


What Are the Carbon Emissions Elasticities for Income and Population? New Evidence From Heterogeneous Panel Estimates Robust to Stationarity and Cross-Sectional Dependence

This paper uses the STIRPAT model to determine what are the carbon emissions elasticities for income and population and whether those elasticities differ across development/income or population levels. (from Introduction)

Liddle, Brant. 2012. What Are the Carbon Emissions Elasticities for Income and Population? New Evidence From Heterogeneous Panel Estimates Robust to Stationarity and Cross-Sectional Dependence. USAEE Working Paper No. 12-135

DOI: <https://dx.doi.org/10.2139/ssrn.2162222> 

Working Paper

Agrodiversity as a means of sustaining small scale dryland farming systems in Tanzania

Dryland farming systems in Africa are often characterised as being extremely degraded, vulnerable to external forces, and low in productive output. Global biodiversity loss in areas of land use is a well-attested phenomenon. Ecologists, in particular, are alarmed at how natural biological diversity is being replaced by relative biological uniformity, especially under the pressure of population growth (Cincotta and Engelman, 2000). However, there is good evidence that natural biological diversity may be giving way to another diversity, equally valuable and of greater immediate significance to society, which in this paper is called 'agrodiversity'. (from text)

Kaihura, F. B. S., Stocking, M. A. and Murnaghan, N. Agrodiversity as a means of sustaining small scale dryland farming systems in Tanzania. United Nations University.

Link(s)

<http://unu.edu/africa/papers/agrodiv-tanzania.pdf> 

Working Paper

Population-Environment Dynamics: Toward Building a Theory, Monographs of student papers. Seminar: 1992-1998

This page links to eighty-four papers written by students of the course. Each year's seminar was organized around themes.

Drake, William D.; Arlinghaus, Sandra L. Population-Environment Dynamics: Toward Building a Theory, Monographs of student papers. Seminar: 1992-1998. School of Natural Resources and

Environment NRE 545, Cross-listed as School of Public Health EIH 575, The University of Michigan.

Link(s)

<http://websites.umich.edu/~csfound/545/> 

Monograph, Conference and Working Papers, Conference Paper

Environmental Migration in Asia and the Pacific. Could We Hang Out Sometime?

Several proposals for global legal governance of environmental migration have recently been published, almost exclusively by Western scholars. While governance of environmental migration is most likely to succeed in the regional arena, this article argues that Asia and the Pacific (and their sub-regions) should determine the content of regional legal approaches of environmental migration. While environmental migration is a reality in many places of Asia and the Pacific, research on governance options led in the global West are rarely based on empirical research. This article suggests a postcolonial critique of the discourse on a global governance of environmental migration. Establishing and participating in a multi-civilizational forum of best practices is a unique opportunity for rising regions of Asia and the Pacific to affirm their growing role in the international community and to demonstrate the compatibility of "Asian values" with a liberal form of transnational governance. (Author's Abstract)

Mayer, Benoît. 2012. Environmental Migration in Asia and the Pacific. Could We Hang Out Sometime? Earth System Governance Working Paper No. 22. Lund and Amsterdam: Earth System Governance Project.

Link(s)

<https://www.earthsystemgovernance.org/publication/mayer-beno%C3%A9t-environmenta...> 

Working Paper

Year: 2012

Environmental Migrants: A Myth?

The papers reviewed recent evidence in migration-climate links then discussed the research challenges of identifying the links. Policy options to formalize migration as an adaptation mechanism to climate change were also discussed.

Maystadt, J.-F. & V. Mueller. 2012. Environmental Migrants: A Myth? IFPRI Research Brief 18

Link(s)

<https://www.ifpri.org/sites/default/files/publications/rb18.pdf> 

Working Paper

Year: 2012

India: Patterns of an Urbanizing Nation.

The authors used multi-temporal DMSP-OLS cloud-free data (1999-2009) to study the urban footprints of twelve large Indian cities.

Joshi, P. K., R. Sharma, B. M. Bairwa & V. Sinha. 2011. India: Patterns of an Urbanizing Nation. UGEC Viewpoints No.5.

Link(s)

<https://ugec.org/docs/ugec/viewpoints/ugec-viewpoints-5.pdf> 

Working Paper

Year: 2011

Weather and Infant Mortality in Africa.

The paper investigated to what extent have weather fluctuations in Africa affected infant mortality over the last fifty years in 28 African countries.

Kudamatsu, M., T. Persson & D. Strömberg. 2011. Weather and Infant Mortality in Africa. IIES, Stockholm University.

Link(s)

http://people.su.se/~tpers/papers/Africa_paper110418.pdf 

Working Paper

Year: 2011

Natural Resources and Rural Livelihoods: Differences between Migrants and Non-Migrants in Madagascar.

This study explores the association between natural resource availability and well-being for migrants' and non-migrants' in rural Madagascar.

Nawrotzki, R., L. M. Hunter & T. W. Dickinson. 2011. Natural Resources and Rural Livelihoods: Differences between Migrants and Non-Migrants in Madagascar. Working Paper. Population Program, Institute of Behavioral Science, University of Colorado, Boulder

Link(s)

<https://ibs.colorado.edu/pubs/pop/pop2011-0008.pdf> 

Working Paper


Year: 2011

Population and Environment Connections. The Role of U.S. Family Planning Assistance in U.S. Foreign Policy

In this paper, the author argues that PHE programs can promote and sustain stability in developing countries and thus support of, and funding for, PHE approaches should be increased.

Dabelko, G. D. 2011. Population and Environment Connections. The Role of U.S. Family Planning Assistance in U.S. Foreign Policy. Council on Foreign Relations.

Link(s)

http://i.cfr.org/content/publications/attachments/CFR_WorkingPaper6_Dabelko.pdf ,
<https://www.cfr.org/report/population-and-environment-connections> 

Working Paper

Year: 2011

The Impacts of Urbanization on Cultivated Land Change in China

Urbanization is correlated with economic growth and an improvement in livelihoods and standards of living. However, it has also resulted in numerous environmental problems such as rapid resource extraction, water and air pollution, and high levels of energy use and greenhouse gas emissions. (from Introduction)

Deng, X. & K. C. Seto. 2011. The Impacts of Urbanization on Cultivated Land Change in China. UGEC Viewpoints No.5.

Link(s)

<https://ugec.org/docs/ugec/viewpoints/ugec-viewpoints-5.pdf> 

Working Paper

Year: 2011

Preparing for Population Displacement and Resettlement Associated with Large Climate Change Adaptation and Mitigation Projects.

The paper provided an overview of lessons learned from three decades of research into displacement and resettlement associated with large infrastructure and development projects, and then identified how these can be applied to the pressing issue of likely future displacement associated with climate change related projects.

de sherbinin, A., M. Castro & F. Gemenne. 2010. Preparing for Population Displacement and Resettlement Associated with Large Climate Change Adaptation and Mitigation Projects. Background Paper for the Bellagio Workshop 2-6 November 2010.

Link(s)

<http://www.ciesin.columbia.edu/confluence/download/attachments/92799210/Backgrou...> 

Conference Paper
Year: 2010

The Persistent Decline in Urban Densities: Global and Historical Evidence of 'Sprawl'.

Using satellite imagery, census data and historical maps, we report on density variation among cities the world over. We find significant differences in the average population density in the built-up areas of a global sample of 120 cities: In 2000, average density was 28?5 persons per hectare in cities in land-rich developed countries, 70?8 in cities in other developed countries, and 135?11 in cities in developing countries. We also find that built-up area densities in this sample declined significantly, at an average annual rate of 2.0?0.4 percent, between 1990 and 2000. We report on the five-fold decline in average tract density in 20 U.S. cities between 1910 and 2000, at an average long-term rate of 1.9 percent per annum, on the slowing down of the rate of decline in recent decades, and on the decline in several other density metrics during this period. Using historical maps and historical demographic data for 1800-2000, we also report on the threefold decline in average urbanized area densities in a global sample of 30 cities during the twentieth century, following an increase in average density in the nineteenth century. On average, densities in this historical sample have been in decline since their peak circa 1890?16, at an average long-term annual rate of 1.0-1.5 percent. All or most of the significant factors accounting for density variations and density decline are identified in multiple regression models and the implications of the findings for urban containment and compact city strategies in different regions are examined. At current rates of density decline in the cities of developing countries, for example, when their urban populations double in the next 30 years, as now expected, their built-up areas will likely triple. Minimum preparations for this massive expansion are clearly in order.
(Authors' Abstract)

Angel, S., J. Parent, D. L. Civco & A. M. Blei. 2010. The Persistent Decline in Urban Densities: Global and Historical Evidence of 'Sprawl'. Cambridge, MA: Lincoln Institute of Land Policy.

Link(s)

<https://www.lincolnst.edu/publications/working-papers/persistent-decline-urban...> 

Working Paper

Year: 2010

The Fragmentation of Urban Footprints: Global Evidence of Sprawl, 1990-2000

Cities the world over are highly fragmented. The fragmentation of the built-up area cities by the open spaces interpenetrating them is a key attribute of urban-sprawl, and sprawl as fragmentation, as distinct from sprawl as lower-density development, is now a universal feature of cities. Using satellite images and census data for 1990 and 2000 for a global sample of 120 cities, we find that cities typically contain or disturb vast quantities of open spaces, equal in area, on average, to their built-up areas. That said, we find that fragmentation, defined at various

spatial scales as the relative share of open space in the urban footprint as a whole or in parts of it, is now in decline. We use multiple regression models to explain variations in fragmentation and in its decline among cities and regional groupings. We find that larger cities are less fragmented; that high levels of car ownership tend to reduce fragmentation, possibly because they allow infill at relatively low costs; that there were parallel declines in average built-up area densities and in levels of fragmentation during the 1990s; and that cities that do not permit development in large areas around are slightly, yet significantly, less fragmented. Policies aimed at reducing fragmentation should be clearly distinguished from policies aimed at increasing the density of built-up areas. Encouraging infill in cities with little population growth is qualitatively different from encouraging infill in cities with rapidly growing populations. In the former, it can form the backbone of an effective 'smart growth' policy. In the latter, it is overshadowed by the urgent need to prepare vast areas for projected outward expansion. (Authors' Abstract)

Angel, S., J. Parent & D. L. Civco. 2010. The Fragmentation of Urban Footprints: Global Evidence of Sprawl, 1990-2000. Cambridge, MA: Lincoln Institute of Land Policy.

Link(s)

https://www.lincolninst.edu/pubs/dl/1835_1086_Angel%20%20Final.pdf 

Working Paper

Year: 2010

A Planet of Cities: Urban Land Cover Estimates and Projections for All Countries, 2000-2050.

We created a new data set comprising the universe of all 3,649 named metropolitan agglomerations and cities that had populations in excess of 100,000 in the year 2000, their populations in that year, and their built-up area identified in the MOD500 map, currently the best satellite-based global map of urban land cover. Using this data set, we estimated urban land cover in smaller cities and towns in all countries and calculated total urban land cover in every country in the year 2000. We then employed multiple regression models that could explain more than 90 percent of the variations in urban land cover among countries. Then, using U.N. urban population projections in combination with three realistic density change scenarios based on our previous global and historical study of densities, we projected urban land cover in every country and world region from 2000 to 2050. (Authors' Abstract)

Angel, S., J. Parent, D. Civco, A. Blei & D. Potere. 2010. A Planet of Cities: Urban Land Cover Estimates and Projections for All Countries, 2000-2050. Cambridge, MA: Lincoln Institute of Land Policy.

Link(s)

https://www.lincolninst.edu/pubs/dl/1861_1171_Angel%20III%20Final.pdf 

Working Paper

Year: 2010

The environmental factor in migration dynamics - a review of African case studies.

Claims that climate change will shape the future of global migration are continuously being made in academia as well as popular and policy circles. This paper questions the empirical basis for such claims, drawing on a critical review of 13 case studies of environmentally induced migration in the Sahel and the wider migration and development literature. (From Author's Abstract)

Jonsson, G. 2010. The environmental factor in migration dynamics - a review of African case studies. International Migration Institute, James Martin 21st Century School, University of Oxford. Working Papers, 21.

Link(s)

<http://www.imi.ox.ac.uk/pdfs/imi-working-papers/wp21-jonsson> 

Working Paper

Year: 2010

Climate Change and Migration: Considering the Gender Dimensions

The authors reviewed case studies of dry-season migration in the West African Sahel, hurricane-related population displacements in the Caribbean basin, winter migration of "snowbirds" to the US Sun-belt, and 1930s drought migration on the North American Great Plains then identified general causal, temporal and spatial dimensions of climate migration.

McLeman, Robert A. and Lori M. Hunter. 2009. Climate Change and Migration: Considering the Gender Dimensions. IBS, POP2009-14. Population Program, Institute of Behavioral Science, University of Colorado at Boulder.

Link(s)

<https://ibs.colorado.edu/pubs/pop/pop2009-0014.pdf> 

Working Paper

Year: 2009

Climate Change and Migration: Considering the Gender Dimensions

In this paper, the authors used a livelihoods framework to explore the ways in which climate change may differentially shape both migration's cause and consequence by gender.

Hunter, Lori M. and Emmanuel David. 2009. Climate Change and Migration: Considering the Gender Dimensions. IBS, POP2009-13. Population Program, Institute of Behavioral Science, University of Colorado at Boulder.

Link(s)

<https://ibs.colorado.edu/pubs/pop/pop2009-0013.pdf> 

Working Paper

Year: 2009

Addressing Environmentally Induced Population Displacements. A Delicate Task.

This background paper aims to present a concise review of relevant topics related to the cyberseminar theme, "Environmentally Induced Population Displacements," serving as a "navigation" tool and attempting to build a common ground to foster brainstorming and discussion during the seminar.

Adamo, S. B. 2008. Addressing Environmentally Induced Population Displacements. A Delicate Task. Background Paper for the Population-Environment Research Network Cyberseminar on "Environmentally Induced Population Displacements." 18-29 August 2008.

Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/sadamo_pern2008....

Conference Paper

Year: 2008

The evolution of China's in situ urbanization and its planning and environmental implications. Case studies from Quanzhou Municipality in China.

Based on case studies from Fujian Province, especially its Quanzhou Municipality where in situ urbanization is well developed, this paper demonstrates the important planning and environmental implications of in situ urbanization in China.

Zhu, Y. 2007. The evolution of China's in situ urbanization and its planning and environmental implications. Case studies from Quanzhou Municipality in China. PRIPODE Workshop on Urban Population, Development and Environment Dynamics. Nairobi, Kenya, June 11-13, 2007.

Link(s)

http://www.cicred.org/Eng/Seminars/Details/Seminars/PDE2007/Papers/YuZHU_paperNa... 

Conference Paper

Year: 2007

An Account of the High Population in Kano State, Northern Nigeria.

The principal objectives of this paper is to reveal the following: The nature and origin of population development in Kano State; The socio- cultural impulses for the maintained high population concentration in Kano State; The prospects for the sustained population growth in Kano state; To objectively inform compatriots, expatriates and professionals about the peculiar

nature of the population of Kano state; and To highlight some of the ecological risks associated with the population pressure stress in the state.

Barau, A.S. 2007. An Account of the High Population in Kano State, Northern Nigeria. Department of geography, Federal College of Education: Kano, Nigeria.

Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/Barau.pdf

Working Paper

Year: 2007

Demographic Change and Future Carbon Emissions in China and India

This paper investigates whether projected changes in the demographic characteristics of Chinese and Indian households over the next century could have a substantial influence on consumption, economic growth, energy demand, and carbon dioxide emissions. We use new household projections for China and India that model changes in population size, urbanization, and the size and age structure of households over the next 100 years. The initial economic characteristics of different household types, including demand for consumer goods, supplies of labor, and capital, are estimated from household surveys and production data for each country. A global energy-economic growth model simulates economic growth as well as changes in consumption of various goods, direct and indirect energy demand, and carbon emissions over time. Effects of demographic change are compared under different scenarios that include technical change. Results show that explicit consideration of urbanization leads to a substantial increase in projected emissions, while aging leads to a decrease. The net effect of demographic change is to increase projected emissions from China by 45% by the end of the century, and from India, by 15-35%.

Dalton, M., Jiang, L., O'Neill, B. 2007. Demographic Change and Future Carbon Emissions in China and India, presented at the Population Association of America Annual Meeting, New York, NY, March 29-31, 2007.

Link(s)

https://iiasa.ac.at/Research/PCC/pubs/dem-emiss/Daltonetal_PAA2007.pdf 

Conference Paper

Year: 2007

Household Response to Urban Encroachment on Rural Hinterland in Ogbomoso Urban Fringe.

This study focuses on the response of inhabitants of urban hinterland to city encroachment on farmlands in the peri-urban areas of Ogbomoso, a pre-colonial but rapidly urbanizing community. The Objectives of the study include: Determination of the rate, pattern and direction of city development between 1914 and 2007; Estimation of the rate of city growth and the

quantum of rural farmland absorbed by city expansion between 1914 and 2007; Evaluation of the environmental impact of growth of the city; Analysis of households and community response to city encroachment. (from Introduction).

Thompson, A. and A. Olajoke. 2007. Household Response to Urban Encroachment on Rural Hinterland in Ogbomoso Urban Fringe. PRIPODE Workshop on Urban Population, Development and Environment Dynamics. Nairobi, Kenya, June 11-13, 2007.

Link(s)

<http://www.cicred.org/Eng/Seminars/Details/Seminars/PDE2007/Papers/ADEBOYEJO%20A...>



Conference Paper

Year: 2007

Population, Urban Development and the Environment in Uganda. The Case of Kampala City and its Environs.

Uganda is experiencing rapid urbanization estimated at an annual growth rate of 5.5% where Kampala has remained a primate city since 1969 growing at annual rate of 5.61%. With this growth rate, Kampala absorbs 40% of the national urban population and 4.9% of the national population (UBOS, 2002). Kampala's growth and development is characterized by the sprawl into hitherto rural areas engulfing formerly satellite towns within a radius of 32 kilometers. The urbanized area has become metropolitan spanning approximately 386 square kilometers. But, the growth and expansion are associated with lack of infrastructure, social services and pose planning and environment problems. The challenge is how to address the problems through proactive policy and concerted effort by the city authority, government Civil society and public. This research examined the relationship between population, development and environment in Kampala and its immediate environs for policy action that would promote sustainable urbanization and development of Kampala metropolitan area. Kampala is selected because of its strategic and functional roles as a commercial, industrial, administrative, social, economic and cultural hub of Uganda. The study combined several research methods that included secondary data from various reports, and policy documents dotted around in different agencies, which have tried to address the environment and development issues of the city. Remote sensing techniques and GIS were also utilized to spatially analyze the relationships between population, development and environment with a focus on housing, industrial development and how they relate to pollution, land cover change, challenges of waste management and sanitation in the metro area of Kampala. From the study findings, it's apparent that Kampala is faced with environmental problems that are putting pressure on the existing infrastructure while the poor settlements are beset with environmental burdens that are deteriorating the well-being of the dwellers. As the environment deteriorates, so is the increase in poverty due to reliance by the urban poor on natural resources through urban agriculture, natural resource extraction, informal production and trade as coping strategies. To respond to these challenges, some policy recommendations are proposed to break the vicious circle of population, environment and poverty. (Authors' Abstract)

Nyakaana., J. B., H. Sengendo, et al. 2007. Population, Urban Development and the Environment in Uganda. The Case of Kampala City and its Environs. PRIPODE Workshop on Urban Population, Development and Environment Dynamics. Nairobi, Kenya, June 11-13, 2007.

Link(s)

http://www.cicred.org/Eng/Seminars/Details/Seminars/PDE2007/Papers/NYAKAANA_pape...



Conference Paper

Year: 2007

Urbanization and Environmental Quality: Insights from Ghana on sustainable policies.

The paper offers a policy-oriented discussion of the relationship between population, environment and economic development. Our particular focus is on the relationship between urbanization and environmental change. Their impact is often represented as strongly negative. We examine the relationship between nutrient levels in coastal lagoons, examining the degree to which these impacts are linked to population density in the watershed. We supplement this with information about environmental attitudes collected from a stratified, clustered random sample of households in six coastal districts of the Central Region. We conclude with some speculations about the implications for environmental change in the years after the Johannesburg Summit. (Authors' Abstract)

White, M. J., K. Awusabo-Asare, et al. 2007. Urbanization and Environmental Quality: Insights from Ghana on sustainable policies. PRIPODE Workshop on Urban Population, Development and Environment Dynamics. Nairobi, Kenya, June 11-13, 2007.

Link(s)

http://www.cicred.org/Eng/Seminars/Details/Seminars/PDE2007/Papers/White-etal_Ur...

Conference Paper

Year: 2007

Brazzaville, croissance urbaine et problèmes environnementaux/Brazzaville.

In this work, it is a question of putting action on the environmental problems in relation to spatial and demographic growth of the town of Brazzaville. The evolution of the space and demographic of Brazzaville, comes along with a degradation of the environment: i) The occupation of the unhealthy spaces; ii) the quality of the environment; iii) the security; iv) the access to the essential services (water, energy); v) the pollution of air, some water and the ground. (Authors' Abstract)

Samba, G. and M. Patrice. 2007. Brazzaville, croissance urbaine et problèmes environnementaux/Brazzaville. Urban Growth and Environmental Problems. PRIPODE

Workshop on Urban Population, Development and Environment Dynamics. Nairobi, Kenya, June 11-13, 2007.

Link(s)

http://www.cicred.org/Eng/Seminars/Details/Seminars/PDE2007/Papers/SambaGASTON_p...

Conference Paper

Year: 2007

Mobility, Urban Sprawl and Environmental Risks in Brazilian Urban Agglomerations: Challenges for the Urban Sustainability in a Developing Country.

This paper discusses the recent changes that have occurred in Brazilian urban agglomerations, arguing that population mobility (migration and commuting) play an important role in determining demographic changes, in particular sprawl-like urbanization processes. (From Introduction)

Ojima, R. and D. J. Hogan. 2007. Mobility, Urban Sprawl and Environmental Risks in Brazilian Urban Agglomerations: Challenges for the Urban Sustainability in a Developing Country. PRIPODE Workshop on Urban Population, Development and Environment Dynamics. Nairobi, Kenya, June 11-13, 2007.

Link(s)

http://www.cicred.org/Eng/Seminars/Details/Seminars/PDE2007/Papers/Programme_Urb...

Conference Paper

Year: 2007

Economy, Population and Urban Sprawl A Comparative Study of Urban Agglomerations of Bangalore and Hyderabad, India using Remote Sensing and GIS Technique.

In India, big cities and urban agglomerations have been the magnets that attract investment, which leads to development of industrial and service sector, employment generation, migration and population growth. Expanding industries like manufacturing, construction, trade and service of all kinds opens avenues of employment and has become the pull factor for the ever-increasing migration. The present study brings out the association between investment patterns, economic activities, migration, and land use changes in urban agglomerations of Bangalore and Hyderabad (1971- 2001), to bring out the population aspect and its effect on land use in spatial perspective using Remote Sensing and GIS Techniques. (Authors' Abstract)

Iyer, N. K., S. Kulkarni, et al. 2007. Economy, Population and Urban Sprawl A Comparative Study of Urban Agglomerations of Bangalore and Hyderabad, India using Remote Sensing and GIS Technique. PRIPODE Workshop on Urban Population, Development and Environment Dynamics. Nairobi, Kenya, June 11-13, 2007.

Link(s)

http://www.cicred.org/Eng/Seminars/Details/Seminars/PDE2007/Papers/IYER_Neelakan...

Conference Paper

Year: 2007

Social Change, Community Context, Land Use, and First Birth Timing in an Agricultural Setting

The dramatic changes in earth's landscape have prompted increased interest in the links between population and land use and land cover. Previous research emphasized the notion of population pressure (population pressure increases demands on natural resources causing land use change), overlooking the potentially important effect of changes in land use on humans. Using multiple data sets from the Chitwan Valley Family Study in Nepal, we test competing hypotheses about the impact of land use on first birth timing. We argue that while agricultural land should encourage early childbearing, land area devoted to public infrastructure should discourage it. The results show that individuals from neighborhoods with larger proportions of land under agriculture experienced first birth at rates higher than those from neighborhoods with smaller proportions. On the other hand, individuals from neighborhoods with larger proportions of land under public infrastructure experienced first birth at rates lower than those from neighborhoods with smaller proportions. (Authors' Abstract)

Ghimire, D. J. and L. Hoelter. 2006. Social Change, Community Context, Land Use, and First Birth Timing in an Agricultural Setting, presented at Population Association of America 2006 Annual Meeting. Los Angeles, CA. March 30 - April 1, 2006.

Link(s)

<https://paa2006.populationassociation.org/abstracts/60188>,

<https://paa2006.populationassociation.org/papers/60188>

Conference Paper

Year: 2006

Anthropogenic Environmental Change and Emerging Infectious Disease: A Proximate-Determinants Approach

While there are innumerable pathways between human agency and disease emergence, all these paths must pass through a finite number of proximate determinants. Using the combined formalism of mathematical epidemiology and theoretical community ecology, we present an analysis of these proximate determinants and discuss how both intrinsic population features (e.g., mortality and fertility, age-structure, population growth or decline) and behavioral features (e.g., consumer preferences, consumption patterns, environmental policy) contribute to disease emergence. Disease emergence is essentially a problem in invasive-species ecology. Population growth (and the size of populations) plays a role in community dynamics associated with successful invasion. However, other factors such as interaction strength in the community matrix, play roles at least as important as the population growth of any given species in the

community. Two dimensions of proximate determinants are particularly salient: (1) the identity of the invading species (i.e., humans, pathogen, vector); and (2) the evolutionary status of the pathogen. (Authors' abstract)

Jones, J. H. and W. H. Durham. 2006. Anthropogenic Environmental Change and Emerging Infectious Disease: A Proximate-Determinants Approach, presented at Population Association of America 2006 Annual Meeting. Los Angeles, CA. March 30 - April 1, 2006.

Link(s)

<https://paa2006.populationassociation.org/abstracts/60156> 

<https://paa2006.populationassociation.org/papers/60156> 

Conference Paper

Year: 2006

Child Malnutrition and the Environment: How Women's Work in Collecting Environmental Goods Affects Children's Health in Malawi

Half of Malawi children are stunted. Malawi also has a high infant mortality rate. Malnutrition contributes to this problem and to lower children's education. Several studies have analyzed determinants of malnutrition in Africa. However few have analyzed the link between the environment and malnutrition. This paper contributes to this scanty literature using data from 1997-98 Malawi national survey. Determinants of stunting are estimated using a probit model that includes water and fuel wood collection hours among explanatory variables. Longer water collection hours are associated with increased probability of child stunting while women's self-employment is associated with lower probability of stunting. A multinomial logit model of women's choice of main activity is also estimated. Women in degraded areas are less likely to be self-employed. These results imply that environmental degradation contributes to child's lower nutrition by increasing women's time spent on environmental goods collection and by lowering women's participation in income-generating activities. (Authors' abstract)

Nankhuni, F. J. and J. L. Findeis. 2006. Child Malnutrition and the Environment: How Women's Work in Collecting Environmental Goods Affects Children's Health in Malawi, presented at Population Association of America 2006 Annual Meeting. Los Angeles, CA. March 30 - April 1, 2006.

Link(s)

<https://paa2006.populationassociation.org/abstracts/61275> 

<https://paa2006.populationassociation.org/papers/61275> 

Conference Paper

Year: 2006

National trends in population, resources, environment and development: Country profiles

This publication provides a set of country profiles showing the current situation and recent trends in population, resources, environment and development indicators, based on PRED Bank database, version 4 (2005). (from DESA Publication website)

Department of Economic and Social Affairs Population Division. 2006. National trends in population, resources, environment and development: Country profiles. ESA/P/WP.196. New York, United Nations.

Link(s)

<https://www.un.org/esa/population/publications/countryprofile/index.htm> 

Working Paper

Year: 2006

A Demographic Dynamics System for Municipalities in the Brazilian Amazon

Population growth and migration represent an important underlying cause of deforestation in the Brazilian Amazon. Models designed to simulate deforestation should therefore incorporate a demographic dynamics system to help project the rates of deforestation across the basin. We present a demographic model that projects population at municipality level by computing migratory movement among Amazonian municipalities, both in and out of the region, as well as their crude birth and mortality rates. The annual projections from 1995 to 2035 are based mainly on mortality, fertility, and migration data from the 1991 and 2000 IBGE censuses. The migratory movement was determined by establishing an origin-destination matrix for all the Amazonian municipalities and Brazilian states from 1995 to 2000. Validation was performed by comparing the model output with 2000 IBGE data. The model is designed to handle various scenarios of regional migration in face of existing projects to expand infrastructure across the Amazon. (Authors' Abstract)

Garcia, R. A. and B. Soares-Filho. 2006. A Demographic Dynamics System for Municipalities in the Brazilian Amazon, presented at Population Association of America 2006 Annual Meeting. Los Angeles, CA. March 30 - April 1, 2006.

Link(s)

<https://paa2006.populationassociation.org/abstracts/61471> ,

<https://paa2006.populationassociation.org/papers/61471> 

Conference Paper

Year: 2006

Where Are the Poor and Where Are the Trees? Targeting of poverty reduction and forest conservation in Vietnam

Using country-wide spatial data on commune-level poverty estimates and the geographic distribution of forest quality, the authors examined the spatial linkages between forest quality and poverty incidence and poverty density.

Müller, D., Epprecht, M., Sunderlin, W.D. 2006. Where Are the Poor and Where Are the Trees? Targeting of poverty reduction and forest conservation in Vietnam. CIFOR Working Paper No. 34. Jakarta, Indonesia, Center for International Forestry Research.

DOI: <https://dx.doi.org/10.17528/cifor/002026>

Link(s)

https://www.cifor.org/publications/pdf_files/WPapers/WP-34.pdf,

<https://www.cifor.org/knowledge/publication/2026/>

Working Paper

Year: 2006

How environmental migrants choose their place of destination in Burkina Faso?

Burkina Faso is characterized by intense mobility. For several decades, harsh natural conditions have caused large population movements characterized, to a large extent, by "environmental refugees". Very few studies have tackled the factors determining the destination of migration. The objective of this study is to understand how environmental migrants choose their destination compared to economic migrants. We aim to test three hypotheses in the Burkinabè context: (i) a favourable natural environment is a pull factor of major importance for migrants; (ii) the economic diversification of villages attracts migrants; and (iii) the level of equipment and infrastructure are not major factors in migrants' destination choice. Our study involves a combination of demographic and geographic methods. Research is based upon multi-level event-history analysis using an exceptional set of retrospective data, including a national survey on migration, a longitudinal community survey and other geo-coded data generated by GIS (e.g. rainfall data). (Authors' Abstract)

Henry, S. J. F. and R. Bilsborrow. 2006. How environmental migrants choose their place of destination in Burkina Faso? European Population Conference 2006. Liverpool, UK, June 21-24, 2006.

Link(s)

<https://epc2006.eaps.nl/abstracts/60302>, <https://epc2006.eaps.nl/papers/60302>

Conference Paper

Year: 2006

Population Dynamics and the Environment: Examining the Natural Resource Context of the African HIV/AIDS Pandemic

There is a lack of research on the interaction between demographic dynamics and household natural resource use in less developed regions. This information is especially important, however, given the centrality of the environment within rural livelihoods. Further, natural resources act as a buffer against household shocks, offering a potential means of generating income and/or meeting dietary needs. Herein, we focus on HIV/AIDS mortality as a household shock in rural South Africa; We contrast household resource use across households characterized

by the death of a household member aged 15-49 relative to those without such mortality. As examples of potential impacts, the loss of an adult household member may yield changes as related to resource use resultant of lost income and/or lost labor; each entails opportunity costs with regard to the time allocation of remaining household members. The results contribute to our emerging understanding of the environmental dimensions of the HIV/AIDS pandemic. (Authors' Abstract)

Hunter, L. M., W. Twine, et al. 2006. Population Dynamics and the Environment: Examining the Natural Resource Context of the African HIV/AIDS Pandemic, presented at Population Association of America 2006 Annual Meeting. Los Angeles, CA. March 30 - April 1, 2006.

Link(s)

<https://paa2006.populationassociation.org/abstracts/60626> 

<https://paa2006.populationassociation.org/papers/60626> 

Conference Paper

Year: 2006

An IPAT-type Model of Environmental Impact Based on Stochastic Differential Equations

This work adds to the literature examining human-driven climate change within the framework of IPAT-based models. Starting from the well-known IPAT identity, we develop a stochastic differential equations model that describes the trend of the environmental impact, expressed as CO₂ emissions, on the basis of the dynamics of population and affluence. Our theoretical scheme has then been used to develop a model for the assessment of the costs that a country has to bear, if committed to respect an international agreement on emissions reduction. We show that the adherence to an environmental treaty may be traced back to a problem of cost valuation in a risk situation: this allows us to exploit the mathematical tools developed in the field of finance to determine the expected investment that a country is supposed to make in order to reduce its emissions of a certain amount, within a well-defined temporal frame. (Authors' abstract)

Zagheni, E. and F. C. Billari. 2006. An IPAT-type Model of Environmental Impact Based on Stochastic Differential Equations, presented at Population Association of America 2006 Annual Meeting. Los Angeles, CA. March 30 - April 1, 2006.

Link(s)

<https://paa2006.populationassociation.org/abstracts/60753> 

<https://paa2006.populationassociation.org/papers/60753> 

Conference Paper

Year: 2006

Demographic profile of economic resources and environment in South Asia

The south Asia region - Afganistan, Bangladesh, Bhutan, India, Maldives, Pakistan, Nepal, Sri-Lanka-possesses an extra ordinary diversity of landforms and climatic regimes. Deepening nature of poverty and its impact on the process of environmental degradation is one of the major concerns in this area. In this context the countries of region need to examine carefully the development option available to them and cooperate in designing strategies, which promote the sustainable development. Accordingly, first part of this paper deals with the state of south Asian economy and environment and the second part examines a few likely scenarios of long term economic growth, foreign investment, and demographic change and their implications for regional economic relationship. Results demonstrated that south Asian countries are at a turning point to achieve 6 to 7 percent growth rate however a poor social infrastructure and the low level of human resource development will impose severe constraints. (Author's abstract)

Pradhan, J. 2005. Demographic profile of economic resources and environment in South Asia, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/51977> , <https://iussp2005.princeton.edu/papers/51977>



Conference Paper

Year: 2005

Science for Global Sustainability: Toward a New Paradigm.

The authors outline a transdisciplinary science that has emerged as a response to unprecedented planetary-scale challenges.

Clark, William C.; Crutzen, Paul J.; Schellnhuber, Hans J. 2005. Science for Global Sustainability: Toward a New Paradigm. CID Working Paper No. 120 .

Link(s)

https://www.hks.harvard.edu/var/ezp_site/storage/fckeditor/file/pdfs/centers-pro... 

Working Paper

Year: 2005

Household life cycle and land use in Santarém and Altamira, Pará, Brasil

This paper extends the household life cycle model of land use in the Amazon. We add larger scale socioeconomic factors in this microlevel model by comparing study areas. Altamira is a settlement area on the TransAmazon highway with regular lots and (non-indigenous) settlement beginning in the 1970s. Santarém is characterized by irregularly shaped and sized properties resulting from spontaneous settlement over a longer period. In each study area, we use graphical and regression methods to examine the relationships between land use / land cover and time since household formation, household age-sex composition, and time since acquisition of the lot

by the household. Land use / land cover is measured using survey data and satellite data to test the stability of results between these two measurement strategies. We then compare the results of these models across study areas to determine the impact of differences in development between the two areas. (Authors' abstract)

Van Wey, L. K., A. O. D'Antona, et al. 2005. Household life cycle and land use in Santarém and Altamira, Pará, Brasil, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/52212> , <https://iussp2005.princeton.edu/papers/52212>



Conference Paper

Year: 2005

Farmers from Tarija (Bolivia) to Cordoba (Argentina): migration processes and environmental factors. (Les agriculteurs de Tarija (Bolivie) à Cordoba (Argentine) : processus migratoire et facteurs environnementaux)

Córdoba, deuxième ville d'Argentine, a commencé à recevoir des immigrants boliviens vers la fin des années 1960. Ces immigrants ont été employés principalement dans le secteur du bâtiment et dans la vente des fruits et légumes sur les marchés de quartier. Dès le début des années 1980, on observe l'amorce d'un nouveau type de mobilité : les agriculteurs saisonniers originaires de Tarija qui s'installent dans la ceinture verte. Le but de cette communication est de présenter les caractéristiques générales du processus migratoire des agriculteurs de Tarija à Córdoba, en essayant d'incorporer l'environnement des lieux d'origine comme facteur contribuant aux déplacements. Nous nous intéressons également à la relation que ces agriculteurs établissent avec l'environnement sur le lieu d'arrivée. Il s'agit d'une étude qui repose sur une enquête et des entretiens réalisés à Córdoba et à Tarija entre 1999 et 2002. (Author's abstract)

Gareri, V. L. 2005. Farmers from Tarija (Bolivia) to Cordoba (Argentina): migration processes and environmental factors. (Les agriculteurs de Tarija (Bolivie) à Cordoba (Argentine) : processus migratoire et facteurs environnementaux), presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/50917> , <https://iussp2005.princeton.edu/papers/50917>



Conference Paper

Year: 2005

Comunidades indígenas y conservación de los bosques.

En el estudio se realiza una breve discusión teórica sobre los distintos enfoques que analizan la relación entre población y medio ambiente, posteriormente, presenta evidencia empírica de esta relación mediante un estudio de caso, en una comunidad indígena zapoteca del estado de Oaxaca en México, donde la fortaleza institucional local ha permitido la conservación de los recursos forestales mediando las condiciones de pobreza y la presión sobre los recursos, derivada del alto crecimiento poblacional, especialmente durante la década de los ochenta. El estudio analiza ¿cuáles han sido los patrones de crecimiento de la población y por qué se han dado? ¿Cuál ha sido la relación entre crecimiento poblacional y estado de los recursos forestales? ¿qué papel han jugado las instituciones comunitarias en la mediación entre crecimiento poblacional y conservación de los bosques? ¿Cuáles son las reglas para el uso y manejo del bosque? ¿cuál es el nivel de dependencia que tiene la población del bosque? ¿cuál es el estado de los recursos? El estudio concluye relativizando los planteamientos neomalthusiano y el de la tragedia de los comunes de Hardin. (Author's abstract)

Patiño Pascumal, L. I. I. 2005. Comunidades indígenas y conservación de los bosques, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/52207> , <https://iussp2005.princeton.edu/papers/52207>



Conference Paper

Year: 2005

The distribution of people and the dimension of place: methodologies to improve the global estimation of urban extents

What is known about the urban world is largely derived from local knowledge. This paper showcases substantial efforts at new data integration with existing technologies to develop a new suite of global datasets on urban population and extents. These new databases far surpass past efforts to construct a systematic global database of urban areas by combining census and satellite data and methods of analysis, in an integrated geospatial framework. The resulting data allow for inquiry into analysis urban issues and population by environmental and other ecological characteristics in novel ways. This paper focuses on the methodologies employed to construct these new datasets. Summary results regarding population distribution at continent- and global-levels are also given, , as well as suggestions for future research. (Authors' Abstract)

Balk, D., F. Pozzi, et al. 2005. The distribution of people and the dimension of place: methodologies to improve the global estimation of urban extents, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/51096> , <https://iussp2005.princeton.edu/papers/51096>



Conference Paper
Year: 2005

Mortality as a factor shaping household use of natural resources in rural South Africa

There is a lack of research on the interaction between demographic dynamics and household natural resource use in less developed regions. This information is especially important, however, given the centrality of the environment within rural livelihoods. Further, natural resources act as a buffer against household shocks, offering a potential means of generating income and/or meeting dietary needs. Herein, we focus on HIV/AIDS mortality as a household shock in rural South Africa; We contrast household resource use across households characterized by the death of a household member aged 15-49 relative to those without such mortality. As examples of potential impacts, the loss of an adult household member may yield changes as related to resource use resultant of lost income and/or lost labour; Each entails opportunity costs with regard to the time allocation of remaining household members. The results contribute to emerging understanding of the environmental dimensions of the HIV/AIDS pandemic. (Authors' Abstract)

Hunter, L. M., W. Twine, et al. 2005. Mortality as a factor shaping household use of natural resources in rural South Africa, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/papers/50320> , <https://ipc2005.popconf.org/abstracts/50320> 

Conference Paper

Year: 2005

Urbanisation, development, and environmental quality: insights from coastal Ghana.

