the following: It is not the numbers of tourists, but the quantity and type of resources used to service the needs of the tourists that brings about changes in coastal ecosystems. High budget tourists consume more land than the mixed and low budget tourists and hence land use and land cover changes are more. Out migration and host population are also responsible for land use and cover change along with in-migrants Laws, especially those relating to agriculture, comunidades and coastal regulation Act of 1991 have contributed towards land Use change. Mature tourist destinations reveal a greater awareness and concern for the environment, especially among the youth , than other tourist destinations. Tourism is an important driver for land use and land cover change as: (a) It provides the opportunity to alienate land profitability (b)It also creates a dissociation between production and consumption of coastal resources. The changes brought in by the needs of the tourist and the pressures of globalisation for providing the tourist with what she/he expects, results in a dilution and erosion of the local communities' sustainable use of coastal resources.

Population, Consumption, and Environment: a Tourist Spot Scenario

Link(s)

<https://www.teriin.org/teri-wr/projects/pce.htm> 

Research Project

Year: 1997

HSD: Marginality in a Marginal Environment: An Agent-Based Approach to Population-Environment Relationships

As a consequence of global climate change, intra- and inter-annual variability in precipitation and air temperature are expected to increase. Droughts may become more severe, more frequent, more prolonged. Flooding due to excessive rainfall may also be a more common occurrence. The investigators undertaking this interdisciplinary research project hypothesize that across multiple social and spatial-temporal scales, marginal populations are especially likely to be affected by weather-related events, partly because of their location in marginal environments and also because of dynamic feedbacks involving human behavior. To test this hypothesis, the investigators will construct an agent-based simulation model for Nang Rong, a study site in Northeast Thailand with unusually detailed data. The simulation model will be the first to incorporate feedbacks involving out-migration, return migration, marriage, residential choice, and household division in a spatially explicit model with land use as a key outcome. It will incorporate dynamic social networks as both cause and consequence of behavioral change at the individual and household level. (from website)

HSD: Marginality in a Marginal Environment: An Agent-Based Approach to Population-Environment Relationships. Carolina Population Center, The University of North Carolina at Chapel Hill.

Link(s)

<http://www.cpc.unc.edu/research/projects/grants> 

Research Program or Institution

Year: 1997

April World Population Update.

A UN newsletter that describes an unusual collaboration among NGO and governmental entities that combines conservation and family planning messages in a radio soap opera.

Population Information Network (POPIN) of the United Nations Population Division (DESIPA), and Population Communication International. 1996. April World Population Update. 96-04: International Dateline, April 1996.

Link(s)

<https://www.un.org/popin/popis/journals/dateline/date9604.html> 

Research Project

Year: 1996

Center for the Integrated Study of the Human Dimensions of Global Climate Change

The Center is a coordinated research program by 47 Principal Investigators at 22 Institutions - 13 Institutions in the US, and 9 in seven other countries - interested in interactions of society and the environment. Research topics: China; Climate Change Policy; Climatology; Ecological Impacts; Economics; Emissions; Energy; Environmental Assessment; Environmental Policy; Health Impacts ; Impact Valuation; India; Integrated Assessment Modeling; Model Validation; Regulation; Sea Level Rise; Social Adaptation; Social Science; Technological Adaptation (excerpted from website)

Center for the Integrated Study of the Human Dimensions of Global Climate Change

Link(s)

<http://hdgc.epp.cmu.edu/> 

Research Program or Institution

Year: 1996

Population Dynamics and Resource Management in Small-Scale Fishing Communities in Africa 1998-2000

This multidisciplinary project (demography, geography, fishery biology, sociology, economics) co-ordinated by Chr. Michelsen Institute, Bergen Norway centres on two case studies: in-land fishing communities on Lake Kariba, Zambia and one coastal fishery community in Moree,

Ghana (10 km from Cape Coast). Quantitative (household survey of approximately 100 households) and qualitative (focus groups and in-depth interviews) methods collected three types of information: (1) cross-sectional community and household-level population dynamics (fertility, mortality and health, and fishery-related migration), (2) household and community level information on the formal and informal resource management institutions and practices affecting fishery and fishery related resources (e.g. wood used in fish-processing), and (3) information on other important factors shaping fishery activity (policy changes such as structural adjustment, conflicts over resources). The Moree-Ghana study collected longitudinal data (1-year continuous) on gear use and the biophysical characteristics of the quantity and quality of fishery resources. This information is being used to consider characteristics and trends in demographic dynamics and how they interact with resource management institutions to shape the volume and nature of fishery activity, changes in the quality and quantity of fishery resources, and resource conflicts. In Lake Kariba, the links between population dynamics, fishery and agricultural activity are also analysed. The household-level data is also providing a unique micro-level glimpse into the organisation and dynamics of fishing households.(Authors Summary)

Population Dynamics and Resource Management in Small-Scale Fishing Communities in Africa 1998-2000

Link(s)

<https://www.cmi.no/research/project/> 

Research Project

Year: 1996

Land use and population pressure within and adjacent to Mount Elgon National Park: Implications and potential management strategies

This study examined population pressure through a demographic survey and questions related to the use of and attitudes towards family planning. Land issues were examined through a survey of current land uses and the use of and attitudes towards a range of sustainable agricultural techniques. Despite a relatively high awareness of modern family planning methods (63%), only 10% were practicing and 24% planned to practice family planning in the future. 37% were not aware of family planning, three-quarters of respondents wished to receive more information. The proportion of households using sustainable agricultural techniques was generally low. The management implications of these findings are assessed and recommendations are made. (from abstract)

Land use and population pressure within and adjacent to Mount Elgon National Park: Implications and potential management strategies

Link(s)

https://www.see.leeds.ac.uk/misc/elgon/land_use.html 

Research Project

Year: 1996

International Research Institute for Climate Prediction (IRI)

IRI was established as a cooperative agreement between NOAA Office of Global Programs and Columbia University. IRI is a unit of the Columbia Earth Institute located at Lamont-Doherty Earth Observatory. Activities include forecasting, climate prediction, applications research and training. Data on oceans, air-sea interface, topography (no population data) are found online as well as maps, reports from training sessions, newsletters and other resources relating to climate change prediction, modeling and forecasting for agriculture, water resources, health, natural disasters, etc.

International Research Institute for Climate Prediction (IRI)

Link(s)

<https://iri.columbia.edu/> 

Research Program or Institution

Year: 1996

DYPEN (Dynamique de population et ressources naturelles en Tunisie)

Description sur internet: 'le collectif de recherche DYPEN a choisi de s'intéresser aux interactions entre la population et son environnement à un niveau plus fin, qui est celui de la petite région. Dans une optique comparative, quatre sites d'étude en Tunisie rurale ont été retenus pour élaborer une méthode d'observation de ces interactions de manière longitudinale. Dynamique de l'environnement et dynamique de la population sont ainsi intégrées dans le temps et l'espace pour connaître leurs effets croisés et montrer que les effets au niveau local sont souvent plus subtils que les abrupts schémas néo-malthusiens qui ne voient que des impacts négatifs de la croissance démographique sur l'environnement.

DYPEN (Dynamique de population et ressources naturelles en Tunisie)

Link(s)

<https://books.openedition.org/irdeditions/1109> 

Research Project

Year: 1996

Center for the Study of Institutions, Population and Environmental Change

Understanding how and why some forests are fragmented, degraded, and losing species, while other forests are in good condition and even regrowing and expanding, is a puzzle to any thoughtful observer of the environment. In a world which is experiencing unprecedented degrees of environmental change and degradation at a global scale, one sees evidence of restoration, suggesting that under certain conditions, people can self-organize and stem the steady loss of the ecological systems that sustain us. At the Center for the Study of Institutions Population, and

Environmental Change (CIPEC) we are dedicated to understanding these processes and sharing this knowledge with the scientific community and the public.