Urbanization and migration are repeatedly implicated in environmental change. Their impact is often represented as strongly negative. Our objective is to examine the connection, with special attention to the case of Ghana. The paper first characterizes the issue, drawing on a current comparison of a low and high income setting. We then present preliminary results for nutrient levels in several coastal lagoons, examining the degree to which these impacts are linked to nearby human settlement. The paper then turns to demographic behaviour at the level of the individual and the household. We use primary survey data collected from a stratified, clustered random sample of households in six coastal districts of the Central Region of Ghana. Employing standard regression methods, we use these data to present evidence about urbanization, fertility, behaviour, health, and environmental attitudes. The paper concludes with a policy-oriented discussion of the relationship between population, environment and economic development. (Authors' abstract)

White, M. J. and S. Nixon. 2005. Urbanisation, development, and environmental quality: insights from coastal Ghana, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/50771> , <https://iussp2005.princeton.edu/papers/50771>



Conference Paper

Year: 2005

Integrating projections of households, energy use and carbon emissions for the United States

We explore whether expected changes in the age and size composition of U.S. households over the next 25-100 years could have a substantial influence on total energy demand and emissions of carbon dioxide, the most important greenhouse gas. We introduce 12 types of households, classified by age and size, into the U.S. region of the Population-Environment-Technology (PET) model, a dynamic multi-region computable general equilibrium model of energy and economic growth. The PET model translates consumption of various goods into demand for energy, other inputs, and carbon emissions. Classification of households, benchmark demand for consumer goods, and benchmark supplies of labour and capital are determined through an analysis of Consumer Expenditure Survey data. We use the ProFamy model to develop household projections for the 12 household types, and integrate these into the PET model. Our results demonstrate that demographic heterogeneity can substantially affect energy use and long-term carbon emissions. (Authors' Abstract)

Dalton, M., B. C. O'Neill, et al. 2005. Integrating projections of households, energy use and carbon emissions for the United States, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://ipc2005.popconf.org/abstracts/52096> , <https://iussp2005.princeton.edu/papers/52096> 

Conference Paper

Year: 2005

Methods of analysing the population-environment relationship: from numbers to systems. (Les méthodes d'analyse de la relation population-environnement : des nombres aux systèmes)

La prise de conscience de la complexité des relations population-environnement a donné lieu récemment à un essai de classification systématique de celles-ci, permettant de rendre compte de la grande diversité des méthodes employées dans ce champ scientifique. Notre communication s'inscrit dans le prolongement de cette réflexion méthodologique. Dans une première partie, nous présenterons une typologie alternative des approches de la relation population-environnement,

fondée sur une dichotomie nombres-systèmes. Dans une seconde partie, nous privilégierons une démarche systémique d'analyse de cette relation, en identifiant les échelles spatiales et temporelles pertinentes pour rendre compte des comportements et stratégies des différents acteurs. Deux modèles seront proposés : le premier -« action-réaction-réaction »- d'un effet de la population sur l'environnement engendrant une réaction environnementale susceptible de donner lieu à des réponses sociétales d'adaptation ; le second -« choc-réaction », permettant d'envisager des perturbations écologiques exogènes (catastrophes naturelles) et les réactions possibles des populations à celles-ci. (Authors' Abstract)

Codur, A.-M. and J. Véron. 2005. Methods of analysing the population-environment relationship: from numbers to systems. (Les méthodes d'analyse de la relation population-environnement : des nombres aux systèmes), presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/51910> , <https://iussp2005.princeton.edu/papers/51910>



Conference Paper

Year: 2005

Development, population, climate change: some painful conclusions

This paper makes six points. First, economic development has been, and in the foreseeable future will be, mainly based on the burning of fossil fuels; there is little alternative. Second, due to momentum in population, economic and, above all, climate processes, it is inevitable that there will be major increases in atmospheric CO₂ and, as a consequence, global temperatures during the present century. Third, future global warming could well be very rapid indeed; positive feedback must be considered as likely as negative feedback. Fourth, major climate change is probably unavoidable now; and there is a significant chance that it could be abrupt. Fifth, responses like avoidance, denial, and blame are natural and predictable human reactions; scientific research on the subject is hindered by the problem of segmentation. Finally, the demographic and other social consequences for a world of nine or so billion are likely to be truly immense. (Author's Abstract)

Dyson, T. 2005. Development, population, climate change: some painful conclusions, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/50222> , <https://iussp2005.princeton.edu/papers/50222>



Conference Paper

Year: 2005

Medio ambiente y hogares de migrantes hacia y desde la ciudad de México

La ciudad de México representa uno de los ejemplos más claros de las malas condiciones ambientales de las megalópolis de países en desarrollo. Incluso, dichas condiciones fueron parcialmente vinculadas al saldo neto migratorio negativo reportado en el censo del año 1990, como resultado de la reversión de los flujos migratorios que tradicionalmente se dirigían a la capital del país. Los datos censales del 2000, sin embargo, reportaron que la emigración se desaceleró y que la inmigración pudiera estar ganando dinamismo. La relación que esta situación podría tener con las condiciones ambientales, depende de las características demográficas y socioeconómicas de los migrantes hacia y desde la ciudad, pero no sólo como individuos aislados, sino de los hogares a los que pertenecen. En la ponencia se presentará la evolución de las principales variables ambientales durante la última década, así como las características demográficas y socioeconómicas de los hogares y viviendas de los migrantes hacia y desde la ciudad de México, con base en los datos de la muestra del 10% del censo del año 2000. (Author's Abstract)

Izazola, H. 2005. Medio ambiente y hogares de migrantes hacia y desde la ciudad de México, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/50766> , <https://iussp2005.princeton.edu/papers/50766>



Conference Paper

Year: 2005

Continental physiography, climate and the global distribution of human population

Geographically indexed moderate-resolution demographic and geophysical data are combined to quantify the spatial relationships between population and basic geophysical parameters of continental physiography and climate. We describe the localization of human population with respect to elevation, coastal proximity, regional temperature and precipitation. A global compilation of census data specifies the population distribution to a median spatial resolution of 31 km. Local population densities span more than six orders of magnitude. 50% of the global population occupies less than 3% of Earth's habitable land area. Average population densities are 3-4 times higher at low elevations and near coasts than inland; 38 percent of the 1990 population lived within 100 km of a sea coast. Inland population densities are highest in topographic basins where conditions are suitable for agriculture. Population distribution is more uniform with respect to climatic parameters. Average population density increases significantly in regions with high seasonal variability in precipitation. (Authors' Abstract)

Cohen, J. E. and C. Small. 2005. Continental physiography, climate and the global distribution of human population, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://lab.rockefeller.edu/cohenje/PDFs/285Smallcohen.pdf> ,
<https://iussp2005.princeton.edu/abstracts/50236> , <https://iussp2005.princeton.edu/papers/50236>



Conference Paper

Year: 2005

Refugees, Climate Change, and Instability.

This paper has examined a number of pathways through which environmental stresses, brought about by global warming, may lead to migration, which in turn may lead to conflict in receiving areas.

Salehyan, I. 2005. Refugees, Climate Change, and Instability, paper presented at the Human Security and Climate Change, An International Workshop. Holmen Fjord Hotel, Asker, near Oslo, 21-23 June 2005.

Link(s)

https://www.researchgate.net/publication/254982049_Refugees_Climate_Change_and_I... 

Conference Paper

Year: 2005

Migration dynamics in Brazil's major biomes

Based on initial considerations on the differences among biomes, this paper asks questions on population movements within and between biomes. With a view to identifying where population-environment relations are more or less favourable, the paper asks: What are the major inter-biome streams? Which biomes have the greatest internal mobility? The conclusion is that favourable trends in population processes will only produce favourable results if land-use planning allocates population in favourable sites and if economic development is based on environmental considerations. Conclusions do not fit current assumptions on regional development because attention is given only to population growth and not its distribution. (Author's Abstract)

Hogan, D. J. 2005. Migration dynamics in Brazil's major biomes, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/51543> , <https://iussp2005.princeton.edu/papers/51543>



Conference Paper

Year: 2005

Sao Paulo peri-urban dynamics: some social causes and environmental consequences

There has been great expectation that the decline in São Paulo rate of growth would positively impact this metropolis, reducing the need for public investment and its environmental disruptions. However, such expectation is misguided. Although the growth rate has declined, such an impact has not happened: while the centre of the city is losing population, the peri-urban areas are growing fast (6% per year in the 90s). Consequently, the region still demands strong public investments in infrastructure, followed by considerable environmental impacts. The objective of this paper is to first understand why this intra-urban dynamic is happening. We intend to show that the city is losing population exactly in the same places where real state investments are growing more significantly. Secondly, we intend to explore the environmental consequences of this pattern of urban sprawl - such as the occupation of environmentally protected areas - presenting data on forest coverage reduction. (Authors' abstract)

Torres, H., H. Alves, et al. 2005. Sao Paulo peri-urban dynamics: some social causes and environmental consequences, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/50266> , <https://iussp2005.princeton.edu/papers/50266>



Conference Paper

Year: 2005

Demographic dynamics and socio-economic development as drivers of deforestation in the Brazilian Atlantic forest: a GIS integration of census and remote sensing data at different spatial scales

In this paper, I will present and discuss the methodology and the main findings of my doctoral dissertation, submitted in February 2004 at University of Campinas-UNICAMP, Brazil, with Dr. Daniel Hogan as advisor. In this study, we do an analysis of the socio-demographic factors associated with land cover change and deforestation processes in the Ribeira Valley watershed, a region that concentrates the biggest remnants of the Brazilian Atlantic Forest. The main objective is to analyze the role of demographic dynamics and socio-economic development upon deforestation processes, in the last 25 years, at regional, municipal, district and census tracts levels. We also look at role of conservation units and topography on deforestation. The methodology for the analysis is the integration of socio-demographic data (from Brazilian demographic census - 1991 and 2000) and land cover change data (from satellite images - Landsat TM), at different levels of aggregation (spatial scales), in a geographic information system (GIS). (Author's Abstract)

Alves, H. 2005. Demographic dynamics and socio-economic development as drivers of deforestation in the Brazilian Atlantic forest: a GIS integration of census and remote sensing data

at different spatial scales, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/50825>, <https://iussp2005.princeton.edu/papers/50825>



Conference Paper

Year: 2005

Appreciating the Complexity and Dignity of People's Lives: Integrating Population-Health-Environment Research in Petén, Guatemala

The paper describes the context and history of the development of a new environmental module for Guatemala's Demographic and Health Survey (DHS). The module was developed by a team of researchers to analyze the rapidly changing population-environment dynamics in Petén, a frontier region in the northern part of the country.

Grandia, L. 2005. Appreciating the Complexity and Dignity of People's Lives: Integrating Population-Health-Environment Research in Petén, Guatemala. FOCUS (10). Washington DC, Environmental Change and Security Program. Woodrow Wilson Center.

Link(s)

<https://www.wilsoncenter.org/publication/issue-10-appreciating-the-complexity-an...>

https://www.wilsoncenter.org/sites/default/files/Focus_Issue10.pdf

Working Paper

Year: 2005

Multilevel determinants of indigenous land use in the northern Ecuadorian Amazon: a cross-cultural study

Agricultural extensification is the world's primary proximate cause of tropical deforestation, and population-environment research has addressed this issue through studies of land use by smallholder agriculturalists at tropical forest frontiers. In part due to their isolation, these methods have not been applied to populations of indigenous peoples who inhabit frontier forests, despite recognition of their important role in conservation efforts and ongoing transformations of their traditional livelihoods. We analyze data from a 2001 household survey of five indigenous populations in the Northern Ecuadorian Amazon, with the goal of understanding processes of extensification and intensification affecting traditional swidden-fallow agriculture. Using multi-level models, we investigate the demographic, geographic, ecological and socio-economic determinants at household and community levels of the size and composition of agricultural plots, including the effect of ethnicity. The results should have important implications for conservation and development policy in indigenous territories throughout the Amazon basin. (Authors' Abstract)

Gray, C. L., J. Bremner, et al. 2005. Multilevel determinants of indigenous land use in the northern Ecuadorian Amazon: a cross-cultural study, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/52269> , <https://iussp2005.princeton.edu/papers/52269>



Conference Paper

Year: 2005

Do migrants degrade coastal environments? Migration, natural resource extraction and poverty in North Sulawesi, Indonesia

Recent literature on migration and the environment has identified key mediating variables such as how migrants extract resources from the environment for their livelihoods, the rate and efficiency of extraction, and the social and economic context within which their extraction occurs. This paper tests these theories in a new ecological setting using data from coastal fishing villages in North Sulawesi, Indonesia. We do not find as many differences between migrant and non-migrant families regarding destructive fishing behavior, technology and investment as might have been expected from earlier theories. Instead, the context and timing of migrant assimilation seems to be more important in explaining apparent associations of migration and environmental impacts than simply migrants themselves. This finding fits well with recent literature in the field of international migration and immigrant incorporation. (Author's Abstract)

Cassels, S. L. 2005. Do migrants degrade coastal environments? Migration, natural resource extraction and poverty in North Sulawesi, Indonesia, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/51972> , <https://iussp2005.princeton.edu/papers/51972>



Conference Paper

Year: 2005

Environmental security and labour migration in Nepal

Drawing upon the new economics of migration, this paper empirically examines if changes in environmental security resulting from declining access to forest resources such as firewood shape labor migration in Nepal. The results from multinomial logistic regression models using the micro-level data from the Chitwan Valley of Nepal showed that, net of other factors, a decrease in access to forest resources increased the likelihood of migration of individual(s) for work regardless of destination, domestic or international. Results provide evidence that

environmental insecurity leads to labor migration in an agrarian society where household production and consumption activities are intimately dependent on environmental resources. The research findings also suggest that labor requirements for household maintenance also play a role in household migration decision. (Authors' abstract)

Shrestha, S. S. and P. B. Bhandari. 2005. Environmental security and labour migration in Nepal, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/52252> , <https://iussp2005.princeton.edu/papers/52252>



Conference Paper

Year: 2005

Internal female labour migration, agricultural productions and potential of environmental degradation in a densely populated rural region (Western high lands of Cameroon)

The actual state of agrarian system in the west high lands region of Cameroon and the social relations which hold them are the results of a long historical processes. Agriculture is the mainstay of this region. It provides food, employment and monetary resources to its population. But this area is also lack of suitable lands comparing to its rapid population growth. This study is an explanatory analysis of evaluation of socio-economic context of agricultural production as to put in evidence the role of rural female labours migrations. This research identifies the relations existing between, demographic growth, labour rural female migrations, agricultural production and the degradation of the vegetal cover and the soils in a densely populated rural areas. This case study on the problem, in a region and a society well circumscribed shows that demographic growth which patterns are rural migrations and food productions is directly responsible for the infertility of soils, and environmental degradation .The actual state of agrarian system in the west high lands region of Cameroon and the social relations which hold them are the results of a long historical processes. Agriculture is the mainstay of this region. It provides food, employment and monetary resources to its population. But this area is also lack of suitable lands comparing to its rapid population growth. This study is an explanatory analysis of evaluation of socio-economic context of agricultural production as to put in evidence the role of rural female labours migrations. This research identifies the relations existing between, demographic growth, labour rural female migrations, agricultural production and the degradation of the vegetal cover and the soils in a densely populated rural areas. This case study on the problem, in a region and a society well circumscribed shows that demographic growth which patterns are rural migrations and food productions is directly responsible for the infertility of soils, and environmental degradation .The actual state of agrarian system in the west high lands region of Cameroon and the social relations which hold them are the results of a long historical processes. (Author's Abstract)

Kelodjoue, S. 2005. Internal female labour migration, agricultural productions and potential of environmental degradation in a densely populated rural region (Western high lands of

Cameroon), presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://iussp2005.princeton.edu/abstracts/50175>, <https://iussp2005.princeton.edu/papers/50175>



Conference Paper

Year: 2005

Human fertility declines with higher population density

Reproduction has been found to decline with increasing population density in a wide variety of species, yet demographers have not given systematic attention to density as a relevant factor in human reproduction. If human fertility also depends on population density, this has important implications for population projections, which conventionally ignore heterogeneity and assume universal convergence of fertility rates. We examine the relationship between population density and fertility in 145 countries since 1960, by using cross-sectional and time-series regression models controlling for some important social and economic variables. In all models we find strong and significant negative associations between density and fertility. In addition, we find that fertility preferences (ideal family size) decline with higher density across 54 regions of Europe. Our findings alter the way we think about future fertility and human population growth. (Authors' abstract)

Lutz, W., M. R. Testa, et al. 2005. Human fertility declines with higher population density, presented at the International Union for the Scientific Study of Population XXV International Population Conference. Tours, France, July 18-23, 2005.

Link(s)

<https://ipc2005.popconf.org/abstracts/51659>, <https://iussp2005.princeton.edu/papers/51659>

Conference Paper

Year: 2005

Sustainability Values, Attitudes, and Behaviors: A Review of Multi-national and Global Trends.

The authors summarize global-scale surveys related to population, affluence, technology, and entitlements with particular attention to how the results bear on the Millennium Declaration. Gaps and barriers are identified.

Leiserowitz, Anthony A.; Kates, Robert W.; Parris, Thomas M. 2004. Sustainability Values, Attitudes, and Behaviors: A Review of Multi-national and Global Trends. CID Working Paper No. 113.

Link(s)

https://www.hks.harvard.edu/var/ezp_site/storage/fckeditor/file/pdfs/centers-pro... 

Working Paper

Year: 2004

Demographic, economic, and political determinants of land development in the U.S.

Using linear and semi-quadratic fixed-effects models, the author concludes that land development is induced by increases in average state population and the average annual growth rate of real non-agricultural and non-mining output per capita during the previous five years induced land development.

Templeton, S. R. 2004. Demographic, economic, and political determinants of land development in the U.S. Selected short paper prepared for presentation at the Annual Meeting of the American Agricultural Economics Association in Denver CO, July 1-4, 2004.

Link(s)

<http://purl.umn.edu/20052> 

Conference Paper

Year: 2004

The spatial patterns and root causes of land use change in East Africa

The purpose of this report is to synthesise findings on the patterns and processes of land use and land management change, and their root causes. For this study, six sites in three countries - Kenya, Tanzania, and Uganda, were examined.

Olson, J. M., S. Misana, et al. 2004. The spatial patterns and root causes of land use change in East Africa. Land Use Change Impacts and Dynamics (LUCID) Project Working Paper Number 47. Nairobi, Kenya, International Livestock Research Institute.

Link(s)

http://www.lucideastafrica.org/publications/Olson_LUCID_WP47_PART1.pdf 

http://www.lucideastafrica.org/publications/Olson_LUCID_WP47_PART2.pdf 

Working Paper

Year: 2004

Linkages among changes in land use, biodiversity, and land degradation in the Loitokitok Area of Kenya.

Based on a study conducted for nearly 30 years between 1976 and 2003 on the northern side of Mt. Kilimanjaro in Kenya, this paper reports a summary of linkages among changes in land use, biodiversity and land degradation.

Reid, R. S., L. N. Gachimbi, et al. 2004. Linkages among changes in land use, biodiversity, and land degradation in the Loitokitok Area of Kenya. Land Use Change Impacts and Dynamics (LUCID) Project Working Paper Number 49. Nairobi, Kenya, International Livestock Research Institute.

Link(s)

http://www.lucideastafrica.org/publications/Reid_LUCID_WP49.pdf 

Working Paper

Year: 2004

The challenges of bringing consumption into the population-environment equation.

This paper was offered as a discussion document for the Population, Consumption and the Environment cyberseminar, hosted by PERN.

de Sherbinin, A. and Curran, S. R. 2004. Completing the picture: The challenges of bringing consumption into the population-environment equation. Essay Prepared for Consideration by the PERN Cyberseminar May 17-31, 2004.

Link(s)

http://www.populationenvironmentresearch.org/pern_files/papers/PCE_discussion_p...

Working Paper

Year: 2004

The Effects of Wildlife-Livestock-Human Interactions on Habitat in the Meru Conservation Area, Kenya.

Government policy is driving immigration to Kenya's Meru Conservation Area. Historically communal areas are being subjected to fragmentation and degradation.

Otuoma, John. 2004. The Effects of Wildlife-Livestock-Human Interactions on Habitat in the Meru Conservation Area, Kenya. Land Use Change Impacts and Dynamics Project Working Paper #39. Nairobi, Kenya: International Livestock Research Institute.

Link(s)

http://www.lucideastafrica.org/publications/Otuoma_LUCID_WP39.pdf 

Working Paper

Year: 2004

Continental physiography, climate and the global distribution of human Population.

Abstract: Human populations are not uniformly distributed on Earth's landmasses. The spatial distribution of the global human population at any time shows large variations over a wide range of spatial scales. Understanding this distribution is fundamental to understanding the relationships between humans and the environment. The recent availability of moderate resolution population data and higher resolution geophysical data now makes it possible to quantify the spatial relationships between population and basic geophysical parameters related to continental physiography and climate. Multivariate distributions of population and land area in geophysical parameter space reveal patterns that may not be obvious in geographic space. When population distributions are normalized by available land area as a function of a geophysical parameter, the most densely populated ranges of the parameter can be determined. When applied to multivariate distributions, the most densely populated combinations of the parameters are indicated. These integrated population densities are generally distinct from local population densities. We investigate the localization of human population with respect to elevation and coastal proximity and with respect to regional temperature and precipitation. Average population densities are far higher at low coastal elevations and diminish rapidly with increasing elevation and distance from coastlines. Inland population densities tend to be highest in topographic basins adjacent to mountain ranges. We also find that population is significantly more localized with respect to continental physiography than with respect to the climatic parameters we have analysed. (authors)

Small, C. and Cohen, J. E. Continental physiography, climate and the global distribution of human Population. Intl. Symposium on Digital Earth Proceedings Paper.

Link(s)

http://www.ldeo.columbia.edu/~small/PDF/ISDE_SmallCohen.pdf 

Conference Paper

Year: 2004

Land cover and socio-economic characteristics in the eight counties of Alabama: A spatial analysis

The authors employed a clustering algorithm and a logistic regression in the analysis of eight watershed areas in Alabama. They showed a significant relationship between use type and population density, race, and poverty level.

Gyawali, B., Fraser, R., Wang, Y. and Bukenya, J. 2004. Land cover and socio-economic characteristics in the eight counties of Alabama: A spatial analysis. Selected Paper prepared for presentation at the American Agricultural Economics Association.

Link(s)

<http://purl.umn.edu/20173> 

Conference Paper

Year: 2004

Sustainability Values, Attitudes, and Behaviors: A Review of Multi-national and Global Trends.

The authors summarize global-scale surveys related to population, affluence, technology, and entitlements with particular attention to how the results bear on the Millennium Declaration. Gaps and barriers are identified.

Leiserowitz, Anthony A.; Kates, Robert W.; Parris, Thomas M. 2004. Sustainability Values, Attitudes, and Behaviors: A Review of Multi-national and Global Trends. CID Working Paper No. 113.

Link(s)

https://www.hks.harvard.edu/var/ezp_site/storage/fckeditor/file/pdfs/centers-pro... 

Working Paper

Year: 2004

Water resources, land exploration and population dynamics in arid area: The case of Tarim River Basin in Xinjiang of China.

This study utilized time series data to analyze the relationship between population growth, water, and land resources in the Tarim River Basin.

Leiwen, J., Yufen, T., Zhijie, Z., Tianhong, L. and Jianhua, L. 2004. Water resources, land exploration and population dynamics in arid area: The case of Tarim River Basin in Xinjiang of China. Asian Metacentre Research Paper Series no. 18.

Link(s)

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

Working Paper

Year: 2004

Standard of living, energy consumption and environment in Bulgaria.

These slides energy compare the efficiency of energy consumption in Bulgaria with that of other European countries. Recent reductions in energy consumption and emissions of pollutants are shown to be the result of economic crisis.

Zlatunova, D. and Rusev, M. 2003. Standard of living, energy consumption and environment in Bulgaria. PERN Workshop: Population, Consumption and Environment Dynamics: Theory and Method, Wyndham Hotel, Montréal, Canada, October 19, 2003.

Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/Zlatunova_Paper...

Conference Paper

Year: 2003

Settler welfare and land cover change in the Ecuadorian Amazon communities.

This study utilizes remote sensing to describe settler welfare and land use in the Ecuadorian Amazon. Demographic control variables figured significantly.

Barbieri, A. F.; Mena, C. F.; Erlien, C. M.; Bilsborrow, R. E.; Torres, B. 2003. Settler welfare and land cover change in the Ecuadorian Amazon communities. 2003 Open Meeting Human Dimensions of Global Change, Montreal Canada, October 16-18, 2003.

Link(s)

<https://sedac.ciesin.columbia.edu/openmtg/docs/barbieri.pdf> 

Conference Paper

Year: 2003

Rural out-migration and environmental risk: Examining the association between hazardous waste facilities and population loss

This research extends consideration of the demographic correlates of the local environment to include proximate facilities potentially posing risk to proximate environmental quality, namely facilities that manage, treat, or store hazardous wastes. We examine the possibility that the presence of such facilities equates with differential loss of rural population, focusing on human capital, through modeling of aggregate outmigration rates, as well as age and education composition of outmigration streams, and the number of hazardous waste facilities, incinerators, and landfills across rural counties within the 48 contiguous states. (from author's abstract)

Hunter, L. M. and Sutton, J. 2003. Rural out-migration and environmental risk: Examining the association between hazardous waste facilities and population loss. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/61811> 

Conference Paper

Year: 2003

The human-environment nexus: Progress in the past decade in the integrated analysis of human and biophysical factors

This keynote lecture identifies recent advances in land-use change analysis and reviews the major ecological changes that make such analysis important.

Moran, E. F. 2003. The human-environment nexus: Progress in the past decade in the integrated analysis of human and biophysical factors. Keynote lecture at World System History and Global Environmental Change Congress, Lund, Sweden, September 19, 2003.

Link(s)

<http://www.humecol.lu.se/woshglec/papers/moran.doc> , <http://www.humecol.lu.se/woshglec/> 

Conference Paper

Year: 2003

Historical ecology: Integrated thinking at multiple temporal and spatial scales

Crumley explores multilevel integrated frameworks for analysing human-environment relationships.

Crumley, C. L. 2003. Historical ecology: Integrated thinking at multiple temporal and spatial scales. World System History and Global Environmental Change, Lund University, Sweden, September 19-22, 2003.

Link(s)

<http://www.aimes.ucar.edu/docs/ssc/2005/03.crumley.pdf> 

Conference Paper

Year: 2003

A cross-cultural study of human impacts on the rain forest environment in Ecuador

The impact of modernization on lowland Amerindians and their land use is of great concern to anthropologists and policy-makers. This is especially true in Ecuador, which is losing about 1.8% of its Amazon forests per year, the highest loss rate of any Amazon basin country. In 2001, Richard Bilsborrow and Flora Holt co-led a research project in the northern Ecuadorian Amazon investigating how market integration, proximity to infrastructure, demographic patterns, and socio-cultural characteristics influence land use among five Native Amazonian populations. Demographic, ethnographic, and socio-economic research was carried out among eight communities encompassing a cross-cultural sample of the Shuar, Quichua, Huaorani, Cofan, and Secoya. (from author's abstract)

Holt, F. L. and Bilsborrow, R. 2003. A cross-cultural study of human impacts on the rain forest environment in Ecuador. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/63047> 

Conference Paper

Year: 2003

Turning influential data points into ethnographic informants: Elaborating links between population dynamics and environmental consumption

This paper outlines a mixed-method approach to studying the effects of population dynamics on environmental consumption at the micro-level and offers new insights into the complex nature of the relationship. We use regression diagnostics, performed on recently developed models of survey data from Nepal, to identify influential cases. We then study these cases intensively for insights into why the current models are not explaining their behavior well. Next, we use the findings from our fieldwork in Nepal to inform our models of environmental consumption, adjusting them to provide a more comprehensive reflection of behavior and achieve better statistical fit to available data. (from author's abstract)

Pearce, L. D., Axinn, W. G. and Chaudhary, I. 2003. Turning influential data points into ethnographic informants: Elaborating links between population dynamics and environmental consumption. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/62778> 

Conference Paper

Year: 2003

Urbanization, transportation and land use: Policy integration towards sustainable urban energy use for cities in Asia.

This paper examines drivers of urbanization in Asia, constraints on solutions to problems of urban density, regulatory options, and the varied conclusions that result from different framings of these problems.

Ford, J. F. 2003. Urbanization, transportation and land use: Policy integration towards sustainable urban energy use for cities in Asia. Proceedings of International Workshop on Policy Integration Towards Sustainable Urban Energy Use for Cities in Asia.

Link(s)

<https://www.iges.or.jp/en/ue/pdf/megacity03/HTML/pdf/3.5%20Ford%20paper.pdf> 

Conference Paper

Year: 2003

Impacts of demographic and socioeconomic factors on spatio temporal dynamics of panda habitats

In the Wolong Nature Reserve (China) for giant panda conservation, local households live a rural lifestyle that has caused forest degradation by cutting fuelwood. Based on field data and an Integrative Model with Agent-Based Artificial Intelligence and GIS (IMABAIG), we simulated the spatio-temporal dynamics of households and their impacts on panda habitat by keeping track of each family member's life history and the dynamics of each household agents when they interact with each other and with the environment through their activities over 20 years. (from author's abstract)

An, L., He, G. and Liang, Z. 2003. Impacts of demographic and socioeconomic factors on spatio temporal dynamics of panda habitats. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/63060> 

Conference Paper

Year: 2003

An Integrative Model with Agent-based Artificial Intelligence and GIS (IMABAIG): Simulating spatio-dynamics of rural households and the associated impacts on giant panda habitats in the Wolong Nature Reserve (China)

This paper reports on the development, implementation, and results of an agent-based model simulating the impact of a growing rural population on the forests of the Wolong Nature Reserve for giant pandas (China). The local households follow a traditional Tibetan lifestyle, in which fuelwood consumption has caused panda habitat degradation. By keeping track of the life history of individual persons and dynamics of households, this model has equipped household agents with knowledge about themselves, other agents, and the environment, and allowed them to interact with each other through activities based on a set of artificial intelligence rules. (from author's abstract)

An, L., Linderman, M., Shortridge, A. and Liu, J. 2003. An Integrative Model with Agent-based Artificial Intelligence and GIS (IMABAIG): Simulating spatio-dynamics of rural households and the associated impacts on giant panda habitats in the Wolong Nature Reserve (China). Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/63056> 

Conference Paper

Year: 2003

Land use and the family cycle in the U.S. Great Plains

This paper explores the process of settlement and its relationship to land use trajectories through the lens of family structures in the Great Plains of the U.S., during the period (1870 to 1940)

when this region turned from open rangeland to a developed mix of land uses. The theoretical perspective in this paper draws on studies of family, settlement, and environment in the Americas, which show that land use processes simultaneously reflect the mechanism of settlement and each settler family's life cycle stage. Family formation and cropland development went hand-in-hand, but there are differences in the process of family formation in different ecological sub-regions. The causal process is intertwined with ethnic differences and fertility decline in the U.S. (from author's abstract)

Gutmann, M. P., Pullum-Piñon, S. and Cunfer, G. 2003. Land use and the family cycle in the U.S. Great Plains. Population Association of America, 2003 Annual Meeting, Minneapolis, Minnesota, USA, May 1-3, 2003.

Link(s)

<https://paa2003.populationassociation.org/abstracts/63237> 

Conference Paper

Year: 2003

The use of rapid assessment techniques to acquire baseline data in squatter communities: The case of Palawan Province, the Philippines

This paper compares specific results obtained from RAP survey approaches used in Year 1 to results obtained through probability sampling in Year 2. Specifically we examine the response patterns and weighted results for 17 identical questions fielded in Year 1 and Year 2 of the fieldwork period. Additionally we test and compare results from analysis related to household incomes and wealth measured obtained from independent instruments. These tests will measure both the efficacy of RAP approached where there is one to one correspondence between questions and sensitivity analysis of difference in response patterns when different instruments are used in a RAP framework and a probability sampling framework. (from author's abstract)

McNally, J. W.; Poggie, J. 2003. The use of rapid assessment techniques to acquire baseline data in squatter communities: The case of Palawan Province, the Philippines. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/62356> 

Conference Paper

Year: 2003

People said extinction was not possible: 2,000 years of environmental change in South China.

This substantial conference paper documents the early inkling that anthropogenic changes in the land were partially responsible for extinctions in South China. The account is remarkable.

Marks, R. B. 2003. People said extinction was not possible: 2,000 years of environmental change in South China. World System History and Global Environmental Change, Lund University, Sweden, September 19-22, 2003.

Link(s)

http://www.humecol.lu.se/woshglec/papers/robert_marks.pdf 

<http://www.humecol.lu.se/woshglec/> 

Conference Paper

Year: 2003

Demographic dynamics in Brazil's major ecological regions

Brazil has one of the world's greatest ecological and demographic diversities. Widespread international concern for the environmental integrity of the Amazon is matched, in Brazil, with concern for other important ecological regions, principally the savanna-like cerrado and the Atlantic Rainforest. Other regions, such as the semi-arid caatinga, ecologically unique and demographically dense, are also important. While the advanced stage of Brazil's demographic transition and its extensive territory mean that the overall ratio of population to environment will continue to be favorable, where the population lives and works will be of increasing importance. (from author's abstract)

Hogan, D. J. 2003. Demographic dynamics in Brazil's major ecological regions. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/61833> 

Conference Paper

Year: 2003

Environmental impacts of the Roman economy and social structure: Augustus to Diocletian.

This conference paper outlines the way in which environmental base of the Roman Empire deteriorated.

Hughes, J. D. 2003. Environmental impacts of the Roman economy and social structure: Augustus to Diocletian. World System History and Global Environmental Change, Lund University, Sweden, September 19-22, 2003.

Link(s)

<http://www.humecol.lu.se/woshglec/papers/hughes.doc>  <http://www.humecol.lu.se/woshglec/> 

Conference Paper

Year: 2003

Migration and land use change: A case study in Nang Rong, Uriram, Thailand

This case study focuses on migration and land use in rural Thailand. This work aims to study the change of household land in Nang Rong and to investigate the household factors as they relate to change in household land. The theory of Multiphasic Response including migration theories are used to explain population and social change. Socio-economic and political factors are also considered. The analysis of longitudinal data and in-depth interviews are employed. The summary provided that population pressure leads to the change of household structure and inevitably affects land use change. The study reveals that migration is found as the means to reduce pressure on land. (from author's abstract)

Rattanawarang, W. 2003. Migration and land use change: A case study in Nang Rong, Uriram, Thailand. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/62558> 

Conference Paper

Year: 2003

Health and haze: the immediate and medium term effects of smoke inundation on the health of adults in Indonesia

In the last half of 1997, smoke from the worst forest fires in decades blanketed parts of Borneo, Sumatra, and peninsular Malaysia for several months. This paper measures the immediate and medium-term impact of the fires on the health of the Indonesian population by combining population-based household survey data from the Indonesia Family Life Survey (IFLS) with satellite measures of smoke levels. (from author's abstract)

Frankenberg, E. and McKee, D. M. 2003. Health and haze: the immediate and medium term effects of smoke inundation on the health of adults in Indonesia. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/63043> 

Conference Paper

Year: 2003

Population, consumption and environment: Issues and future research.

These well-notated slides contain closing panel comments delivered at the PERN Workshop: Population, Consumption and Environment Dynamics: Theory and Method, held at the Wyndham Hotel in Montréal, Canada.

de Sherbinin, A. 2003. Population, consumption and environment: Issues and future research. PERN Workshop: Population, Consumption and Environment Dynamics: Theory and Method, Wyndham Hotel, Montréal, Canada, October 19, 2003.

Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/de_Sherbinin_pre...

Conference Paper

Year: 2003

Evolution of health impacts research: International and national aspects.

A Word document and accompanying PowerPoint presentation documents recent findings on the effects of climate change on human health.

McMichael, A. J. 2003. Evolution of health impacts research: International and national aspects. Climate Change and Health: Research Methods and Policy Issues, Canberra. 29 September 29-October 2, 2003.

Link(s)

https://nceph.anu.edu.au/Envir_Collab/Short_Course_Presentations_Summaries/Sympo...

https://nceph.anu.edu.au/Envir_Collab/Short_Course_Presentations_Summaries/Sympo...

Conference Paper

Year: 2003

Multilevel statistical models to assess factors influencing land use: A case study in the Ecuadorian Amazon

Statistical models examining the interaction between population and land use (LU) have been evolving through the integration of survey and satellite data as well as the application of more sophisticated estimation techniques. However, very few approaches incorporate contextual factors influencing LU or directly test or control for spatial autocorrelation among model variables. We have developed a multilevel model to simultaneously investigate contextual effects at the household and community levels. In addition, we explicitly test for the presence of spatial autocorrelation and control for spatial dependencies in the model. (from author's abstract)

Pan, W. and Bilborrow, R. 2003. Multilevel statistical models to assess factors influencing land use: A case study in the Ecuadorian Amazon. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/62889>

Conference Paper

Year: 2003

Environmental hazards, migration, and race.

Most theory and much empirical research acknowledge that contextual characteristics matter in decisions about internal migration. Yet, we know surprisingly little about another category of contextual factors, those specific to the quality of the physical environment. This study contributes to our understanding of the association between migration and environmental factors, specifically environmental risk factors, through the development of models reflecting associations between internal migration, socio-economic characteristics, and environmental risk factors at the county-level nationwide. An additional focus is upon race-specific internal migration thereby yielding insight into the social demography of environmental hazards. (from author's abstract)

Hunter, L. M., White, M. J., Little, J. S. and Sutton, J. Environmental hazards, migration, and race. Department of Sociology, Brown University, Providence, RI.

Link(s)

<https://spot.colorado.edu/~hunterlm/RiskMig.PDF> 

Working Paper

Year: 2003

Modeling the population-environment interaction: A geo-demographic analysis of north-central Costa Rica to support biological corridor designation, conservation policy and practice.

Buck and Ventura combined data of human populations, biophysical conditions, infrastructure, land tenure and other landscape factors as layers in a geographic information system. Using simple factor analysis the authors generated a priority areas model to aid in conservation efforts.

Buck, M. V. and Ventura, S. J. 2003. Modeling the population-environment interaction: A geo-demographic analysis of north-central Costa Rica to support biological corridor designation, conservation policy and practice. Land Resources Program, Gaylord Nelson Institute for Environmental Studies, University of Wisconsin-Madison.

Link(s)

<https://ccp.ucr.ac.cr/noticias/conferencia/pdf/buck.pdf> 

Conference Paper

Year: 2003

Human impacts on the environment in India.

Though the relationship is complex, population size and growth tend to expand and accelerate these human impacts on natural resources and the environment. The data have been analyzed from various secondary sources of data [from the] last fifty years. The analysis reveals that rapid population growth plays an important role in depleting natural resources. Population pressure on

arable land contributes to the land degradation, thus affecting the productive resource base of the economy. The importance of population and environmental pollution control and protection of natural resources and environment has been highlighted. The paper concludes with some policy reflections and emphasizes the potential importance of natural resources. (from author's abstract)

Nagdeve, D. A. 2003. Human impacts on the environment in India. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/61654> 

Conference Paper

Year: 2003

Unequal burdens: The demographics of noxious industrial activity in metropolitan areas

Using tract-level census data and data on various types of industrial facilities and noxious sites, the analysis presented in this paper provide results that are consistent with the notion that certain groups are better able to capture the rewards associated with industrial activity while others are more burdened. Hispanics are more likely to reside in industrial areas of all kinds. Blacks, however, are more likely to live in industrial areas characterized by a high level of burden. Access to industrial employment opportunities come, therefore, at a much higher cost to blacks than other groups. (from author's abstract)

Davidson, P. 2003. Unequal burdens: The demographics of noxious industrial activity in metropolitan areas. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/61807> 

Conference Paper

Year: 2003

Spatial configuration of malaria risk on the Amazon frontier

This paper seeks to identify the local determinants of malaria transmission on the Brazilian Amazon, considering social, economic, behavioral, and environmental issues, and accounting for the possible autocorrelation in the spatial distribution of malaria rates. The analysis is focused on the Machadinho settlement project, located in the Western part of the Amazon. Field surveys were realized in the area in 1985/87 and 1995. Additionally, key information was obtained through the application of GIS and Remote Sensing techniques. In order to analyze such complex and heterogeneous data, a three-step methodological approach is proposed, combining spatial statistical analysis, geostatistical tools, and grade of membership models (fuzzy sets). (from author's abstract)

De Castro, M. C. 2003. Spatial configuration of malaria risk on the Amazon frontier. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/62007> 

Conference Paper

Year: 2003

Evolution of population and resource with maximum objective.

This paper was presented at the 2003 conference of the European Association of Environmental and Resource Economists. It presents an economic model of steady states between population and natural resources within a framework of John Rawls' maximin.

Tian, H. and Cairns, R. D. 2003. Evolution of population and resource with maximum objective. European Association of Environmental and Resource Economists, 12th Annual Conference. Bilbao, Spain, June 27-30, 2003.

Link(s)

<http://www.crde.umontreal.ca/cree/textes/tian.PDF> 

Conference Paper

Year: 2003

Do migrants degrade coastal environments? Migration, natural resource extraction and poverty in North Sulawesi, Indonesia.

Theories that identify key variables in migrant-environment interaction is tested in a new setting, a coastal fishing village in North Sulawesi, Indonesia.

Cassels, S., Curran, S. R. and Kramer, R. 2003. Do migrants degrade coastal environments? Migration, natural resource extraction and poverty in North Sulawesi, Indonesia. Office of Population Research Princeton University Working Paper No. 2003-05.

Link(s)

<https://sedac.ciesin.columbia.edu/openmtg/docs/cassels.pdf> 

Working Paper

Year: 2003

Growth, development and land-use in a simple agrarian economy with endogenous population.

This paper utilizes econometrics to model population change and land-use pressure in a simple agrarian economy in which population affects and is affected by economic change.

Skonhofs, A. and Solstad, J. T. 2003. Growth, development and land-use in a simple agrarian economy with endogenous population. Working Paper Series No. 4/2003.

Link(s)

<http://www.svt.ntnu.no/iso/WP/2003/4pop1100.pdf> 

Working Paper

Year: 2003

Root causes of land use change in the Loitokitok Area, Kajiado District, Kenya.

Campbell et al describes driving forces of land use change in two districts of Kenya since independence in 1963.

Campbell, David J.; Lusch, David P.; Smucker, Thomas A.; Wangui, Elizabeth Edna. 2003. Root causes of land use change in the Loitokitok Area, Kajiado District, Kenya. Land Use Change Impacts and Dynamics (LUCID) Project Working Paper 19; Nairobi, Kenya: International Livestock Research Institute.

Link(s)

http://www.lucideastafrica.org/publications/Campbell_Lucid_WP19.pdf 

Working Paper

Year: 2003

The Implications of Changes in Land Use on Forests and Biodiversity: A Case of the "Half Mile Strip" on Mount Kilimanjaro, Tanzania.

William studies land use, forest cover, and biodiversity changes in two rural Tanzanian villages on the southern slopes of Mount Kilimanjaro.

William, Christopher M. 2003. The Implications of Changes in Land Use on Forests and Biodiversity: A Case of the "Half Mile Strip" on Mount Kilimanjaro, Tanzania. Land Use Change Impacts and Dynamics (LUCID) Project Working Paper 30; Nairobi, Kenya: International Livestock Research Institute.

Link(s)

http://www.lucideastafrica.org/publications/William_LUCID_WP30.pdf 

Working Paper

Year: 2003

Living in groups, dying alone.

This set of slides presents an overview of population health literature in order to inform debates on resilience and social capital. The role of social networks in resource dependent forest communities is used as an illustration.

Tansey, J. 2003. Living in groups, dying alone. 2003 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Montreal, Canada, October 16-18, 2003.

Link(s)

<https://sedac.ciesin.columbia.edu/openmtg/docs/Tansey.pdf> 

Conference Paper

Year: 2003

Household lifestyles: Ideas for a research program.

The objective of behavior change at the household level requires two classification systems: activities and ways households can be grouped by how they engage in those activities.

Duchin, F. 2003. Household lifestyles: Ideas for a research program. PERN Workshop: Population, Consumption and Environment Dynamics: Theory and Method, Wyndham Hotel, Montréal, Canada, October 19, 2003.

Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/Duchin_Paper.pdf

Conference Paper

Year: 2003

The 1997 Malaysian forest fires: Respiratory hospitalizations in persons with a history of chronic obstructive pulmonary disease

To investigate the respiratory health effects of the 1997 Malaysian haze episode, admissions to hospitals in Kuching, Malaysia, were selected from a database of all hospital admissions that occurred in the state of Sarawak from 1/1/1995-12/31/1998. We compared the survival curve of time to first readmission for the 1997 cohort (exposed to the haze) to the survival curves for the 1995 and 1996 cohorts (.pre-haze. cohorts). Persons with previous admissions for respiratory diseases were more likely to be re-hospitalized for respiratory diseases during the follow-up period in 1997 than during the pre-haze years. These findings suggest an association between forest-fire smoke exposure and increased respiratory hospitalizations among susceptible adults. (from author's abstract)

Mott, J. A.; Alverson, C. J.; Mannino, D.; Kiyu, A.; Hashim, J.; Falter, K.; Redd, S. 2003. The 1997 Malaysian forest fires: Respiratory hospitalizations in persons with a history of chronic obstructive pulmonary disease. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/62091> 

Conference Paper

Year: 2003

Towards sustainable charcoal production and use: a systems approach

A systems approach to sustainable charcoal production in sub-Saharan Africa is proposed to minimize energy loss.

Kituyi, E. 2003. Towards sustainable charcoal production and use: a systems approach. PERN Workshop: Population, Consumption and Environment Dynamics: Theory and Method, Wyndham Hotel, Montréal, Canada, October 19, 2003.

Link(s)

https://sedac.ciesin.columbia.edu/repository/pern/papers/Kituyi_Paper.pdf 

Conference Paper

Year: 2003

Population and food production: Prospects and challenges for Asia.

This paper reviews supply and demand for food along with population trends in Asia.

Singh, G. 2003. Population and food production: Prospects and challenges for Asia. Agricultural Engineering International: the CIGR Journal of Scientific Research and Development Vol. V. Invited Overview Paper. Presented at the Forum on Bioproduction in East Asia: Technology Development & Opportunities. ASAE Annual meeting, Las Vegas. July 27, 2003.

Link(s)

<http://dspace.library.cornell.edu/retrieve/374/Invited+Overview+Singh+30Jan2004....> 

Conference Paper

Year: 2003

Quantifying the spatial issues in human dimensions research.

One of the largest technical obstacles to model human dimensions of the environment is spatial autocorrelation. This paper presents a solution using classification and regression trees.