Center for the Study of Institutions, Population and Environmental Change

Link(s)

<https://urbanforestry.indiana.edu> 

Research Program or Institution

Year: 1996

The Center for Health and the Global Environment (CHGE)

The Center for Health and the Global Environment was founded in 1996 at Harvard Medical School to address the gap of environmental education at medical schools and to further investigate and promote awareness of the human health consequences of global environmental change. ...Two main ongoing, core projects include the Center's course, Human Health and Global Environmental Change, and online publication, The Quarterly Review, which summarizes the latest finding in the field of human health and global environment (excerpt from the center's website)

The Center for Health and the Global Environment (CHGE)

Link(s)

<https://www.hsph.harvard.edu/c-change/> 

Research Program or Institution

Year: 1996

Nagaland Environment Protection And Economic Development Project (NEPED)

NEPED commenced operation in Nagaland in February 1995, funded by the International Development Research Centre (IDRC) and the Canadian International Development Agency (CIDA) through the India Canada Environment Facility (ICEF). Nagaland is a small hilly state in North Eastern India with Myanmar entirely bordering the eastern side. This mountainous terrain has a total forest area of 8,629 Sq. Kms. Governed by the northwesterly Monsoons, the climate is sub-tropical/temperate and receives about 250 cms. of rainfall annually. The main method of subsistence farming is slash and burn (also called swidden or shifting) agriculture, known locally as Jhum. In the Naga system of jhum cultivation, every year large tracts of cultivable land are literally slashed down and then burnt to convert biomass to ash and increase soil fertility. This system is sustainable with low population densities, but population growth has shortened the jhum cycle to unsustainable levels. NEPED does not reject jhum, but aims for improving fallow by encouraging agroforestry in jhum fields. Jhum cultivation can be productive and sustainable. Honed over thousands of years, it is a system well suited to the needs of traditional subsistence farmers, with multiple inter-cropping of up to 60 foods in one field. After one or two years of

use, fields go into fallow, the farmers move to the next plot and forest land returns to protect the soil and allow for a buildup of nutrients. When the cycle lasts 15-20 years, jhum is sustainable, but increasing population has led to a shortened jhum cycle (to as low as 5 years) and land degradation. A possible alternative to jhum cultivation is terrace cultivation. But this too has its limitations because extensive parts of Nagaland are too hilly for economical use of terracing. When jhum cycles fall below 10 years there is not enough time for nutrients to build up and yields are reduced. As a result, farmers must cut down more and more primary forest for their food needs. From project website.

Nagaland Environment Protection And Economic Development Project (NEPED)

Link(s)

<http://cigrasp.pik-potsdam.de/adaptations/nagaland-environment-protection-and-ec...> 

Research Project

Year: 1995

Socio-economic and Physical Approaches to Analysing Climate Change Impacts in Vietnam

Adaptation to the uncertain impacts of future climate change remains one of the key environmental issues of a global nature, highlighted both in international scientific assessments and in the UN Framework Convention on Climate Change. The reliable identification of adaptive options must be based on a prior analysis of vulnerability to potential impacts. This project is an interdisciplinary study of socio-economic vulnerability to climate change impacts in the coastal zone of the Red River delta of Vietnam. The ultimate goal is to provide a sound analytical foundation for an effective resource management strategy and policy development. The research is being undertaken through case study and sectoral analysis of resources and vulnerable groups. Primary data is being collected through household survey and secondary data is being collated. Climate data analysis and modelling results will also be integrated. The research is being undertaken in collaboration with Vietnamese scientists. Major research activities include: further integrated evaluation of the role of natural ecosystems in alleviating and mitigating the impacts of extreme climate events; field research on the role of coastal management policies across different vulnerable groups using quantified indices of vulnerability; and analysis of the collective vulnerability of the vulnerable groups within the region to enlighten policy responses to present and future extreme climate events. The conceptual and empirical research will be used as a basis for an overall assessment of the policy options for alleviating social vulnerability to climate change. An iterative process of policy formulation will be tested with feedback from the Vietnamese collaborators, focus groups and a final, co-funded, workshop in Hanoi. A main theme of these discussions will be the examination of collective vulnerability and the relevance of various institutional reforms and policy responses to present and future extreme climate events.