Mageean, D. M., O' Connor, R. J., Rain, S. C. and Urquhart, N. S. 2003. Quantifying the spatial issues in human dimensions research. 2003 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Montreal, Canada, October 16-18, 2003.

Link(s)

<https://sedac.ciesin.columbia.edu/openmtg/docs/mageean.pdf> 

Conference Paper

Year: 2003

Spatial pattern of urban land use growth and impacts on ecological environment in Beijing.

China's rapid urban expansion since its economic reforms has raised an important question: Does urban land use growth go beyond control and cause serious damage to urban ecological environment? Through our empirical analyses on the spatial differentiation and spatial patterns of urban land use growth in Beijing in the period of 1982-1997, we observe that urban land use growth in Beijing went beyond of the control of urban planning, in terms of the extraordinary high growth rate and undesired spatial pattern, and significantly aggravated the regional ecological environment. (Author's abstract)

Shenghe, L. 2003. Spatial pattern of urban land use growth and impacts on ecological environment in Beijing. United Nations University/Institute of Advanced Studies.

Link(s)

<https://ias.unu.edu/proceedings/icibs/ecocity03/papers/liushenghe/index.html> 

Conference Paper

Year: 2003

Delivering modern energy services for urban Africa: Status, trends and opportunities for commercially sustainable interventions.

The urban population of most sub-Saharan African countries is growing rapidly. It is estimated that urban growth rates are almost double the national population growth rates. As expected, urban energy consumption is growing rapidly, driven by the fast growth of urban centers. Although urban poor households in most cities of the region constitute over 50 percent of the total households, the provision of modern energy services to the urban poor does not seem to be receiving the requisite attention from policymakers. Three energy analysts came to the World Bank to review the status of the African urban energy sector. They highlighted key trends and identified opportunities for the private sector, government agencies, and development agencies such as the World Bank. (from introduction)

Armar, A., Karekezi, S. and Kalumiana, O. 2003. Delivering modern energy services for urban Africa: Status, trends and opportunities for commercially sustainable interventions. The World Bank Group.

Link(s)

https://www.worldbank.org/wbi/B-SPAN/sub_energy_africa.htm 

Conference Paper

Year: 2003

UNFPA's view on Population: An economic analysis

This paper portrays the UNFPA as having an overly pessimistic view of the relationship between population growth and economic development. The author then offers an economic critique of this view.

Cid, A. 2003. UNFPA's view on Population: An economic analysis. Universidad de Montevideo.

Link(s)

https://mpira.ub.uni-muenchen.de/39905/1/MPRA_paper_39905.pdf , <https://mpira.ub.uni-muenchen.de/id/eprint/39905> 

Working Paper

Year: 2003

In search of sustainability: What can we learn from the past?

de Vries derives lessons from transdisciplinary histories of socio-natural systems such as recent paleo-climate and -vegetation reconstructions.

de Vries, B. 2003. In search of sustainability: What can we learn from the past? World System History and Global Environmental Change, Lund University, Sweden, September 19-22, 2003.

Link(s)

<https://www.pbl.nl/sites/default/files/downloads/lundpaperbertdevriesmarch2004.p...> 

Conference Paper

Year: 2003

Spatial pressure and environmental degradation within Yaounde and its suburbs

The study aims to display various forms of physical pressure on space along with consequences on the inner and surrounding environment of the town of Yaounde. (from Introduction)

Nguendo Yongsu, H. B. 2003. Spatial pressure and environmental degradation within Yaounde and its suburbs. Paper presented at the 2003 Open Meeting of the Global Environmental Change Research Community, Montreal, Canada, October 16-18, 2003.

Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/spatia_pressure....

Conference Paper

Year: 2003

Impacts of population migration on land degradation in Tarim River Basin, Xinjiang of China.

The potential environment repercussion associated with migration increasingly attracts attention from many researchers. This study is designed to investigate the interactions between population change and land degradation in Xinjiang of China. Taking Tarim River Basin as the focus research site, we study the process of deforestation, desertification under the pressure of large volume of in-migration flow since the 1950s, particularly in its down-stream. Exploiting digitized aerophotograph, remote sensing data and ground socioeconomic, demographic data in 1950-2000, changes in landscape by in-migrants intervention and out-migrants driven by land degradation is visualized and modeled. (from author's abstract)

Jiang, L., Tong, Y., Zhao, Z., Li, T. and Han, W. 2003. Impacts of population migration on land degradation in Tarim River Basin, Xinjiang of China. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/62705> 

Conference Paper

Year: 2003

Dangerous regions: A source of cascading cultural changes.

This workshop paper uses the Maya Lowlands of the Yucatan Peninsula and the Coastal Plain of North and Southern Carolina as examples of climate change acted as a proximate cause of population change.

Gunn, J. D., Folan, W. J. and Herbert, J. M. 2003. Dangerous regions: A source of cascading cultural changes. The Fifth World Archaeological Congress, Washington D.C., 2003.

Link(s)

<http://godot.unisa.edu.au/wac/pdfs/117.pdf> 

Conference Paper

Year: 2003

Modelling land degradation in low-input agriculture: The 'Population Pressure Hypothesis' revised

This paper presents a neo-Malthusian theoretical framework to analyse labor allocation and land quality among poor households engaged in swidden agriculture in the context of increased population density.

Pascual, U. and Barbier, E. 2003. Modelling land degradation in low-input agriculture: The 'Population Pressure Hypothesis' revised. Contributed paper selected for presentation at the 25th International Conference of Agricultural Economists, Durban, South Africa, August 16, 2003.

Link(s)

<http://purl.umn.edu/25827> 

Conference Paper

Year: 2003

Ages of redistribution.

Dark Ages are contrasted with periods of concentration, which are characterized by population growth and economic expansion. In Dark Ages, growth ceases and populations disburse. This conference paper probes the robustness of this concept and the possibil

Modelski, G. 2003. Ages of redistribution. World System History and Global Environmental Change, Lund University, Sweden, 19-22 September 2003.

Link(s)

<http://www.humecol.lu.se/woshglec/papers/modelski.doc> , <http://www.humecol.lu.se/woshglec/>



Conference Paper

Year: 2003

Fertility and the Environment in a Natural Resource Dependent Economy: Evidence from Petén, Guatemala

Using data from the 1998/99 Demographic Health Survey in Guatemala, this paper examines the relationships between environmental factors and fertility decision-making and behaviors, especially in natural resource dependent economies like that of the Petén, Guatemala. The Petén, is the largest lowland humid forest in Mesoamerica.

Sutherland, E. G., D. L. Carr, et al. 2004. Fertility and the Environment in a Natural Resource Dependent Economy: Evidence from Petén, Guatemala. Población y Salud en Mesoamérica 2(1): 2.

Link(s)

https://people.geog.ucsb.edu/~carr/DCarr_Publications/Sutherland_Carr_Curtis_Pob... 

<http://revistas.ucr.ac.cr/index.php/psm> 

Conference Paper

Year: 2003

Economic Growth and the Rise of Forests

This paper explores the hypothesis that increases in demand for forests associated with growth of population and income lead to forest growth. Results were consistent with the hypothesis.

Rosenzweig, Mark; Foster, Andrew. 2003. Economic Growth and the Rise of Forests. BREAD Working Paper No. 008.

Link(s)

<http://ibread.org/bread/working/8> , http://ibread.org/bread/system/files/bread_wpapers/008.pdf



Working Paper

Year: 2003

Sustaining Caribbean coastal areas.

This PowerPoint presentation was delivered in February 2003 at Princeton University's Woodrow Wilson School Annual Science, Technology and Environmental Policy Conference, titled "Sink or Swim: Building Sustainable Coastal Communities in the Wider Caribbean." The conference focused on the Wider Caribbean region "the island nations of the Greater and Lesser Antilles, the coastal communities of Mexico, Central America, and the northeastern countries of South America" and regional issues of environmental health, land-use practices, and economic development. This presentation explores the role of population dynamics in coastal areas in the Caribbean, highlighting population trends and the special vulnerability of small island developing states. (from introduction)

De Souza, R. 2003. Sustaining Caribbean coastal areas. Population Reference Bureau.

Link(s)

<https://www.prb.org/presentations/SustainingCaribbeanCoastalAreas.ppt> 

Conference Paper

Year: 2003

The impact of population growth on sanitary conveyances and sewage treatment facilities in the City of Lusaka, Zambia.

Lusaka urban the focus of the study, has the fast growing population in Zambia as well as in Africa. The population of Lusaka is about 2 million by the year 2000. The high population of Lusaka has caused pressure on the public amenities, especially sanitary infrastructure' In view of the given background, the overall aim of the proposed study is to promote safe and sustainable management of sanitation systems in urban settlements of Zambia to induce economic growth and environmental protection. (from Abstract)

Kawanga, O. C. 2003. The impact of population growth on sanitary conveyances and sewage treatment facilities in the City of Lusaka, Zambia. United Nations University/Institute of

Advanced Studies. Presented in the Internet Conference on Ecocity Development, Feb-June 2003.

Link(s)

<https://ias.unu.edu/proceedings/icibs/ecocity03/papers/kawangal/index.html> 

Conference Paper

Year: 2003

The Influence of the Natural Environment on Migration in Burkina Faso: A Multilevel Event History Analysis

This study evaluates the influence of environmental conditions on migration in rural Burkina Faso, while controlling for various individual and community determinants of migration. The individual data come from a retrospective migration survey conducted in 2000 in Burkina Faso and community-level data come from a retrospective community survey conducted in 2002 on 600 villages. Environmental data consists of fine-resolution rainfall data and land degradation data. Land degradation assessment is based on time-series of remote sensing data. The analyses use multi-level discrete-time event history models, and are conducted separately for men and women. (from author's abstract)

Schoumaker, Bruno; Henry, Sabine; Beauchemin, Cris; Dabire, Bonayi . 2003. The Influence of the Natural Environment on Migration in Burkina Faso: A Multilevel Event History Analysis presented at the 2003 Population Association of America Annual Meeting.

Link(s)

<https://paa2003.populationassociation.org/abstracts/62077> 

Conference Paper

Year: 2003


Limits to world population - revisited: Meta-analysis and meta-estimation.

Global human population limits are estimated using 70 past studies as a base.

van den Bergh, J. C. J. M. and Rietveld, P. 2003. Limits to world population - revisited: Meta-analysis and meta-estimation. European Association of Environmental and Resource Economists 12th Annual Conference, Bilbao, Spain, June 28-30, 2003.

DOI: [https://dx.doi.org/10.1641/0006-3568\(2004\)054\[0195:RTLTPW\]2.0.CO;2](https://dx.doi.org/10.1641/0006-3568(2004)054[0195:RTLTPW]2.0.CO;2) 

Link(s)

<http://www.bioone.org/doi/full/10.1641/0006-3568%282004%29054%5B0195%3ARTLTPW%5D...> 

Conference Paper

Year: 2003

Household lifestyles: Ideas for a research program.

The objective of behavior change at the household level requires two classification systems: activities and ways households can be grouped by how they engage in those activities.

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Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/Duchin_Paper.pdf

Conference Paper

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Link(s)

<http://ibread.org/bread/working/8> , http://ibread.org/bread/system/files/bread_wpapers/008.pdf



Working Paper

Year: 2003

Migration and land use change: A case study in Nang Rong, Uriram, Thailand

This case study focuses on migration and land use in rural Thailand. This work aims to study the change of household land in Nang Rong and to investigate the household factors as they relate to change in household land. The theory of Multiphasic Response including migration theories are used to explain population and social change. Socio-economic and political factors are also considered. The analysis of longitudinal data and in-depth interviews are employed. The summary provided that population pressure leads to the change of household structure and inevitably affects land use change. The study reveals that migration is found as the means to reduce pressure on land. (from author's abstract)

Rattanawarang, W. 2003. Migration and land use change: A case study in Nang Rong, Uriram, Thailand. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/62558> 

Conference Paper
Year: 2003

In search of sustainability: What can we learn from the past?

de Vries derives lessons from transdisciplinary histories of socio-natural systems such as recent paleo-climate and -vegetation reconstructions.

de Vries, B. 2003. In search of sustainability: What can we learn from the past? World System History and Global Environmental Change, Lund University, Sweden, September 19-22, 2003.

Link(s)

<https://www.pbl.nl/sites/default/files/downloads/lundpaperbertdevriesmarch2004.p...>

Conference Paper
Year: 2003

Ages of redistribution.

Dark Ages are contrasted with periods of concentration, which are characterized by population growth and economic expansion. In Dark Ages, growth ceases and populations disperse. This conference paper probes the robustness of this concept and the possibility

Modelski, G. 2003. Ages of redistribution. World System History and Global Environmental Change, Lund University, Sweden, 19-22 September 2003.

Link(s)

<http://www.humecol.lu.se/woshglec/papers/modelski.doc>, <http://www.humecol.lu.se/woshglec/>

Conference Paper
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Fertility and the Environment in a Natural Resource Dependent Economy: Evidence from Petén, Guatemala

Using data from the 1998/99 Demographic Health Survey in Guatemala, this paper examines the relationships between environmental factors and fertility decision-making and behaviors, especially in natural resource dependent economies like that of the Petén, Guatemala. The Petén, is the largest lowland humid forest in Mesoamerica.

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Link(s)

https://people.geog.ucsb.edu/~carr/DCarr_Publications/Sutherland_Carr_Curtis_Pob...,
<http://revistas.ucr.ac.cr/index.php/psm>

Conference Paper

Year: 2003

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De Souza, R. 2003. Sustaining Caribbean coastal areas. Population Reference Bureau.

Link(s)

<https://www.prb.org/presentations/SustainingCaribbeanCoastalAreas.ppt>

Conference Paper

Year: 2003

Evolution of population and resource with maximum objective.

This paper was presented at the 2003 conference of the European Association of Environmental and Resource Economists. It presents an economic model of steady states between population and natural resources within a framework of John Rawls' maximin.

Tian, H. and Cairns, R. D. 2003. Evolution of population and resource with maximum objective. European Association of Environmental and Resource Economists, 12th Annual Conference. Bilbao, Spain, June 27-30, 2003.

Link(s)

<http://www.crde.umontreal.ca/cree/textes/tian.PDF>

Conference Paper

Year: 2003

Changing global lifestyle and consumption patterns: The case of energy and food.

This paper offers a rough classification system in which to place regional lifestyles of energy and food consumption.

Reusswig, F., Lotze-Campen, H. and Gerlinger, K. 2003. Changing global lifestyle and consumption patterns: The case of energy and food. PERN Workshop: Population, Consumption and Environment Dynamics: Theory and Method, Wyndham Hotel, Montréal, Canada, October 19, 2003.

Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/Lotze-Campen_Reu...

Conference Paper

Year: 2003

The human-environment nexus: Progress in the past decade in the integrated analysis of human and biophysical factors

This keynote lecture identifies recent advances in land-use change analysis and reviews the major ecological changes that make such analysis important.

Moran, E. F. 2003. The human-environment nexus: Progress in the past decade in the integrated analysis of human and biophysical factors. Keynote lecture at World System History and Global Environmental Change Congress, Lund, Sweden, September 19, 2003.

Link(s)

<http://www.humecol.lu.se/woshglec/papers/moran.doc> , <http://www.humecol.lu.se/woshglec/> 

Conference Paper

Year: 2003

Exploring the Forest Poverty Link: Key Concepts, Issues and Research Implications

This paper provides an overview of issues, debates and research on the link from forest to poverty alleviation. (from Introduction)

Angelsen, A. and S. Wunder. 2003. Exploring the Forest Poverty Link: Key Concepts, Issues and Research Implications. CIFOR Occasional Paper No. 40. Jakarta, Indonesia, Center for International Forestry Research.

Link(s)

https://www.cifor.org/publications/pdf_files/OccPapers/OP-40.pdf 

Working Paper

Year: 2003

Settler welfare and land cover change in the Ecuadorian Amazon communities.

This study utilizes remote sensing to describe settler welfare and land use in the Ecuadorian Amazon. Demographic control variables figured significantly.

Barbieri, A. F.; Mena, C. F.; Erlien, C. M.; Bilsborrow, R. E.; Torres, B. 2003. Settler welfare and land cover change in the Ecuadorian Amazon communities. 2003 Open Meeting Human Dimensions of Global Change, Montreal Canada, October 16-18, 2003.

Link(s)

<https://sedac.ciesin.columbia.edu/openmtg/docs/barbieri.pdf> 

Conference Paper

Year: 2003

Quantifying the spatial issues in human dimensions research.

One of the largest technical obstacles to model human dimensions of the environment is spatial autocorrelation. This paper presents a solution using classification and regression trees.

Mageean, D. M., O'Connor, R. J., Rain, S. C. and Urquhart, N. S. 2003. Quantifying the spatial issues in human dimensions research. 2003 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Montreal, Canada, October 16-18, 2003.

Link(s)

<https://sedac.ciesin.columbia.edu/openmtg/docs/mageean.pdf> 

Conference Paper

Year: 2003

Urbanization, transportation and land use: Policy integration towards sustainable urban energy use for cities in Asia.

This paper examines drivers of urbanization in Asia, constraints on solutions to problems of urban density, regulatory options, and the varied conclusions that result from different framings of these problems.

Ford, J. F. 2003. Urbanization, transportation and land use: Policy integration towards sustainable urban energy use for cities in Asia. Proceedings of International Workshop on Policy Integration Towards Sustainable Urban Energy Use for Cities in Asia.

Link(s)

<https://www.iges.or.jp/en/ue/pdf/megacity03/HTML/pdf/3.5%20Ford%20paper.pdf> 

Conference Paper

Year: 2003

Human impacts on the environment in India.

Though the relationship is complex, population size and growth tend to expand and accelerate these human impacts on natural resources and the environment. The data have been analyzed from various secondary sources of data [from the] last fifty years. The analysis reveals that rapid population growth plays an important role in depleting natural resources. Population pressure on arable land contributes to the land degradation, thus affecting the productive resource base of the economy. The importance of population and environmental pollution control and protection of natural resources and environment has been highlighted. The paper concludes with some policy reflections and emphasizes the potential importance of natural resources. (from author's abstract)

Nagdeve, D. A. 2003. Human impacts on the environment in India. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/61654> 

Conference Paper

Year: 2003

Impacts of population migration on land degradation in Tarim River Basin, Xinjiang of China.

The potential environment repercussion associated with migration increasingly attracts attention from many researchers. This study is designed to investigate the interactions between population change and land degradation in Xinjiang of China. Taking Tarim River Basin as the focus research site, we study the process of deforestation, desertification under the pressure of large volume of in-migration flow since the 1950s, particularly in its down-stream. Exploiting digitized aerophotograph, remote sensing data and ground socioeconomic, demographic data in 1950-2000, changes in landscape by in-migrants intervention and out-migrants driven by land degradation is visualized and modeled. (from author's abstract)

Jiang, L., Tong, Y., Zhao, Z., Li, T. and Han, W. 2003. Impacts of population migration on land degradation in Tarim River Basin, Xinjiang of China. Population Association of America 2003 Annual Meeting, Minneapolis, MN. May 1-3.

Link(s)

<https://paa2003.populationassociation.org/abstracts/62705> 

Conference Paper

Year: 2003

A global analysis of urban reflectance.

Spectral characterization of urban reflectance is necessary for discrimination of human settlements from other types of land cover. The 10 to 20 m scale of urban land cover elements

results in a preponderance of spectrally mixed pixels when imaged with moderate resolution optical sensors like Landsat. The overall reflectance of the urban mosaic is determined by the spectral reflectance of surface materials and shadows and their spatial distribution. Building materials dominate net reflectance in most cities but in many cases vegetation also has a very strong influence on urban reflectance. A comparative analysis of Landsat imagery for a set of 28 cities worldwide provides a basis for a general spectral characterization of urban reflectance. (from author's abstract)

Small, C. 2002. A global analysis of urban reflectance. Lamont Doherty Earth Observatory, Columbia University.

Link(s)

<http://www.ldeo.columbia.edu/~small/Urban/SmallUrbYst2002Fmt.pdf> 

Working Paper

Year: 2002

Modeling Human Environmental Interaction: Local Instabilities and Structural Persistence.

The author develops a mathematical model of human population and environment interaction that includes a provisions for the acceleration of the population size.

Read, Dwight W. 2002. Modeling Human Environmental Interaction: Local Instabilities and Structural Persistence. January 23, 2002 Paper prepared for the Abisko Conference, May 19 - 23, 2001.

Link(s)

http://www.sscnet.ucla.edu/anthro/faculty/read/PDF_Files/Conferences/Read_Abisko... 

Conference Paper

Year: 2002

Population and the environment.

"Humans have influenced environmental changes in the past, and vice versa. The two-way interaction between people and their environments will continue in the future. In the coming half-century, the human population will probably be larger, more slowly growing, more urban, and older than in the twentieth century. No one knows whether humans will be more internationally mobile. These changes, with uncertain environmental consequences, result from human choices, individual and collective, and are therefore subject to influence by programs and policies."

Cohen, J. 2002. Population and the environment. The Convergence of U.S. National Security and the Global Environment Sixth Conference, May 27-June 2, 2002.

Link(s)

https://www.aspeninstitute.org/congressional/pdfs/pop_env_cohen.pdf 

Conference Paper

Year: 2002

Demography, food production and famine risks in the 21st century

After a review of the main demographic effects of famine, the authors argue that population growth will not outpace food supply in the near future. Aspects of population growth and scale are considered as significant to risk of famine.

Dyson, T. and Ó Gráda, C. 2002. Demography, food production and famine risks in the 21st century. Centre for Economic Research Working Paper Series, WP02/16.

Link(s)

<http://hdl.handle.net/10197/486> , <https://researchrepository.ucd.ie/handle/10197/486> 

<https://www.ucd.ie/economics/research/papers/2002/WP02.16.pdf> 

Working Paper

Year: 2002


Urban land cover analysis from satellite images.

This is a study of modeling urban environments from TM satellite images. Urban environments are so heterogeneous. It is necessary to simplify them as combinations of basic land cover materials in order to enable quantitative studies. The V-I-S model proposed by Ridd in 1995 is a conceptual model to simplify urban environments as combination of three basic ground components: vegetation, impervious surface, and soil. Most urban grounds can be interpreted as combinations of these three basic components. This model is used by this study on Salt Lake City, Utah. As a step further, six ground components are selected as basic components of urban environments: two for vegetation, three for impervious surface, and one for soil. (from author's abstract)

Hung, M. 2002. Urban land cover analysis from satellite images. Paper from the Mid-Term Symposium in conjunction with Pecora 15/Land Satellite Information IV Conference, Denver, CO, November 10-15, 2002.

Link(s)

<https://www.isprs.org/commission1/proceedings/paper/00099.pdf> 

https://www.isprs.org/commission1/proceedings/contents_pecora.html 

Conference Paper

Year: 2002

Population dynamics, environment and quality of life in North-East India

This paper was prepared for the 2002 IUSSP Population Meetings, Bangkok, Thailand. It describes a framework for understanding development in North-East India that involves the interaction of population, environment, and quality of life.

Mishra, B. 2002. Population dynamics, environment and quality of life in North-East India. 2002 IUSSP Population Meeting.

Link(s)

<http://archive.iussp.org/Bangkok2002/S17Mishra.pdf> 

Conference Paper

Year: 2002

The elderly, HIV/AIDS and sustainable rural development.

The objective of this paper is to examine briefly how the international community is perceiving and responding to the HIV/AIDS pandemic from the perspective of the elderly, why the elderly have a role to play and under what circumstances can they play it in rural areas of developing countries. The focus is on rural elderly in developing countries, especially, but not only, in Africa. (from Introduction)

du Guerny, J. 2002. The elderly, HIV/AIDS and sustainable rural development. Food and Agriculture Organization of the United Nations (FAO).

Link(s)

<https://www.fao.org/home/404> 

Conference Paper

Year: 2002

Impact of air quality on human health: A case of Mumbai City, India

Air Pollution is a major environmental problem in developing countries. It has serious health effects as it results in respiratory diseases. This study focuses on Mumbai a mega city (India) where the levels of all air pollutants are significantly higher than the norms of WHO. In Mumbai, there is a considerable variation in levels of pollution as reflected by the 22 pollution monitoring sites to study the impact of air pollution on health, two areas were selected: Chembur (highly polluted), Borivali (less polluted). (Authors' abstract)

Shankar, P. Ravi; Rao, G. Rama. 2002. Impact of air quality on human health: A case of Mumbai City, India. Paper presented at the IUSSP Regional Conference on Southeast Asia's Population in a Changing Asian Context, 10-13 June 2002

Link(s)

<http://archive.iussp.org/Bangkok2002/S09Shankar.pdf> 

Conference Paper

Year: 2002

Tubewells and arsenic exposure in Bangladesh: Results of national surveys

Bangladesh was able to provide 94 percent of the rural population with safer tubewell water, but recent findings show that 40 million people using that water are at great or medium danger of arsenic poisoning from the water. The study uses two surveys, of the population and of tubewell water to establish how people use the tubewell water, how they have been affected by the national campaign, and by tubewell testing. The article concludes that the appropriate strategy to deal with the arsenic problem is to maintain the water source where possible, but to increase testing.

Caldwell, B. K., Caldwell, J. C., Mitra, S. N. and Smith, W. 2002. Tubewells and arsenic exposure in Bangladesh: Results of national surveys. IUSSP.

Link(s)

<http://archive.iussp.org/Bangkok2002/S09Caldwell.pdf> 

Conference Paper

Year: 2002

Demographic composition and projections of car use in Austria

Understanding the factors driving demand for transportation in industrialized countries is important for addressing various environmental issues (e.g., air pollution and climate change). Although non-economic factors receive less attention, recent research finds that demographic factors are important. While some studies apply a detailed demographic composition to analyze past developments of transportation demand, projections for the future are mainly restricted to aggregate demographic variables. Here we go beyond previous work by combining cross-sectional analysis of car use in Austria with detailed household projections. We show that projections are sensitive to the particular type of demographic disaggregation employed. The highest projected car use - an increase of 26% between 1996 and 2046 - is obtained if we apply the value of car use per household. For a composition that differentiates between household size and age of the household head, car use is projected to decrease by 7% during the same period. (Authors' Abstract)

Prskawetz, A., Leiwen, J. and O'Neill, B. C. 2002. Demographic composition and projections of car use in Austria. MPIDR Working Paper WP-2002-034. Rostock, Max Planck Institute for Demographic Research

Link(s)

https://www.demogr.mpg.de/en/publications_databases_6118/publications_1904/mpidr... 

<https://www.demogr.mpg.de/papers/working/wp-2002-034.pdf> 

https://www.demogr.mpg.de/papers/workshops/010518_paper07.pdf 

Working Paper

Year: 2002

How important are household demographic characteristics to explain private car use patterns? A multilevel approach to Austrian data.

n.a.

Borgoni, R., Ewert, U. and Prskawetz, A. 2002. How important are household demographic characteristics to explain private car use patterns? A multilevel approach to Austrian data. Working Paper WP 2002-006. Max Planck Institute for Demographic Research.

Link(s)

<https://www.demogr.mpg.de/> 

Working Paper

Year: 2002

Human migration in North Sulawesi fishing communities.

The paper examines immigration and fishing in coastal villages of the Minahasa district of Sulawesi, Indonesia. The authors conducted a survey among 600 fishermen, village leaders, and focus groups, with questions about fishing methods, catch, household characteristics and such. They conclude that immigration's main effect on the coastal villages has been to augment the population; the migrants do not employ different fishing techniques. Vice versa, migration status does not have an impact on fish catches. The authors conclude that there is pressure on the fishing resources, and recommend that policies be implemented.

Kramer, Randall A.; Simanjuntak, Sahat; Liese, Christopher. 2002. Human migration in North Sulawesi fishing communities. IUSSP

Link(s)

<http://archive.iussp.org/Bangkok2002/S12Kramer.pdf> 

Conference Paper

Year: 2002

Health consequences of forest fires in Indonesia

In 1997, Indonesia experienced the worst forest fires in decades. This paper explores the health impacts of areas affected by smoke, using detailed information from the intensity of smoke, and information from the Indonesia Family Life Survey of 1997. According to the results of the study, adults in households of smoke inundated areas were in worse health than those in smoke-free areas, even when correcting for pre-fire regional health differences from 1993.

Frankenberg, E., McKee, D. and Tomas, D. 2002. Health consequences of forest fires in Indonesia. IUSSP.

Link(s)

<http://archive.iussp.org/Bangkok2002/S09Frankenberg.pdf> 

Conference Paper

Year: 2002

Multi-agent systems for the simulation of land-use and land-cover change: A review.

This paper presents an overview of multi-agent system models of land-use/cover change (MAS/LUCC models). This special class of LUCC models combines a cellular landscape model with agent-based representations of decisionmaking, integrating the two components through specification of interdependencies and feedbacks between agents and their environment... We conclude that, while significant challenges exist, these models offer a promising new tool for researchers whose goal is to create fine-scale models of LUCC phenomena that focus on human-environment interactions. (from Abstract)

Parker, D. C., Manson, S. M., Janssen, M. A., Hoffmann, M. J. and Deadman, P. 2002. Multi-agent systems for the simulation of land-use and land-cover change: A review. Center for Spatially Integrated Social Science.

Link(s)

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

Conference Paper

Year: 2002

The Impact of HIV/AIDS on Rural Households and Land Issues in Southern and Eastern Africa

The paper highlights key issues regarding the impact of the epidemic HIV/AIDS on rural households and their economies, and ultimately on surrounding land. The study focused on Kenya, Lesotho, and South Africa.

Drimie, S. 2002. The Impact of HIV/AIDS on Rural Households and Land Issues in Southern and Eastern Africa. Food and Agricultural Organization, Sub-Regional Office for Southern and Eastern Africa.

Link(s)

[HTML version of paper](#) , [Pdf for download](#)

Working Paper

Year: 2002

Policies, people and land use change in Uganda: A case study in Ntungamo, Lake Mburo and Sango Bay sites.

The research documented in this paper explores intermediate variables through which population dynamics affect the environment.

Tukahirwa, Joy. 2002. Policies, people and land use change in Uganda: A case study in Ntungamo, Lake Mburo and Sango Bay sites. Land Use Change Impacts and Dynamics (LUCID) Project Working Paper 17; Nairobi, Kenya: International Livestock Research Institute.

Link(s)

http://www.lucideastafrica.org/publications/Tukahirwa_Lucid_WP17.pdf 

Working Paper

Year: 2002

Urbanization and natural disasters in the Mediterranean: Population growth and climate change in the 21st century.

This paper observes a relationship between urbanization and natural disasters resulting from environmental stress. Projections are analyzed. Case studies include Izmet's earthquake and Algiers' flash flood.

Brauch, H. G. 2002. Urbanization and natural disasters in the Mediterranean: Population growth and climate change in the 21st century. Presented at the The Future of Disaster Risk: Building Safer Cities Conference, December 2002.

Link(s)

<https://www.proventionconsortium.org> 

Conference Paper

Year: 2002

Linking global environmental change to the local burden of disease.

Composite health indicators, including Healthy Life Years and Disability Life Years are used to compare climate-driven disease burden, such as malaria and cerebrospinal meningitis, with disease burden resulting from ambient lead.

Ogunseitan, O. A. and Smith, T. R. Linking global environmental change to the local burden of disease. Forum 6, Global Forum for Health Research, Arusha, Tanzania, November 12-15, 2002.

Link(s)

<https://www.globalforumhealth.org/> 

Conference Paper

Year: 2002

Root causes of land cover/use change in Uganda: An account of the past 100 years

Mugisha documents the effect of biophysical-socio-economic factors on land cover/use changes in Uganda over the past 100 years.

Mugisha, Samuel. 2002. Root causes of land cover/use change in Uganda: An account of the past 100 years. Land Use Change Impacts and Dynamics (LUCID) Project Working Paper 14; Nairobi, Kenya: International Livestock Research Institute.

Link(s)

[link to pdf, part I](#) , [Link to pdf, part II](#) 

Working Paper

Year: 2002

Remote sensing, GIS, and land use and land cover mapping along the I-10 corridor

The National Consortium on Remote Sensing in Transportation's "Environmental Assessment" headed out of Mississippi State University conducts research into the nature of land cover change as it relates to transportation features. For an environmentally sensitive area on the Mississippi Gulf Coast, ongoing research studies the changes in land cover for the area with particular emphasis on changes that have occurred related to completion of Interstate 10. Analyses of population and demographic information, existing land cover data, and non-spectral retrospective research illustrate that the area has changed dramatically in the past thirty years as evidenced by a population increase of around 50%. (from author's abstract)

Johnson, A., Truax, D. D., O'Hara, C. G. and Cartwright, J. 2002. Remote sensing, GIS, and land use and land cover mapping along the I-10 corridor. International Society for Photogrammetry and Remote Sensing

Link(s)

<https://www.isprs.org/proceedings/XXXIV/part1/paper/00085.pdf> 

Conference Paper

Year: 2002

Modeling the distribution of human population with night-time satellite imagery and gridded population of the world

In this study we look at the World Stable Lights dataset as a potential means to refine the spatial detail of the population dataset. We compared the Log10 of population density to the nighttime light frequency for sample of regions of the world with spatially detailed administrative data and

found a consistent relationship between population density and light frequency. Based on this relationship, we developed a transfer function to relate light frequency to population density and a mass-conserving algorithm that relocates fractions of populations within large administrative units to locations of lighted settlements. (from author's abstract)

Pozzi, F., Small, C. and Yetman, G. 2002. Modeling the distribution of human population with night-time satellite imagery and gridded population of the world. International Society for Photogrammetry and Remote Sensing.

Link(s)

<http://www.isprs.org/proceedings/XXXIV/part1/paper/00061.pdf> 

Conference Paper

Year: 2002

Environmental change and forced migration: making sense of the debate

This paper seeks to find a way into current discussions about the links between environmental change and forced migration for non-specialists. (taken from Introduction)

Castles, Stephen. 2002. Environmental change and forced migration: making sense of the debate. UNHCR New Issues in Refugee Research, Working Paper 70.

Link(s)

<https://www.unhcr.org/research/RESEARCH/3de344fd9.pdf> 

Working Paper

Year: 2002

A change vector analysis technique to monitor land use/land cover In SW Brazilian Amazon: Acre State.

The Brazilian Amazon is an area where extensive tropical rainforest areas are being destined to agriculture and cattle raising activities, contributing to the environmental and landscape change of this large region. In this context, the main objective of this paper is to present and test a technique for change detection called Change Vector Analysis (CVA) to analyze the variability of land use/land cover dynamics in the region of Peixoto, Acre State, using multi-temporal analysis of multi-spectral TM-Landsat data. The results demonstrate the capacity of the CVA technique to stratify different types of change related to land use/land cover dynamics in this region. (Authors' abstract)

Lorena, R. B.; dos Santos, J. R.; Shimabukuro, Y. E.; Brown, I. F.; Kux, H. J. H. 2002. A change vector analysis technique to monitor land use/land cover In SW Brazilian Amazon: Acre State. Paper from the Mid-Term Symposium in conjunction with Pecora 15/Land Satellite Information IV Conference, Denver, CO, November 10-15, 2002.

Link(s)

<https://www.isprs.org/proceedings/XXXIV/part1/paper/00014.pdf> 

Conference Paper

Year: 2002

Community awareness campaigns for timber and non-timber resources in rural Romanian villages.

The government of Romania has initiated a restitution process of transferring state-controlled forestlands to private ownership. There is concern on the part of the State, however, on how forested land will be managed under new private ownership. This concern is based on potential widespread removal of timber and its economic, social and environmental impacts. Before forest operations can be initiated on private forests, the property is required to be under a forest management plan developed by the State. Because of strict regulations on forest management, emphasis has been placed on non-timber resources such as berries, nuts, mushrooms, etc. Thus, the main goal of this project is to create awareness campaigns to educate the villages about extractive and non-extractive timber resources. These awareness campaigns will educate local communities about environmentally sound forest practices. This paper will focus on effective ways of communicating these ideas to various stakeholders in rural communities and identify key elements associated with the successful adoption of practices in their forest management plans. Participant observation will be used to gather data for this study. From the Natural Resources Research Group homepage.

Robinson, L., Reid, K., Dubois, M., Bailey, C. and Dunkelberger, J. 2002. Community awareness campaigns for timber and non-timber resources in rural Romanian villages. Presented at the 2002 Meeting of the Rural Sociological Society, Chicago, IL, August 14-18, 2002.

Link(s)

<http://www.ag.auburn.edu/~bailelc/rss2002%20forestry%20paper%20abstracts.pdf> 

Working Paper

Year: 2002

Urban growth seen from space.

Using sophisticated remote sensing systems, scientists have evidence of significant changes to regional geography. At this year's annual meeting of the American Association for the Advancement of Science in Washington, D.C., researchers present findings about their study of wide scale urbanization. While some of their work demonstrates common sense causes and effects from growth, others provide startling evidence for heavy urban growth apparently causing major changes to local weather and climate patterns. (from Introduction)

Quattrochi, D., Masek, J. G., Howell, B., Bornstein, B., Lin, Q., Lo, C., Seto, K. C. and Imhoff, M. L. 2002. Urban growth seen from space. NASA Goddard Space Flight Center, Scientific Visualization Studio.

Link(s)

<http://svs.gsfc.nasa.gov/stories/AAAS/> 

Conference Paper

Year: 2002

Rapid urbanization, the environment and infant mortality.

From RAND website: This study will investigate the consequences of rapid urbanization and environmental degradation on infant mortality in the Brazilian state of São Paulo over the past 25 years

Sastry, N. 2002. Rapid urbanization, the environment and infant mortality. RAND.

Link(s)

<https://www.rand.org/child/research.html> 

Working Paper

Year: 2002

Environment and health in India

Using national data from the last 50 years, the paper analyzes population trends, environmental degradation and health effects in India. The topics covered in the paper are demographic trends, urbanization, poverty, deforestation, land/soil degradation, pollution from vehicles and energy production, water pollution. The paper concludes that the large scale environmental degradation in India is accelerated by population growth, and is having a significant and negative impact on health.

Nagdeve, D. A. 2002. Environment and health in India. IUSSP.

Link(s)

<http://archive.iussp.org/Bangkok2002/S09Nagdeve.pdf> 

Conference Paper

Year: 2002

Will population stabilization lead to a better environment in Pakistan?

This short paper warns against simplistic analyses of the relationship between population and environment.

Zaidi, A. A. and Farooq, S. 2002. Will population stabilization lead to a better environment in Pakistan? 5th International Sustainable Development Conference Organized by Sustainable Development Policy Institute (SDPI), Islamabad. October 31 to November 2, 2002.

Link(s)

<https://www.iucn.org/places/pakistan/poverty/docs/pslep-sdpi.pdf> 

Conference Paper

Year: 2002

Urbanization, urbanism, environmental change and health.

Urbanisation refers to the shift of population from rural to urban setting. Urbanism is the associated set of living conditions, behaviors and values. On the one hand, there are some economies of scale and service provision (especially with high-density housing) and opportunities for recycling. On the other hand, urbanism entails increases in consumption level and energy use, combined with an uncoupling of communities from engagement with their environmental life-supports; cities thus have "ecological footprints" that extend well beyond their physical boundaries, and this has present and future consequences for the wellbeing and health of adjoining and distant populations. (from abstract)

McMichael, A. J. 2002. Urbanization, urbanism, environmental change and health. Asian MetaCentre for Population and Sustainable Development Analysis.

Link(s)

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

Conference Paper

Year: 2002

Population, environment and development in India: Can the achievement of economic prosperity in India be reconciled with environmental concern?

Recent studies suggest that pollution and environmental damage will grow exponentially for many decades in developing countries-in India, for most of this century-before it is eventually brought under control and reduced to tolerable levels' India is in a position to address its environmental problems at an earlier phase of development than was the case historically in the industrial countries. Pollution is likely to rise before it is reduced on account of the lags associated with investment and substitution of 'clean' for 'dirty' practices. But the rate of increase and the timing of the peak depends far more on environmental policies than it does on per capita income growth. (from Introduction)

Anderson, D. 2002. Population, environment and development in India: Can the achievement of economic prosperity in India be reconciled with environmental concern? London School of Economics and Political Science.

Link(s)

https://www.lse.ac.uk/Depts/spa/india-project/Working_Papers/DA%20-%20Can%20the%20... ,
<https://www.lse.ac.uk/Depts/spa/india-project/> 

Working Paper

Year: 2002

Exploring the population/water resources nexus in the developing world

The authors argue the case for analyzing water scarcity in an African context, not only as a mere first-order scarcity of a natural resource, but as a second-order scarcity of the adaptive capacity (a social resource) required to manage the first-order natural resource scarcity, and implement the social changes necessary to adapt to the first-order water scarcity. Their argument is underpinned by standard macroeconomic data, used as indicators for the second-order scarcity, or relative abundance, of such social resources (adaptive capacity). The reasoning is readily applicable to other water-scarce regions. In addition, a discussion is undertaken on the value of GIS (Geographical Information System) methods within this first- and second-order framework. (text adapted from EDC News)

Turton, A. R. and Warner, J. F. 2002. Exploring the population/water resources nexus in the developing world. Woodrow Wilson Institute.

Link(s)

<http://n.ereserve.fiu.edu/010006980-1.pdf> 

Working Paper

Year: 2002

The impact of rapid migration on environmental stability: Coastal resource management in Palawan Province, Philippines.

A multidisciplinary study combining demography and anthropology, on the environmental impact of migration-driven population growth in the coastal areas of Palawan Province in the Philippines. The study results show that recent population growth has been largely migration and migrant fertility driven. The immigrants brought with them more efficient and destructive modes of resource extraction, which upset the existing folk management of resources. The authors find that possibly a new regime of folk management, based on conservation of existing resources, is emerging.

McNally, J. W., Poggie, J. and Perez, A. E. 2002. The impact of rapid migration on environmental stability: Coastal resource management in Palawan Province, Philippines. IUSSP.

Link(s)

<http://archive.iussp.org/Bangkok2002/S12Mcnelly.pdf> 

Conference Paper

Year: 2002

Fertility determinants on the frontier: Longitudinal evidence from the Ecuadorian Amazon

This paper takes advantage of a subset of longitudinal data collected in 1990 and 1999 in the Ecuadorian Amazon. By using longitudinal data we were able to follow families and plots over time and analytically describe the relationship between landholdings and fertility. (Authors' abstract)

Carr, D. and Pan, W. 2002. Fertility determinants on the frontier: Longitudinal evidence from the Ecuadorian Amazon. Presented at the Population Association of America (PAA) Annual Meeting, Atlanta, Georgia, May, 2002.

Link(s)

https://people.geog.ucsb.edu/~carr/DCarr_Publications/Carr_Pan_AAGpop.sp.gr.comp... 

Conference Paper

Year: 2002

Safeguarding the commons: Conflicts over natural resource use and poverty alleviation strategies in rural Tanzania

The author examines competition over natural resource use and poverty eradication strategies. Among the factors considered is population growth.

Madulu, N. F. 2002. Safeguarding the commons: Conflicts over natural resource use and poverty alleviation strategies in rural Tanzania. Presented at The Commons in an Age of Globalisation, the Ninth Conference of the International Association for the Study of Common Property, Victoria Falls, Zimbabwe, June 17-21, 2002.

Link(s)

<http://hdl.handle.net/10535/1907> , <https://dlc.dlib.indiana.edu/dlc/handle/10535/1907> 

Conference Paper

Year: 2002

Impact of population changes on aquatic food consumption patterns in PRC.