Socio-economic and Physical Approaches to Analysing Climate Change Impacts in Vietnam

Link(s)

<http://www.researchcatalogue.esrc.ac.uk/grants/L320253240/read> 

Research Project

Year: 1995

Reciprocal Relation Between Population and Environment

This project takes advantage of ongoing research on family formation in the Nepalese Himalayas to investigate the reciprocal relations between changes in population processes and the environment. The aim of the project is to gather additional data on environmental quality and population processes and link it to data on neighborhood contexts and family formation from the Chitwan Valley Family Study, for the purpose of analyzing reciprocal links between population processes and environmental changes. The data will be used to address three specific questions regarding the reciprocal relations between population processes and the environment: (1) To what extent do changes in marriage timing, household fission, childbearing, and migration influence changes in land use, water quality, and flora diversity? (2) To what extent do variations in land use, water quality, and flora diversity, produce changes in marriage, household fission, childbearing, and migration? and (3) To what extent are the observed relationships between population processes and the environment produced by exogenous changes in the social and institutional context? Existing historical data on environmental factors will be merged with historical data on community-level social and institutional changes, and individual-level histories of demographic events being gathered by the Chitwan Valley Family Study (CVFS). We will also collect new measures of variations in environmental factors in the 151 neighborhoods being studied by the CVFS for two time periods, and maintain a 3-year household registry from the 1400 sampled households between these time periods, including monthly updates on major demographic events and seasonal updates on agricultural activities. By taking detailed measures of environmental variations at two points in time and maintaining a systematic registry of agricultural organization and population events during the intervening time, these data will provide the means to assess the reciprocal relations between population processes and changes in environmental quality over time. Finally, by linking these new data together with data (from the CVFS) on the changing social and institutional contexts in these communities, we will be able to explore the extent to which these contextual changes produce the observed links between population and the environment. Funded all or in part by: National Institute of Child Health and Human Development (NICHD 1R01 HD33551-01. Period of Study: 9/1/95 to 6/1/2000.

(Author's abstract)

Reciprocal Relation Between Population and Environment

Link(s)

<https://psc.isr.umich.edu/research/project-detail/34844> 

Research Project

Year: 1995

Population Dynamics and Changes in the Landscape

The goal is to study interrelationships among a) population dynamics, b) changes in patterns of land use, and c) social and economic change over the past two decades in Nang Rong, Thailand. The study site, a relatively poor district located in the Northeast of the country, has experienced dramatic deforestation, the rapid growth of market agriculture, high rates of out-migration, and intensive social and economic development. The study marries the data, tools, and perspectives of social demography and physical geography. Aim# 1 is to combine extant social surveys, administrative records, maps, and remotely sensed data into an integrated data set. The data set will be multilevel. It will include observations for individuals, households, villages, and the entire district. It will also include the characteristics of patches and landscapes. It will cover at least a decade for key social and demographic variables, and more than two decades of information on land use derived from the satellite images. Whereas most studies of population and land use have focused at higher levels of aggregation, the Nang Rong data (and analyses based on them) are particularly strong at lower levels of aggregation (individual, household, village, landscape, patch). A Geographic Information System (GIS) is the primary tool for integration. Aim #2 uses the integrated data set as the basis for a series of interrelated descriptive studies that explore the impact of international markets for cassava and other cash crops on land use, deforestation in relation to the extension of road networks and settlement patterns, and population change in relation to the extensification and intensification of agriculture. The mapping and integrative capabilities of the GIS are central to these descriptive studies. Building on these studies Aim # 3 is to investigate the spatial organization of the landscape around villages in relation to social and environmental forces. Using spatial metrics to develop a landscape signature through a satellite time-series is a new approach to understanding landscape organization as a discriminant element of village form and function, and linking the satellite data with social surveys is another innovative element. This analysis will both inform and be informed by social demographic analyses that incorporate spatially derived measures into multilevel statistical analyses. Aim #4 is to examine household decisions about land use and migration within a context of competition for resources and in response to environmental endowments and constraints. Aim #5 is to investigate the consequences of past high fertility for size of landholdings and for the fragmentation of agricultural plots and to explore the impact of the availability of forested land on the decisions made by newly married couples about where to live.

Population Dynamics and Changes in the Landscape

Link(s)

<http://www.cpc.unc.edu/projects/nangrong/> 

Research Project

Year: 1995

Southern African Savannas: Sustainable Management of Natural Resources - A Synthesis Study of Human Impacts and Enhancement of Social and Economic Benefits.