Among North Pacific coastal states, China is playing important role not only in terms of the population size, but also because of in terms of the increasing demand and quickly changing consumption patterns of marine and fresh water resources. However, until recently our studies ignored existing links between growing population, its increased income levels and associated growth in demand for marine and aquatic products. This paper uses the official data to analyze how the demographic factors such as population size, migration, and urbanization affect consumption of the marine and aquatic products. (author's abstract)

Lu, J., Li, J. and Wang, G. 2001. Impact of population changes on aquatic food consumption patterns in PRC. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Global vegetation production and population distribution.

Human population is not uniformly distributed on the Earth ' This relationship can be both considered the result of human ability to dominate the environment as well as the influence of the environment 'Vegetation production is a good indicator of the availability of natural resources ... Actual vegetation production can be easily derived from global remote sensing data sets. We examined here the distribution of global human population with respect to the vegetation production and its temporal variability... results indicate that about 40% of the world population lives in areas with average or high vegetation production levels...[and high population density].. areas with the highest vegetation production are still characterized by low population density '(excerpt from author's abstract)

Milesi, C. and Running, S. 2001. Global vegetation production and population distribution. Presented at the 2001 Spring Meeting of the American Geophysical Union (AGU), Boston, MA, May 29 - June 2, 2001.

Link(s)

<http://earth.agu.org/> 

Conference Paper

Year: 2001

Integrating the social and natural sciences in the study of land use and land cover change.

Part I of this paper draws on hierarchy theory in ecology to develop a multi-leveled framework to conceptualize the "Socioeconomic" and the "Biophysical" drivers that lead to land use change. These broad conceptual domains are further broken down into "Proximate," "Intermediate," and "Distant" analytical scales. The discussion addresses the conceptual and methodological challenges of analyzing the cross-scale dynamics that link socioeconomic and biophysical events at proximate, intermediate, and distant levels of analysis. The model's utility can be assessed in terms its effectiveness as a guide to data collection and analysis, by its ability to generate hypotheses that can be subjected to empirical test, and by its capacity to organize existing information into a coherent understanding of how global, regional and local events are related. To illustrate its applicability, Part II uses the framework to review the literature on land use and environmental change in the Amazon. (author's abstract)

Wood, C. and Porro, R. 2001. Integrating the social and natural sciences in the study of land use and land cover change. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Simulating land use and land cover dynamics in the Ecuadorian Amazon through Cellular Automata approaches and an integrated GIS

Focusing on the spatial and temporal dynamics of deforestation, agricultural extensification, and plant succession at the finca-level and urbanization and transportation networks at the community level, a cell-based morphogenetic model of LUCC was developed as the foundation for a predictive model of regional landscape dynamics. Integrated into the model were results from a longitudinal household survey conducted in 1990 and 1999; a multiphase hybrid classification applied to an assembled Landsat image time-series for 1973, 1986, 1989, 1996, and 1999; image change-detections to characterize LUCC and to train and validate the cell-based model implemented within a cellular automata framework; and an integrated GIS of coverages representing hypothesized social, biophysical, and geographical drivers of LUCC. The models suggest that land conversion along roads, near market centers and communities, and in areas having an enhanced geographic access serve as the regional nodes of landscape dynamics leading towards a landscape cycling between one dominated by forest to one dominated by agricultural, fragmented forest, and urbanized communities and service centers. (author's abstract)

Walsh, S. J. and Messina, J. 2001. Simulating land use and land cover dynamics in the Ecuadorian Amazon through Cellular Automata approaches and an integrated GIS. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Human dimensions studies in the large-scale biosphere-atmosphere experiment in Amazonia (LBA).

This presentation will focus on the important role of the human dimensions investigations to understand the dynamics of land use change and land cover change in Amazonia. Conversely, the comprehensive LBA studies on the functioning of ecosystems will help to understand impacts and limitations to the sustainable development of this vast tropical forest. (author's abstract)

Nobre, C. A. 2001. Human dimensions studies in the large-scale biosphere-atmosphere experiment in Amazonia (LBA). 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Managing water supply in developing countries.

The world is currently faced with 510 million urban residents without access to domestic water and 850 million without access to sanitation. By 2020, there will be additional 1,900 million in need of water and sanitation services. In addition, major problems exist with the management of existing systems. The entire governance of the water sector and the management of particular systems raise serious questions about the application of technologies. The paper outlines a few feasible technical and economic solutions. (excerpt from author's summary)

Rogers, P. 2001. Managing water supply in developing countries. Presented at the 2001 Spring Meeting of the American Geophysical Union (AGU), Boston, MA, May 29 - June 2, 2001.

Link(s)

<http://earth.agu.org/> 

Conference Paper

Year: 2001

Middle Eastern cities: Water needs in the twenty-first century.

it is the towns and cities of the Middle East, and not the rural areas, which will be the main creators of wealth in the twenty-first century. It is, therefore, vital that the water needs of these areas are satisfied so that sustained economic development can continue unchecked. In most cases this can be achieved if varying amounts of irrigation water are reallocated to urban usage. While this will put extra strains on rural regions the extra wealth created in the urban areas will more than compensate for such losses. (author's abstract)

Beaumont, P. 2001. Middle Eastern cities: Water needs in the twenty-first century. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Land-use change and carbon sequestration in the forests of Ohio, Indiana, and Illinois: Sensitivity to population and model choice

This paper utilizes spatial econometrics to estimate carbon sequestration costs under different assumptions of population growth, future land use change, and error terms.

Choi, S.; Sohngen, B. and Alig, R. 2001. Land-use change and carbon sequestration in the forests of Ohio, Indiana, and Illinois: Sensitivity to population and model choice. Selected Paper for the Annual Meeting of the American Agricultural Economics Association Chicago, IL, August 5-8, 2001.

Link(s)

<http://purl.umn.edu/20564> 

Conference Paper

Year: 2001

Climate change and the urban heat island: methods for defining complex impacts and vulnerabilities in Sao Paolo, Brazil.

The objective of this study is to define methods for determining how climate change may affect the urban heat island in Sao Paolo, Brazil, and for studying how these changes may in turn affect heat stress, air pollution, and health outcomes across the complex urban environment of Sao Paolo. The research on urban impacts will contribute to providing insight into such questions as: How do climate variability and projected climate change impact complex urban environments? What conditions make particular sites, people, and systems more vulnerable than others? What are the current levels of response capacity in differing urban regions within the city to climate extremes and change? and How can response capacity be more effectively developed? (author's abstract)

Lombardo, M. A. 2001. Climate change and the urban heat island: methods for defining complex impacts and vulnerabilities in Sao Paolo, Brazil. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Environmental change and vulnerability in the Philippines.

The environment-poverty connection has been the subject of recent discourse in environmental management. Despite this, there seems to be limited understanding and appreciation on the intricacies of this connection in the Philippine context. This paper is written to fill this gap. It

aims to explore deeper the environment-poverty interlink by offering some explanations to the following questions: 1. What are the recently documented environmental changes in the Philippines and how are these impacting on the vulnerability of the poor? 2. How do environmental changes affect the population movements especially among the poor? 3. What are the strategies employed by the different sectors, especially the government, to reduce impacts of adverse environmental changes? 4. Which strategies seem to be most effective in reducing the vulnerability of the poor?

Pulhin, J. 2001. Environmental change and vulnerability in the Philippines. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Local population impacts and mitigation of sea level rise

Using sea level rise (SLR) as an example, we describe a protocol to synthesize population/environment case studies that contribute to minimizing local impacts of global environmental change. We delineate areas of potential impact from SLR for the coterminous United States, ascertain and project SLR impacts for selected sandy beach urban sites in South Coast California and South Coast Maine, describe relevant local policy instruments, and summarize responses of local stakeholder populations. Findings are as follows: (1) Storm surges generate cutting edge SLR impacts. (2) Coastal population growth is the overriding proximate determinate of SLR impacts in the areas examined. (3) State and local policy instruments do not fully protect populations at risk. (4) Different stakeholder populations share a common fate from SLR, that may be a basis for developing adaptation and mitigation strategies. Demographers can contribute to protocols that assess impacts of climate change on local populations and develop appropriate responses. (author's abstract)

Van Arsdol, M., Constable, A., Mageean, D. M., Lameka, R. A., Av Ruskin, G. and Ricci, N. M. 2001. Local population impacts and mitigation of sea level rise. Presented at the IUSSP XXIV General Conference, Salvador, Brazil, August 18-24, 2001.

Link(s)

http://archive.iussp.org/Brazil2001/s00/S09_01_VanArsdol.pdf 

Conference Paper

Year: 2001

Managing water supply in developing countries.

The world is currently faced with 510 million urban residents without access to domestic water and 850 million without access to sanitation. By 2020, there will be additional 1,900 million in need of water and sanitation services. In addition, major problems exist with the management of existing systems. The entire governance of the water sector and the management of particular systems raise serious questions about the application of technologies. The paper outlines a few feasible technical and economic solutions. (excerpt from author's summary)

Rogers, P. 2001. Managing water supply in developing countries. Presented at the 2001 Spring Meeting of the American Geophysical Union (AGU), Boston, MA, May 29 - June 2, 2001.

Link(s)

<http://earth.agu.org/> 

Conference Paper

Year: 2001

The meaning of sustainability in a developed landscape: The U.S. Great Plains in the twentieth century.

This paper raises important questions about sustainability by examining the U.S. Great Plains. In less developed settings -- for example tropical forests -- land use and population are often closely linked so that agricultural intensification and demographic growth produce environmental degradation, or short-term changes in water availability, soil quality, or weather reduce economic viability and population growth. The same may not be true of the semi-arid grasslands of the Great Plains during the last fifty years when agricultural, economic, and social systems have become fully developed. Starting with a detailed study of Colorado, and then expanding to the rest of region, this paper shows that urban sprawl has a profound impact on land use and cover, that the differential availability of water for irrigation has allowed some agricultural areas to flourish, and that sustaining population and community requires both agricultural viability and the presence of other kinds of economic infrastructure. (author's abstract)

Gutmann, M. P., Parton, W. J. and Riebsame, W. E. 2001. The meaning of sustainability in a developed landscape: The U.S. Great Plains in the twentieth century. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Population vulnerability and broad environmental climatic exposure.

This paper comprises a geographical study of the spatial distribution of mortality patterns at population level, in Brazil, with a particular analysis of possible explanatory links with local and

broad environmental dimensions in contrast with socio-economic conditions. The dependent variable was represented by patterns of ancient and modern mortality causes according to the epidemiological transition theory, as applied to the Brazilian setting. The independent explanatory variables were represented by a general socio-economic, and by local and broad environmental dimensions. The local one was represented by housing conditions water supply and sanitation, and the broad one by climatic characteristics (temperature, UV-B exposure and precipitation). The main method applied in this study was principal components analysis, which revealed associations of inter-related mortality causes and underlying explanatory conditions. The author argues in favour of a general vulnerability dimension, acting spatially upon populations, regardless of specific risk factors to specific diseases. (author's abstract)

Prata, P. R. 2001. Population vulnerability and broad environmental climatic exposure. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Integration of physical and social sciences in regional resource modeling in the GLOWA Volta Project.

To address issues of integrated water management of large watersheds in the face of global change, the German Federal Ministry for Science and Education has initiated a large program under the name "GLOWA". GLOWA comprises five research projects along a gradient from North Germany to West Africa. The GLOWA Volta Project concerns itself with the analysis of the water cycle in the Volta Basin and the subsequent development of a decision support system. The research team consists of meteorologists, hydrologists, agronomists, geographers, economists, and institutional analysts. Integration of the research outcomes from all these disciplines into one quantitative basin model is the main scientific challenge of the project.

Andreini, M.; van Edig, A.; van de Giesen, N.; Berger, T.; Vlek, P. L. G. 2001. Integration of physical and social sciences in regional resource modeling in the GLOWA Volta Project. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Economy-Energy-Emission (E-Cubed) Model for mega-cities in Asia.

In this study, we cover three capital cities in the Northeast Asian region: Beijing, Seoul and Tokyo. To address the environmental issues in the mega-cities, we adopt a top-down approach linking macroeconomic activities, local government finances, households' incomes and expenditures, transportation modes, energy use and greenhouse gas (GHG) emissions. Based on this top-down approach, we conduct a scenario analysis to measure the effect of national/local energy/environmental policies. (author's abstract)

Jung, T. Y., Moon, C., Kaneko, S. and Imura, H. 2001. Economy-Energy-Emission (E-Cubed) Model for mega-cities in Asia. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Environmental security for a growing population: A critical look on the human dimensions of population growth, food security, quality of life and environment in the next few decades in India.

This paper briefly examines the gains made by India in the area of food production and how this has contributed directly/indirectly to improvement of quality of life. It then examines the post - WTO situation of food security in India and constructs various scenarios of population growth and food demand for next few decades and deliberates on relationships of growing population, food demand and its pressure on resources like land, water, seed and fertilizers etc. It analyses the issue of environmental security in the face of different scenarios thus worked out. The main thrust of the paper is to see how India would be able to maintain/improve environmental security for its growing population and critically look on the human dimensions of population growth, food Security, quality of life and environment in the next few decades. (author's abstract)

Sharma, N. 2001. Environmental security for a growing population: A critical look on the human dimensions of population growth, food security, quality of life and environment in the next few decades in India. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Land use changes under pressure of urbanization: a time dimensional analysis of Ibadan, Nigeria, 1970-2000.

In this paper, the author examined how global environmental change has influenced urbanization and study how urbanization and its induced city centers adapt positively to the negative consequences of global environmental change.

Agbola, B. 2001. Land use changes under pressure of urbanization: a time dimensional analysis of Ibadan, Nigeria, 1970-2000. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Temporary migrations in Amazonia: the Bolivian-Peruvian border region of Acre, Brazil.

In Acre State, at the western end of Brazil's Amazonian frontier, rural-urban migration produced high urban growth rates and the associated poor peripheries, as well as re-organized rural space. New rural land-uses have developed in recent decades in Acre -- extractive reserves, extractive settlements, national parks, large cattle ranches, and colonization projects. This new construction of space in Amazonia has produced a population that resides permanently neither in cities nor in the forest. This population depends on temporary work and migrates in search of work and land. Currently, these migrations involve forested lands in Acre and neighboring Bolivia and Peru. These Brazilian-Bolivians or 'Brasivianos' are now faced with accelerating social and environmental changes that are re-defining the space available for them. The changing confluence of the agricultural frontiers of these countries and Peru, coupled with all-weather road transport connecting southwestern Amazonia to Pacific ports, constitute new forces for these nearly invisible populations.(author's abstract)

Esteves, B. 2001. Temporary migrations in Amazonia: the Bolivian-Peruvian border region of Acre, Brazil. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Land-use and land-cover change in the Sarapiquí region of northeastern Costa Rica.

The purpose of this research was to understand the spatial and temporal patterns of anthropogenic activities for a lowland tropical site in northeastern Costa Rica, through examining the land-cover and land-use history situated within the changing infrastructure and

socioeconomic environments. This was achieved through analyzing 1960-1996 land cover/land use time-series data derived from aerial photographs and Landsat Thematic Mapper data in conjunction with demographic and agricultural census data (Government of Costa Rica), field data, and historical information. Patterns were analyzed spatially within a geographic information system (GIS). (author's abstract)

Read, J. M. 2001. Land-use and land-cover change in the Sarapiquí region of northeastern Costa Rica. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Global population, primary productivity and economic prosperity.

Satellite remote sensing allows us to easily monitor land vegetation productivity on a global scale. We suggest using a simple measure of land productivity as an index of economic prosperity and compare it to more traditional macroeconomic indicators. For this study we used integrated monthly NDVI data from the NASA/NOAA Land Pathfinder global data set as a measure of land productivity. World human population distribution as a function of vegetation productivity was analyzed at the global and at the country scale. These distributions were compared to values of Gross Domestic Product (GDP per capita) collected for the countries with more than 1 million inhabitants. The analysis indicates that higher land productivity provides the potential for the economic prosperity of a certain country, in particular for temperate and not-tropical countries. A more complex relationship between land productivity and economic performance exists for the tropical countries. The results indicate that other factors, such as diseases, wars and market access, influence the realization of the economic potential of these countries. (author's abstract)

Milesi, C., Nemani, R. and Running, S. W. 2001. Global population, primary productivity and economic prosperity. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Socioeconomic and environmental factors affecting deforestation in Africa: Implications for environmental sustainability.

The purpose of this paper is to account for differences in the extent of deforestation among African countries, whilst focusing on the effects of socioeconomic and environmental factors. By adopting a cross-national approach, this paper seeks to provide answers to the following questions. What is the extent of deforestation in Africa and how does this vary among countries? What socioeconomic, environmental, human- and development-related factors account for inter-country differences in the extent of deforestation? What is the relative importance of these factors? What are the environmental implications of the effects of these factors and how do these impinge on the sustainable development of the African continent. The answers to these questions will improve our understanding of the causes of deforestation in Africa, as well as help in developing counter-measures. (author's abstract)

Arimah, B. C. 2001. Socioeconomic and environmental factors affecting deforestation in Africa: Implications for environmental sustainability. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Change patterns of population and land use in Ecuador's Northern Amazon.

This research describes the key factors leading to land conversion, such as road construction and colonization, as well as the specific factors that influence household and farm-level land use, such as demographic factors, economic constraints, livelihood strategies, and geographic accessibility. The objectives of this research are to examine LUCC in Ecuador's northern Oriente from 1990 to 1999 based on five broad categories of analysis: demographic characteristics of the household; farm/ecological characteristics; land tenure and wealth; labor inputs and outputs; and LUCC trajectories. Both descriptive statistics and the statistical model suggested that land use patterns are strongly affected by all five analysis categories. Demographic variables generally had the strongest effect on cropping; farm characteristics strongly influenced annual/food cropping, pasture, and forest; land tenure and wealth primarily affected cropping; labor inputs and outputs had significant affects on all four different land cover types; and trajectories of LUCC were affected by demographic and accessibility characteristics. Preliminary comparisons among the 1990 and 1999 surveys and image time-series indicate some significant changes have occurred among land cover determinants and trajectories of change across space and time. (author's abstract)

Walsh, S. J., Pan, W., Bilsborrow, R. E. and Crews-Meyer, K. A. 2001. Change patterns of population and land use in Ecuador's Northern Amazon. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 



Conference Paper
Year: 2001

Structure and scale identification in population-environment models.

We used regression trees, optimized by cross-validation, to model county-level population density in 1990 and to model relative population change over 1980-1990 in relation to climate and remotely sensed land cover variables over a 12,600 cell hexagon grid across the conterminous United States. The results imply that no single scale and model structure is optimal for socio-demographic analysis over a global or continental extent. Instead, initial global models need to be regionally and locally refined in a recursive but geographically specific manner using hierarchical modeling techniques. (author's abstract)

Mageean, D. M., Bartlett, J. G. and O'Connor, R. J. 2001. Structure and scale identification in population-environment models. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/downloads/1005862866_presentation_... ,
https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper
Year: 2001

PHOENIX: An integrated modelling framework for population and development.

There are many modelling approaches to describe and forecast population size. However, most of them do not comprise a fully integrated approach in which fertility behaviour and mortality patterns are integrated, and which relates these processes to socio-economic and environmental conditions. On the basis of existing approaches, the PHOENIX population modelling framework has been developed. In this framework, all steps to arrive at the computer simulation model are explicitly described. Applying a systems dynamic approach, causal relationships are structured making use of the Pressure-State-Impact-Response (PSIR) mechanism. This procedure has resulted in a integrated, transparent and well-founded modelling framework which enables to position, evaluate and analyze components of the demographic transition in relation to socio-economic and environmental conditions. (author's abstract)

Hilderink, H. 2001. PHOENIX: An integrated modelling framework for population and development. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

<http://arch.rivm.nl/iweb/iweb/index.html> 

Conference Paper

Year: 2001

Water and human security in the Middle East.

This paper uses a combination of historical evidence, projections of water demand, case study, and literature review to address relationship between freshwater availability and human security in the Middle East. The Middle East is one region of the world where water is considered a strategic resource, and a significant amount of work has been done examining the importance of water in this region. This paper provides a different way of looking at the problem. It focuses on issues of poverty, equity, culture and society - particularly among Israelis and Palestinians - in an effort to better understand the problem and to guide the way toward efficient and equitable solutions. (author's abstract)

Loneragan, S. 2001. Water and human security in the Middle East. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Towards sustainable urban environments in Africa.

Rapid urbanisation in the face of incommensurate provision of urban public utilities and facilities has triggered multifarious environmental problems in Africa's large cities. Six of such problems are identified for analysis, namely: air, water and noise pollution; escalating poverty at the urban communal level as well as at household and individual levels; poor and obsolescent health infrastructure, resulting in declining health quality; a resurgence of infant and childhood mortality, readily exacerbated by the HIV/AIDS pandemic; residential mobility from the inner fringes of cities to urban fringes where spontaneous settlements keep mushrooming; and the urbanites' vulnerability to a host of environmental, socio-economic and political problems. The paper examines each of these issues and provides selected evidence from different cities located in different African sub-regions. Against the evidence provided, the paper suggests policy strategies and programmes that could arrest the situation. Particular attention is drawn on large cities such as Lagos, Ibadan, Kinshasa, Cairo, Addis Ababa and Johannesburg. (author's abstract)

Oucho, J. 2001. Towards sustainable urban environments in Africa. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

The sustainable use of space.

The population/environment literature has centered mostly on the relation between population growth and environmental change. Focusing on the largely-neglected area of spatial distribution would open up more useful avenues for policy and action. Past attempts to deal with the relation between sustainability and the use of space issue have centered on "carrying capacity" and "ecological footprints." Though useful for awareness-raising, these approaches do not provide policy orientation and could be superseded by an emphasis on "the sustainable use of space". Attempting to understand the environmental advantages of different spatial options, within concrete development contexts, seems an effective way to contribute to sustainability in coming years. Reviewing regional development and urbanization patterns would appear to be a promising place to start. The issue of urban growth is particularly relevant in this context. Most environmental studies have traditionally focused on rural areas. Yet, the locus of both demographic and economic growth today is the cities. In contradiction to the predominant view, it contends that, in the practicalities of this end-of-century scenario, there are excellent demographic socio-economic and even environmental reasons to assert that urban loci are more sustainable, over the medium and long range. (author's abstract)

Martine, G. 2001. The sustainable use of space. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

The dynamics of deforestation: Evidence from Costa Rica.

We estimate deforestation patterns with an econometric method explicitly derived from a dynamic microeconomic model. The model is similar to Stavins & Jaffe's (1990), but we condition on land selection and current forest/clearing status, and allow for dynamic adjustments of unobserved variables. Our coefficients are estimated from forest transitions, yielding parameterized deforestation regressions where estimated coefficients can be linked to theory. Our methodology most naturally applies to plot data, but can be applied to aggregates including districts (as in this paper) or even to countries. Our regression results could be used not only to understand deforestation and agricultural extensification patterns, but also as the basis for creating carbon baseline projections. The Kyoto Protocol requires credible baseline estimates in order to allow the Clean Development Mechanism to provide credit for avoided deforestation without damaging the integrity of the global climate change effort. (author's abstract)

Pfaff, A., Kerr, S., Sanchez, A. and Power, W. 2001. The dynamics of deforestation: Evidence from Costa Rica. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Urban sprawl and landscape degradation in high quality agro ecosystems: The case of Buenos Aires.

This paper describes causes and consequences of the conflictive uses of land in a broad edge around Buenos Aires city, where rural undertakings have been rapidly shifting from food, fiber and meat production to other activities. We describe and analyze the ecological changes brought about by the urban expansion and certain raw material demands from the soil and subsoil in peri-urban and rural areas between 1869 and 1991, and the form that these have taken. We end with a discussion of the lack of control over the continued expansion of the city, which results in natural ecosystem fragmentation, speculative parceling of the land, and soil decapitation, attempting against both the city and the rural area sustainability. (author's abstract)

Morello, J. and Matteucci, S. D. 2001. Urban sprawl and landscape degradation in high quality agro ecosystems: The case of Buenos Aires. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Environmental change and vulnerability in the Philippines.

The environment-poverty connection has been the subject of recent discourse in environmental management. Despite this, there seems to be limited understanding and appreciation on the intricacies of this connection in the Philippine context. This paper is written to fill this gap. It aims to explore deeper the environment-poverty interlink by offering some explanations to the following questions: 1. What are the recently documented environmental changes in the Philippines and how are these impacting on the vulnerability of the poor? 2. How do environmental changes affect the population movements especially among the poor? 3. What are the strategies employed by the different sectors, especially the government, to reduce impacts of adverse environmental changes? 4. Which strategies seem to be most effective in reducing the vulnerability of the poor?

Pulhin, J. 2001. Environmental change and vulnerability in the Philippines. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Climate change and the urban heat island: methods for defining complex impacts and vulnerabilities in Sao Paolo, Brazil.

The objective of this study is to define methods for determining how climate change may affect the urban heat island in Sao Paolo, Brazil, and for studying how these changes may in turn affect heat stress, air pollution, and health outcomes across the complex urban environment of Sao Paolo. The research on urban impacts will contribute to providing insight into such questions as: How do climate variability and projected climate change impact complex urban environments? What conditions make particular sites, people, and systems more vulnerable than others? What are the current levels of response capacity in differing urban regions within the city to climate extremes and change? and How can response capacity be more effectively developed? (author's abstract)

Lombardo, M. A. 2001. Climate change and the urban heat island: methods for defining complex impacts and vulnerabilities in Sao Paolo, Brazil. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Middle Eastern cities: Water needs in the twenty-first century.

it is the towns and cities of the Middle East, and not the rural areas, which will be the main creators of wealth in the twenty-first century. It is, therefore, vital that the water needs of these areas are satisfied so that sustained economic development can continue unchecked. In most cases this can be achieved if varying amounts of irrigation water are reallocated to urban usage. While this will put extra strains on rural regions the extra wealth created in the urban areas will more than compensate for such losses. (author's abstract)

Beaumont, P. 2001. Middle Eastern cities: Water needs in the twenty-first century. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Human dimensions studies in the large-scale biosphere-atmosphere experiment in Amazonia (LBA).

This presentation will focus on the important role of the human dimensions investigations to understand the dynamics of land use change and land cover change in Amazonia. Conversely, the comprehensive LBA studies on the functioning of ecosystems will help to understand impacts and limitations to the sustainable development of this vast tropical forest. (author's abstract)

Nobre, C. A. 2001. Human dimensions studies in the large-scale biosphere-atmosphere experiment in Amazonia (LBA). 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Integrating the social and natural sciences in the study of land use and land cover change.

Part I of this paper draws on hierarchy theory in ecology to develop a multi-leveled framework to conceptualize the "Socioeconomic" and the "Biophysical" drivers that lead to land use change. These broad conceptual domains are further broken down into "Proximate," "Intermediate," and "Distant" analytical scales. The discussion addresses the conceptual and methodological challenges of analyzing the cross-scale dynamics that link socioeconomic and biophysical events at proximate, intermediate, and distant levels of analysis. The model's utility can be assessed in terms its effectiveness as a guide to data collection and analysis, by its ability to generate hypotheses that can be subjected to empirical test, and by its capacity to organize existing information into a coherent understanding of how global, regional and local events are related. To illustrate its applicability, Part II uses the framework to review the literature on land use and environmental change in the Amazon. (author's abstract)

Wood, C. and Porro, R. 2001. Integrating the social and natural sciences in the study of land use and land cover change. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper
Year: 2001

Global vegetation production and population distribution.

Human population is not uniformly distributed on the Earth ' This relationship can be both considered the result of human ability to dominate the environment as well as the influence of the environment 'Vegetation production is a good indicator of the availability of natural resources ... Actual vegetation production can be easily derived from global remote sensing data sets. We examined here the distribution of global human population with respect to the vegetation production and its temporal variability... results indicate that about 40% of the world population lives in areas with average or high vegetation production levels...[and high population density].. areas with the highest vegetation production are still characterized by low population density '(excerpt from author's abstract)

Milesi, C. and Running, S. 2001. Global vegetation production and population distribution. Presented at the 2001 Spring Meeting of the American Geophysical Union (AGU), Boston, MA, May 29 - June 2, 2001.

Link(s)

<http://earth.agu.org/> 

Conference Paper
Year: 2001

Understanding climate change impacts on a global city: New York City, 2000-2080.

This paper focuses on two issues: first, the anticipated impacts of climate change on New York City; and second, how research is conducted on this and related issues of vulnerability, adaptation, and mitigation of impacts. It will summarize the findings of a multidisciplinary research project on the impacts of climate change on the New York Metropolitan region over an eighty-year period (from 2000 to 2080). (author's abstract)

Miller, R. B. 2001. Understanding climate change impacts on a global city: New York City, 2000-2080. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper
Year: 2001

The impacts of potential climate change for Shanghai, China.

The objective of this study is to present some initial investigations into the impact of potential climate change on the city of Shanghai and the surrounding region. Potential climate warming, increased frequency of strong storms, and enhanced rates of sea level rise are conditions that might lead to the most significant impacts for the region. Current rates of climate change and associated shifts, including measures for temperature, precipitation, and sea level rise, are determined from available data. Where possible, scenarios of potential future climates are constructed out to the year 2100. Shanghai is vulnerable to strong cyclonic storms (e.g. typhoons) and given the city's low elevation (e.g. much of the city is below 3 meters), there is potential for catastrophic flooding. Sea level rise and land subsidence are already recognized as environmental problems for the region. Global climate warming will foster increased rates of sea level rise, which in turn could have dramatic impact on coastal urban populations like Shanghai. (author's abstract)

Yu, L. 2001. The impacts of potential climate change for Shanghai, China. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Migration, population change, and the rural environment.

This paper reviews literature on the linkages among rural populations, migration, and environmental degradation in developing countries. It examines rural population size, density, recent growth trends, and patterns of migration; theories and approaches to the study of migration; and evidence on the environmental consequences of migration. Environmental degradation as a cause of out-migration is also examined (based on limited evidence) as are the effects of out-migration on rural areas of origin. The paper concludes with research recommendations as well as policy options ...(excerpt from online abstract)

Bilsborrow, R. E. 2001. Migration, population change, and the rural environment. Population, Environmental Change, and Security working paper.

Link(s)

<https://sph.umich.edu/pfps/pepapers.html> 

Working Paper

Year: 2001

Risks of conflict: Resource and population pressures.

Sir Crispi, Chancellor of the University of Kent at Canterbury, Chairman of the Climate Institute of Washington D.C., and President of the Earth Centre in South Yorkshire.

Tickell, S. C. 2001. Risks of conflict: Resource and population pressures. Linacre Lecture, University of Oxford, March 8, 2001.

Link(s)

<http://www.crispintickell.com/page13.html> 

Conference Paper

Year: 2001

Institutions, mobility and resilience in the Fante migratory fisheries of West Africa.

Summary: The fishery of the Fante town Moree in Ghana and its network of migrants in West Africa is here understood as a social field, whose institutions are key to an understanding of fisher people's livelihood strategies. By following rules and norms for behaviour that to a large degree are shared in both home community and migration community - institutionalised in the chief system, in the fishermen and traders' leader institutions, through asafo companies, and through kinship and marriage practices - migrants are able to participate in social and political arenas where access to resources is negotiated. At the same time they constantly shape the institutions through negotiation of practices in new contexts. The institutions also function as important "buffers" in the potentially uneasy relationship between migrants and host communities. It is argued that the outcome of a spatially extensive but institutionally efficient migratory production system such as the Fante fisheries, is an extremely flexible utilisation of resources, which is well adapted to the West African ecological, economic and political environment. Furthermore, it is suggested that because of this flexibility, Ghanaian canoe fisheries is both socially and ecologically a particularly resilient system. This explains its ability to adapt to and absorb resource fluctuations, population increase, and economic and political shocks in the region

Overå, R. 2001. Institutions, mobility and resilience in the Fante migratory fisheries of West Africa. CMI Working paper WP 2001:2.

Link(s)

<http://www.cmi.no/publications/2001/wp/wp2001-2.pdf> 

Working Paper

Year: 2001

Environmental, social and economic problems in the Borkena plain, Ethiopia.

Abstract: People in Borkena in Ethiopia suffer from a complex interplay of environmental degradation, increasing shortage of land due to population growth, conflicts between different ethnic and religious identities, and social confrontations as a result of such tensions. The most depressing problem is that they can not find a way out of the downward spiral of resource scarcity and conflict. And the authorities do not give them any chance to get involved themselves in actively searching for solutions specific to their complex problems. All they get is orders, and

plans which are designed from above and do not take into account their experience about the complexity of their social situation, and consequently can not solve their problems. This paper was part of the requirements for a Masters degree at the University of Aalborg. Fieldwork for this study was supported by Chr. Michelsen Institute through a grant from the Norwegian Ministry of Foreign Affairs and by the Heinrich Böll Foundation in Germany. It was supported as part of a research effort on "Democracy from Below" in Ethiopia, in a cooperation between the Chr. Michelsen Institute, the Forum for Social Studies in Ethiopia and the University of Addis Ababa. The author thanks the donors for enabling him to carry out his fieldwork in Northern Shoa, Ethiopia, in Autumn 1999

Balcha, B. G. 2001. Environmental, social and economic problems in the Borkena plain, Ethiopia. CMI Working paper WP 2001:8.

Link(s)

<http://www.cmi.no/publications/2001/wp/wp2001-8.pdf> 

Working Paper

Year: 2001

Economic growth, demographics, and renewable resources: A dynamical systems approach.

A two sector growth model including human demographics and a renewable resource base is developed and analyzed. The influence of economic structure, investment, and the interplay between demographics and growth on the evolution of the system is studied. The model is very robust over a wide parameter range and exhibits two basic classes of behavior: convergence to a state with a stable population and constant consumption over time or "overshoot and collapse" where periods of welfare increase are followed by periods of welfare decline. It is shown via a combination of numerical bifurcation techniques and simple scaling arguments that the key determinant of model behavior is the relationship between per capita consumption, fertility and mortality, and the relative time scales implicit in the economic, demographic, and resource systems. Also, technological change that increases productivity favors "overshoot and collapse" type dynamics while technological change that reduces the environmental impact of production has no effect on the dynamics of the model and thus cannot prevent "overshoot and collapse" type behavior. Paper abstract from website.

Anderies, J. M. 2001. Economic growth, demographics, and renewable resources: A dynamical systems approach. Working paper from the 2nd Workshop on Population and the Environment: Modelling and Simulating this Complex Interaction, Max Planck Institute for Demographic Research, Rostock, Germany, May 18-19, 2001.

Link(s)

<https://www.demogr.mpg.de/> 

Working Paper

Year: 2001

Ecological degradation, rural poverty, and migration in Ethiopia: A contextual analysis.

Paper abstract: The interrelationships between ecological degradation, poverty, and rural out-migration in Ethiopia are examined using data from a Household and Community Survey conducted in 1994-95. The survey, which covered a sample of 2,000 house-holds, collected retrospective data on changes in household composition, including migration of household members, during the period 1984 to 1994. The study hypothesizes that the decision to out-migrate in the impoverished rural areas of northern Ethiopia is influenced by a combination of factors based on individual, household, and community characteristics. A multilevel analysis is applied to determine the role of these factors in the decision. The findings show that individuals belonging to economically poor households in ecologically vulnerable communities have a higher propensity to out-migrate for economic reasons, compared with those who belong to wealthier households in ecologically less vulnerable communities. The study provides information relevant to policy formulation in the interrelated areas of environmental planning, workers' mobility, poverty alleviation, and urban development. From paper located on Population Council website.

Ezra, M. 2001. Ecological degradation, rural poverty, and migration in Ethiopia: A contextual analysis. Policy Research Division Working paper #149.

Link(s)

<https://popcouncil.org/pubasps/SearchProcess.asp> 

Working Paper

Year: 2001

Challenges of urbanization and environmental degradation in India

A study of the process of urbanization and urban growth in India since the beginning of the twentieth century reveals a steady increase in the size of urban population, the number of towns and the degree of urbanization. But the tempo of increase became faster from 1951 onward. From 1951 to 1991, India's urban population more than three times from 58 million to 216 million. The number of towns of different size-classes swelled from 2,257 in 1951 to 3,697 in 1991, an increase of about 39 percent. The proportion of the population living in urban areas increased from 16 percent in 1951 to 26 percent in 1991. The annual rate of growth of the urban population during 1981-91 was 3.1 percent-- slightly less than that in the previous two decades, 1961-71 (3.2 percent) and 1971-81 (3.8 percent). Thus it appears that the pace of urbanization has been somewhat slower, albeit imperceptibly so, in recent years. Urbanization in India has essentially been the growth of large towns and metropolitan cities, at the cost of small and tiny towns. However, unlike the big cities in rich countries, Indian cities are not able to take in more and more people because of poor urban management and resource constraints. The people continuously confront problems of safe drinking water, power, sewerage and garbage disposal. With rapid natural increase and inflow of rural population, cities are growing rapidly and there is an urgent need for better governance, transport and basic amenities for the growing population. Here it is worthwhile to point out that most people including many social scientists and

journalists believe that rural to urban migration is the prime factor of urbanization. This myth has already been exploded by demographers. Studies have clearly established that natural increase has been the most potent factor behind rapid rise in urban population not only in India but also in most developing countries of the world. From author's introduction

Singh, J. P. 2001. Challenges of urbanization and environmental degradation in India.

Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/Singh_I.doc

Working Paper

Year: 2001

Strategies for sustainable agriculture development in the Ethiopian highlands

This paper relates population growth in the northern Ethiopian highlands with poverty, land degradation, and food insecurity.

Pender, J., Gebremedhin, B., Benin, S. and Ehui, S. 2001. Strategies for sustainable agriculture development in the Ethiopian highlands. EPTD Discussion Paper No. 77.

Link(s)

<http://purl.umn.edu/16121> 

Working Paper

Year: 2001

Population growth and global carbon dioxide emissions

Previous studies on the determinants of carbon dioxide emissions have primarily focused on the role of affluence. The impact of population growth on carbon dioxide emissions has received less attention. This paper takes a step forward providing such empirical evidence, using a data set of 93 countries for the period of 1975-1996. The paper has following findings. (1) Population growth has been one of the major driving forces behind increasing carbon dioxide emissions worldwide over the last two decades. It is estimated that half of increase in emissions by 2025 will be contributed by future population growth alone. (2) Rising income levels have been associated with a monotonically upward shift in emissions. (author's abstract)

Shi, A. 2001. Population growth and global carbon dioxide emissions. Presented at the IUSSP XXIV General Conference, Salvador, Brazil, August 18-24, 2001.

Link(s)

http://archive.iussp.org/Brazil2001/s00/S09_04_Shi.pdf 

Conference Paper

Year: 2001

Water management on the U.S.-Mexico border: Mandate challenges for binational institutions.

Abbreviated from its original length, this paper examines the various demands on water in the rapidly growing border cities and towns. It was presented at a workshop at the Woodrow Wilson Center, The Future of the U.S.-Mexico Border: Population, Development

Mumme, S. P. and Pineda, N. 2001. Water management on the U.S.-Mexico border: Mandate challenges for binational institutions. Woodrow Wilson Center.

Link(s)

<http://wwics.si.edu/index.cfm> 

Conference Paper

Year: 2001

The demographic challenges and quality of life on the north Mexican border.

Abbreviated from its original length, this paper examines the effect of NAFTA-induced economic growth on population-environment interaction. It was presented at a workshop at the Woodrow Wilson Center, The Future of the U.S.-Mexico Border: Population, Development

Pineiro, R. C. 2001. The demographic challenges and quality of life on the north Mexican border. Woodrow Wilson Center.

Link(s)

<http://wwics.si.edu/index.cfm> 

Conference Paper

Year: 2001

Modeling population-environment-development-agriculture interactions for science policy communication and advocacy in Africa: The PEDDA model

The search for new ways to engage policy-makers' attention on these issues led to the creation of a powerful advocacy tool, the Population-Environment- Development-Agriculture (PEDDA) model. 'an interactive computer simulation model demonstrating the medium to long-term impacts of alternative policies (including policies on HIV/AIDS) on the food security status of the population. As food security is a factor of developments in the areas of population, the environment, agriculture and socio-economic development, the model demonstrates the relationships between these fields as well. ' First, (multi-state) population projections are carried out to determine the size and characteristics of the population. Simultaneously, the model estimates the food availability as the sum of food production and net trade. Agricultural production is considered as factor of the natural resources stock (land and water); the size and productivity of the labour force and technological inputs and innovations in agriculture. In a third step, the estimated available food is distributed over the population following a non-linear food

distribution curve to determine the fraction of the population that will be food insecure. The output variables of PEDDA range from the classic demographic parameters, to indicators of land degradation, agricultural production and socio-economic development. The PEDDA model will be illustrated through an application for Ethiopia for which some alternative development scenarios are compared. The model provides indicative answers to policy questions such as 1) what is the effect of increased education on the environment and land degradation? 2) How does a decline in fertility rates influence agricultural production? and 3) what is the impact of HIV/AIDS on agricultural outputs? ' (from authors' abstract)

Lutz, W., Scherbov, S., Makinwa-Adebusoye, P. and Reniers, G. 2001. Modeling population-environment-development-agriculture interactions for science policy communication and advocacy in Africa: The PEDDA model. Paper presented to the XXIVth IUSSP General Conference, Salvador de Bahia, Brazil, August 18-24, 2001.

Link(s)

http://archive.iussp.org/Brazil2001/s40/S43_03_Makinwa.pdf 

Conference Paper

Year: 2001

Simulating land use and land cover dynamics in the Ecuadorian Amazon through Cellular Automata approaches and an integrated GIS

Focusing on the spatial and temporal dynamics of deforestation, agricultural extensification, and plant succession at the finca-level and urbanization and transportation networks at the community level, a cell-based morphogenetic model of LUCC was developed as the foundation for a predictive model of regional landscape dynamics. Integrated into the model were results from a longitudinal household survey conducted in 1990 and 1999; a multiphase hybrid classification applied to an assembled Landsat image time-series for 1973, 1986, 1989, 1996, and 1999; image change-detections to characterize LUCC and to train and validate the cell-based model implemented within a cellular automata framework; and an integrated GIS of coverages representing hypothesized social, biophysical, and geographical drivers of LUCC. The models suggest that land conversion along roads, near market centers and communities, and in areas having an enhanced geographic access serve as the regional nodes of landscape dynamics leading towards a landscape cycling between one dominated by forest to one dominated by agricultural, fragmented forest, and urbanized communities and service centers. (author's abstract)

Walsh, S. J. and Messina, J. 2001. Simulating land use and land cover dynamics in the Ecuadorian Amazon through Cellular Automata approaches and an integrated GIS. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Population, consumption and environmental degradation in a mangrove ecosystem in El Salvador

This paper summarizes those factors that have precipitated the loss of environmental capital and contributed to the degradation of the mangroves in El Salvador. Current patterns of extraction and conversion in the mangrove ecosystem in El Salvador can be viewed through an entitlement lens that confers property rights upon some actors and denies them to others. A hierarchy of activities contribute to environmental degradation in the mangroves reflecting the different demands upon and entitlements to that ecosystem. Ecosystem goods and services are undermined by direct conversion to aquaculture and salt ponds; post-larvae collection that reduces the stock of juveniles in the estuary; pollution and runoff from the discharge of solid waste and agricultural chemicals; siltation and sedimentation from upstream deforestation; and the loss of mangrove stands to logging and fuelwood gathering. Exploring the multiplicity of these demands upon the ecosystem and those factors that accentuate or ameliorate the degradation of the mangroves provides information about how this degradation can be redressed. (excerpt from author's introduction)

Gammage, S.; Benítez, M.; Machado, M. 2001. Population, consumption and environmental degradation in a mangrove ecosystem in El Salvador.

Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/macarthur_ambio_...,
https://www.populationenvironmentresearch.org/pern_files/papers/El_Salvador_Mang...