The Project is EU-INCO/SCOPE/UNEP funded and is managed by Jeremy Woods (project researcher) at King's College London. It is a collaboration between research groups from 5

African regional centres (GEO3) and 3 EU countries. The extent and value of savannas is not well quantified, but they constitute about 75% of the area of Southern Africa (SA) and their ecosystem services and natural capital value has recently been estimated at about US\$ 100 billion per year. However, very little research has studied the transnational implications of the continued use of savannas which are naturally dry and fragile and thus subject to high variability. They are increasingly coming under severe stress from human and animal population pressures and from land distribution policies; thus sustainable practices and policies are difficult to implement. Savannas in SA are subject to great climate variability which for sustainable use requires linked socioeconomic and environmental management strategies; but these processes are not now well documented or understood (see literature review). Unfortunately there has been very little integration between the social and natural environment management sciences in order to ensure sustainable use of the savannas while providing optimum resources for the local people. The proposed collaboration is between three EU groups which have considerable experience with savanna soils and vegetation and five Southern Africa groups which work on rangelands and agriculture, woodlands and agroforestry, wildlife, soils and water management, and economic and social sustainability. The three main savanna land use patterns will be studied: traditional "subsistence" agriculture and agroforestry, commercial agriculture and forestry, and wildlife utilisation. Each land use pattern will be studied from three viewpoints: ecosystem sustainability, economic sustainability, and social equity. The three main savanna land use patterns will be studied : 1.traditional "subsistence" agriculture and agroforestry, 2.commercial agriculture and forestry, and 3.wildlife utilisation. Each land use pattern will be studied from three viewpoints: ecosystem sustainability, economic sustainability, and social equity. The concerted action will accomplish the following four tasks: i) evaluate current practices and policies on savannas from an interdisciplinary view to ascertain their sustainability; ii) describe alternative practices and policies required for achieving sustainable savanna systems; iii) recommend mechanisms for promoting the implementation of these regionally appropriate practices and policies, and iv) Synthesise existing data and data generated through the tasks, carry out meetings and scientific exchange, publish reports and data, and evaluate potential training and policy options; identify research priorities needed to address unanswered questions about sustainable savanna ecosystems. (from project website)

Southern African Savannas: Sustainable Management of Natural Resources - A Synthesis Study of Human Impacts and Enhancement of Social and Economic Benefits.

Link(s)

<http://www.2020-horizon.com/Southern-African-Savannas-sustainable-management-of-...> 

Research Program or Institution

Year: 1994


Social and Environmental Disturbance: Impacts on Fertility and Poverty in Africa

Environmental shocks of recent years, including erratic rainfall and the progression of the AIDS pandemic have had a fundamental impact on rural African communities. Poverty is increasing, social and economic infrastructures are deteriorating and the environment is becoming degraded.

This has enhanced the value of children. Very often their labour power, from as early as the age of six, is essential to their families' survival. This research project focused on a rural district in Eastern Province, Zambia, an area where women have on average 7.1 children. The region was badly hit by the 1992 drought, resulting in chronic poverty. There are increasing rates of HIV infection. Of particular interest was the link between these difficulties, the value of children, and the effects on human fertility. The research started with interviews with key informants at national and provincial levels and consultation of data, documents and reports. Village based research included interviews, household questionnaires, case studies, and participant observation. Mapping, child-to-child interviews and small discussion groups were effective methods of involving children. Project duration was June 1994 - June 1997. Research findings: The importance of labour and cash transactions for rural households is intensified in periods of environmental and social change; Environmental and social change is impacting on family structures and the roles of family members; Fertility is increasingly being used by young women in their own favour....(excerpted from online description of project)

Social and Environmental Disturbance: Impacts on Fertility and Poverty in Africa

Link(s)

<http://www.sussex.ac.uk/Units/gec/ph3summ/barrett3.htm> , <https://esrc.ukri.org/my-esrc/grants/L320253108/read> 

Research Project

Year: 1994

The Project on Environment, Population, and Security

This project developed several case studies -f Mexico, Gaza, Rwanda, Pakistan, South Africa - focusing on population growth, environmental degradation and conflict. The Project on Environmental Scarcities, State Capacity, and Civil Violence (1994-97) developed similar themes for China, Indonesia and India.