Working Paper

Year: 2001

Land use dynamics in Tari basin of Papua New Guinea using multi sensor satellite data.

This research combines multiple layers of satellite data with physical and socioeconomic information to document human-environment interaction in lands home to indigenous Huli people.

Pahari, K., Umezaki, M. and Ohtsuka, R. 2001. Land use dynamics in Tari basin of Papua New Guinea using multi sensor satellite data. 22nd Asian Conference on Remote Sensing, Singapore, November 5-9, 2001.

Link(s)

<https://www.crisp.nus.edu.sg/~acrs2001/pdf/158pahari.pdf> 

Conference Paper

Year: 2001

Three millenia in the Southern Yucatan Peninsular Region: Implications for occupancy, use and carrying capacity.

Carrying capacity is a concept that is difficult to define in a meaningful way when applied to human systems. Not only do humans adjust these 'capacities' to changing human-environment conditions through 'substitutes' for labor, resources, and ecological services, but major technological innovations may lead to punctuated shifts in the kind and quality of the substitutes applied. Nowhere has carrying capacity been advanced with such a range in outcomes than for the Lowland Maya area, complete with implications not only for the ancient Maya civilization but for modern-day visions of development and interpretations of the 'relic' landscapes of Maya lowlands. This paper [i] examines the range of uses in the southern Yucatán peninsular region, both past and present, and [ii] draws upon recent evidence from a large, on-going interdisciplinary project on land-use/cover change in that region to lend insights on the environmental opportunities and constraints confronting occupation and carrying capacity there.

Turner, B. L. 2001. Three millenia in the Southern Yucatan Peninsular Region: Implications for occupancy, use and carrying capacity. Presented at the 21st Symposium in Plant Biology, Lowland Maya Area: Three Millennia at the Human-Wildland Interface, University of California, Riverside, CA, January 18-20, 2001.

Link(s)

<https://www.impresaitalia.info/> 

Conference Paper


Year: 2001

Diarrheal morbidity among young children in Eritrea: Environmental and socio-economic determinants

Diarrhoeal disease is widely recognized as a major cause of child morbidity and mortality in many developing countries, particularly in sub-Saharan Africa. In Eritrea, diarrhoeal disease is one of the most frequent causes of childhood and a major contributor to child mortality. Yet, except some descriptive reports by the National Statistics Office, no systematic univariate or multivariate analysis of the factors that influence the prevalence of diarrhoeal morbidity among young children exists in Eritrea today. The main purpose of this paper is to examine the effect of some environmental and socio-economic factors that determine childhood diarrhea in Eritrea. The data used come from the 1995 Eritrea Demographic and Health Survey (EDHS). The method employed is logistic regression. The results show that type of floor material, household economic status and place of residence are significant predictors of diarrhea. The study also discovers an important relationship between diarrhoeal morbidity and age of child and number of children living in the house with particularly high prevalence of diarrhea at the age of weaning and in households with large number of living children. However, the effects of toilet facility and maternal education were not found to be statistically significant when other factors are held constant. (author's abstract)

Woldemicael, G. 2001. Diarrheal morbidity among young children in Eritrea: Environmental and socio-economic determinants. Presented at the IUSSP XXIV General Congress, Salvador, Brazil, August 18-24, 2001.

Link(s)

http://archive.iussp.org/Brazil2001/s00/S08_P01_Gebremariam.pdf 

Conference Paper

Year: 2001

Human-Climate-Environment Interactions in the Maya Lowlands.

A sediment core collected in 1993 from Lake Chichancanab, Yucatan, Mexico, contained evidence of a protracted drought that coincided with the Classic Maya collapse in the 9th century A.D. Cores retrieved from Lake Chichancanab in summer 2000 are better dated and have higher sedimentation rates, providing new, higher-resolution records of climatic events in northern Yucatan. We have also extended our paleoclimate studies into the Peten Lake District, Guatemala, permitting comparison of long-term climate change between the northern and southern Maya lowlands. Preliminary results from Lago Salpeten, Guatemala, indicate that oxygen isotope values were lowest and lake levels were highest during the Preclassic Period, from ~400 B.C. to 150 A.D. Climatic drying, indicated by increasing oxygen isotope ratios, occurred in steps at approximately 150, 560, 850 and 1400 A.D. Several of these events correlate temporally with documented climate changes in northern Yucatan, and with discontinuities in Maya cultural evolution. We used seismic profiling in Lago Salpeten to map the 3-dimensional distribution of the "Maya Clay" unit, an erosional deposit that has been equated with human-induced deforestation of the lake catchment. The base of the "Maya Clay" was dated by AMS-14C of terrestrial organic material to 3,160 14C years B.P. (~1400 BC), suggesting that the Peten environment had already sustained substantial Maya impact by the end of the early Preclassic Period. Lastly, two distinct volcanic ash layers were identified in Peten cores and dated by AMS-14C to ~1500 (+/-50) and 1840 (+/-80) 14C yrs B.P.

Hodell, D., Rosenmeier, M., Brenner, M., Curtis, J., Anselmetti, F., Ariztegui, D., McKenzie J. and Guilderson, T. 2001. Human-Climate-Environment Interactions in the Maya Lowlands. Presented at the 21st Symposium in Plant Biology, Lowland Maya Area: Three Millennia at the Human-Wildland Interface, University of California, Riverside, CA, January 18-20, 2001.

Link(s)

<https://www.impresaitalia.info/> 

Conference Paper

Year: 2001

Socio-environmental consequences of land cover change in Brazil's Center West region.

This paper discusses the process of economic and demographic expansion of the Center-West region of Brazil in recent decades, taking into account the relations, specific characteristics and implications in terms of the uses and the spatial pattern of occupation of the region, as well as environmental impacts. We demonstrate how the introduction of a new production model has reconfigured the earlier form of land use, from both economic and demographic perspectives. We also discuss the new characteristics of population dynamics, most especially migration.
(author's abstract)

Hogan, D. Joseph, do Carmo, R. L. and da Cunha, J. M. P. 2001. Socio-environmental consequences of land cover change in Brazil's Center West region. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

[https://sedac.ciesin.columbia.edu/openmeeting/downloads/1005399094_presentation ...](https://sedac.ciesin.columbia.edu/openmeeting/downloads/1005399094_presentation...),
https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html

Conference Paper

Year: 2001

A power beyond measure: How fear of population growth has changed the way people think about the world.

This paper focuses on how population growth and its anticipated consequences have prompted both policy scientists and policy-makers to rethink international relations. Population issues provided new reasons and new ways to divide up the world, but they also contributed to critiques of the very idea of sovereignty and helped shape an emerging global identity... this paper narrates the period 1890-1970'

Connelly, M. 2001. A power beyond measure: How fear of population growth has changed the way people think about the world.

Link(s)

<https://sph.umich.edu/pfps/pepapers.html>

Working Paper

Year: 2001

Population pressure, market access and food security in the uplands of northern Vietnam: A micro-economic analysis

This conference paper analyses the effect of population pressure and market access on food production in upland areas in Vietnam.

Pandey, S. and Khiem, N. T. 2001. Population pressure, market access and food security in the uplands of northern Vietnam: A micro-economic analysis. Selected Paper prepared for

presentation at the Annual Meeting of the American Agricultural Economics Association
Chicago, IL, August 5-8, 2001.

Link(s)

<http://purl.umn.edu/20667> 


Conference Paper

Year: 2001

How the Location of Roads and Protected Areas Affects Deforestation in North Thailand.

The study examines whether agricultural expansion in Chiang Mai province in Thailand was population or market driven. This study used data for 361 villages in reserved forests in Chiang Mai between 1986 and 1996. (from Abstract)

Cropper, Maureen, Jyotsna Puri, and Charles Griffiths. 2001. How the Location of Roads and Protected Areas Affects Deforestation in North Thailand. Policy Research Working Paper 2583. World Bank, Development Research Group, Washington, D.C

DOI: <https://dx.doi.org/10.1596/1813-9450-2583> 

Working Paper

Year: 2001

Population and environment interface in the Great Himalayan National Park

Declaring Sanctuaries, National Parks and Biosphere Reserves is one of the most important ways of conserving natural resources and enhancing, bio-diversity. In India the wild life protection act in 1972 and the wild life protection amendment act 1991 have been instrumental in providing legal provisions for the constitution and control of sanctuaries and National Parks. The act in strict interpretation ignores the historically evolved symbiotic relation between forest and forest people. The new approach is of participation rather than enforcement. The Great Himalayan National Park area... was selected as one of the last protected area in India to demonstrate this new approach. The basic strategy has been eco-development which revolves around the participation of local people in the preparation and implementation of micro-plans. This paper is an attempt to assess the impact of population environment and development interface in the Great Himalayan National Park and its eco-development zone.

Nangia, S. and Kumar, P. 2001. Population and environment interface in the Great Himalayan National Park. Presented at the IUSSP XXIV General Conference, Salvador, Brazil, August 18-24, 2001.

Link(s)

http://archive.iussp.org/Brazil2001/s00/S08_P08_Sudesh.pdf 

Conference Paper

Year: 2001

Impact of population changes on aquatic food consumption patterns in PRC.

Among North Pacific coastal states, China is playing important role not only in terms of the population size, but also because of in terms of the increasing demand and quickly changing consumption patterns of marine and fresh water resources. However, until recently our studies ignored existing links between growing population, its increased income levels and associated growth in demand for marine and aquatic products. This paper uses the official data to analyze how the demographic factors such as population size, migration, and urbanization affect consumption of the marine and aquatic products. (author's abstract)

Lu, J., Li, J. and Wang, G. 2001. Impact of population changes on aquatic food consumption patterns in PRC. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

International trade and the environment: A framework for analysis.

This paper sets out a general equilibrium pollution and trade model to provide a framework for examination of the trade and environment debate. The model contains as special cases a canonical pollution haven model as well as the standard Heckscher-Ohlin-Samuelson factor endowments model. We draw quite heavily from trade theory, but develop a simple pollution demand and supply system featuring marginal abatement cost and marginal damage schedules familiar to environmental economists. We have intentionally kept the model simple to facilitate extensions examining the environmental consequences of growth, the impact of trade liberalization, and strategic interaction between countries. Abstract from website.

Copeland, B. R. and Taylor, M. S. 2001. International trade and the environment: A framework for analysis. NBER Working Paper No.w8540.

Link(s)

<https://www.nber.org/papers> 

Working Paper

Year: 2001

American public opinion on population size and growth

A wide variety of recent public opinion surveys have described knowledge of and attitudes toward national demographic trends. Such studies have provided little information on causal factors, and have usually ignored attitudes toward sub-national areas. A recent survey of about 1,000 New York State households has filled in some of the gaps. Methods. Survey respondents were chosen to be representative of all New York State households with telephones, but upstate (non-New York City) households were over-sampled. Results here are unweighted. Interviews of approximately 20 minutes were conducted by telephone. Results: (1) There seems to be a general 'demographic sophistication' factor since correlations are moderately high among population knowledge levels for state, nation, and world. (2) The best predictor of population knowledge was gender, followed by education. Multivariate analysis does not diminish the importance of either characteristic. (3) Although knowledge of the population size and rates of growth of NY State, the USA and the world is markedly deficient, superior knowledge shows no relation to concern over population size or growth. (4) The strongest predictor of concern about population is residence-urban residents are more concerned than rural residents about local, state and national size. (5) A lesser but significant predictor of population attitudes is general concern about environmental problems, especially where attitudes toward world population are concerned. (author's abstract)

Stycos, J. M. 2001. American public opinion on population size and growth. Presented at the IUSSP XXIV General Congress, Salvador, Brazil, August 18-24, 2001.

Link(s)

http://archive.iussp.org/Brazil2001/s00/S08_01_Stycos.pdf 

Conference Paper

Year: 2001

Pachyderms, Primates, Plants and Population.

In the past, growth in human population has often been associated with species loss. Current rates of population growth, both globally (one million more births than deaths every 103 hours) and regionally, pose of a threat of additional ecological damage. There is a well documented unmet demand for family planning in nearly all high fertility countries. Improved family planning and safe abortion services will improve the health of women and their families, accelerate fertility decline, and help preserve the environment. Many ecologically vulnerable areas are especially poorly served by family planning services. Examples are given of improving family planning services through private health provides near the Kakamega Forest in western Kenya, and of adding family planning choices to a reforestation project run by the Jane Goodall Institute near the Gombe National Park, Tanzania. Wildlife biologists can play a critical role in identifying local professionals and institutions with the potential to improve family planning. (author's abstract)

Campbell, Martha. 2001. Pachyderms, Primates, Plants and Population. Prepared for presentation at IUSSP XXIV General Congress, Salvador, Brazil

Link(s)

<http://www.publish.csiro.au/RD/pdf/RD01069> 

Conference Paper

Year: 2001

Migration, social capital, and the environment: considering migrant selectivity and networks in relation to coastal ecosystems.

This essay shows that there is a timely convergence of ideas and demand for empirical evidence for understanding the relationship between migration and coastal ecosystems. It explores a limited set of theoretical pathways from which hypotheses might be derived about the positive and negative impacts of migration upon the environment. These pathways are derived from a discussion about property relations in coastal ecosystems and current theory about migration processes. Social capital emerges as a key concept in both literatures enabling a productive, theoretical synthesis. In conclusion, some examples from recent research about coastal ecosystems are used to generate a future research agenda that systematically addresses measurement, methods, and modeling approaches for refining our understanding of the possible impact of migration upon coastal ecosystems. Paper abstract.

Curran, S. 2001. Migration, social capital, and the environment: considering migrant selectivity and networks in relation to coastal ecosystems. The Center for Migration and Development, Working Paper #01-02. Princeton University.

Link(s)

<https://cmd.princeton.edu/> 

Working Paper

Year: 2001

Interactions between desertification and population movements.

This paper analyses the relationship between human migration strategies and desertification. It challenges the hypothesis that migration movements which take place in reaction to increasing discrepancies between carrying capacity and population density in regions affected by desertification tend to support the way to an equilibrium between both. The empirical analysis first considers general investigations about people's reactions to a deteriorating relationship between economic carrying capacity and population density. Built on that, it tests if the rules deduced from theories and general empirics are valid in rural areas of low-income countries. For that purpose it draws on experiences made in different low-income countries, relying on case studies from Asia, Africa and Latin America carried out by the author and by other researchers. The results demonstrate that predicting adjustment processes by applying conventional theoretical models may be insufficient or even misleading, as - for economically rational reasons - individuals and households may prefer strategies which accelerate desertification and imply cumulating downward processes characterised by a discrepancy between their own short-term interests and the longer term ecological stability. These strategies might contribute to a

permanently unstable situation, implying a threat to the natural environment and to the people living in and from it. (author's abstract)

Knerr, Beatrice. 2001. Interactions between desertification and population movements. Prepared for presentation at IUSSP XXIV General Congress, Salvador, Brazil

Link(s)

http://archive.iussp.org/Brazil2001/s00/S09_03_Knerr.pdf 

Conference Paper

Year: 2001

Aging, Changes in household characteristics, and energy use.

Several studies have identified household characteristics such as size and composition as important determinants of residential energy use. A number of alternative frameworks have been used to explore these relationships, including analyses based on variations in demand over household life cycle stages and research focused on the influence of household size through the existence of economies of scale in energy use at the household level. We further explore this issue by analyzing and comparing two cases: U.S. residential and transportation energy use, and household transportation in Austria.

O'Neill, B. C., Prskawetz, A. and Leiwen, J. 2001. Aging, Changes in household characteristics, and energy use. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Do humans create deserts? An integrated assessment of the multiple dimensions of desertification.

The 88th Dahlem Conference on Global Desertification (June 10-17, Berlin) discussed a framework for desertification that promotes sustainability and provides principles for directing resources aimed at combating desertification based on the fundamental nature of interactions between nature and society. We report on the main points of the paradigm: (i) that socio-ecological systems in drylands of the world are not static; (ii) that while change is inevitable, there does exist a constrained set of ways in which these socioeconomic systems function, thereby allowing us to understand and manage them; (iii) that an integrated approach, which simultaneously considers both biophysical and socioeconomic attributes in these systems, is absolutely essential to understand land degradation; and (iv) that the biophysical and socioeconomic attributes that govern or cause land degradation in any particular region are invariably 'slow' (e.g., soil nutrients) relative to those that are of immediate concern to human

welfare (e.g., crop yields, the 'fast' variables). It is necessary to distinguish these in order to identify the causes of land degradation from its effects; and that restoring degraded socio-ecological systems to a sustainable state requires outside intervention. (author's abstract)

Reynolds, J., Smith, M. S. and Chasek, P. 2001. Do humans create deserts? An integrated assessment of the multiple dimensions of desertification. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Famine demography: An introduction

The authors compare how modern famines and historical famines kill and affect population dynamics.

Dyson, Tim and Ó Gráda, Cormac. 2001. Famine demography: An introduction. Centre for Economic Research Working Paper Series, WP01/25.

Link(s)

<http://hdl.handle.net/10197/502> 

Working Paper

Year: 2001

Population, land use, and deforestation in the Sierra de Lacandón National Park, Petén, Guatemala.

There is an immediate ecological concern for the continued expansion of the agricultural frontier further into the Sierra de Lacandón National Park (SLNP), the most ecologically precious core zone of the Maya Biosphere Reserve (MBR). This paper links interview data from 28 communities of high out-migration to the SLNP with household demographic and farm characteristics and land use decisions among farm households in eight communities in the SLNP to understand migration to the frontier, and how subsequent land use contributes to forest clearing. In total over five hundred interviews were conducted by the author from 1998 to 2000. (author's abstract)

Carr, D.L. 2001. Population, land use, and deforestation in the Sierra de Lacandón National Park, Petén, Guatemala. Proceedings of the 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research. Rio de Janeiro, Brazil. October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Population change, land use, and the environment in the Equadorian Amazon

The purpose of this paper is to summarize and review key findings from ongoing research of land use and land cover change, LULC, in the Ecuadorian Amazon based on a probability sample of farm plots as well as biophysical information collected via a time series of satellite images. We will examine key factors thought to be responsible for the decline in tropical forests, such as road construction, expansion of towns and communities, individual and household factors, and quality and quantity of landholdings. We will also briefly summarize remote sensing research and the results of studies on women's participation in agricultural work and deforestation, household income and wealth, and factors influencing in- and out-migration among migrant settler children. The organization of this paper is as follows: Section II describes project objectives, section III the sample selection and data collection, and section IV key characteristics of the sample population and how they have changed over time. Section V examines the main findings from studies of land use change based on the 1990 and 1999 data, and section VI findings from other studies on the settler population. Section VII discusses some of the broader issues pertaining to directions for future research and policy. From authors' introduction

Bilsborrow, R. E.; Pan, W. K. Y. 2001. Population change, land use, and the environment in the Equadorian Amazon. Presented at the 24th IUSSP Conference, 18-24 August, 2001.

Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/bilsborrow_IUSSP...

Conference Paper

Year: 2001

Integrated modelling of land use change at multiple scales with the CLUE modelling framework.

A GIS-based modelling approach, the CLUE modelling framework, is developed which includes the analysis of relations between land use and its (proximate) driving factors as well as the dynamic simulation of near-future land use changes by a numerical model. Relations between land use and its (proximate) driving factors, including both biophysical and human factors, are quantified by multi-variate statistical techniques. These relations are used in a dynamic model that explores changes in the land use pattern under near future conditions of demand for agricultural production and other land utilization. (author's abstract)

Verburg, P. and Veldkamp, T. 2001. Integrated modelling of land use change at multiple scales with the CLUE modelling framework. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Recent vegetation changes of the Yucatán Península

In earlier days during the last millennium, the Yucatán Península was almost 95% covered by tropical forest. The activities of indigenous Maya and later on of European colonists caused the percentage of forest cover to oscillate over centuries. During the 20th century, the tropical forest was reduced irreversibly through growth of towns, villages, and roads. The slash and burn agriculture continued, but usually the vegetation recovered to similar previous forest. During the 20th century, there were many more changes in Yucatán than in Quintana Roo and Campeche, especially due to the henequen plantations. The changes that have occurred during the last 20 years have drastically changed the face of the peninsula. Development of towns, roads, tourism on all coasts, induced grasslands for cattle and extensive cattle ranching, rice and sugar cultivation, etc. are some of the causes. A vegetation map of the peninsula of 1995 shows 42% of secondary vegetation. Since the vegetation is in a dynamic state, it will recover, but the resulting tropical forests may be quite different in composition and structure. We shall present three different examples of vegetation changes over the last 20 years in Quintana Roo and Yucatán: 1) The loss of low inundated forest in southeastern Quintana Roo to rice plantation, which failed and was then abandoned; 2) The increase of agriculture and cattle ranching in southeastern Quintana Roo at the loss of medium statured semi-evergreen forest; and 3) The succession of abandoned henequen plantations in northern Yucatán. (authors' abstract)

Olmsted, I.; González-Iturbe, J. A. 2001. Recent vegetation changes of the Yucatán Península. The 21st Symposium in Plant Biology, Lowland Maya Area: Three Millennia at the Human-Wildland Interface, University of California, Riverside, CA, January 18-20, 2001.

Link(s)

<https://www.impresaitalia.info/> 

Conference Paper

Year: 2001

Land-use change and carbon sequestration in the forests of Ohio, Indiana, and Illinois: Sensitivity to population and model choice

This paper utilizes spatial econometrics to estimate carbon sequestration costs under different assumptions of population growth, future land use change, and error terms.

Choi, S.; Sohngen, B. and Alig, R. 2001. Land-use change and carbon sequestration in the forests of Ohio, Indiana, and Illinois: Sensitivity to population and model choice. Selected Paper for the Annual Meeting of the American Agricultural Economics Association Chicago, IL, August 5-8, 2001.

Link(s)

<http://purl.umn.edu/20564> 

Conference Paper

Year: 2001

Population pressure, land tenure, and natural resource management in selected areas of Africa and Asia.

The author examines Boserup's hypothesis using data from four sites, one each in Ghana, Uganda, Malawi, and Sumatra.

Otsuka, K. 2001. Population pressure, land tenure, and natural resource management in selected areas of Africa and Asia. Foundation for Advanced Studies on International Development.

Link(s)

https://eml.berkeley.edu/~bardhan/e271_f01/oct15.pdf 

Working Paper

Year: 2001

Long-term monitoring of urbanization in the Brazilian Amazon using optical remote sensing.

This research develops a methodology to systematically characterize urban land cover in the Amazon using optical remotely sensed imagery. The spectral properties of urban land cover are derived from Landsat TM imagery using spectral mixture analysis (SMA). Aerial videography is used to relate spectral properties of urban surfaces with physical materials on the ground. The bio-physical properties of urban land cover are then characterized and mapped using a simple Vegetation-Impervious Surface-Soil (VIS) model. Comparing such maps through time and across regions will provide insights into the role of urbanization in regional land-cover change and as a driver of environmental change. This paper presents an application of this methodology to a cluster of cities and towns around Cacoal, Rondônia. (author's abstract)

Powell, R. 2001. Long-term monitoring of urbanization in the Brazilian Amazon using optical remote sensing. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/downloads/1005702838_presentation_... 

Conference Paper

Year: 2001

Malaria foci and colonization processes on the Amazon frontier: New evidence from a spatial analysis and GIS approach

During the past two decades, many studies have analyzed human settlements on the Amazon frontier and their consequences for the environment and well being of the populations. The analytical strategies emphasize generalized linear models that assume spatial stationarity. Focusing on malaria epidemics, spatially explicit analyses of exposure rates shows patterns that clarify the focal nature of transmission and its relation to local ecological conditions. Combining GIS and spatial statistical analysis, this paper focuses on the Machadinho colonization project, located in the western part of the Brazilian Amazon. We identify clusters of sites where malaria rates are high and characterize their dynamics in conjunction with the advancement of the colonization process. Malaria hot spots are linked to ecological transformations induced by settler behavior, aimed at establishing productive agriculture on the Amazon frontier. The evolution of, and explanations for, low malaria rate clusters is also documented. The spatially explicit analyses are of basic importance for planning malaria mitigation strategies in the presence of unstable population mobility. Author's abstract.

de Castro, M. C. and Singer, B. 2001. Malaria foci and colonization processes on the Amazon frontier: New evidence from a spatial analysis and GIS approach. Paper presented at the XXIV General Population Conference (IUSSP) in Salvador, Bahia, Brazil, August 18-24, 2001.

Link(s)

http://archive.iussp.org/Brazil2001/s60/S67_02_CaldasdeCastro.pdf 

Conference Paper

Year: 2001

Going small when the city grows big: New options for water supply and sanitation in rapidly expanding urban areas

The paper looks at the development of water management options in urban areas and their relationship to population growth. A study of the developments of water and sanitation management in the rapidly expanding town of Kisumu on the shore of Lake Victoria in Kenya was conducted in 1988-2000. The aim was to describe and analyse actual developments in the water sector and to foresee what prospective development could be identified in the light of its rapid population expansion. The small town was growing at moderate speed up to the end of the colonial period and, if no external forces had been active, little would have been achieved. However, the infrastructure was developed as part of a colonial plan for expansion. The municipal council managed to supply water to and collect latrine buckets from a large portion of the town-dwellers. The post-colonial period after 1963 is one with rapid population growth and progressively poorer social cohesion in the community. Heavy stress on the municipal council has made it failed to provide water and sewage services. The residents have "gone small" when the city grew and the majority of Kisumu residents live in houses on small plots with dug latrines and a well. (author's abstract)

Drangert, J. 2001. Going small when the city grows big: New options for water supply and sanitation in rapidly expanding urban areas. Presented in the Water, Poverty and Social Development Session at the International Water History Association conference 2001.

Link(s)

http://iwha.info/abstracts/abstracts_d.htm 

Conference Paper

Year: 2001

The effects of water supply on infant and childhood mortality: A review of historical evidence

...The provision of clean water is mentioned as an important factor in many studies dealing with the decline of mortality in Europe during the late nineteenth and early twentieth centuries. In developing countries too, improved water supply is assumed to have a strong impact on mortality. When studying the effect of water supply on public health, researchers are confronted with many methodological problems. Most of these also apply to historical studies of the subject. We review the evidence from this historical research, taking into account the methodological problems observed in contemporary impact evaluation studies, and we use more refined data from the Dutch city of Tilburg, enabling us to overcome many of these shortcomings. Finally, we discuss some factors which may explain why we failed to discover an effect of the availability of piped water on the level of childhood mortality. (from author's abstract)

van Poppel, F. 2001. The effects of water supply on infant and childhood mortality: A review of historical evidence. International Water History Association Congress, Session on History of Water, Sanitation and Health.

Link(s)

http://iwha.info/abstracts/abstracts_e.htm 

Conference Paper

Year: 2001

A model describing Community Rangelands in Southern Africa (CoRiSA).

The CoRiSA model integrates ecological and socio-economic factors to illustrate the relationships and dependencies between communities, or individual farmers, and the natural resources. The major components of CoRiSA include submodels for both biophysical and socio-economic factors. The model, combined with GIS methods, will be used as a tool to assist in the evaluation of natural resource management systems, environmental impacts, alternative strategies and income sources and policy options available to rural communities. (author's abstract)

Mobbs, D., Lawson, G. and Young, E. 2001. A model describing Community Rangelands in Southern Africa (CoRiSA). 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper
Year: 2001

Population and environment linkages: A U.S. government perspective.

This is a transcript of Margaret Pollack's remarks at the Experts' Meeting on the Impact of Human Population on Freshwater Resources, hosted by the Yale School of Forestry & Environmental Studies, March 22-23, 2001. (from Introduction)

Pollack, M. 2001. Population and environment linkages: A U.S. government perspective. Yale School of Forestry and Environmental Studies Bulletin.

Link(s)

<https://environment.yale.edu/> 

Conference Paper
Year: 2001

Sustainability and space in Haiti

Environmental degradation reaches every region in Haiti. Rooted in the country's legacy of social and political upheaval, and accentuated by dire poverty, rapid population growth, inadequate agricultural practices and political instability, the pace of environmental degradation defies the efforts of national and international development agencies' Rural to urban migration prompted by abject poverty further contributes to the sprawl of urban slums on inappropriate land areas'. The critical question in this context is - can anything be done to revert this apparently-irrevocable slide to population pressure, increasing poverty and environmental degradation? Prospects appear to be bleak' The starting point for this discussion has to be recognition of the need to promote economic growth in Haiti. Family planning programs are essential in order to help people meet their desired family size and reduce the pressure of population growth; nevertheless, without sustained economic growth, such programs will ultimately fall short of stabilizing population growth and, moreover, will perpetually depend on external aid' The key question is thus - how and where to promote economic growth? ". This effort at jump-starting the economy has to be carried out jointly with attempts to rationalize the use of space and to protect the environment. It is currently unfashionable to link economic planning to spatial planning nor to environmental planning. Nevertheless, promoting a favorable economic environment inherently implies modifying both the spatial distribution of activities and population as well as the physical environment. The manipulation of public investments in infrastructure and services, the extension of credit, fiscal policies and the manipulation of other fiscal instruments by the State -- all have a direct impact on the spatial location of economic activity as well as on environmental outcomes. Consequently, it is essential that a proactive forward-looking stance towards the sustainable utilization of space be promoted at this juncture'. At the same time, patterns of demographic concentration will have to be reviewed for their social, economic and environmental implications.

Martine, G. 2001. Sustainability and space in Haiti.

Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/space_sustain.do...

Working Paper

Year: 2001

Coping with environmental change: The experience of Somali refugee women in a West London housing estate.

This paper examines the process by which East African refugee women from Somalia have adapted to an unfamiliar, urban environment on the South Acton Estate, West London, UK. The paper considers various aspects of the 'material' urban environment including housing, pollution, and health, alongside its effects on social relations, culture, and women's access to urban space. Women have found settling in and adapting to the Estate environment to be difficult. A language barrier has proved a fundamental deterrent to women's independence, and restricts their access to public facilities and other services provided by the local public authority. Somali women are wary of trusting people who are not from their clan or sub-clans, which also affects their access to available services. The process of adapting to the British urban environment and to housing conditions for Somali refugee women can be eased by understanding and working around cultural and language barriers. Abstract from the LSE website.

Atubo, M. R. and Batterbury, S. P. J. 2001. Coping with environmental change: The experience of Somali refugee women in a West London housing estate. Working Paper Series 1, No. 01-02.

Link(s)

<https://www.lse.ac.uk/internationalDevelopment/> 

Working Paper

Year: 2001

Urbanisation and global environmental change from the IHDP industrial transformation project perspective.

Cities are highly dependent upon the industrial system and exploit a large portion of its capacity. That is partly because the majority of humans now live in urbanized areas, and the urbanized proportion of the population is growing rapidly in several world regions. Further, consumption levels tend to be higher in cities'[Four main questions are addressed:] To what extent are the processes of urbanisation and urban centers themselves causes of global environmental change? Is urbanisation (as a process) influenced by global environmental change? What are the prospective effects of global environmental change on urban centres? To what extent might urbanisation and urban centres be positive adaptations to the negative consequences of global environmental change? (Excerpts from author's abstract)

Rockwell, R. C. 2001. Urbanisation and global environmental change from the IHDP industrial transformation project perspective. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Energy supply-chain, the human dimension of energy poverty and the effects on urban sustainability: A case study of Nigeria.

The human tragedy, especially the socio-economic burden, which women and children from sourcing fuelwood disproportionately share is compelling enough to demand a critical look at Nigeria's energy sector. The main focus is energy supply-chain, its structure and performance and the extent to which it contributes or exacerbates Nigeria's energy problems. Such an understanding is crucial to the economic and environmental sustainability of the country, especially given the role of energy as an instrument of socio-economic development. Given that Nigeria shares similar socio-economic characteristics and identical development problems with other sub-Saharan African countries, the findings and recommendations should be widely applicable. (author's abstract)

Ebohon, O. J., Field, B. and Pugh, C. 2001. Energy supply-chain, the human dimension of energy poverty and the effects on urban sustainability: A case study of Nigeria. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Environmental and socio-economic dynamics of smallholder agriculture: A systematic integration of case studies resulting in a formal qualitative model as a basis for policy assessment.

This paper presents a novel methodology to integrate qualitative knowledge from different case studies on Global Change related issues into a single framework. (author's abstract)

Luedeke, M. K. B. and Petschel-Held, G. 2001. Environmental and socio-economic dynamics of smallholder agriculture: A systematic integration of case studies resulting in a formal qualitative model as a basis for policy assessment. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Environmental degradation and health hazards in medium sized towns in India: Research methods for studying the interdependency between urban growth and health risks.

This paper discusses the research approach of risk perception and will present preliminary findings of two ongoing projects concerned with the environmental health in two rapidly growing medium-sized towns: Pondicherry in South India and Guwahati in North India. Our approach of analyzing environmental and health risk perception corresponds to the state of exposure within the Driving forces, Pressures, State, Exposures, Effects, and Actions (DPSEEA) framework: Identifying vulnerable groups and individuals and gaining knowledge about the collective and individual risk perception and/or risk awareness will form a basis for effective action planning and taking. The first project focuses on the major environmental threats in urban Pondicherry, namely air and noise pollution due to traffic increase, vector-borne diseases caused by inadequate infrastructure, and problems due to insufficient solid waste management. The second project aims at analyzing the environmental health risks created not only by urbanization processes, but also by occurrence of natural hazards like flooding. (author's abstract)

Krafft, T., Kremer, A. and Rothweiler, A. 2001. Environmental degradation and health hazards in medium sized towns in India: Research methods for studying the interdependency between urban growth and health risks. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Land use dynamics and institutional interplay: scenario in a mountainous country - Nepal.

A critical review of the driving forces that governed the Land Use in the past together with the Institutional Interplay with examples of success and failure and expected impact of the Globalization process in the Nepalese context. (author's abstract)

Adhikary, S. 2001. Land use dynamics and institutional interplay: scenario in a mountainous country - Nepal. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

The historical reconstruction of land use change and its driving forces: A case study in Shandong Province in the Ming and Qing Dynasties (1368-1911).

How land cover has been changed by human use over the last 300 years is one of the five overarching questions guiding the LUCC Science/Research Plan. The land use changed dramatically during the Ming and Qing dynasties (1368-1911) in China. China has tremendous, valuable documents covering 5000 years, from which large amounts of information about climate change and its impacts on society and economy could be extracted. First, the characteristics of farmland area in Shandong Province during the Ming and Qing dynasties are discussed: (1) the rising trend of farmland area was striking; (2) farmland area had remarkable fluctuation; (3) farmland area per capita decreased dramatically; (4) wasteland reclamation index increased rapidly. Then, this article analyzes the driving forces of farmland area change. (author's abstract)

Zhang, X.; Ge Q. 2001. The historical reconstruction of land use change and its driving forces: A case study in Shandong Province in the Ming and Qing Dynasties (1368-1911). 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Conservation in the Southern Yucatán Peninsular Region Mexico: Linking land use patterns and social institutions.

This paper investigates three themes related to forest change and sustainability in southern Mexico: regional conservation institutions; changing local practices of land-use, and their relationship to landscape pattern such as forest fragmentation. An internationally designated hotspot of biodiversity as well as deforestation, the southern Yucatán peninsular region (SYPR) of Mexico offers a unique opportunity to examine these themes. In recent decades, the SYPR has experienced rapid population growth, infrastructure development, and rising deforestation pressures. In response, a complex set of policies and communal actions have evolved to address deforestation threats and assert local control of forest resources. National, state, and communal institutions and non-governmental organizations (NGOs) have engendered conservation experiments such as agroforestry, forest plantations, sedentarized organic agriculture, ecotourism, and extractive industries including non-timber forest products (NTFPs), as well as a major biosphere reserve. As a partial consequence of such experimentation, ejido lands increasingly reflect a complex set of strategies that combine the formerly dominant subsistence

agriculture with the market cultivation as well as more conservation-oriented land-uses. (author's abstract)

Chowdhury, R. R. 2001. Conservation in the Southern Yucatán Peninsular Region Mexico: Linking land use patterns and social institutions. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Migration, Resilience And Global Change In The Coastal Zone - Policy Implications For Communal Trends.

The resilience of a community to global environmental change depends on a number of factors, not least the varied societal trends that can reduce or enhance vulnerability. This paper considers the effect on levels of vulnerability and resilience of trends in Vietnamese society in recent years accompanying the process of economic renovation, doi moi. The effects challenge not only the local but also the national authorities who have to confront these trends in the coming future.

Nguyen Huu, N., Quang Huy, L. and Kelly, M. 2001. Migration, Resilience And Global Change In The Coastal Zone - Policy Implications For Communal Trends. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Analysis of deforested lands in the Napo Basin: Socioeconomic and geophysical factors, spatial patterns and metrics.

The primary purpose of this research is to characterize and analyze deforested lands in the Napo basin of Ecuador, and to determine the significance and magnitude of the relation socioeconomic factors and spatial patterns of deforestation. (author's abstract)

Mena, C. 2001. Analysis Of Deforested Lands In The Napo Basin: Socioeconomic And Geophysical Factors, Spatial Patterns And Metrics. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001


A global analysis of urban population distributions and the physical environment.

This study presents results of a global spatial analysis of the human population distribution with respect to several geophysical parameters related to continental physiography, climate and natural hazards. These results have implications for future impacts of climate change and natural hazards on urban sustainability. (author's abstract)

Small, C. 2001. A global analysis of urban population distributions and the physical environment. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

<http://www.ldeo.columbia.edu/~small/Urban/SmallUrbEnv2001.pdf> 

Conference Paper

Year: 2001

Regional research on mitigation of global environmental change syndromes in West Africa and Chad. Links between health and in-creasing density of syndromes in urban and peri-urban areas.

Since 1994, the Swiss Tropical Institute (STI) - in collaboration with many local partner organisations has undertaken studies in Ouagadougou, Nouakchott and N'djamena aiming at introducing and validating new approaches in research on the interactions between the environment and the population undergoing urbanization. These studies (supported by the Special Programme "Environment and Development" of the Swiss National Science Foundation) generated the basis for a more comprehensive understanding of urbanization and the development of long-term programme on "North-South: mitigating syndromes of global change", to start in 2002. This programme will consider the following dimensions: (1) The process of urbanisation is not only reflected in mega-cities but produces a range of different types of towns that are interrelated by a multitude of economic, social and political processes. (2) In developing countries small-scale urban agriculture is becoming more important in securing food for the urban poor. Against this background, there is a broad range of problems related to resource use, infrastructure and health, as well as in corresponding conflicts. (3) The focus on urban poverty and related problems has shifted to a perspective that focuses on the strategies, needs and vulnerability of the urban poor, including a special focus on women and children. (author's abstract)

Cisse, G., Girardin, O. and Tanner, M. 2001. Regional research on mitigation of global environmental change syndromes in West Africa and Chad. Links between health and increasing density of syndromes in urban and peri-urban areas. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html

Conference Paper

Year: 2001

Pasture instead of rubber? The ranching tendencies of family-based agriculture in extractive reserves and colonization projects in Acre, Brazil, Southwestern Amazonia.

Analytical studies of rural family-based economies of the eastern region of the State of Acre were conducted using a sample of 330 families in the Chico Mendes Extractive Reserve, extractive settlements, and agricultural colonization projects. The results suggest that the economic improvement of extractive families is occurring simultaneously with the increase of deforestation for pasture. To improve the economic situation of extractivist families, alternative technologies to improve the economic return of current non-timber forest products should be combined with the incorporation of new extractive products. Without such changes, the scenario for extractive families will be intensification of livestock production. During the next decade, livestock will be the principle alternative for family units involved in colonization projects and extractive reserves, unless global and national societies pay for the ecological services associated with maintenance of forests by these families. (author's abstract)

Souza, F. K. 2001. Pasture instead of rubber? The ranching tendencies of family-based agriculture in extractive reserves and colonization projects in Acre, Brazil, Southwestern Amazonia. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/downloads/1006009397_presentation_...,

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html

Conference Paper

Year: 2001

Cultural ecological responses to environmental change: Lessons from Javanese transmigrants in Kalimantan, Indonesia.

This paper discusses the process of Javanese cultural and environmental adaptation in transmigration settlements in Kalimantan, Indonesia, with the central focus on the key components of adaptive strategies. However, many studies found that instead of introducing

Javanese agriculture to Kalimantan, settlers also adopted and adapted traditional agricultural techniques practised by the indigenous people. Three major phenomena affecting the transmigrants were the Javanese heritage they carried with them, the culture of the indigenous societies into which they moved, and the ecological characteristics of the environment into which they settled. A further dimension comprised external factors emerging from the development and modernisation of Kalimantan as part of Indonesia. Tension among these sets of factors determined the nature of the process of adaptation, and the main mechanisms through which it operated. (author's abstract)

Hidayati, D. 2001. Cultural ecological responses to environmental change: Lessons from Javanese transmigrants in Kalimantan, Indonesia. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html 

Conference Paper

Year: 2001

Between a rock and a hard place: options for Australia's population, infrastructure, resources and environment.

In an integrated analysis of an Australia with 20, 25 or 32 million people by the year 2050, six dilemmas emerged which link human population, labour, physical trade, material flows, greenhouse emissions and natural resource depletion. Each dilemma and the interactions between dilemmas are guided by many assumptions within the base case scenario, and the laws which constrain the physical world. Single dilemmas are mostly open to resolution within the current settings of technology and ideology. However the co-resolution of two, three or more dilemmas in parallel is difficult because of human behavioural dynamics that lie outside the context of the analytical methods. Dilemma one is that population is ageing and birth rates seem destined to decline. High immigration can help reduce ageing in a proportional sense, but absolute numbers of aged citizens continue to rise and the supporting and caring tasks do not decline. Dilemma two is that reasonably full employment is feasible under all population scenarios provided that participation rates and physical productivity adjust appropriately in each case. Lower populations might require higher participation rates and higher productivity while higher populations might require more moderate levels of both. Dilemma three postulates that higher populations maintain a lower physical trade balance as expanding populations require more imports particularly of elaborately transformed goods with high information and embodied energy content. Dilemmas four (material flows) and five (greenhouse emissions) are enhanced by dilemma three as trade in manufactures, materials and commodities expands to pay for population and lifestyle based requirements for imports. Dilemma six is that past domestic requirements and trade activities have left agricultural soils, marine fisheries, and some environmental issues such as water quality in serious disrepair. An integrated resolution to dilemmas four, five and six might require that the nations complete set of physical transactions be reduced. Knock-on effects might reduce the physical trade balance, and require services exports, or trade in information, to fill the gap. An

information rich economy with low material transactions requires a highly educated workforce who might be willing to moderate lifestyle and physical demand as their contribution to the resolution of dilemmas four, five and six. How radical requirements for change such as this might interact with the birth/ageing and employment dilemmas remains a difficult analytical task, and is beyond the capability of this particular paper. Paper summary from website.

Foran, B. and Poldy, F. 2001. Between a rock and a hard place: options for Australia's population, infrastructure, resources and environment. Working paper from the 2nd Workshop on Population and the Environment: Modelling and Simulating this Complex Interaction Max Planck Institute for Demographic Research, Rostock, Germany, May 18-19, 2001.

Link(s)

<https://www.demogr.mpg.de/> 

Working Paper

Year: 2001

Population growth, economy and the natural environment: A dynamic model with endogenous fertility.

Jöst, F., Quaas, M. and Schiller, J. 2001. Population growth, economy and the natural environment: A dynamic model with endogenous fertility. Working paper from the 2nd Workshop on Population and the Environment: Modelling and Simulating this Complex Interaction, Max Planck Institute for Demographic Research, Rostock, Germany, May 18-19, 2001.