The Project on Environment, Population, and Security

Link(s)

<https://homerdixon.com/eps/> 

Research Program or Institution

Year: 1994

Population and the Environment

From RAND website: Given the realities of continued population growth and global environmental change, it has become critical to improve our understanding of the role played by human population dynamics in environmental change. Drawing from the scientific literature, our report on synthesizes what is known about the role played by human population factors in environmental change. Specifically, the report discusses: The relationship between population

factors; size, distribution, and composition; and environmental change; The primary forces that mediate this relationship: technology, the institutional and policy contexts, and cultural factors; Two specific aspects of environmental change that are affected by population dynamics: climate change and land-use change; and Implications for policy and further research.

Population and the Environment

Link(s)

<https://www.rand.org> 

Research Project

Year: 1994

Demographic and Environmental Change in Nang Rong

The overall goal of the Nang Rong research involves a comprehensive account of social, economic, demographic, and environmental change. Nang Rong related studies seek to understand the: Dynamic interrelationships between land use, population, geographic location, environmental gradients, spatial organization, and social and economic change; The spatial organization of the biophysical landscapes associated with villages in relation to spatial, social, and environmental forces and their scale dependence; The nature of land suitability defined from an integration of social, biophysical, and geographic factors; The nature of agricultural risk abatement approaches associated with rice planting strategies; Linkages between land use and migration at the household and community-level; The consequences of past high fertility for the current size of land holdings and the fragmentation of agricultural plots; The impact of availability of forested land on postnuptial residence decisions; How social networks affect relationships between population and the environment; How land use, in conjunction with biophysical features of the landscape, affect social networks." PERN abstract of "Research Goals" and "Research Aims"

Demographic and Environmental Change in Nang Rong

Link(s)

<http://www.cpc.unc.edu/projects/nangrong/> 

Research Project

Year: 1994

The Economy and Environment Program for Southeast Asia (EEPSEA)

The Economy and Environment Program for Southeast Asia was established in May 1993 to support training and research in environmental and resource economics. Its goal is to strengthen local capacity for the economic analysis of environmental problems so that researchers can provide sound advice to policymakers. The program uses a networking approach to provide not only financial support but meetings, resource persons, access to literature, publication outlets, and opportunities for comparative research across its ten member countries. These are Thailand,

Malaysia, Indonesia, the Philippines, Vietnam, Cambodia, Laos, China, Papua New Guinea and Sri Lanka.

The Economy and Environment Program for Southeast Asia (EEPSEA)

Link(s)

<https://eepsea.org/> 

Research Program or Institution

Year: 1993

Sustainable Agriculture and the Environment in the Humid Tropics

This committee assembled in response to a request from USAID to 'identify and analyze key problems of agricultural practices that contribute to environmental degradation and result in declining agricultural production in humid tropic environments.' Although the authors note that the committee lacked demographic expertise, significant attention was placed on population factors. Country profiles on Brazil, C?te d'Ivoire, Indonesia, Malaysia, Mexico, The Philippines, and Zaire are included.

Sustainable Agriculture and the Environment in the Humid Tropics

DOI: <https://doi.org/10.17226/1985> 

Link(s)

<https://www.nap.edu/catalog/1985/sustainable-agriculture-and-the-environment-in-...> 

Research Project

Year: 1993

Thailand Environment Institute

Established in May 1993, the Thailand Environment Institute (TEI) is a non-profit organization focusing on environmental issues in Thailand. By working closely with international organizations, government, non-governmental organizations (NGOs), academia, the private sector and local communities TEI helps to formulate environmental directives and link policy with action to encourage meaningful environmental progress in Thailand. The work of TEI is presently carried out within six specialized program areas, with a total staff of over 120 persons, managing up to over 60 environmental projects annually, including both research as well as field action projects, and training and consultancies.

Thailand Environment Institute

Link(s)

<https://www.tei.or.th/> 

Research Program or Institution

Year: 1983

Committee on Population. National Academy of Sciences (NAS)

The Committee on Population was established by the National Academy of Sciences (NAS) in 1983 to bring the knowledge and methods of the population sciences to bear on major issues of science and public policy. The committee's work includes both basic studies of fertility, health and mortality, and migration; and applied studies aimed at improving programs for the public health and welfare in the United States and in developing countries. The committee also fosters communication among researchers in different disciplines and countries and policy makers in government and international agencies.

Committee on Population

Link(s)

<https://www.nationalacademies.org/cpop/committee-on-population> 

Research Program or Institution

Year: 1983