Link(s)

<https://www.demogr.mpg.de/> 

Working Paper

Year: 2001

Impacts of air pollution on property values: An economic valuation for Bogotá, Colombia.

This study attempts to value air quality (a non marketable good) from the urban housing market in Bogotá (a marketable good). Furthermore, the study examines the impacts of air pollution on housing values. By means of a Geographical Information System (GIS), the housing market is characterized from a random sub-sample of 1006 observations that correspond to properties within the 19 localities of the Capital District of Bogotá. Total of Suspended Particles (TSP) is used as the pollution variable. The methodological framework for estimations is based on a hedonic price model. This approach establishes a relationship between the price of a marketable good (e.g., housing) and the amenities and characteristics this good contains (e.g., air quality, presence of parks, and structural features such as built area, residential or commercial use, etc.). Therefore, if variations in air pollution levels occur, then households would change their behavior in an economic way by offering more money for housing located in highly improved

environmental areas. In the final analysis, estimations suggest that an increase of 1 per cent in the emission level of TSP decreases property values in 0.123 per cent. For the average housing price of Col.\$37,506,800 (US\$24,322), the marginal willingness to pay for a reduction of 1% in the emission levels is Col.\$47,731 (US\$31). In the aggregate of the Capital District of Bogotá, this reduction would mean benefits of more than Col.\$47.348 million. (US\$30,703,387) (All numbers in 1998 prices). This would indicate that a control pollution policy brings as a result substantial monetary benefits for both house owners and local government authorities. The results of this study are likely to be sub-valued since the monetary valuation of health-related problems and other impacts of air pollution are not taken into account. Paper summary from website.

Carriazo-Osorio, F. 2001. Impacts of air pollution on property values: An economic valuation for Bogotá, Colombia. Working paper from the 2nd Workshop on Population and the Environment: Modelling and Simulating this Complex Interaction, Max Planck Institute for Demographic Research, Rostock, Germany, May 18-19, 2001.

Link(s)

<https://www.demogr.mpg.de/> 

Working Paper

Year: 2001

A model of demographic and economic processes interaction.

This paper gives a description of fertility influence on education level of population and its well-being. We carry out the consideration by a demographic model keeping age structure. We suppose that (i) a part of GDP is used for investment in education, (ii) the production level depends on the education level, and (iii) the pollution is directly proportional to the size of population. We are carrying on research on the dependence of average consumption on demographic structure of the population for an industrialised economy. In the model each age group of population has different skilled level determined by education and different level of potential labour productivity. The education level is completely determined by education expenditures. We have found the relation between the value of average consumption of population and the children-adults ratio, share of education expenditures in GDP. We have found that the quality of life can be improved by decrease of the population size not only ecologically but also economically. Paper abstract from website.

Olenev, N.; Sarancha, D. 2001. A model of demographic and economic processes interaction. Working paper from the 2nd Workshop on Population and the Environment: Modelling and Simulating this Complex Interaction, Max Planck Institute for Demographic Research, Rostock, Germany, May 18-19, 2001.

Link(s)

<https://www.demogr.mpg.de/> 

Working Paper

Year: 2001

Demographic composition and projections of car use in Austria

Our study is divided into three steps. We start with a descriptive analysis of the demographic composition of car use in Austria in 1997. In a second step we perform a detailed household projection for Austria up to the year 2046. We apply these projections to study the change in demographic compositions across time. In the third step we combine car use patterns in 1997 -as decomposed by selected demographic characteristics- with future changes in these demographic compositions. By applying this three-step procedure to combine demographic compositions and projections of private car use we aim to explore the following questions: a. what is the best level of demographic composition for understanding the effect of demographic characteristics on private car use in a cross-sectional analysis, b. which level of demographic composition will change the most in the future; and c. in light of results for a and b, what level of demographic composition is best for projecting future car use? (From Introduction)

Prskawetz, A., Leiwen, J. and O'Neill, B. C. 2001. Demographic composition and projections of car use in Austria. Paper presented at the XXIV General Population Conference (IUSSP) in Salvador, Bahia, Brazil, August 18-24, 2001.

Link(s)

https://www.demogr.mpg.de/Papers/workshops/010518_paper07.pdf 

Conference Paper

Year: 2001

Population, environment and development: Culture matters

I suggest that the links among population, development and the environment are difficult to understand in part because a fourth topic is missing from the list, namely, culture. Culture includes technology, institutions, law, politics, and values. Without an understanding of these aspects of culture, we have little chance of understanding how population, development and the environment interact. (excerpt from speech)

Cohen, J. 2001. Population, environment and development: Culture matters. Presented at the meeting of the United Nations Commission on Population and Development, New York, NY, April 2-6 2001.

Link(s)

<https://www.un.org/en/development/desa/population/pdf/commission/2001/keynote/co...> 

Conference Paper

Year: 2001

Deforestation and frontier expansion in Brazilian Amazonia.

Here we analyze data on conditions of life (an integrated index proposed at IPEA - Instituto de Pesquisa Economica Aplicada, that combines data on income, longevity, education, and housing) and deforestation to investigate how these different variables may be related on the municipal level. Conditions of life data were available for 1991 and deforestation data included deforestation rates and forest clearing sizes for the period from 1991 through 1997. We found that data on conditions of life would not explain deforestation directly. Results suggest that the combination of conditions of life and deforestation data can help to recognize different socioeconomic patterns and processes developing in Amazonia, and characterize different regions that have formed during the last decades. (author's abstract)

Alves, D. 2001. Deforestation and frontier expansion in Brazilian Amazonia. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html, <https://www.ihdp.org/>



Conference Paper

Year: 2001

Assessment and monitoring of land use/land cover change in Southeast Asia.

We analyzed the multi-temporal and multi-seasonal NOAA AVHRR satellite data of 1985/86, and 1992/93 and SPOT VEGETATION data of 1999/2000 to (1) prepare historical land cover maps and (2) to identify areas undergoing major land cover transformations (called "hot spots") in the region. The identified "hot spot" areas were investigated using high-resolution satellite data such as Landsat and SPOT supplemented by intensive field survey. Shifting cultivation, intensification of agricultural activities and change of cropping patterns, and conversion of forest to agricultural land were found to be the principal reasons for land use land cover change in Oudomxay province of Lao P.D.R, Mekong Delta of Vietnam and Loei province of Thailand respectively. Moreover, land use/land cover dynamics of the region and a typical land use/land cover change patterns of the 'hot spot' areas were also examined. We also developed a field-based methodology for land use/land cover change analysis at the national level with the help of national remote sensing institutions. (author's abstract)

Giri, C., Shrestha, S., Levy, M. 2001. Assessment and monitoring of land use/land cover change in Southeast Asia. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001. #13;

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html, <https://www.ihdp.org/>



Conference Paper

Year: 2001

Challenges of data integration in the study of a complex system: A case study of Lake Atitlán in Guatemala.

The watershed of Lake Atitlán on the Highlands of Guatemala is presented as an example of the high level of complexity found in a system that involves natural, social, and economic forces interacting in a small but extremely diverse geographical area. This paper describes our efforts to use a multidisciplinary approach to study the two main forces of natural and social change in the area: coffee production and tourism, as well as to understand how these interact with a highly intertwined system of institutions. In spite of the large number of institutions present, little is achieved in terms of planning and managing the region in a sustainable way and the degradation of the environmental conditions is now evident in both the land and in the water. We have recently started an effort to link an additional set of data to this analysis integrating land use, social elements, and institutional aspects. We are examining the use of biophysical parameters of lake water quality: nutrient levels, presence of fecal bacteria, pesticide residue levels, and the like, as integrative indicators of changes in the different factors that affect the resources and the people in the watershed. (author's abstract)

Castellanos, E., de Mejía, M. and Knedel, W. 2001. Challenges of data integration in the study of a complex system: A case study of Lake Atitlán in Guatemala. 2001 Open Meeting of the Human Dimensions of Global Environmental Change Research Community, Rio de Janeiro, Brazil, October 6-8, 2001.

DOI: <https://www.ihdp.org/> 

Link(s)

https://sedac.ciesin.columbia.edu/openmeeting/OM_merge_search.html , <https://www.ihdp.org/>



Conference Paper

Year: 2001

Agricultural colonization, environmental changes, and patterns of malaria transmission in the tropical rain forest: The case of Machadinho d'Oeste, Rondônia, Brazil

The purpose of this paper is to understand the linkages between frontier expansion, ecological transformation, land potential/use, and malaria transmission in the Brazilian Amazon. The focus of the analysis is on the Machadinho settlement project, implemented in Rondônia state as part of the POLONOROESTE program. The findings show that poor soils, improperly utilized for crop production, were the sites of crop failures that posed serious problems for the overall success of the project. The social, political and physical contexts of the area were major factors in understanding the linkages with malaria.

de Castro, M. C. and Singer, B. H. 2000. Agricultural colonization, environmental changes, and patterns of malaria transmission in the tropical rain forest: The case of Machadinho d'Oeste, Rondônia, Brazil. Paper presented at the 2000 Meeting of the Population Association of America in Los Angeles, California, March 23-25, 2000.

Link(s)

<https://sedac.ciesin.columbia.edu/repository/pern/papers/deCastroPAA2000.pdf> 

Conference Paper

Year: 2000

Colonization, clear-cutting, and cornfields: Rural migration and deforestation in The Sierra de Lacandón National Park, Petén, Guatemala

This paper uses household level data to examine the ecological and political factors and household characteristics associated with small farmer land use change and forest clearing between 1993 and 1998. (Author Abstract)

Carr, D. 2000. Colonization, clear-cutting, and cornfields: Rural migration and deforestation in The Sierra de Lacandón National Park, Petén, Guatemala. Proceedings of the Conference of the Latin American Studies Association of America, March, 2000, Miami, FL, USA.

Link(s)

https://people.geog.ucsb.edu/~carr/DCarr_Publications/DCarr_LASA_Proceedings_00.... 

Conference Paper

Year: 2000

Employment and natural resources management: A livelihoods approach to poverty reduction.

The purpose of this paper is to contribute additional and innovative pro poor policy options in the area of employment and natural resources management. Within this framework the concept of sustainable livelihoods is used as both a concrete goal of policy and as an approach for policy formulation and development of anti-poverty strategies. The paper initially examines UNDP's use of a sustainable livelihoods approach for poverty reduction, including the evolution of the concept and methodology. Using a livelihoods lens, subsequent sections explore: (a) innovative enterprise mechanisms that can potentially play a key role in providing sustainable livelihoods and halting the impoverishment process; (b) the linkages between poverty and the environment, identifying strategies that can empower communities by improving access to and control over a wide range of assets; and (c) the employment and livelihood opportunities for young people, an area of particular concern for the General Assembly and Secretary-General. (online abstract).

Singh, N. and Gilman, J. Employment and natural resources management: A livelihoods approach to poverty reduction. Social Development and Poverty Elimination Division (SEPED) Conference Paper Series, Conference Paper #5. Social Development & Poverty Elimination Division, Bureau for Development Policy, United Nations Development Programme.

Link(s)

<https://sustainable-livelihoods.com/pdf/employmentnatural.pdf> 

Conference Paper

Year: 2000

Changing patterns of natural resource use: A case study from north eastern India.

Northeastern India is a veritable laboratory for understanding the transformations that relatively autonomous, subsistence based small scale societies undergo as they develop links with the larger scale, market oriented society. This paper, focussing on Gangtes of Manipur, presents a case study of the time course of such changes through the three phases of autonomy till the end of nineteenth century, of pacification during the British rule in the first half of the twentieth century and of commodification following independence in 1947. This last phase has been characterised by a process of sequential exploitation of forest resources. Only a small fraction of the profits realised in this process reaches the ordinary people, a somewhat larger fraction reaches the village Chiefs, while the bulk goes to the contractors with an understanding of markets and trade. This process of exhaustion of forest resources goes hand in hand with the privatization of control over land and tree resources, and a breakdown of the community based social organization. The Gangtes offer specific suggestions for averting this process of forest degradation reaching out into the areas as yet remote from roads and markets. These suggestions include more secure community land rights, and financial rewards to encourage more sustainable patterns of resource use and continued protection to undisturbed patches of forest. (Author's abstract)

Hemam, N. S., Mohan Reddy, B. and Gadgil, M. 2000. Changing patterns of natural resource use: A case study from north eastern India. Working paper series, 00-5. Center for Studies in Demography and Ecology, University of Washington, Seattle, WA.

Link(s)

<https://csde.washington.edu/csde.html> 

Working Paper

Year: 2000

Population and environment

The purpose of this study is to review the literature on population and environment and to identify the main strands of thought and the assumptions that lie behind them. The author begins with a review of the historical perspective. He then reviews and assesses the evidence on the relationship between population and environment, focusing on selected natural and environmental resources: land use, water use, local pollution, deforestation and climate change. The author also reviews selected recent macro and micro perspectives. The new macro perspective introduces the environment-income relationship and examines the role of population growth and density in mediating this relationship. The new micro perspective introduces the close relationship between poverty and environmental degradation, also examining the roles of gender in decision -making and the role of children as economic assets in fertility decisions. Finally, the author carries out a comparative assessment of the approaches and methods employed in the literature to explain the wide variation in findings and predictions. This

literature review demonstrates that there is little agreement on the relationship between population and growth, and even whether any relationship exists at all. Empirical research has been unable to resolve the issue because of limited data, divergent methodologies, and varying levels of analysis. (author's abstract)

Panayotou, T. 2000. Population and environment. CID Working Paper no. 54, July 2000. Environment and Development Paper No.2.

Link(s)

<https://www.hks.harvard.edu/centers/cid/publications/faculty-working-papers/cid-...>,
https://www.hks.harvard.edu/var/ezp_site/storage/fckeditor/file/pdfs/centers-pro...

Working Paper

Year: 2000

Some effects of climate and environment change on prehistoric human populations in the North American Arctic.

Not yet available

Kunz, M. 2000. Some effects of climate and environment change on prehistoric human populations in the North American Arctic. American Geophysical Union, Fall Meeting, San Francisco, CA, December 15-19, 2000.

Link(s)

<https://www.agu.org/meetings/fm00top.html/>, <https://www.agu.org/meetings/fm00alf11.html/>



Conference Paper

Year: 2000

Re-examining the more people less erosion hypothesis: Special case or wider trend?

Recent research into natural resource rehabilitation based on in-depth case studies has highlighted situations where population growth and agricultural intensification have been accompanied by improved rather than deteriorating soil and water resources (e.g. Tiffen et al., 1994). Drawing on new case studies in six countries (Burkina Faso, Ghana, Nigeria, Senegal, Tanzania and Uganda), this paper examines how widespread are the prospects for positive outcomes of the 'more people, less erosion' type. (Author's abstract)

Boyd, C. and Slaymaker, T. 2000. Re-examining the more people less erosion hypothesis: Special case or wider trend?. Natural Resource Perspectives Number 63, November 2000.

Link(s)

<https://odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/241...>

Working Paper
Year: 2000

Sources of environmentally destructive behavior: Individual, organizational, and institutional perspectives.

Authors' Intro: The past century has witnessed unprecedented economic growth and human prosperity. Global per capita income has nearly tripled (World Business Council on Sustainable Development, 1997), average life expectancy has increased by almost two-thirds (World Resources Institute, 1994), and people are significantly more literate and educated than their predecessors. Yet, juxtaposed against these encouraging statistics are concerns that the past century has also witnessed unprecedented damage to the natural environment -- that in pursuing an improved quality of life, we are engaging in environmentally destructive behavior that is unsustainable and, therefore, contrary to our long-term interests. The human population is geometrically expanding while crop land is eroding, forests are declining, species are facing extinction, fresh water supplies are dwindling, fisheries are collapsing and pollution threatens human health (Brown, 1998). Overall, society is pursuing economic growth while depreciating the capital in natural resources upon which that growth depends. This apparent contradiction has led many researchers to analyze the causes and solutions to environmental degradation. This paper offers similar focus, yet applies a lens of organizational behavior to yield insights not otherwise visible. In our view, environmental problems are not primarily technological or economic, but behavioral and cultural. While technological and economic activity may be the direct cause of environmentally destructive behavior, it is our argument that individual beliefs, cultural norms and societal institutions guide the development of that activity (David, 1985; Barley, 1986; Arthur, 1988). The question for us, then, is to consider how individual and social behavior shape how the natural environment is perceived and how individual, organizational, and institutional values perpetuate behavior that damages it.

Bazerman, M. H. and Hoffman, A. J. 2000. Sources of environmentally destructive behavior: Individual, organizational, and institutional perspectives. *Research in Organizational Behavior* 21:39-79.

Link(s)

https://webuser.bus.umich.edu/ajhoff/pub_academic/1999%20ROB%20Ind,%20Org%20and%...



Working Paper
Year: 2000

Fertility behaviour and its correlates in Botswana, 1988

Authors' abstract: This paper presents a preliminary analysis of secondary data coming from the 1988 Botswana Family Health Survey-II . The primary aim of the analysis is to find out how demographic strategies interplay (notably, how fertility is affected by other demographic behaviours), how they vary according to socio-economic factors and what information is needed

to ascertain these relationships. The secondary aim of the analysis is to help the preparation of the questionnaire which will be used in the fieldwork during the 4ERP (4th European Research Project, on "Land use and fertility"). One of the purposes of the 4ERP is to verify the relationships between fertility behaviour and landholding (which includes distribution and characteristics of the land, access to water, and the like, especially in the drylands). This is especially interesting in Botswana, since recent estimates suggest that there may have been a very rapid decline of more than two births per woman between 1981 and 1988 (Rutenberg and Diamond, 1993). The fertility decline seems to be linked to a deterioration in the social and economic conditions (following a major drought in the early 1980s), and to the increased availability of family planning services in the same period. This paper analyses some background characteristics of Tswana women which can help to explain their fertility behaviour, such as educational level, place of residence, religion and the use of contraceptive methods. Unfortunately, economic questions included in the BFHS-II questionnaire proved too few to be really informative in this respect.

Drovandi, S. 2000. Fertility behaviour and its correlates in Botswana, 1988. Impact of rural inequality on fertility and migration, viewed as alternative household responses to changing population-resource ratios: 4th European Union Research Programme, 1998-2001.

Link(s)

<https://local.disia.unifi.it/ricerca/progetti/demografia/poverty/papers/drovandi...>

Working Paper

Year: 2000

Land and population on the Indian reservation of Wisconsin: Past, present, and future

The authors trace the history of Native American populations in Wisconsin and characterize recent trends. Special attention is given to the effect of policy on demography.

Sandefur, G., Ceballos, M. and Mannon, S. 2000. Land and population on the Indian reservation of Wisconsin: Past, present, and future. Land Tenure Center, Working Paper No. 42. September 2000.

Link(s)

<https://ageconsearch.umn.edu/bitstream/12780/1/lcwp42.pdf>,

<http://digital.library.wisc.edu/1793/21979>

Working Paper

Year: 2000

Tenure and natural resource in the Gambia: Summary of research findings and policy options

The author of this report points out that inadequate tenure rules can lead to land degradation. He then provides a detailed look at land tenure in the Gambia, processes by which disputes are resolved, and relevant legal principles.

Freudenberger, S. M. 2000. Tenure and natural resource in the Gambia: Summary of research findings and policy options. Land Tenure Center, Working Paper No. 40. August 2000.

Link(s)

<http://purl.umn.edu/12788> 

Working Paper

Year: 2000

The experience with dams and resettlement in Mexico.

Until the 1980s, Mexico was the country with the largest population displaced by irrigation and hydropower dams. From the arid north to the subtropical southern states, a series of hydropower dams now supply almost 29% of the energy flowing on the nation's electric power grid. A total of 80 irrigation districts now form the lucrative homelands for exported horticultural products, and officially, water is no longer judged to be a renewable resource. (from introduction)

Robinson, S. The experience with dams and resettlement in Mexico. Prepared for Thematic Review I.3: Displacement, resettlement, rehabilitation, reparation and development. The World Commission on Dams.

Link(s)

<http://siteresources.worldbank.org/INTINVRES/214578-1112885441548/20480078/Exper...> 

Working Paper

Year: 2000

A 3500 year record of climate change and human disturbance from the Southern Maya Lowlands, Peten, Guatemala.

Rosenmeier, M. F., et al. 2000. A 3500 year record of climate change and human disturbance from the Southern Maya Lowlands, Peten, Guatemala. American Geophysical Union Fall Meeting, December 15-19, 2000.

Link(s)

<https://www.agu.org/meetings/fm00top.html/> 

Conference Paper

Year: 2000

Population-development-environment in Namibia. Background Readings.

The text contains fifteen in-depth case studies that showcase various aspects of the interrelationships between population change, the environment and development in Namibia. In addition, the book lays the foundation for development of a scientific model to help scholars assess scenarios and policies regarding sustainable human development in Namibia and in other developing countries. The papers included in the text are the result of workshops held at IIASA in 1997 and in 1998, augmented with meetings in Namibia, and close collaboration with the University of Namibia Multidisciplinary Research and Consultancy Centre.

Fuller, B.; Prommer, I. (eds.). 2000. Population-development-environment in Namibia. Background Readings. IIASA Report.

Link(s)

<http://www.iiasa.ac.at/cgi-bin/pubsrch> , <http://webarchive.iiasa.ac.at/Admin/INF/PR/PR-00.07.25.html> 

Working Paper

Year: 2000

From refuge to refugee: The African case

The authors consider how environmental security may differ from human security. Policies for reform are proposed after a review of population and land in Africa.

Geisler, C. and de Sousa, R. 2000. From refuge to refugee: The African case. Land Tenure Center, Working Paper No. 38. August 2000.

Link(s)

<http://purl.umn.edu/12777> 

Working Paper

Year: 2000

Dams, indigenous peoples and ethnic minorities

The objective of this paper is to assess the extent to which Indigenous Peoples and Ethnic Minorities have gained or lost from large dam projects. Like many previous studies on the theme, it finds that indeed large dams have had very serious impacts on these peoples. lives, livelihoods, cultures and spiritual existence. Due to structural inequities, cultural dissonance, pervasive and institutional racism and discrimination, and political marginalisation, Indigenous Peoples and Ethnic Minorities have suffered disproportionately from the negative impacts of large dams, while often being among those who have been excluded from sharing the benefits. (from introduction)

Colchester, M. 2000. Dams, indigenous peoples and ethnic minorities. Thematic Review 1.2. World Commission on Dams.

Link(s)

<http://www.forestpeoples.org/sites/fpp/files/publication/2010/08/damsipsethnicmi...>,
<http://www.forestpeoples.org/topics/extractive-industries/publication/2010/dams-...>

Working Paper

Year: 2000

The experience with dams and resettlement in Argentina.

The three projects here selected are also the only ones that caused a considerable displacement of population. The Salto Grande Project, finished in 1979, resulted in the displacement of 12,000 persons in its Argentine side and posed the problem of the need to resettle an entire town of more than 5,000 inhabitants. Finally, the still unfinished but already operative Yacyreta project, pose the problem of resettling approximately (because the resettlement process is still in progress) 37,000 per sons in the Argentine margin and a similar number in the Paraguayan side, most of them urban dwellers. These cases account for the bulk of the Argentine experience with population resettlement associated with the construction of dams. (from introduction)

Bartolome, L.O and Danklmaier, C. 2000. The experience with dams and resettlement in Argentina. Prepared for Thematic Review I.3: Displacement, resettlement, rehabilitation, reparation and development. The World Commission on Dams.

Link(s)

<http://www.dams.org/docs/kbase/contrib/soc200.pdf>

Working Paper

Year: 2000

An overview of the connections between land, fertility, and family in pre-industrial times.

De Santis, G.; Doveri, A.; Livi Bacci, M. 2000. An overview of the connections between land, fertility, and family in pre-industrial times. Impact of rural inequality on fertility and migration, viewed as alternative household responses to changing population-resource ratios: 4th European Union Research Programme, 1998-2001.

Link(s)

<https://www.ds.unifi.it/ricerca/interessi/demografia/poverty/papers/desantis/desa...>

Working Paper

Year: 2000

A longitudinal study of mortality and air pollution for São Paulo, Brazil.

The paper studies the effect of various air pollution variables on the daily death counts for people over 65 years in São Paulo, Brazil, from 1991 to 1993, controlling for meteorological variables.

A state space model is used, where the air pollution variables enter via the latent process, and the meteorological variables via the observation equation. The latent process represents the potential mortality due to air pollution, and is estimated by Kalman filter techniques. The effect of air pollution on mortality is found to be a function of the variation in the sulphur dioxide level for the previous three days, whereas the other air pollution variables (total suspended particulates, nitrogen dioxide, carbon monoxide, ozone) are not significant when sulphur dioxide is in the equation. There are significant effects of humidity and up to lag three of temperature, and a significant seasonal variation. Author's abstract

Botter, D. A., Jørgensen, B. and Peres, A. A. Q. 2000. A longitudinal study of mortality and air pollution for São Paulo, Brazil. Research Reports, Odense University, Denmark. ISSN: 1398 - 1676; ISBN: 87 - 90700 - 33 - 3.

Link(s)

<http://www.ou.dk/TVF/StatDem/> 

Working Paper

Year: 2000

Population, natural resources and food security: Lessons from comparing full and reduced form models.

This paper discusses one of the most difficult issues in modeling complex population-environment interactions: The advantages and disadvantages of highly disaggregated empirical models versus highly reduced theoretical models. The analysis is carried out on the basis of the PEDDA model, recently developed to capture interactions between population change, education, agricultural production, food security and natural resource degradation in Africa. An important feature of the approach is a non-linear food distribution function. Ranging in its use from direct science-policy communication with a number of African governments, to highly advanced dynamic mathematical analysis, PEDDA turns out to be appropriate for the kind of sensitivity analysis and comparison of different levels of complexity attempted in this paper. In short, the results show that highly reduced models can never replace full empirical models, but that they show important additional features that complement the full models. For the researcher, the best understanding will be gained if one does not limit ones analysis to one level of complexity, but compares results from different levels. (author's online abstract)

Lutz, W., Scherbov, S., Prskawetz, A., Dworak, M. and Feichtinger, G. 2000. Population, natural resources and food security: Lessons from comparing full and reduced form models. IR-00-038.

Link(s)

<http://www.iiasa.ac.at/cgi-bin/pubsrch> 

Working Paper

Year: 2000

Demographic behaviour in a changing environment: framework and preliminary findings from the pilots of a EU research project.

Author's abstract: The aim of the paper is to present the research framework and the preliminary findings of the pilots of a large European-Union sponsored research project on the impact of rural inequality on fertility and migration, and hence agricultural sustainability, comparing the drylands of Botswana, South Africa and India. The research project, involving UK, Italy, Botswana, South Africa and India is still in progress: the final results are awaited in the course of 2000. To investigate the impact of the distribution of agricultural resources on population pressure, our goals are to prove or disprove the hypotheses that very poor couples, with high child mortality, need children to secure minimal income and reduce vulnerability and that, as the poor acquire more and safer access to farm assets and product markets, several things happen to reduce fertility: substituting a few educated for many uneducated children becomes more feasible, child mortality falls and the work and time of women become more valuable, increasing the costs of child care. Can demographic behaviour be analysed in the light of economic rationality? And, if so, is this exactly of the kind depicted by the so-called New Household Economics school? The research tries, among other things, to focus on issues like these, considering in great detail the economic, social and cultural background of the respondents. Several demographic dimensions are considered at the same time, including, in particular, mobility and fertility. Although a complete analysis of the data is not yet possible at this stage, the preliminary findings of the pilots will be used as tentative indicators of what goes on, and why, in the rural households of the three countries mentioned above

De Santis, G., Drovandi, S., Livi Bacci, M., Mencarini, L. and Salvini, S. 2000. Demographic behaviour in a changing environment: framework and preliminary findings from the pilots of a EU research project. Impact of rural inequality on fertility and migration, viewed as alternative household responses to changing population-resource ratios: 4th European Union Research Programme, 1998-2001.

Link(s)

<https://www.ds.unifi.it/ricerca/interessi/demografia/poverty/paa2000/paapaper.htm> 

Conference Paper

Year: 2000

Managing population-environment systems: Problems of institutional design.

In population-environment systems human activity is inherently part of the system rather than something to be minimized in order to maintain or restore "natural" environmental conditions. Issues arising in managing such systems are discussed in this paper. Three preliminary sets of problems are first dealt with. The system's boundaries must be identified, defining its human participants and its ecological content. Procedures for monitoring demographic and environmental change in the system must be set up. And consensus must be reached on how to evaluate that change. Each of these tasks calls for technical knowledge of demographic and ecological relationships (and assessment of uncertainties); in addition each has important political and administrative dimensions. Unclear or contested boundaries, large numbers of

participants, complex system dynamics and outcome indicators, and unequal stakes by participants complicate the management task. Among the general problems of designing governing institutions for large and complex population-environment systems are devising compensation arrangements to remedy major asymmetries in returns to participants, enforcing compliance to agreed access rules, and building in adaptability to changing knowledge and circumstances. Paper description from Population Council website

McNicoll, G. 2000. Managing population-environment systems: Problems of institutional design. PRD Working papers.

Link(s)

<https://popcouncil.org/pubasps/PublicationDetails.asp> 

Working Paper

Year: 2000

The underlying causes of forest decline.

Loggers, miners and rural communities all exploit forests in unsustainable ways 'these are the primary actors in forest decline ... However, these motivations are determined [by] the underlying causes of deforestation. Effective action against forest decline requires an understanding of these underlying causes [which] originate in some of the most basic features of society, such as the distribution of economic and political power, attitudes towards corruption, population growth, flaws in the market system and also in seemingly unrelated government policies'(edited excerpt from online abstract)

Contreras-Hermosilla, A. 2000. The underlying causes of forest decline. Center for International forestry Research (CIFOR).

Link(s)

https://www.cifor.org/publications/pdf_files/OccPapers/OP-030.pdf 

Working Paper

Year: 2000

Indigenous rights and biodiversity conservation: A case study of Ayubia National Park (DRAFT).

Ayubia National Park is situated in the Gallis Forest Division of Abbotabad District, North West Frontier Province. In March 1998, the park area was more than doubled to 3,312 hectares under the NWFP Wildlife Act of 1975. The national park consists entirely of reserve forests, which spill out of the park area on the west and south sides. Beyond the reserve forests are 'guzara' forests and waste land which is the communal or private property of the people. With increasing population, the pressure on land and its resources is enormous. The forests are a source of fuelwood, timber, fodder, medicinal plants and wild vegetables for the surrounding communities. As guzara lands become increasingly denuded the pressure on forests is increasing.

Khan, S. R. and Naqvi, A. 2000. Indigenous rights and biodiversity conservation: A case study of Ayubia National Park. Working Paper Series # 52. Sustainable Development Policy Institute.

Link(s)

<https://www.eldis.org/document/A70224>, <https://sdpi.org/index.php/publications/files/W52-Indigenous%20Rights%20and%20Bi...>

Working Paper

Year: 2000

Assessing the sensitivity of the Southwest's urban water sector to climate variability: Case studies in Arizona

The purpose of this analysis is to examine the impacts of climatic fluctuation and population growth on water supply and demand on five water management areas in southern Arizona, and to highlight the distinct sensitivities that each of these areas is likely to experience under different climatic scenarios. In doing so, we hope to provide insight that will be useful to water managers regarding the role of climatic variability in evaluating water supply and demand. Greater understanding of the role played by climate variability may spur closer examination of the utility of current climate forecasts and perhaps encourage water managers to further integrate additional forecast information in planning annual and longer-term water use. (quoted from authors' introduction)

Carter, R., Tschakert, P. and Morehouse, B. J. 2000. Assessing the sensitivity of the Southwest's urban water sector to climate variability: Case studies in Arizona. CLIMAS Report Series, CL1-00. Climate Assessment for the Southwest (CLIMAS), Institute for the Study of Planet Earth, University of Arizona.

Link(s)

<https://prism.lib.asu.edu/items/43179>, <http://hdl.handle.net/2286/R.A.92724>, <https://repository.asu.edu/attachments/92724/content/2000%20CL1-00.pdf>

Working Paper

Year: 2000

Population, conservation, and land use change in Honduras

This paper examines land use allocation in an extensive agricultural system faced with a relative land scarcity. We frame our inquiry using Boserup's (1965) classic work that explicitly considered the role of fallows in the process of land use intensification under conditions of population increase and land scarcity. (from Introduction)

Pfeffer, M. J., Schelhas, J. W., DeGloria, S. D. and Gómez, J. 2000. Population, conservation, and land use change in Honduras. Population and Development Program, Working Paper #00.04, 2000.

Link(s)

https://as.cornell.edu/poverty/papers/pfeffer_fallows.pdf 

Working Paper

Year: 2000

Recent human impacts on Australian environmental systems: A paleoenvironmental perspective

Australia is in a relatively unique position to provide baseline data on the impact of agriculture, forestry and urban expansion on a large variety of environmental systems. The major phase of European settlement began just over 200 years ago, and this brought a whole new set of cultural and technological practices that rapidly displaced those used by Aboriginal people. To assess the impact of humans it is necessary to establish proper baseline conditions against which change can be measured. This is not easy to do because we know that environments are naturally dynamic, and they are more so when humans are added to the milieu. This paper reviews a number of investigations recently published for southeastern Australia which take a sediment-based approach to compare the environmental changes of the historic period against those of the last 2,000 years. We have particularly focussed on assessing the relative degree of change in vegetation, fire, erosion and eutrophication either side of the pre- and post-European settlement boundary, from a variety of environments and land-uses. The purpose of this paper is to draw together the findings of these studies to look for commonalities in the types and scales of human impacts across southeastern Australia. We present an 'index of change' for all sites investigated to date, revealing that many environmental systems are characterized by massive changes during these last two centuries in comparison with the previous 2,000 years. This index also allows some quantification of the resilience or fragility of the investigated environments to the imposed land uses. Many of the quantified parameters figure in questions of environmental sustainability (e.g. accelerated erosion, vegetation change, eutrophication). Land management practices have been or are being developed in part because of the recognition of the great and continuing impact of humans on natural systems. Nonetheless, such regulatory control only rarely takes account of the lessons a palaeoecological perspective can bring to understanding process and results of land use.

Mooney, S.D and Dodson, J.R. 2000. Recent human impacts on Australian environmental systems: A paleoenvironmental perspective. American Geophysical Union Fall Meeting, December 15-19, 2000.

Link(s)

<http://www.agu.org/cgi-bin/SFgate/SFgate> , <https://www.agu.org/meetings/fm00top.html/> 

Conference Paper

Year: 2000

Farmer constraints, agricultural intensification and resource conservation in the buffer zone of the Maya Biosphere Reserve, Guatemala.

This paper is based on about 12 months of field work conducted in the buffer zone of the MBR to identify the socioeconomic and agronomic factors that influence farmer strategy (Shriar 1999). The primary focus was on the adoption of practices and systems that provide a more intensive alternative to shifting cultivation. (from Introduction)

Shriar, A. J. 2000. Farmer constraints, agricultural intensification and resource conservation in the buffer zone of the Maya Biosphere Reserve, Guatemala. Presented at the Latin American Studies Association (LASA) Miami, FL, March 2000.

Link(s)

<https://lasaweb.org/en/en/en/en/> 

Conference Paper

Year: 2000

Integrating the human scale into global change studies.

Author's Abstract: Changes in human activity (e.g., subsistence strategies, demography, perception) have through time resulted in both intentional and unintentional modification of the global environment. While scholars have reconstructed many of these complex interactions from as long ago as the early Pleistocene, a comprehensive interdisciplinary framework reflecting the contributions of social, physical, and biological scientists and humanists has, until recently, been lacking. The new field of historical ecology provides an acceptable theoretical orientation and a suite of appropriate methods that link globally relevant archaeology, history, and ethnography with more familiar biological and physical approaches to Earth system history. A central methodological issue is that of scale: thus the successful practice of historical ecology must match the history and geography of human activity, guided by choice and circumstance, with physical and biological changes that occur at very different temporal and spatial scales. Comparative regional case studies are then central to the endeavor, offering a means of examining the duration, intensity, and periodicity of phenomena at specific temporal and spatial scales and of incorporating the role of culture. These parameters must be considered relative to a particular environment, because the perception of environmental change is culturally determined and each disturbance parameter has a threshold or crisis level that, if reached, triggers some cultural response. Thresholds are determined by, transmitted through, and vary with the accumulated corpus of cultural knowledge possessed by a given society. Determining both the threshold at which a response will be generated and also the particular response itself, cultural knowledge frames a society's resilience in the face of environmental (and other) disturbances. Transgenerational transmission of this knowledge ensures that risk acceptability remains dynamic and responsive to new experiences and opportunities. In this paper, a paradigmatic case study of Burgundy--a region in which evidence for its long human and environmental history is abundant--is offered, principles of long- and short-term land use are extracted, and global implications are examined.

Crumley, C. L. 2000. Integrating the human scale into global change studies. American Geophysical Union Fall Meeting, December 15-19, 2000.

Link(s)

<https://www.agu.org/meetings/fm00top.html/> 

Conference Paper

Year: 2000

Forest fires, air pollution and mortality in Southeast Asia

Abstract: In this paper, the author assesses the population health effects in Malaysia of air pollution generated by a widespread series of fires that occurred mainly in Indonesia between April and November of 1997. The author describes how the forest fires occurred and why the associated air pollution was so widespread and long lasting. The main objective is to determine whether there were mortality effects and to assess how large and important these were. The author also investigates whether the mortality effects were persistent or whether they simply represented a short-term, mortality harvesting effect. The results show that the smoke haze from these fires had a deleterious effect on population health in Malaysia. From the Rand website.

Sastry, N. 2000. Forest fires, air pollution and mortality in Southeast Asia. RAND.

Link(s)

<https://www.rand.org/pubs/reprints/RP998.html> 

Working Paper

Year: 2000

Household demographic factors as life cycle determinants of land use in the Amazon

This paper focuses on household lifecycle dynamics as an area for research in population-environment studies, using Amazon deforestation as a case study. "This paper seeks to broaden the application of demography to environmental studies by complementing existing macro-level approaches, which feature aggregate populations, with a micro-level approach that highlights household life cycles. I take up the case of small farm households in the Brazilian Amazon to present a theoretical framework that identifies demographic characteristics which dispose families to engage in different forms of land use as household age structures change. Empirical models show that net of the effects of farmer background, neighborhood and institutional contexts, and off-farm incomes, demographic variables indicative of the household life cycle exert significant effects on the prominence of land uses with distinct environmental ramifications. The findings not only reveal micro-level demographic factors which affect Amazon land cover, they yield implications for future changes in rainforest landscapes in northern Brazil, and suggest household life cycle models as an avenue for further demographic research on environmental change in Latin America and other contexts." (author's abstract)

Perz, S. 2000. Household demographic factors as life cycle determinants of land use in the Amazon. Presented at the Presented at the 22nd International Congress of the Latin American Studies Association, Miami, Florida, March, 2000.

Link(s)

<http://lasa.international.pitt.edu/Lasa2000/Perz.PDF> 

Conference Paper

Year: 2000

Cities as ecological devices: Reducing the environmental impacts of humanity's growing and increasingly prosperous cities.

Paper presented at conference -- 2nd APN International Symposium, - Urbanization in Asia and the Global Environment of the Asia-Pacific Network for Global Change Research (APN) is an inter-governmental organization with 20 member countries, whose mission is to foster global environmental change research in the Asia-Pacific region.(papers not yet available)

Rockwell, R. C. 2000. Cities as ecological devices: Reducing the environmental impacts of humanity's growing and increasingly prosperous cities. 2nd APN International Symposium - Urbanization in Asia and the Global Environment, Awaji Island, Japan, July 11, 2000.

Link(s)

http://www.apn.gr.jp/activity/hyogo_sympo/2000_apn2sympo.html 

Conference Paper

Year: 2000

Urbanisation, industrialisation and sustainable development

This paper describes two important transformations of the past century: industrialisation and urbanisation. These transformations will continue in the new century and create policy challenges because the use of land, materials and energy will increasingly meet natural limits or be constrained by intergenerational equity arguments. New local and international institutional arrangements will be needed to meet these challenges. Increased public participation and involvement of private companies will be needed in order to balance the different perspectives on sustainable development. The UN can show leadership because of the global character of many environmental problems and the growing need for environmental and social minimum requirements in the global liberalised market. (Author's Abstract)

Langeweg, F., H. Hilderink, et al. 2000. Urbanisation, industrialisation and sustainable development, presented at On the Threshold: The United Nations and Global Governance in the New Millennium. International Conference. UNU Tokyo, Japan, 19-21 January 2000.

Link(s)

<http://rivm.nl/bibliotheek/rapporten/402001015.pdf> 

Conference Paper

Year: 2000

The role of land use education in assisting urbanizing communities in the newest round of water resource regulation

Recent expanded water resource regulation efforts will put increasing pressure on urban and urbanizing communities to come up with solutions to the complicated issue of nonpoint source pollution. At the same time, many studies seem to indicate that nonpoint source pollution control by the use of on-site, mechanical 'best management practices' alone is not getting the job done. The water resource community is coming to the realization that the best long term approaches to curbing nonpoint source pollution involve better land use planning and practices. Since land use is largely a local issue, local land use decision makers at the town and county levels are a critical target audience for education and technical assistance. Without an educational support system for local officials that provides land use planning and site design options, the possibility exists for the new wave of regulations to stimulate continued emphasis on on-site structural BMPs, resulting in further degraded water resources and less attractive and functional communities. Professional outreach education and technical assistance is therefore needed as never before. The University of Connecticut Nonpoint Education for Municipal Officials (NEMO) Project is one such educational effort. NEMO has fostered significant impacts in Connecticut communities, is engaged in research and applications development focusing on making geospatial technology useful and useable to local officials, and is at the center of a growing National NEMO Network of projects. (quoted from WEF website)

Arnold, C., Giannotti, L. and Nakashima, S. 2000. The role of land use education in assisting urbanizing communities in the newest round of water resource regulation. Presented at the Watershed 2000 Management Conference, Vancouver, British Columbia, July 9-12, 2000.

Link(s)

https://nemo.uconn.edu/publications/about_nemo/Wshed2000.pdf 

Conference Paper

Year: 2000

Private car use in Austria by demographic structure and regional variations.

Abstract: Due to its manifold impact on the environment private car use represents an important dimension of environmental behaviour in industrialized countries. Obviously, private car use is related to demographic characteristics of households such as the life-cycle stage and the living arrangement the household lives in. In addition systematic regional differences of private car use have to be taken into account. In this paper a causal model is derived, which aims to explain regional variations in car use (as measured by the distance driven) by regional demographic differences and region-specific control factors such as attitudes towards car use, car technology, and institutional factors. Using aggregate data from an household survey in Austria and data from Austrian official statistics causal effect coefficients are then estimated. By applying path analysis the estimated effects of regional demographic characteristics on region-specific car use can be decomposed into direct and indirect effects, with the latter effects being mediated by the control factors. Almost no significant direct demographic effect on car use can be found. Region-specific averages of distances driven are best predicted by using the considered control factors as

predictor variables. Nevertheless, many of the presumed indirect effects turn out to be of importance. For instance, the regional mean age of household heads can be discerned as a key factor of demographic effects on car use since it significantly influences several of the region-specific control factors. Moreover our results evidence that the regional pattern of car use is covered by various combinations of control factors. © Copyright is held by the authors.

Ewert, U. C.; Prskawetz, A. 2000. Private car use in Austria by demographic structure and regional variations. Working Paper WP 2000-006.

Link(s)

<https://www.demogr.mpg.de/Papers/Working/wp-2000-006.pdf> ↗,

<https://www.demogr.mpg.de/labs/modeling/envbeh.htm> ↗

Working Paper

Year: 2000

A methodology for estimating watershed future total imperviousness through urban growth forecasts

A methodology was developed by the Greater Vancouver Sewerage & Drainage District (GVS&DD) to estimate future percent total impervious area in stormwater catchments and watersheds using population density. Percent total anthropogenic impervious area is an indicator of watershed health and a parameter associated with stormwater hydrology. Furthermore, parameters that can be forecast into the future are often limited to population growth, and in some instances land use. (quoted from the WEF website)

Hicks, Robert W. B., Irvine, M. J. and Wellman, M. 2000. A methodology for estimating watershed future total imperviousness through urban growth forecasts. Presented at the Watershed 2000 Management Conference, Vancouver, British Columbia, July 9-12, 2000.

Link(s)

<https://www.wef.org/> ↗

Conference Paper

Year: 2000

The interplay between climatic impacts and human influences on North American ecosystems.

Author's Abstract: During the period since the last glacial maximum (LGM, approximately 21,000 years ago), ecosystems in North America have undergone profound changes. Many of these changes can be ascribed first to climatic warming following the continental glaciation, then to lesser, but still significant, climatic variations through the Holocene. Increases in carbon dioxide since the LGM probably also affected vegetation, because water loss in many plant species declined as fewer stomata were required to obtain sufficient carbon dioxide for growth. At the present time, our society is heavily impacting the ecosystems of North America through

urbanization, agriculture, consumption of water and other natural resources, chemical modification of the atmosphere, introduction of invasive species, and changes in fire regimes. As we look back in time, European land-clearance is evident in the decline of tree species and the rise of Ambrosia and other weeds in paleoecological records from forested areas (especially in eastern North America). Native Americans were present on the continent through most (or all) of the time since the LGM, and at the time of European contact, settled agricultural communities in Latin America, the Southwest, and eastern North America had modified the ecosystems of these regions. Hunters and gatherers held sway in more arid and colder climates, but they also modified the environment through the use of fire. Pre-historic impacts of human activities are more difficult to assess, perhaps because the populations were smaller, the agricultural practices were smaller-scale, and the effects of natural fires are hard to distinguish from those set purposely by humans.

Thompson, R. S. 2000. The interplay between climatic impacts and human influences on North American ecosystems. American Geophysical Union, Fall Meeting, San Francisco, CA, December 15-19, 2000.

Link(s)

<https://www.agu.org/meetings/fm00top.html/> 

Conference Paper

Year: 2000

Change in Ecuadorian farm composition over time: Population pressures, migration, and changes in land use

Author's abstract: Objective: Provide preliminary analysis for the environmental implications of increasing population pressures in the Ecuadorian Amazon over the period 1990 to 1999. We examine human impacts on the environment of greater numbers of people and farm units (Finca Madre's) on a finite land area over time given differences in farm family size and composition as well as location relative to roads and towns/markets, off-farm work, topography, and soil quality. Data: The data are from household surveys collected in 1999 from migrant settlers living on plots in the northern Ecuadorian provinces of Sucumbios, Napo and Orrellana. Methods: Descriptive tables are developed to portray the changes that have occurred over time. Multivariate regression in SAS version 6.12 was used to model the percent of forest remaining on a Finca Madre. Three sets of independent variables, corresponding to three sets of demographic variables, were used to predict deforestation. A square root transformation of percent of forest remaining was used as the response to help stabilize the variance estimates and satisfy model assumptions. Results: Significant changes in farm composition have occurred since 1990. Mean forest cover on a Finca Madre has decreased from 62% in 1990 to 46% in 1999. Over that same time period, mean pastureland has increased from 14% to 21% indicating only half the loss of forest could be attributed to increased cattle as a maximum. Mean cropland (perennials and annuals combined) also increased from 14% to 18% and the amount of land in fallow has increased from 3% to 6%. Regression models indicate that population, soil, topography, distance to market, and size of the Finca Madre are significant indicators to predict forest coverage.

Pan, W. and Bilborrow, R. 2000. Change in Ecuadorian farm composition over time: Population pressures, migration, and changes in land use. Presented at the PAA Conference in Los Angeles, CA, March 23-25, 2000.

Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/panPAA2000.doc

Conference Paper

Year: 2000

The sustainable use of space: Advancing the population/environment agenda

The population/environment literature has centered mostly on the relation between population growth and environmental change. This discussion is stagnated and provides surprisingly little guidance for policy formulation; at most, it provides legitimacy for what is already being done. Focusing on the largely-neglected area of spatial distribution would open up more useful avenues for policy and action. Past attempts to deal with the relation between sustainability and the use of space issue have centered on 'carrying capacity' and 'ecological footprints.' Though useful for awareness-raising, these approaches do not provide policy orientation and could be superseded by an emphasis on 'the sustainable use of space'. The critical question is - how can this specific population make the most sustainable use of its territory? Attempting to understand the environmental advantages of different spatial options, within concrete development contexts, seems an effective way for population specialists to contribute to sustainability in coming years. Reviewing regional development and urbanization patterns would appear to be a promising place to start.

Martine, G. 2000. The sustainable use of space: Advancing the population/environment agenda.

Link(s)

https://www.populationenvironmentresearch.org/pern_files/papers/Martine_paper.pdf...

Working Paper

Year: 2000

Background issue paper on population/demographics .

Issues regarding the possible linkages between population size and characteristics and demographic processes (fertility, mortality and migration) have recently been attracting growing interest, as the human population and its production and consumption levels have grown. This is evident within the academic community as well as in UN agencies and governments of both developed and developing countries (LDCs), and is related to the much-discussed topic of sustainable development (cf. Bruntland report, Our Common Future). Linkages between population and the environment need to be considered in both directions, in both urban and rural environments, and for both developed and developed countries. Thus both green and brown issues are relevant, though several other breakout groups are dealing with issues that sometimes overlap with those that could be considered here, such as agricultural technology, technological

issues related to pollution, and health and the environment. Thus here such topics are considered only where a main concern is the linkages with population size and demographic rates. Thus issues with no direct relationship to population but which are mainly related to technology (ozone, acid rain, toxic wastes, nuclear accidents) are not considered here'. (Author's introduction)

Bilsborrow, R. 2000. Background issue paper on population/demographics. Background Issue Paper on Population/Demographics for National Conference on Science, Policy and the Environment, Washington, DC, December 7-8, 2000.

Link(s)

<https://www.cnie.org/ncseconference/bp/background11.htm> 

Working Paper

Year: 2000

Population pressure, poverty, and incentives for soil conservation in Ethiopia: A bio-economic modeling approach.

The paper looks into the interrelationship of population pressure and poverty and potential impact on household welfare and land management (from Author abstract)

Shiferaw, B., Holden, S. and Aune, J. 2000. Population pressure, poverty, and incentives for soil conservation in Ethiopia: A bio-economic modeling approach. Presented at the 2nd International Conference on Environment and Development, The Royal Swedish Academy of Sciences, Stockholm, September 6-8, 2000.

Link(s)

<https://www.york.ac.uk/environment/publish/ede/pdf/COnter-2000-120.pdf> 

Conference Paper

Year: 2000

Dams, indigenous people and vulnerable ethnic minorities: A case study on the Ibaloy People and the Agno River Basin, Province of Benguet, Philippines.

During the construction of the Ambuklao and Binga dams in the 1950s, some 300 Ibaloy households were forced to give up their homes and ancestral lands to make way for these two dams along the Agno River. As an afterthought, they were promised monetary compensation for their loss, as well as relocation in areas, which were supposed to be agriculturally fertile. They never received the compensation and most relocation sites assigned to them proved to be inhospitable or previously occupied. Thus, in the 1970's, when the state asked hundreds of other Ibaloy families to make way for the construction of a third and bigger dam along the Agno River at Tabu, Dalupirip, the people simply refused. (from text)

Carino, J. K. 1999. Dams, indigenous people and vulnerable ethnic minorities: A case study on the Ibaloy People and the Agno River Basin, Province of Benguet, Philippines. Prepared for Thematic Review I.2: Dams, indigenous people and vulnerable ethnic minorities. The World Commission on Dams.

Link(s)

<http://www.dams.org/docs/kbase/contrib/soc197.pdf> 

Working Paper

Year: 1999

The resettlement of indigenous people affected by the Bakun Hydro-Electric Project, Sarawak, Malaysia.

The Bakun Hydroelectric Project (HEP) has been dogged by controversy ever since it was first proposed in the early 1980s. Apart from the question of its necessity, its financial viability and its environmental costs, questions were raised from the beginning about its potentially disastrous social impact. This especially derived from the fact that the project would flood an area the size of Singapore and some fifteen indigenous communities, which by 1997 involved some 1,640 families and nearly 10,000 people, would have to be resettled. (from introduction)

The Coalition of Concerned NGOs on Bakun (Gabungan), Malaysia. 1999. The resettlement of indigenous people affected by the Bakun Hydro-Electric Project, Sarawak, Malaysia. Prepared for Thematic Review I.2: Dams, indigenous people and vulnerable ethnic minorities. The World Commission on Dams.

Link(s)

<http://www.dams.org/docs/kbase/contrib/soc198.pdf> 

Working Paper

Year: 1999

Linkages between rural population ageing, intergenerational transfers of land and agricultural production: Are they important?

The objective of this paper is to stimulate discussion among population, land tenure, and agricultural specialists. It is very much a 'work in progress' contribution. Our main intention is to identify the possible effects of demographic ageing on intergenerational transfers of land and formulate a set of intuitively plausible research questions which in our opinion warrant further exploration. Unfortunately, we lack empirical data to test most of our hypotheses. Therefore, we invite all those concerned with rural development in poorer countries to comment on this paper and, if possible, make available evidence to prove or disprove our propositions. Received reactions, comments and criticisms will be acknowledged. (from Introduction)

Iaquinta, D., du Guerny, J. and Stloukal, L. 1999. Linkages between rural population ageing, intergenerational transfers of land and agricultural production: Are they important?. Food and Agriculture Organization of the United Nations (FAO).

Link(s)

<https://www.fao.org/home/404> 

Working Paper

Year: 1999

Does the army have a national land use strategy?

From Rand website and report preface: This report documents the findings of a project related to Army land policy and approaches to fulfilling Army needs for training lands. The Army has been criticized for its lack of a comprehensive land-use strategy to guide decisions and help set priorities for land policy initiatives. This document reviews the Army's current approach to establishing requirements and evaluates the policy changes that might occur with a comprehensive strategy. It differs from previous assessments in that it explicitly considers the political environment for Army land use. This report should be of interest to those concerned with Army environmental policy and questions of land use and military training. It should also be of interest to those concerned with potential future Base Realignments and Closures (BRACs) and the forthcoming efforts to renew three large Army parcels under Public Law 99-606. Large land parcels at Fort Bliss and two Alaska bases will be returned to the public domain unless Congress renews 99-606 by the year 2001. The work was sponsored by Dr. Andrew Vliet, Director of Plans and Programs at Fort Bliss. The research was conducted in the Force Development and Technology Program of RAND Arroyo Center, a federally funded research and development center sponsored by the United States Army.

Rubenson, D., Weissler, R., Wong, C. and Everson, R. 1999. Does the army have a national land use strategy? MR-1064-A.

Link(s)

https://www.rand.org/pubs/monograph_reports/MR1064.html 

Working Paper

Year: 1999

Quantifying vicious circle dynamics: The PDE model for population, environment, development and agriculture in African countries.

Author's abstract: This paper develops a quantitative simulation model linking population parameters and education to land degradation, food production and distribution, and resulting in the proportion of the population which is food insecure. This model is inspired by the Vicious Circle Model of Dasgupta and others, but can be applied more generally to interactions between these variables. The model chooses a population-based approach which groups individuals into eight categories as defined by rural/urban place of residence, literacy status and food security

status. Using the tools of multi-state population projections, each group is simulated by age and sex. The model links this population module to an agricultural production function and a food distribution function which considers the fact that not all people have equal access to the food produced. This model has been applied to several African countries. Here it is illustrated with an application to Burkina Faso.

Lutz, W. and Scherbov, S. 1999. Quantifying vicious circle dynamics: The PDE model for population, environment, development and agriculture in African countries. IIASA Interim Report IR-99-049.

Link(s)

<https://iiasa.ac.at/Publications/Documents/IR-99-049.pdf> 

Conference Paper

Year: 1999

The effects of China's rural policies on the sustainability of agriculture in China.

Major rural policies in China before the reform include the state-monopolized procurement and marketing system (SMPMS), collectivization and grain self-sufficiency policy. All these three policies were shaped by heavy-industry-oriented development strategy, adopted in the early 1950s. SMPMS was implemented to provide cheap food and raw materials for urban areas. Collectivization was a vehicle for implementing the procurement policy. Grain self-sufficiency was for national security and for saving scarce foreign exchanges for the development of industries. The above three policies generally have negative impacts on the sustainability of agriculture. Low price SMPMS led to wasteful usage of natural resources. National self-sufficiency led to over-extraction of resources so as to meet increasing domestic demand from population and economic growth. Local self-sufficiency led to misallocation of resources. Collectivization caused low incentives in agricultural production. But these policies also gave local governments the ability to mobilize labor for construction of irrigation project, increasing the crop intensity and so forth. Some of these may be favorable for environment. The reform started at late 1970s improved farmers' incentives. But land and forest are still collectively owned. Some of the impacts of rural reform on environment are positive and others are negative. The negative impact is because that the property right is not secure so farmers have less incentive to concern about long-term sustainability and the government is less effective in mobilizing labor for environmental protection projects. The reform, however, may also have positive impacts. As the property rights are well defined and income increased, farmers' demand for better environment will increase. The direction of future reform are to secure property rights, to liberalize price and market control, to give up national and regional self-efficiency and to reduce government's direct involvement in economic activities. Suggested areas for future research are the environmental impacts of regional self-sufficiency, insecure land tenure system and the rapid development of township-and-village enterprises.

Lin, J. Y. and Zhang, F. 1999. The effects of China's rural policies on the sustainability of agriculture in China. 11th Biannual Workshop on Economy and Environment in SE Asia. Singapore, November 10-13.1998

Link(s)

<https://idl-bnc.idrc.ca/dspace/bitstream/10625/30543/8/118115.pdf>, <https://idrc-crdi.ca/uploads/user-S/10536140940ACF348.pdf>

Working Paper

Year: 1999

Modeling the land-use change and supply and demand structure for food in Asia.

Economic development and growth of population in Asia have caused an increase in the demand for food. On the other hand, disappearing the cultivation area and global warming have caused a decrease in the supply for food. This study proposes a model which concerns about reciprocal action among demand for food, supply for food, land-use change, environment and economic development. (Author's abstract)

Matsumura, K. and Nakamura, Y. 1999. Modeling the land-use change and supply and demand structure for food in Asia. 1999 NIES Workshop on Information Bases and Modeling for Land Use and Cover Change Studies in East Asia, Tsukuba, Japan, January 25-27, 1999.

Link(s)

[http://www-cger.nies.go.jp/lugec/Proceedings/26\)Matsumura.pdf](http://www-cger.nies.go.jp/lugec/Proceedings/26)Matsumura.pdf), <http://www-cger.nies.go.jp/lugec/Proceedings/pcdscontents.htm>

Conference Paper

Year: 1999

Population and migration dynamics for land use modeling

The annual population increase rate [of China] became about 1% which fell below the average of the world during year. However, a population increase, that is, about 12,000,000 people which equals "Tokyo" every year continues though as much as 1% in the annual rate. Such a population expansion will act on the environment as a big deterioration factor in present and the future. In the case of China, which is a major agricultural country, the population change and the land-use change are so closely interrelated, and searching for the interrelation has an important meaning. It notices the problems of population increase and land-use change in other developing countries. (Author's Introduction)

Sakai, T. 1999. Population and migration dynamics for land use modeling. 1999 NIES Workshop on Information Bases and Modeling for Land Use and Cover Change Studies in East Asia, Tsukuba, Japan, January 25-27, 1999.

Link(s)

[http://www-basin.nies.go.jp/project/lugec/Proceedings/23\)Sakai.pdf](http://www-basin.nies.go.jp/project/lugec/Proceedings/23)Sakai.pdf), <http://www-basin.nies.go.jp/project/lugec/Proceedings/pcdscontents.htm>

Conference Paper

Year: 1999

Forest and the poverty-environment nexus.

This paper sets out to review the main issues related to forests, poverty and the environment. In doing so it addresses two main aspects of this set of relationships. One is the impact on forests of uses by those who are poor, and the long held view that poverty forces people to deplete and destroy forests in order to meet their needs for fuel and other forest products, and for land on which to produce food. The other is the role that forests and forest products play in the livelihoods of the poor. (from 'Introduction')

Arnold, J. E. M. and Bird, P. 1999. Forest and the poverty-environment nexus. Prepared for the UNDP/EC Expert Workshop on Poverty and the Environment, Brussels, Belgium, January 20-21 1999.

Link(s)

http://www.profor.info/sites/profor.info/files/Forestst_Poverty_Nexus.pdf 

Working Paper

Year: 1999

Population dynamics, migration and the future of the Calakmul Biosphere Reserve

This paper is a description of population dynamics and in-migration around the Calakmul Biosphere Reserve located in the southern Yucatán Peninsula of Mexico. It presents results from the initial phases of an applied research program developed with the following objectives: 1) Generate dialogue between stakeholders (e.g. community members, regional authorities, and national and international governmental and non-governmental institutions) about the impact of population growth or distribution on biodiversity conservation around the reserve; 2) develop an effective, low-cost population monitoring system; and 3) establish a culturally and politically appropriate participatory land-use planning process that takes account of complex local and regional human population dynamics. The program is a collaborative effort between Pronatura Península de Yucatán, A.C. (PPY), World Wildlife Fund (WWF), and the University of Michigan Population-Environment Fellows Program. Information gathered primarily through the use of participatory and other qualitative research methods illustrates the complex mosaic of causes and environmental consequences of in-migration around the reserve. The applied research shows that the future of the reserve is compromised by both a steady influx of migrants and rapid natural population growth rates in the ejido communities. Moderating the environmental consequences of in-migration involves the creation of effective community land-use planning practices coupled with supportive national and regional economic and social policies. However, numerous deep structural challenges confront institutions committed to the promotion of conservation and just economic and social development. (c) 1999 American Association for the Advancement of Science (AAAS)

Ericson, J., Freudenberger, M. and Boege, E. 1999. Population dynamics, migration and the future of the Calakmul Biosphere Reserve. Occasional Paper No. 1, Summer 1999.

Link(s)

<https://www.aaas.org/international/ehn/occas1/occas1.pdf> 

Working Paper

Year: 1999

Sustainable land use forms in china from the viewpoints of soil and water conditions and future population impact

Crop production in China has recorded the steady increase. But it was performed by heavy application of fertilizers and wasteful consumption of irrigation water. It is said that the population in China will reach to 2 billions from the present 1 billions by the middle of the 21st century. Facing the unbelievable population increase in the near future, the establishment of sustainable agriculture in China guaranteeing the steady increase in crop production for the future demand is the urgent global issue. (Author's abstract)

Kimura, M. 1999. Sustainable land use forms in china from the viewpoints of soil and water conditions and future population impact. 1999 NIES Workshop on Information Bases and Modeling for Land Use and Cover Change Studies in East Asia, Tsukuba, Japan, January 25-27, 1999.

Link(s)

[http://www-basin.nies.go.jp/project/lucec/Proceedings/22\)Kimura.pdf](http://www-basin.nies.go.jp/project/lucec/Proceedings/22)Kimura.pdf) , <http://www-basin.nies.go.jp/project/lucec/Proceedings/pcdscontents.htm> 

Conference Paper

Year: 1999

People and nitrogen: A global interaction

In the absence of human activities, biological N fixation is the primary source of reactive N, providing about 90-130 Tg N yr⁻¹ (Tg = 10¹² g) on the continents. Human activities have resulted in the fixation of an additional ~150 Tg N yr⁻¹ by energy production, fertilizer production, and cultivation of crops (e.g., legumes, rice). Some sinks of anthropogenic N have been estimated (e.g., N₂O accumulation in the atmosphere; loss to coastal oceans), however the uncertainty around the magnitude of other sinks (e.g., retention in groundwater, soils, or vegetation or denitrification to N₂) is large. While we know that N is accumulating in the environment, we do not know the rate of accumulation. Due to the myriad of effects of excess N on humans, ecosystems and the atmosphere, and their cascading nature (i.e., one atom of N can have a large number of different effects as it is transformed to different N species), this lack of knowledge is unfortunate. There are limited options available to society to reduce the amount of N mobilized by human action because there is, in effect, a N imperative--it is required for food production. As population and per capita consumption of food (especially animal products)

increase, more and more N will be converted from unreactive to reactive forms in the future. This is especially true in less developed regions.

Galloway, J. N. 1999. People and nitrogen: A global interaction. The American Society of Limnology and Oceanography's Aquatic Sciences Meeting in Santa Fe, New Mexico, February 1-5, 1999.

Link(s)

<https://www.gravit-innovation.org/> , <https://www.gravit-innovation.org/> 

Conference Paper

Year: 1999

The influence of age structure and household size on historical and projected energy use in the U.S.

Changes in population age structure and lifestyles, by driving a decrease in average household size, can lead to higher per capita energy use than would otherwise be expected as economies of scale in energy use at the household level are lost. I use household survey data from the US to show that changes in average household size since 1960 may be responsible for as much as 15% of current residential energy use, although further work on the influence of income and age composition of households may revise this conclusion. Projects with a simple model estimated from historical data demonstrate that the effect is of potential importance to future energy use as well. Aging driven changes in US household size could increase residential energy use in 2050 by 20% above what it otherwise would be. (author's abstract)

O'Neill, B. 1999. The influence of age structure and household size on historical and projected energy use in the U.S. Presented at the 2000 meeting of the Population Association of America, Los Angeles, CA, March 24, 2000.

Link(s)

<http://www.ciesin.columbia.edu/repository/pern/papers/ONeillPAA2000msv2.pdf> 

Conference Paper

Year: 1999

Population weights in the international order

Three sources of possible change are explored, in which states would be "population-weighted" to a greater degree than before. Convergence of productivity levels around the world, expected by many, would bring the economic and population rankings of states more into line. A second source of change is the necessity to allocate among states the use of global commons, particularly the atmosphere as a sink for greenhouse gases. And third, population weights are implicitly more prominent in futures in which states are less important—as in envisaged scenarios of global civil society. (Author's abstract)

McNicoll, G. 1999. Population weights in the international order. Policy Research Division Working Paper No. 126 (1999). Population Council.

Link(s)

<https://www.semanticscholar.org/paper/673e1dc580baa9ae98b7849f32167fb55b52bd0f>

Working Paper

Year: 1999

The population debate in historical perspective: Revisionism revisited (draft).

This draft paper examines population optimists.

Kelley, A. C. 1999. The population debate in historical perspective: Revisionism revisited (draft). Center for Demographic Studies, Duke University.

Link(s)

<http://public.econ.duke.edu/pub/kelley/revision.pdf>,

<http://public.econ.duke.edu/Papers//Abstracts99/abstract.99.09.html>

Working Paper

Year: 1999

Statistical analysis on factors in farmland/urban land-use change in Japan (1975 -1990).

This research is statistical analysis on driving forces in land-use change in Japan. We adopted the municipalities as a unit of analysis in order to use both of ample socioeconomic and physiographical indicators as explanatory variables. In case of farmland change, potentiality of urbanization and its advancement were detected as the most major driving forces of land-use change... In case of urban land-use change, several physiographical conditions were adopted in addition to the potentiality of urbanization and its advancement. (Author's abstract)

Hoshino, S. 1999. Statistical analysis on factors in farmland/urban land-use change in Japan (1975 -1990). 1999 NIES Workshop on Information Bases and Modeling for Land Use and Cover Change Studies in East Asia, Tsukuba, Japan, January 25-27, 1999.

Link(s)

[http://www-cger.nies.go.jp/lugec/Proceedings/06\)Hoshino.pdf](http://www-cger.nies.go.jp/lugec/Proceedings/06)Hoshino.pdf),

<http://www-cger.nies.go.jp/lugec/Proceedings/pcdscontents.htm>

Conference Paper

Year: 1999

Ethnicity and land use in a changing environment: The Great Plains in the twentieth century

Drawing upon a century's worth of population, environmental and land use data for the Great Plains, a major agricultural region in the United States, this paper evaluates how population and environmental characteristics affect agricultural land use outcomes over time and across space. This paper implements the connection between population, environment and land use in a way that treats people as fully-elaborated social actors. The proposal is that human creation of a landscape is mediated through social and cultural systems that can produce different land use outcomes under similar environmental opportunity structures (Greider and Garkovich, 1994). To explore this proposition, this paper examines the historical and contemporary role of ethnicity in determining agricultural land use outcomes. It also examines population and environmental influences on agricultural land use both in the early period of European-origin settlement (1910) and in the contemporary period (1990), for a region that encompasses nearly 450 counties in ten states.(Author's abstract)

Baker, S. G., Gutmann, M. P. and Pullum, S. M. 1999. Ethnicity and land use in a changing environment: The Great Plains in the twentieth century. Population Research Center, The University of Texas, Austin, TX.

Link(s)

http://www.prc.utexas.edu/working_papers/wp_pdf/98-99-02.pdf

http://www.prc.utexas.edu/working_papers/past_series/series_98-99.html

Working Paper

Year: 1999

From the Amazon to Southeast Asia: Human involvement in large-scale drainage basins.

The Amazon represents a unique natural laboratory for testing models of regional scale dynamics. It is large scale and represents a series of hydrological and chemical regimes which are not atypical of world rivers, and as yet has large tracts which have not been substantially perturbed. In contrast, the extraordinary pace of development and population growth in Southeast Asia (a region of roughly similar attributes to the Amazon) has placed dramatically increasing pressure on river basins and their downstream coastal ecosystems. The impact on river systems occurs through erosion of the land surface and changes in the nature of the sediment and its associated organic matter and nutrient content from agricultural and urban sources. Changes in hydrology result as an immediate consequence of dam construction and large-scale water diversion for irrigation. Longer-term changes in regional weather patterns and climate will result in altered flow regimes'.(author's abstract)

Richey, J.E. 1999. From the Amazon to Southeast Asia: Human involvement in large-scale drainage basins. The American Society of Limnology and Oceanography's Aquatic Sciences Meeting in Santa Fe, New Mexico, February 1-5, 1999.

Link(s)

<http://boto.ocean.washington.edu/>, <https://www.agu.org/meetings/fm00top.html/>

Conference Paper

Year: 1999

Historical perspectives of land-use and land-cover changes in Beijing

Beijing is one of ancient cities in China. In history, the land use and land cover within its territory have been changed greatly due to various human activities. The most striking land-use changes have been the expansion of urbanized areas no matter fast or slow in different periods' Through the brief discussion we can see the land use or the land cover changes have been accelerated in the past 100 years, especially in the past 50 years because of changes of social ideologies, policies, population growth, technological improvements and the strengthening of economic power. The consequences of the land use and land cover changes in Beijing, the future development trends of the city and some concerned issues are also discussed in the paper.
(Author's abstract)

Lu, Q. 1999. Historical perspectives of land-use and land-cover changes in Beijing. 1999 NIES Workshop on Information Bases and Modeling for Land Use and Cover Change Studies in East Asia, Tsukuba, Japan, January 25-27, 1999.

Link(s)

[http://www-basin.nies.go.jp/project/lugec/Proceedings/17\)LU%20%20Qi.pdf](http://www-basin.nies.go.jp/project/lugec/Proceedings/17)LU%20%20Qi.pdf), <http://www-basin.nies.go.jp/project/lugec/Proceedings/pcdscontents.htm>

Conference Paper

Year: 1999

Transformation of fallow systems under population pressure

The author models fallow-cultivation with biomass regeneration and finds population-poverty-degradation linkages. Specifically, slight increases in the discount rate results in increased cropping frequency and lower soil fertility.

Thomas, T. S. 1999. Transformation of fallow systems under population pressure. Presented at the Summer 1999 Meetings of the American Agricultural Economics Association, Nashville, Tennessee, August 8-11, 1999.

Link(s)

<http://purl.umn.edu/21603>

Conference Paper

Year: 1999

Urban population-environment dynamics and transportation systems: New interdisciplinary frontiers.

The study examines the population environment relationship in five urban areas: Faisalabad, Pakistan; Khon Kaen, Thailand; Cebu City, the Philippines; Pusan, South Korea; and Kobe, Japan for the period 1970-2020. A dynamic modeling program (STELLA5) was used for the study. A general model of the Urban Population Environment Dynamic was developed to guide the studies. (From the Paper introduction).

Ness, G. and Richardson, B. 1999. Urban population-environment dynamics and transportation systems: New interdisciplinary frontiers. Presented At Fall 1999 Colloquium: Research in the Interest of the Public and the Environment Interdisciplinary Problems and Solutions at the University of Michigan. September 30, 1999.

Link(s)

<http://www.environment.research.umich.edu/downloads/ness.pdf> ↗,

<http://www.environment.research.umich.edu/sched-fall.html> ↗

Conference Paper

Year: 1999

Population, poverty and vulnerability: Mitigating the effects of natural disasters.

This paper analyzes the relationship between demographic dynamics and Hurricane Mitch in Central America, and extracts from this experience lessons that can help reduce vulnerability in the long run. Specifically, it centers on three aspects: How did demographic processes condition the area's vulnerability prior to Mitch? What are Mitch's consequences for population dynamics in the short and long term? What changes must be introduced in population dynamics if the effects of future natural disasters are to be mitigated?

Martine, G.; Guzman, J. M. 1999. Population, poverty and vulnerability: Mitigating the effects of natural disasters.

Link(s)

<https://www.fao.org/home/404> ↗, <https://www.fao.org/home/404> ↗

Working Paper

Year: 1999

Population and the current world food situation.

This document reviews recent trends and developments in food production and markets for basic food products. 'Current World Food Situation,' prepared for FAO's 116th Council session (Rome, 14-19 June 1999) analyses the relationship between population growth and food production. Agricultural production has lagged behind population growth in nearly half of the total number of countries considered. In some cases this has reflected strong demographic pressure rather than faltering performance of the farming sector. Many other countries experienced a negative association of high population growth with stagnating or even declining production. This

document is a summary of the Council document, emphasizing the linkages between population dynamics and food security.

FAO Population Programme Service (SDWP). 1999. Population and the current world food situation.

Link(s)

<https://www.fao.org/3/X1729e/X1729e.htm>, <https://www.fao.org/home/404>

Working Paper

Year: 1999

Agricultural productivity growth and escape from the Malthusian trap

Industrialization allowed the industrialized world of today to escape from a regime characterized by low economic growth and low population growth and to enter a regime of high economic growth and high population growth. To explain this transition in growth regimes, we construct a two-sector growth model with endogenous fertility and endogenous technological progress in the manufacturing sector. With this structure our model is able to replicate the stylized facts of the British industrial revolution. In addition, we show that industrialization requires rising growth of agricultural total factor productivity. This result is in marked contrast to previous work that showed within a similar framework - but with constant population - industrialization requires merely a rising level of agricultural total factor productivity. We conclude by illustrating that our proposed model framework can be extended to also include the demographic transition i.e. a regime where economic growth may lead to decreasing fertility." (author's abstract).

Fürnkranz-Prskawetz, A. and Kögel, T. 2000. Agricultural productivity growth and escape from the Malthusian trap. CEPR Discussion Paper no. 2485. Centre for Economic Policy Research, London, UK.

Link(s)

http://cepr.org/active/publications/discussion_papers/dp.php

Working Paper

Year: 1999

Digital cities II: Monitoring the urban environment from space.

In this study, we discuss methodology for measurement of urban vegetation and compare vegetation distributions in the New York and Guangzhou metropolitan areas using Landsat TM imagery. A systematic analysis of the spatiotemporal dynamics of vegetation in the world's major evolving urban centers would facilitate comparative studies of urban environment and its role in public health and energy consumption as well as constraining the role of the urban center in the dynamics of larger metro-agro-plex system. (from author's abstract)

Small, C. and Miller, R. B. 1999. Digital cities II: Monitoring the urban environment from space. Lamont Doherty Earth Observatory, Columbia University.

Link(s)

http://www.ldeo.columbia.edu/~small/PDF/ISDE_SmallMiller.pdf 

Working Paper

Year: 1999

Famines and the environment: The case of the Great Irish Famine.

A famine is always a human tragedy, but its often overlooked impact on the environment can be just as devastating. For example, the food crisis suffered by refugees fleeing the Rwandan civil war in 1993 has resulted in the partial or complete deforestation of parts of Virunga National Park in Zaïre, prompting fears for the safety of endangered animal species living in the park (Miller, 1993; Pearce, 1994). ...Meanwhile, Rwanda's national park at Akagera has also suffered badly since Tutsi revolutionaries took power in Rwanda. Needing land to support the revolutionaries' herd of 650,000 to 2 million Ankole cattle, they occupied the park to use it as pasture land. The new government of Rwanda then sent troops into the park to hunt down lions that attacked the cattle and slaughtered large numbers of wild herd animals because these might transmit diseases to the cattle (Wolanski, 1996)...In order to better protect endangered species, scientists must be able to accurately predict the impact of a possible famine ... (author's, from introduction)

Fewer, T. G. 1998. Famines and the environment: The case of the Great Irish Famine.

Link(s)

<https://www.yahoo.com/> 

Working Paper

Year: 1998

Bringing the household into the population and environment debate: The environmental effects of timing migration according to the household life cycle.

This paper is intended to enhance the literature on population and the environment by developing a model that takes into account age and gender composition of rural households in order to explain variation in the timing of migration and decisions about land use. In differently structured households, migration patterns may reduce or delay environmental degradation by limiting dependence on the productivity of the land, or these patterns may increase degradation by contributing to extensification with slash and burn methods or intensification with inappropriate inputs. I show that the arguments that characterize the current population and environment debate capture the importance of migration on the agricultural frontier only marginally. Where migration is considered, researchers often ignore the changing capacity of a household's members to migrate, either permanently or temporarily, over the course of a household's life cycle and development. This framework is flawed because it assumes an

idealized context with an indefinitely productive frontier or ignores the possibility that local conditions may pressure households into using temporary migration as a survival strategy, or as a means to obtain more advanced inputs. By recognizing the potential for migration patterns to continue after initial resettlement on the frontier, we should be able to better identify the emergence and persistence of land use patterns. I formulate a model that considers how environmental change drives rural households to modify their income strategies, and the ways in which these strategies are conditioned by the household life cycle. Responses to change then influence future activities which perpetuate environmental change, although at different rates, depending on what resources are available to the household in a given life cycle stage. The model emphasizes the producer/consumer ratio and human capital in a household, the household's social capital, the condition of the landholding, and the desirability of increasing land use relative to other strategies at a given time as factors that contribute to both the probability of migration and decisions about land use. In addition, changes in household activities that result from migration patterns at different life cycle stages are considered. These include changes in land management, use of inputs, extensification, or land acquisition. To operationalize this model, I propose collecting a data set that includes event history calendars providing information on the life history of the household, its migration history, and its land use history. I then suggest using event history analysis to determine the hazard rate of the initiation of migration and changes in land use and labor supply. Together, these models can provide information about the way in which farmers are changing their income-generating strategies and the ways in which they are using land. By including the household life cycle, these models can also explain part of the variation in rates of deforestation due to small farmers and predict future rates of deforestation based on the types of households and migration patterns prevailing in a region. (Author's abstract)

Fomby, P. 1998. Bringing the household into the population and environment debate: The environmental effects of timing migration according to the household life cycle. CDE Working Paper 98-31, Center for Demography and Ecology (CDE), University of Wisconsin, Madison, WI.

Link(s)

<https://www.ssc.wisc.edu/cde/cdewp/1998papers.htm> 

Working Paper

Year: 1998

Seasonal, weather shocks and the timing of births and child mortality in Senegal.

This paper uses data from Senegal to examine two complementary explanations of seasonal fertility based upon the inability of households to smooth consumption and labor time over the crop seasons. First, if the value of time varies seasonally parents may wish to shift births to those months of the year when the shadow value of time, particularly women's time, is relatively low. Second, if parents care about the survival chances of their potential births, and, facing highly seasonal income streams, they are not able to smooth consumption, they may time conceptions so that births occur after harvests have been gathered and monthly income is high. In rural Senegal, births occur disproportionately in the dry season months which is consistent with both

of these hypotheses. If the inability to smooth consumption and labor demand over the seasons is an important cause of the seasonal pattern of births, then unanticipated weather shocks are also likely to alter the timing of births. (Author's abstract)

Pitt, M. and Sigle, W. 1998. Seasonal, weather shocks and the timing of births and child mortality in Senegal. Working Paper Series, wp98-02. Population Studies and Training Center, Brown University, Providence, RI.

Link(s)

<http://www.pstc.brown.edu/~mp/method7a.pdf> 

Working Paper

Year: 1998

Actes du séminaire-atelier en Population-développement-environnement

Résumé: Ce 4e numéro des Études et documents de l'UERD est consacré aux Actes d'un séminaire-atelier qui s'est tenu à l'UERD du 30 novembre au 04 décembre 1998. Ce séminaire-atelier était destiné aux cadres burkinabè ayant été formés en population et développement par le Programme global de formation du FNUAP, tant au CIDEP de Louvain-la-Neuve qu'à l'INSEA de Rabat. Il avait pour double objectif de proposer une remise à niveau et des apports de contenus sur l'articulation population-développement-environnement, et de stimuler l'élaboration, par les participants, de projets d'activités de sensibilisation, de formation ou de recherche-action à mettre en œuvre au Burkina Faso. Organisé conjointement par le Département des Sciences de la population et du développement (SPED, UCL, Belgique) et l'UERD, il a bénéficié de la collaboration active du Programme en population et développement durable de l'INSEA (Rabat, Maroc) et de l'Association interdisciplinaire en développement, environnement et population (AIDEP, Louvain-la-Neuve, Belgique). Il a réuni 26 participants durant 5 jours, dont 13 anciens stagiaires, sur les 17 Burkinabè formés dans le cadre du programme global. Outre ces anciens stagiaires, quelques enseignants des institutions organisatrices, des chercheurs de l'Université et des responsables des ministères et institutions concernées par la population ont pu prendre part aux travaux. Le présent numéro rassemble le texte de toutes les communications présentées lors du séminaire, ainsi que le résultat des travaux réalisés en ateliers. Par son contenu, il devrait intéresser tous les cadres du Burkina Faso formés en population-développement-environnement : ceux qui ont assisté au séminaire-atelier et qui y retrouveront les contenus et les problématiques qui ont suscité réflexion et débats lors de ces quelques journées, mais également ceux qui n'ont pu y assister et qui pourront ainsi prendre connaissance de ces contenus et de ces problématiques. Nous pensons qu'il intéressera aussi nombre de chercheurs et de cadres qui, tant au Burkina Faso que dans d'autres pays d'Afrique, œuvrent pour une meilleure intégration des recherches et des actions entreprises dans ces trois domaines.

Willems, M. and Ryckmans, H. 1998. Actes du séminaire-atelier en Population-développement-environnement. Les Etudes et documents de l'UERD n°4.

Link(s)

<https://www.lycos.fr/> 

Working Paper
Year: 1998

Population growth, land use and food self-sufficiency in Kenya: a comparative analysis of small and medium-large land holdings in Kissii and Nyamira Districts

Summary: Literature has conceptualized the relationship between population growth and food self-sufficiency at two different levels. One school of thought assumes that once population growth outstrips food production, an agricultural crisis will ensue. O

Omosa, M. 1998. Population growth, land use and food self-sufficiency in Kenya: a comparative analysis of small and medium-large land holdings in Kissii and Nyamira Districts. Summary Report Number 31 - 1998.

Link(s)

<http://uaps.org> 

Working Paper
Year: 1998

Valuing changes in life expectancy In England And Wales caused by ambient concentrations of particulate matter.

The monetary valuation of the mortality effects of air pollution relies heavily upon the results of time-series analysis of daily mortality counts. But arguably these studies reveal little about the costs of premature mortality since they do not reveal the true extent of any 'harvesting effect'. Nor do they account for chronic deaths from cumulative exposure to high ambient concentrations of air pollution. This paper argues that a different approach altogether is required. Using statistical models of duration, the probability of survival as a function of exposure to ambient concentrations of particulate matter is used to derive the change in life expectancy conditional upon age. Ambient concentrations of particulate matter in England and Wales are shown to reduce average life expectancy by 4.5 months. The aggregate loss of life years borne by those alive today is estimated to be 15.7 million years assuming no change in current ambient concentrations. Finally, it is demonstrated how an individual's willingness to pay for changes in life expectancy can be derived from knowledge of their willingness to pay to avoid contemporaneous risks. Using this theoretical relationship along with a conventional value of £790,000 for a statistical life points to an annual cost for premature mortality of around £16.6 billion. (author's abstract)

Maddison, D. 1998. Valuing changes in life expectancy In England And Wales caused by ambient concentrations of particulate matter. Global Environmental Change (GEC) Working Paper 98-06. Center for Social and Economic Research on the Global Environment.

Link(s)

<https://cserge.uea.ac.uk/> , <https://cserge.uea.ac.uk/> 

Working Paper
Year: 1998

The impacts of rapid population growth on poverty, food production, and the environment

This survey paper updates what is known about the linkages between demographic change (changes in age distributions, the size and the growth rate of population, and migration) and the capacity of countries to provide food, to reduce poverty, and to maintain their environment. This assessment applies a longer-run perspective, and considers political as well as economic changes and impacts.

Kelley, A. C. 1998. The impacts of rapid population growth on poverty, food production, and the environment. Duke Economics Working Paper 98-13.

DOI: <https://dx.doi.org/10.2139/ssrn.147930> 

Link(s)

<https://www.ssrn.com/abstract=147930> 

Working Paper

Year: 1998

Counterurbanisation and the countryside: Some causes and consequences of urban to rural migration.

Abstract:-Recent government projections that 4.4 million new houses will be needed by 2016 have focused attention on the scale of urban-to-rural population movements in England. This paper conducts a literature review looking at the main causes and consequences of counterurbanisation. It examines the motives and pressures that lead people to move into two main types of countryside: accessible and remote rural areas. In the accessible countryside people attempt to escape the urban environment in order to enjoy close communities and proximity to nature while also continuing to work in towns. In the more remote countryside, attachment to community and nature is even stronger as proximity to employment is a lower consideration. In examining the consequences of counterurbanisation the paper shows that as people move to the countryside they tend to disrupt the composition of rural communities - such communities become, in general, more middle class - and threaten the natural environment. In short, counterurbanisation tends to undermine the very urban/rural distinctions which lead people to move to the countryside.

Murdoch, J. 1998. Counterurbanisation and the countryside: Some causes and consequences of urban to rural migration. Paper in Environmental Planning Research 15. ISBN: 1 897901 19 4.

Link(s)

<https://www.cardiff.ac.uk/geography-planning> 

Working Paper

Year: 1998

Rural poverty: Population dynamics, local institutions and access to resources.

There is a growing recognition among scholars that the relationship between population growth, institutions, and access to resources is complex. Institutions ("complexes of norms and behaviours that persist over time by serving some collectively valued purpose" (Uphoff, 1997: 6)) mediate the relationship between population growth and resource access. In some cases this mediation is remarkably flexible, dynamic, and capable of accommodating pressures of changing population and resource bases. In other cases, institutions play a more conservative and maladaptive role when confronted with these pressures. What is clear is that population growth does not necessarily undermine the capacity of institutions to manage resources effectively nor does it necessarily create absolute scarcity in resources. (author's abstract)

Crowley, E. and Appendini, K. 1998. Rural poverty: Population dynamics, local institutions and access to resources. Workshop on Population, Poverty and Environment held at FAO, Rome, October 26-30, 1998.

Link(s)

<https://www.fao.org/home/404> , <https://www.fao.org/home/404> 

Conference Paper

Year: 1998

Demographic dimensions of an inter-village land dispute in Nubri, Nepal.

In the Sama-Lho conflict, the villagers were fighting over a small stretch of forested land that lay between their two villages. The purpose of this paper is to examine demographic differences between the two villages of Sama and Lho that may be held accountable, or at least can be considered as contributing factors, to the arising of the dispute between the two villages. The author illustrates how the Microdemographic Community Study Approach (Axinn et. al. 1991)(1) can be used to discern the demographic significance of cultural variations between two villages. The main hypothesis is that, prior to the conflict, Lho had a higher rate of population growth than Sama. Due to socio-cultural similarities, this is a trend that would not have been intuitively obvious in the absence of supporting data. The main focus of the paper is on how family management strategies, household economic practices, and social roles shape internal (i.e., cultural) mechanisms for regulating population growth in a context of unstable access to economic resources stimulated by changing exogenous (political and economic) factors. The integration of micro and macro-level perspectives used herein is conducive to the unveiling of many interrelated factors that led to the crisis described above. Population growth (or lack thereof) is seen as a direct outcome of cultural, political, and economic processes that can only be understood in light of ethnographic details and the shifting importance of exogenous connections. (from Introduction).

Childs, G. 1998. Demographic dimensions of an inter-village land dispute in Nubri, Nepal. WP #98-9 1998. Working Papers Series, Department of Anthropology, Indiana University.

Link(s)

<https://bloomington.iu.edu/error/404.html> ↗, <https://bloomington.iu.edu/error/404.html> ↗

Working Paper

Year: 1998

Revising the Malthusian narrative: The comparative study of population dynamics in late imperial China.

Ever since Malthus, it has been conventional to cast the Chinese and European pre-industrial demographic systems as opposing archetypes. Europe's system was characterized by moderate population growth, fertility control keyed to economic conditions, and favorable living standards, compared with China's rapid growth, periodic mortality crises, and precarious balance of population and resources. Although there is some variation in approaches and vocabularies reflecting disciplinary divisions, and recognition of the substantial variability of institutions within Europe and China, this stylized contrast continues to flourish in the demographic and historical literatures. This is important because Malthusian dynamics underlie a popular and persuasive set of explanations for the divergent paths of Chinese and European economies and societies in the industrial era. In this article, drawing on both old and new evidence on demography and economy in late imperial times, we challenge this conventional dichotomy and its empirical underpinnings. (Author's introduction) A preliminary paper was presented at the Annual Meeting of the Association for Asian Studies, New Orleans, April 11-14, 1991. This article complements the comparisons of Chinese and European patterns of economic and political change in Wong's *China Transformed: Historical change and the limits of European experience* (Cornell 1997)

Lavelly, W. and Wong, R. B. 1998. Revising the Malthusian narrative: The comparative study of population dynamics in late imperial China. Working paper series, 98-5. Center for Studies in Demography and Ecology, University of Washington, Seattle, WA.

Link(s)

<https://csde.washington.edu/csde.html> ↗, <https://csde.washington.edu/> ↗

Working Paper

Year: 1998

Migrations, urbanisation et développement au Burkina Faso

Résumé: A la veille de la publication des résultats du recensement de décembre 1996, cette étude fait le point sur un fait social majeur de la démographie burkinabè : les migrations. Elle rappelle la définition du migrant, ainsi que les principales opérations de collecte et études réalisées sur ce thème. En s'appuyant principalement sur le recensement de 1985, elle analyse les migrations intérieures par province, en distinguant la destination rurale et la destination urbaine de celles-ci.

Les migrations internationales, également importantes, sont ensuite analysées par groupe d'âges et par sexe. Les migrations intérieures étant majoritairement orientées vers le milieu rural, l'idée qu'elles peuvent conduire à une meilleure exploitation des ressources naturelles est développée. En conclusion, les auteurs précisent que les migrations ont des effets négatifs aussi bien que positifs, qui doivent tous être pris en considération dans le processus de développement.

Uattara, A. 1998. Migrations, urbanisation et développement au Burkina Faso. Les Travaux de l'UERD n°8.

Link(s)

https://www.ceped.org/ireda/inventaire/ressources/ouattara_ardjouma_1998_tr_008...

Working Paper

Year: 1998

Review of underlying causes of tropical deforestation.

This paper reviews results from our modelling work on the underlying causes of tropical deforestation in three continents. This work has been based on the FAO Foris database, giving rise to more than 500 subnational observations. The roles of validity and reliability of empirical data, and alternative dependent variables in modelling work are discussed. As a major finding we point out the fact that deforestation rate and forest cover as dependent variables give compatible results on the statistical significance of the effects of such underlying causes of deforestation as population pressure-income, wet ecological zone as a proxy for inaccessibility, and forest resources data reliability. Furthermore, our results point to an inverted U-shape relation between deforestation and income level.

Palo, M., Lehto, E. and Uusivuori, J. 1997. Review of underlying causes of tropical deforestation. XI World Forestry Congress, Antalya, Turkey, October 13-22, 1997.

Link(s)

<https://www.fao.org/home/404>

Conference Paper

Year: 1997

Malthusian trap and endogenous population.

This paper addresses whether a Malthusian trap results in economic models where fertility decisions are endogenous and labor cannot be substituted by capital.

Hung, N. M. and Makdissi, P. 1997. Malthusian trap and endogenous population. Cahier 9705, Cahier 97-01. Du Groupe de Recherche en Economie de l'Energie, de l'Environnement et des Ressources naturelles.

Link(s)

<https://www.fss.ulaval.ca/economique> 

Working Paper

Year: 1997

Population, land tenure, and natural resource management: The case of customary land area in Malawi.

Using cross section time series data on 57 Malawian communities, this paper models factors that affect land use, tree cover, and crop yield. Population growth is endogenized.

Place, F. and Otsuka, K. 1997. Population, land tenure, and natural resource management: The case of customary land area in Malawi. EPTD Discussion Paper No. 27, April 1997.

Link(s)

<https://www.ifpri.org/divs/eptd/dp/papers/eptdp27.pdf> 

Working Paper

Year: 1997

Scaling and demographic issues in global change research: The Great Plains, 1880-1990.

The author is concerned with identifying the correct scale at which to study the relationship between population dynamics and environmental change in the Great Plains.

Gutmann, M. P. 1997. Scaling and demographic issues in global change research: The Great Plains, 1880-1990. Elements of Change, Aspen Global Change Institute, 1997.

Link(s)

<https://www.agci.org/publications/EOC97/eoc97session1/Gutmann.html> 

Conference Paper

Year: 1997

Environmental scarcity, resource collection, and the demand for children in Nepal.

This working paper finds that increasing resource scarcity lowers household demand for children. Increasing firewood and water scarcity increases the perceived net cost of children and perhaps acts as a check on population growth.

Loughran, D. and Pritchett, L. 1997. Environmental scarcity, resource collection, and the demand for children in Nepal. World Bank, July 30, 1997.

Link(s)

<https://www.worldbank.org/research/peg/wps19/nepal.pdf> 

Working Paper

Year: 1997

Population pressure, agricultural change and environmental degradation in the Himalayan region: A conceptual, historical and methodological basis.

This is a background paper written as preparation for more focused research the intersection of population pressure, agriculture, and environmental degradation in Himachal Pradesh, India.

Holden, S. T. and Sankhayan, P. L. 1997. Population pressure, agricultural change and environmental degradation in the Himalayan region: A conceptual, historical and methodological basis. Discussion Paper D-05/1997. Department of Economics & Social Sciences, Agricultural University of Norway.

Link(s)

<http://www.nlh.no/ios/Publikasjoner/ABSTRACT/D9705.HTM> 

Working Paper

Year: 1997

Population pressure, land tenure, and tree resource management in Uganda.

This study uses regression analysis to show that population growth is one of several significant causes of land conversion from forest to agriculture.

Place, F. and Otsuka, K. 1997. Population pressure, land tenure, and tree resource management in Uganda. EPTD Discussion Paper No. 24, March 1997.

Link(s)

<https://www.ifpri.org/divs/eptd/dp/papers/eptdp24.pdf> 

Working Paper

Year: 1997

Environmental views in Estonia on the eve of independence: Perceptions of the seriousness of ecological pollution as a social problem.

Throughout Eastern Europe the environment was a focus of political protest on the eve of independence. Since then concern with the environment has declined. This paper examines views of the environment as a social problem in Estonia, based on a survey conducted in 1991. The characteristics of people who were very concerned with ecological pollution in 1991, along with political and economic changes since that year, are discussed in order to gain insight into why environmental concern has declined so greatly in the post-transition period." Author's abstract

Anderson, B. A. and Romani, J. H. 1997. Environmental views in Estonia on the eve of independence: Perceptions of the seriousness of ecological pollution as a social problem. PSC Research Report 97-400.

Link(s)

<https://psc.isr.umich.edu/pubs/papers/rr97-400.pdf> 

Working Paper

Year: 1997

Population growth, income and forest growth: Management of village common land In India.

A newly-assembled data set that combines national household survey data, census data and satellite images of land use in rural India over a 29-year period is used to obtain estimates of economic growth and population effects on forests, to identify the mechanisms by which these factors affect land use, and to address whether forest areas are efficiently managed where community land management is present. The evidence suggests that increases in the returns to alternative uses of land induced by agricultural technical change and population growth, combined with the difficulty of monitoring forest-resource extraction, are the major contributing factors to deforestation. (Authors' abstract)

Behrman, J., Foster, A. and Rosenzweig, M. 1997. Population growth, income and forest growth: Management of village common land In India.

Link(s)

<http://adfdell.pstc.brown.edu/papers/forest.pdf> 

Conference Paper

Year: 1997

Determinants of Mexico-U.S. migration: The role of household assets and environmental factors

Concerns with illegal migration to the United States originating in Mexico's rural population, and the possibility of defining a set of interventions to reduce incentives to migrate at the source, require a precise understanding of the current determinants of migration for this population. Clearly, poverty and the expected income gap between emitting and receiving areas are major determinants of migration. The role of remittances in compensating for credit and insurance market failures for Mexican smallholders is an additional incentive to migrate. As migration networks mature, both at the level of individual households and at the community level, the nature of migration changes and becomes increasingly difficult to detain. Finally, environmental factors, particularly population pressure on scarce agricultural resources, limit the options in agriculture for individuals who reach working age and induce migration. In this report, we try to assess the relative importance of these various determinants of migration for the purpose of identifying policy and programmatic interventions that can be used to reduce incentives to

migrate. In Part I, we review the determinants of Mexico-U.S. migration that have been identified in an increasingly rich array of past studies. We then use a 1994 nationwide survey (excluding Chiapas because of political events in that year) of rural households in the social sector of Mexican agriculture, the so-called ejido sector that includes half of Mexico's territory and nearly 60% of its farm population. Regression models show that networks are important factors in migration. Population pressure on natural resources--measured here by the rate of deforestation, the inverse of the average corn production capacity of a farm household, and location in an environmentally critical municipality--are also important determinants of migration. Reducing this pressure should be part of efforts to detain migration at the source. (summary excerpted from the article)

de Janvry, A., Sadoulet, E., Davis, B., Seidel, K. and Winters, P. 1997. Determinants of Mexico-U.S. migration: The role of household assets and environmental factors. CUDARE Working Papers. Department of Agricultural and Resource Economics, University of California at Berkeley.

Link(s)

<https://escholarship.org/uc/item/0xk432kz> , <http://econpapers.repec.org/scripts/redir.pf> , <https://econpapers.repec.org/RePEc:cdl:agrebk:qt0xk432kz> 

Working Paper

Year: 1997

The cattle for land exchange: elderly women's negotiations in the Gwembe Valley, Zambia.

Introduction: This paper examines the relationship between material resources and support strategies for older women and men in the Gwembe Valley, of southern Zambia. In this paper I argue that gender differences in access to resources, and investments in those resources lead to very different strategies in mobilizing support from children. Drawing on four decades of research in the Gwembe Valley, I will show that changes in land value, cattle herding, and production of local beer have led to women's use of cultural metaphors of "the caring mother" to encourage support from children, while men rely primarily on resource control. In the Gwembe Valley of Southern Province Zambia, older men and women have different methods of encouraging support from their children. During 1994 and 1995 I conducted dissertation fieldwork as part of the Gwembe Tonga Research Project(1), started by Elizabeth Colson and Thayer Scudder in 1956. During my year and a half living with the Gwembe Tonga, I saw women mobilizing their relationships to children by calling on concepts of "mother" and the reproductive experience as evidence for their right to demand support...In the following sections of this paper I will trace the history of men and women's access to fundamental resources, and how they relate to strategies of support. (From introduction)

Cliggett, L. 1997. The cattle for land exchange: elderly women's negotiations in the Gwembe Valley, Zambia. WP #97-13 1997 Working Papers Series, Department of Anthropology, Indiana University.

Link(s)

<https://bloomington.iu.edu/error/404.html> 

Working Paper

Year: 1997

Population pressure and the microeconomy of land management in hills and mountains of developing countries.

Concerns about harmful environmental impacts are frequently raised in research and policy debates about population growth in the hills and mountains of developing countries. Although establishing wildlife corridors and biosphere reserves is important for preserving selected biodiverse habitats, for the vast majority of hilly-mountainous lands, the major ecological concerns are for the sustainability of local production systems and for watershed integrity. What matters for sustained use of those lands not only is the number of producers but also what, where and how they produce. Evidence from empirical research indicates that population growth in hills and mountains can lead to land enhancement, degradation, or aspects of both. This can be explained by extending induced innovation theory to address environmental impacts of intensification. Increases in the labor-land endowment ratios of households and in local land demand and labor supply make the opportunity cost of land relative to labor increase. As a result, people use hilly-mountainous land resources more intensively for production and consumption, thus tending to deplete resources and significantly alter habitats. But, at the same time, capital- and labor-intensive methods of replenishing or improving soil productivity may become economically more attractive, production systems that enhance the land if the expected discounted returns are greater than those of systems that degrade the land. Users will choose production systems that enhance the land if the expected discounted returns are greater than those of systems that degrade the land. In addition to population change, other factors—market conditions, local institutions and organizations, information and technology about resource management, and local ecological conditions—determine the returns from various production systems. (Authors' Abstract)

Templeton, S. R. and Scherr, S. J. 1997. Population pressure and the microeconomy of land management in hills and mountains of developing countries. EPTD DISCUSSION PAPER NO. 26, Environment and Production Technology Division, International Food Policy Research Institute.

Link(s)

<https://www.ifpri.org/publication/population-pressure-and-microeconomy-land-mana...> 

<https://www.ifpri.org/cdmref/p15738coll2/id/125636/filename/125667.pdf> 

Working Paper

Year: 1997

What drives deforestation in the Brazilian Amazon? Evidence from satellite and socioeconomic data.

Pfaff analyzes the determinants of deforestation in the Brazilian Amazon. Using a model of optimal land use, he derives and estimates an equation for deforestation using (1) country-level data for 1978-88 and (2) measures of deforestation from satellite images. The evidence suggests that: -Increased road density in a county leads to more deforestation there and in neighboring counties. - Development projects were associated with deforestation in the 1970s but not in the 1980s. - The greater the distance from markets south of the Amazon, the less the deforestation. - Better soil quality leads to more deforestation. The model results for government provision of credit were mixed across specifications. Population density, the primary explanatory variable in most previous empirical work, was significant when it was the sole explanatory variable but was much less important when other variables were factored in. (online abstract)

Pfaff, A. S. P. 1997. What drives deforestation in the Brazilian Amazon? Evidence from satellite and socioeconomic data. Working Paper No. 1772. Environment, Infrastructure, and Agriculture Division, Policy Research Department, World Bank.

DOI: <https://dx.doi.org/10.1596/1813-9450-1772> 

Link(s)

<https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-1772> 

<https://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-1772> 

Working Paper

Year: 1997

Social science, human ecology, and emerging diseases.

One of the crucial tenets of disease ecology is that population, society, and both the physical and biological environments are in dynamic equilibrium. Significant enough stress on this equilibrium can produce cascading effects on any of the aforementioned components. The human-environment relationship, if disturbed enough by major changes in land use, migration, population pressure, or other stressors can show significant maladaptation, as manifested by the appearance or diffusion of new diseases. HIV/AIDS serves as a prototype of emerging and resurgent infectious diseases, which the medical and public health communities now acknowledge to be a hitherto unappreciated reality and a severe threat to worldwide public health. To understand the emergence and importance of emerging and resurgent diseases, it is crucial to understand the widespread social, economic, and geographical changes which are occurring in the world. Many changes are a consequence of political and economic power at a variety of scales, ranging from the transnational down to the household and individual levels. Some, or even much of this power is influenced by who controls the political and the economic power in decisions over land use, which in turn, influences the relationships of people and the environment. Thus, disease emergence is just as much a matter of social, ecological, and geographical change as it is of smaller scale molecular events. Indeed, the meaning of disease causation changes when it is considered in social and ecological contexts. The basic argument in this paper is that one of the most fruitful approaches in understanding disease emergence and resurgence is that of the macro-scales, ranging from the behavior of the individual, to global social and ecological change. (PERN summary of authors abstract).

Mayer, J. D. 1997. Social science, human ecology, and emerging diseases. Working paper series, 97-3. Center for Studies in Demography and Ecology, University of Washington, Seattle, WA.

Link(s)

<https://csde.washington.edu/csde.html>, <https://csde.washington.edu/>

Working Paper

Year: 1997

Roads, population pressures, and deforestation in Thailand, 1976-1989

Between 1976 and 1989, Thailand lost 28 percent of its forest cover. To analyze how road building, population pressure, and geophysical factors affected deforestation in Thailand during that period, Cropper, Griffiths, and Mani develop a model in which the amount of land cleared, the number of agricultural households, and the size of the road network are jointly determined. The model assumes that the amount of land cleared reflects an equilibrium in the land market. Hence, in the long run, the amount cleared depends on the profitability of agriculture and on the long-run costs of clearing. The size of the country's agricultural population, as well as the size of the road network, affects the demand for cleared land and hence the amount cleared in equilibrium. The authors estimate an equation to explain the amount of land cleared in equilibrium, using data for the 58 provinces that were forested in 1973. Data from five years (1976, 1978, 1982, 1985, and 1989) are combined to estimate the equilibrium model. They find that the number of agricultural households and road density both increase the fraction of each province cleared, but their effects are small. The elasticity of cleared land with respect to agricultural households is only 0.12; with respect to road density, it is only 0.26. These effects do differ by region, however; moreover, the elasticities of forest area with respect to population density and road density are larger in absolute value than the respective elasticities for cleared land. The elasticity of forest-to-total area with respect to population density is -0.41 for the North/Northeast section of the country and -0.22 for the South/Central region. The corresponding elasticities with respect to road density are -0.20 and -1.09. This suggests that population pressures play less of a role in deforestation than earlier studies of Thailand found. For an area to remain deforested, it must be profitable to convert the land to another use, and that use is usually agriculture. Steep slopes and poor soil quality provide some natural protection for forests, although the quantitative impact of those factors vary. Variations in agricultural prices also affect the amount of deforestation. (author abstract)

Cropper, M., Griffiths, C. and Mani, M. 1997. Roads, population pressures, and deforestation in Thailand, 1976-1989. Working Paper No. 1726. Environment, Infrastructure, and Agriculture Division, Policy Research Department, World Bank.

DOI: <https://dx.doi.org/10.1596/1813-9450-1726>

Link(s)

<https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-1726>,

<https://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-1726>

Working Paper



Year: 1997

Turning but not toppling Malthus: Boserupian theory on population and the environment relationships

Subsequent to the Brundtland Report, the 1992 Earth Summit, and the resulting Agenda 21, the issue of population and development has increasingly evolved into discussion on the 'population, environment, and development nexus'. In the face of this new mandate for research on population, environment, and development dynamics, theoretical frameworks are limited. Conceptual thinking on population and environment within both the social and natural sciences has traditionally suffered from a long-term confinement within opposing 'Malthusian' versus 'Cornucopian' views. The work of Ester Boserup, however, continues to transcend the boundaries of this polarized discourse. This paper reviews the main points of Boserupian theory and its relevance to developing regions, in particular to sub-Saharan Africa. Recent reinterpretations of Boserup's work relevant to population and environment relationships in developing countries are also considered.

Marquette, C. 1997. Turning but not toppling Malthus: Boserupian theory on population and the environment relationships. Working Paper 1997:16. Chr. Michelsen Institute, Development Studies and Human Rights. Bergen Norway

Link(s)

<https://www.cmi.no/publications/1158-turning-but-not-toppling-malthus> ,
<https://brage.bibsys.no/xmlui/handle/11250/2435923> 

Working Paper

Year: 1997

Environmental regulation and management: A preliminary analysis of a survey of manufacturing and processing companies in industrial South Wales.

Abstract:-914 manufacturing and processing companies in Industrial South Wales were sent an environmental questionnaire in the winter of 1996/1997. 420 were returned (from 216 small and medium sized enterprises (SMEs) and 204 large companies) giving a 46% response rate. Forty-two questions were asked covering: regulation: perceptions, aspirations, understanding, relevance and implementation; environmental help and advice received; waste management: practices and understanding; implementation of environmental management tools; supply chain position; motivation for environmental improvements; environmental improvements undertaken; costs and benefits of environmental improvements; perceptions of environmental impact and opportunities; sustainable development in practice. In general, the survey has shown that SMEs lag behind large companies in their understanding and approach to environmental management. Furthermore, large companies have been found to be more aware of environmental obligations partly because environmental pressures on them are, in general, greater than on SMEs. Whilst we are not the first to draw such conclusions, the survey has facilitated detailed comparison between the positions of SMEs and large companies across a wide range of topics. This has enabled deeper insights into behaviour, motivation and perceptions and thus forms a sound basis for

developing environmental policy and support mechanisms to help SMEs improve their environmental performance. On the one hand, understanding of environmental legislation remains poor, particularly amongst SMEs. On the other hand, SMEs appeared to demonstrate exaggerated perceptions of the incidence of regulation. Indeed, a regulatory level playing field was important to all sizes of company but most were not sure that one existed, partly due to lack of experience of regulation in practice.

Baylis, R., Connell, L. and Flynn, A. 1997. Environmental regulation and management: A preliminary analysis of a survey of manufacturing and processing companies in industrial South Wales. Paper in Environmental Planning Research 14. ISBN: 1 897901 04 6.

Link(s)

<https://www.cardiff.ac.uk/geography-planning> 

Working Paper

Year: 1997

Adaptations to resource constraints during the pretransitional era: Fertility differentials arising from the peopling of the Thai frontier.

Taking a human ecology perspective, we investigate the effects of population pressure on provincial variations in fertility during the 1950s in Thailand. The research is motivated primarily by Easterlin's investigation of frontier effects in 19th century North America. We hypothesize that during the period prior to Thailand's remarkable economic expansion and fertility decline, both in-migration and rural fertility should vary positively with the availability of arable land. Also, we anticipate that the major proximate determinant of these rural fertility differentials will be exposure to intercourse, i.e., marriage patterns. We find a high correspondence among measures of land availability, migration, and fertility, and find that they were all high in many provinces located across Thailand's heartland. Multivariate analysis indicates that while sex ratio imbalances and early marriage account for much of the relatively high fertility in these frontier provinces, a substantial direct effect of population density on fertility within marriage remains. We discuss the implications of the findings. (Authors abstract)

VanLandingham, M. and Hirschman, C. 1996. Adaptations to resource constraints during the pretransitional era: Fertility differentials arising from the peopling of the Thai frontier. Working paper series, 96-2. Center for Studies in Demography and Ecology, University of Washington, Seattle. WA.

Link(s)

<https://csde.washington.edu/> 

Working Paper

Year: 1996

Population dimensions of world fishery issues.

Most small-scale fishers find it increasingly difficult to survive in an overexploited environment. In this perspective, the crisis of fisheries also is a crisis of livelihoods. The very fate of fishing populations is a source of concern. Policies seeking to improve their condition, and possibly to modify their demographic dynamics, necessitate a preliminary understanding of the functional role of their fertility or migration behaviour. Particular attention is warranted by the fact that small-scale fishers usually are among the poorer population groups. (from Introduction)

Fabri, M. 1996. Population dimensions of world fishery issues. Food and Agriculture Organization of the United Nations (FAO).

Link(s)

<https://www.fao.org/home/404> 

Working Paper

Year: 1996

Challenges for studying population-environment interactions in the Arab Region.

The availability of fresh water has always been a basic prerequisite for human life and civilization all around the world. But in no other world region has water availability played such a dominating role in determining the settlement, growth and movement of human populations as it did in the Arab region. The efficient use of the scarce water resource has become a central ingredient of the Arab culture and of the structure of Arab societies and economies. It may be a new and still unusual issue to explicitly speak about general population-environment interactions in this region--as it is in all other regions--but to talk about water as a determinant of population trends and of population growth as impacting on water availability is certainly nothing new in the Arab region. Hence, the water issue will be a recurrent theme in this paper, although it will be embedded in a broader framework of population-development-environment analysis. We will first look at different degrees of aridity and how they affect human settlement patterns, with empirical observed in the 19 Arab countries. Next, we will summarize our present understanding about likely future trends in population growth and climatic change in the Arab region. Finally, we will propose a strategy of how to study the complex population environment interactions in a more comprehensive and systematic way.(from author's introduction)

Lutz, W. 1996. Challenges for studying population-environment interactions in the Arab Region. WP-96-100, IIASA.

Link(s)

<https://iiasa.ac.at/Publications/Documents/WP-96-100.pdf> 

Working Paper

Year: 1996

Environmental scarcity and violent conflict: The case of Chiapas.

Author's summary: This paper identifies the different forms of environmental scarcities that affect the people of Chiapas, Mexico. In recent years, these scarcities have become acute. Increased demand for cropland arising from high human fertility and an influx of migrants occurred within the context of a long-standing inequitable distribution of land resources. The contribution of cropland degradation to environmental scarcity was localized to the Central Highlands. Environmental scarcities did not cause civil strife by themselves; in interaction with other factors, however, they multiplied the grievances of the campesino and indigena communities. At the same time, economic liberalization reduced the governing regime's capacity in Chiapas and provided greater opportunities for violent challenges by opposition groups.

Howard, P. and Homer-Dixon, T. 1996. Environmental scarcity and violent conflict: The case of Chiapas. Occasional Paper; Project on environment, population and security, Washington, D.C, American Association for the Advancement of Science and the University of Toronto.

Link(s)

<https://library.utoronto.ca/pcs/eps/chiapas/chiapas1.htm> 

Working Paper

Year: 1996

Gender differences in forest practices and environmental awareness in northwestern Thailand: An exploratory study.

This sociologically based study explored gender differences in the forest practices and environmental awareness of rural men and women in Northwestern Thailand. This particular study was part of a CIDA funded linkage project between the University of Alberta and Maejo University in Thailand. The study used both qualitative and quantitative research methods. Individual interviews and observations were combined in the data gathering process. The statistical analysis was done using SPSS. The results showed that both men and women collected numerous products from the forest for use and/or sale. Men were more involved in the collection of trees and large animals while women tended to collect plant material, insects and fish. Men and women acknowledged that there had been changes in their environment over time. They expressed their opinions about reasons for the changes and who was responsible and what could be done. The increased population in the region has resulted in pressure on the natural resources. The changes to expectations and needs of the people of the region were seen as major contributors to the changes to the environment that both men and women were aware of. (quoted from author's abstract)

Wouters, K. 1996. Gender differences in forest practices and environmental awareness in northwestern Thailand: An exploratory study. Publication Number: AAT MM18336. ISBN 0-612-18336-X.

Link(s)

<http://www.lib.umi.com/cr/ualberta/fullcit> 

Working Paper

Year: 1996

Improving population assumptions in greenhouse gas emissions models.

This paper surveys the population assumptions in several important models of global warming in the 1990s, including energy models, integrated emissions models, and economic policy models. Choice of population inputs, the role of population variables in model equations, sensitivity analyses, and consideration of population policy are all described. The paper finds room for improvement in the following areas: choice and provision of population projections, consistent treatment of age structure and urbanization, specification of relationship between per capita income and population, and the consideration of population policy in economic policy models... (Author's abstract)

Wexler, L. 1996. Improving population assumptions in greenhouse gas emissions models. WP-96-99. International Institute for Applied Systems Analysis.

Link(s)

<https://iiasa.ac.at/Publications/Documents/WP-96-099.pdf> 

Working Paper

Year: 1996

Population and deforestation in Costa Rica.

This paper addresses a central debate in research and policy on population and environment, namely the extent to which rapid population growth is associated with the massive deforestation currently underway in the tropics. Although temporal and spatial associations strongly suggest a connection between population growth and deforestation (Preston, 1994), some research indicates that the problem is more complex as it involves non-demographic mechanisms resulting from credit and capital market failures, lack of suitable mediating institutions securing property rights, wretched poverty, uneven land distribution, consumption patterns in developed countries, greedy multinational companies, ignorance and bad management by colonists of frontier land, and so forth (Gillis and Repetto, 1988; Bilsborrow and Ogendo, 1992; Myers, 1984; Palloni, 1994). This paper is an exploratory analysis of highly disaggregated data from Costa Rica-atropical country that in the 1960s and 1970s experienced one of the highest rates of deforestation and population growth in the world. It addresses the methodological problem of linking people and population pressure to land cover, a problem that arises from the fact that people usually do not live in the forests that will be cleared. To establish the population-land linkage the paper relies on a multidisciplinary geographic information system (GIS) platform, which was developed for this study with georeferenced data from two population censuses and a series of land cover maps. The key analyses in the paper use multivariate logistic regression to model the net impact of population growth on the 1973-83 probability of deforestation in about 31,000 parcels of 750 meters per side, which were covered with forest at the beginning of the period. Since conventional logistic models fail to account for sources of unmeasured covariates that could cause autocorrelation, we present in an appendix estimates which attenuate the impact of spatially relevant unmeasured covariates. (from Author's introduction)

Rosero-Bixby, L. and Palloni, A. 1996. Population and deforestation in Costa Rica. CDE Working Paper No. 96-1. Center for Demography and Ecology (CDE), University of Wisconsin, Madison, WI.

Link(s)

<https://www.ssc.wisc.edu/cde/cdewp/1996papers.htm> 

Working Paper

Year: 1996

A Drop to Drink? : Population dynamics and water resources - Illustrations from Northern Tanzania.

The aim of this research was to elucidate the links between population change and water availability, with a focus on the Mwanza region of Tanzania. The stimulus for this work was the gloomy assessment of the relationship between population and water resources in East Africa formulated by certain hydrologists and development economists. Some of these went so far as to claim that by the end of this century many countries of this region would experience such severe water constraints that their population growth would be curtailed. The above estimates of population and water resource balances were invariably based on the requirements of irrigated agricultural production, whereas the majority of the population in the Mwanza region depends on rain-fed agriculture for its food supply. The potential resource base is therefore much larger when rain-fed agriculture is included. However, the conclusions with respect to food supply remain gloomy, since the productivity of traditional rain-fed agriculture is very low compared to that of modern irrigated farming systems. For sedentary farming communities dependent on rain-fed agriculture, limits on crop water availability are equivalent to those on agricultural land availability. In the Mwanza region, the main response to increased land shortage in the last decade has been a large increase in rice cultivation, maximizing the potential of the small pockets of very fertile heavy clay soils, which had been relatively under-used in the past, as they are difficult to cultivate. Migration-environment relationships vary according to geographical scale. At the regional level, neither agricultural nor domestic water availability appear to be related to the net movement of population. At the intermediate level, land availability is significant. At the village level, land availability is not important, but the potential availability of village water sources (for domestic uses) are correlated to migratory movements. This is reinforced by household observations: households close to a reliable water source contain a higher proportion of in-migrants than those relatively far away, and the rate of male out-migration from households close to reliable water sources is lower. In urban areas throughout Tanzania piped water supplies are failing to keep up with population growth. Infrastructure is the main problem, not supply. Migrant households have poorer access because they settle where infrastructure is worst, and because they do not have the social networks of long term residents, who often re-sell piped water to each other. The study involved an analysis of Tanzania's census data (1978 and 1988), focusing on correlations between changes in household water supplies and internal migration. This was complemented by two village household surveys, a study of agricultural water availability in the Mwanza region, an urban household survey and a postal survey of water engineers. (author's summary)

Zaba, B. 1996. A Drop to Drink? : Population dynamics and water resources - Illustrations from Northern Tanzania. Presented at the IUCN Workshop on Population and Water, Montreal, Canada, October 1996, 19p.

Link(s)

<https://www.aaas.org/programs/global-outreach> 

Conference Paper

Year: 1996

Food security for a growing world population, 200 years after Malthus, still an unsolved problem.

While the world has been changing over the last 25 years politically and economically in unexpected and remarkable ways, food security remains an unfulfilled dream for currently more than 800 million people, about 10 percent less than in 1970. What seems to be a small improvement, should not go unappreciated, however, as about 1.5 billion people were added to the population of the developing countries since then. There has been progress on a global scale-but not for all. (from Introduction)

Leisinger, K. M. 1996. Food security for a growing world population, 200 years after Malthus, still an unsolved problem. Syngenta Foundation for Sustainable Agriculture contribution to the Saguf-Symposium, "How will the future world population feed itself?" Zürich, October 9-10, 1996.

Link(s)

http://www.syngentafoundation.com/food_security_population.htm 

Conference Paper

Year: 1996

Simulating the socio-economic and biogeophysical driving forces of land-use and land-cover change: The IIASA land-use change model

The aim of this paper is to summarize IIASA's the Modeling Land-Use and Land-Cover Changes in Europe and Northern Asia (LUC) project approach and to extend their earlier writings on modeling of land-use and land-cover change dynamics. The project's study region is Europe and Northern Asia because of its diversity in social, economic and political organization, the rapid changes in recent history, and the significant implications for current and future land-use and land-cover change.

Fischer, G., Ermoliev, Y., Keyzer, M. A. and Rosenzweig, C. 1996. Simulating the socio-economic and biogeophysical driving forces of land-use and land-cover change: The IIASA land-use change model. WP-96-010, IIASA.

Link(s)

https://iiasa.ac.at/Research/LUC/WP/wp96010_int.html 

Working Paper

Year: 1996

Linkages between population, natural resources and environment in China, Philippines, Indonesia and Vietnam

This document offers four brief country profiles from East and Southeast Asia.

Marcoux, A. 1996. Linkages between population, natural resources and environment in China, Philippines, Indonesia and Vietnam. Food and Agriculture Organization of the United Nations (FAO).

Link(s)

<https://www.fao.org/home/404> 

Working Paper

Year: 1996

Anthropogenic driving forces of land-use change in China

There are a few places in the world where people have changed the land so intensely and for such a long time as in China. Much of the country's habitated land had been transformed by human intervention already several hundred years ago. The Loess Plateau of northern China, for instance, was completely deforested in pre-industrial times (Fang/Xie, 1994). During the early Han Dynasty, in the fourth and third century BC, the Chinese started systematic land reclamation and irrigation schemes, converting large areas of natural land into rice paddies. The process, which was scientifically planned and coordinated by subsequent dynastic bureaucracies, reached a first climax in the eleventh and twelfth century. In the second half of the 18th and first half of the 19th century another period of massive land modification followed. (from author's introduction)

Heilig, G.K. 1996. Anthropogenic Driving Forces of Land-Use Change in China. IIASA Working Paper. IIASA, Laxenburg, Austria, WP-96-011

Link(s)

<https://pure.iiasa.ac.at/5014> 

Working Paper

Year: 1996

Impact of population growth on food supplies and environment

As the world population continues to grow geometrically, great pressure is being placed on arable land, water, energy, and biological resources to provide an adequate supply of food while

maintaining the integrity of our ecosystem. according to the World Bank and the United Nations, from 1 to 2 billion humans are now malnourished, indicating a combination of insufficient food, low incomes, and inadequate distribution of food. Based on current rates of increase, the world population is projected to double from roughly 6 billion to more than 12 billion in less than 50 years (Pimentel et al., 1994). As the world population expands, the food problem will become increasingly severe, conceivably with the numbers of malnourished reaching 3 billion. Most replacement of eroded agricultural land is now coming from marginal and forest land. The pressure for agricultural land accounts for 60 to 80 percent of the world's deforestation. Water is critical for all crops which require and transpire massive amounts of water during the growing season. In total, agricultural production consumes more fresh water than any other human activity. Specifically, about 87 per cent of the world's fresh water is consumed or used up by agriculture and, thus, is not recoverable. In total, agricultural production consumes more fresh water than any other human activity. Specifically, about 87 per cent of the world's fresh water is consumed or used up by agriculture and, thus, is not recoverable.

Pimentel, D., Huang, X., Cordova, A. and Pimentel, M. 1996. Impact of population growth on food supplies and environment. Presented at AAAS Annual Meeting, Baltimore, Maryland, February 9, 1996.

Link(s)

<https://www.dieoff.org/> 

Conference Paper

Year: 1996

Fighting an uphill battle: population pressure and declining land productivity in Rwanda

Clay describes landholding structures through which demographic change has affected the environment in Rwanda.

Clay, D. C. 1996. Fighting an uphill battle: population pressure and declining land productivity in Rwanda. Michigan State University International Development Working Paper No. 58.

Link(s)

<http://purl.umn.edu/54692> 

Working Paper

Year: 1996

Human population and water: To the limits in the 21st century.

This paper was delivered at a half-day symposium entitled "Human Population and Water, Fisheries and Coastal Areas: Science and Policy Issues." The gathering was organized as part of the American Association for the Advancement of Science's Population and Sustainable Development activities. It reviews current freshwater problems and their potential future

worsening. The means of achieving sustainable water use despite growing human population are discussed.

Gleick, P. H. 1995. Human population and water: To the limits in the 21st century. Delivered at the Human Population and Water, Fisheries and Coastal Areas: Science and Policy Issues Symposium, American Association for the Advancement of Science, September 1995.

Link(s)

<https://www.aaas.org/programs/global-outreach> 

Conference Paper

Year: 1995

Marine fisheries, population, and consumption: science and policy issues.

This paper was delivered at a half-day symposium entitled "Human Population and Water, Fisheries and Coastal Areas: Science and Policy Issues." The gathering was organized as part of the American Association for the Advancement of Science's Population and Sustainable Development activities. It raises science and policy issues that must be addressed for the effective management of population and consumption pressures on marine fisheries.

Speer, L. 1995. Marine fisheries, population, and consumption: science and policy issues. Delivered at the Human Population and Water, Fisheries and Coastal Areas: Science and Policy Issues Symposium, American Association for the Advancement of Science, September 1995.

Link(s)

<https://www.aaas.org/programs/global-outreach> 

Conference Paper

Year: 1995

Coasts in crises

This paper was delivered at a half-day symposium entitled "Human Population and Water, Fisheries and Coastal Areas: Science and Policy Issues." The gathering was organized as part of the American Association for the Advancement of Science's Population and Sustainable Development activities. It recommends scientific and policy options as responses to the overdevelopment, overcrowding, and overexploitation of the world's coasts. Special attention is given to United States and China's coastal areas

Hinrichsen, D. 1995. Coasts in crises. Delivered at the Human Population and Water, Fisheries and Coastal Areas: Science and Policy Issues Symposium, American Association for the Advancement of Science, September 1995.

Link(s)

<https://www.aaas.org/international/ehn/fisheries/hinrichs.htm> 

Conference Paper
Year: 1995

L'essor industriel au Mali: La problematique des dechets de la zone industrielle de Bamako

RESUME: L'étude a été menée dans la zone industrielle de Bamako, un des quartiers les plus touchés par l'insalubrité et la dégradation de l'environnement. En effet à partir de l'indépendance du pays en 1960, avec les mouvements de populations que Bamako

Hamadoun, M. 1995. L'essor industriel au Mali: La problematique des dechets de la zone industrielle de Bamako. Rapport De Synthese Numéro 17 - Novembre 1995.

Link(s)

<http://uaps.org> 

Working Paper

Year: 1995

Lifestyles and global land-use change: Data and theses.

One of the most influential publications on land-use change is a small booklet, published by the International Geosphere-Biosphere Programme (IGBP) and the Human Dimensions of Global Environmental Change Programme (HDP). It was written -- as its subtitle says -- as a "proposal for an IGBP-HDP Core Project" on "Relating Land Use and Global Land-Cover Change". The booklet can be seen as some kind of programmatic statement to guide international collaborative research on global land-use change. Unfortunately, the publication promotes a rather biased view of global land-use change. Using questionable statistics the authors conclude that the main focus of research should be the detailed investigation of changes in the rural land use. Urban areas and their infrastructures are considered irrelevant. As a consequence almost all attention is given to arable cultivation and livestock production -- with some interest left over to the forest sector. Population growth and the associate rising food demand are usually considered the main driving forces of global land-use change. In this chapter I will argue that rural land use is only one of the processes which are shaping the globe's land cover. There are other and probably more important land-use changes which are caused by urbanization, infrastructure expansion, industrial production, or changes in consumption patterns and lifestyles. These changes in build-up land might affect only relatively small areas -- as compared to the huge areas of forests and agricultural land. But they are often much more persistent and intrusive. Once a patch of land is sealed off by tons of concrete or highway pavement it is extremely difficult if not impossible to transform it back into a natural ecosystem. Once a valley was filled up with giga-tons of water for a reservoir or a gigantic hole was dug in an open pit mine, we have an almost irreversible land-cover modification. Moreover, I will claim that agricultural land-use change is not only caused by increasing food demand due to population growth (as people usually assume), but also by changes in lifestyles and food preferences which are driven by economic modernization and urbanization. The paper presents FAO data which indicate that probably some 20 percent of the

arable land world-wide is already cultivated for lifestyle-related products, such as drugs, tobacco, coffee, tea, sugar beet, sugar cane, cocoa, or cotton. There is a trend towards animal-based food in many parts of the world, notably in China where per capita meat consumption has significantly increased during the past 20 years. In Europe, Western Asia, and Northern America changing food preferences have caused growing demand for vegetable oils. These are just the most obvious examples of certain (feed) crop areas, such as the expansion of soybean production in Brazil or the increase of oil crops cultivation in Europe. Changes in rural land-use are often caused by driving forces which emanate from the urban centers of industrialized countries. (author's abstract)

Heilig, G. K. 1995. Lifestyles and global land-use change: Data and theses. WP-95-91. IIASA.

Link(s)

https://iiasa.ac.at/Research/LUC/docs/LUC_WP_Info.html 

Working Paper

Year: 1995

A conceptual framework for population and environment research

This paper is an attempt to set some basic parameters and outline the scope for population and environment research. After briefly reviewing the present state of theory, the paper outlines an integrated theory of population, development, and environment. The proposed theory presents population and environments in a transition paradigm. This theory builds on the demographic transition theory and integrates various existing theoretical ideas into a dynamic framework. Demographic transition theory has been modified by incorporating environmental dimensions and rethinking the relationships between demographic processes and development as they interact with the environmental changes. The empirical evidence gathered from various sources provides support for the relationship hypothesized in the theory. The proposed theory is a generalized explanation of population development-environment relationship and encompasses a wide variety of circumstances. For an in-depth understanding of population-environment interactions in an area, detailed case studies must be carried out at appropriate levels of aggregation incorporating the contextual idiosyncracies. (author's abstract)

Mishra, V. 1995. A conceptual framework for population and environment research. WP - 95 - 20. IIASA.

Link(s)

<https://iiasa.ac.at/> 

Working Paper

Year: 1995

The impacts of climate change on Africa

This paper considers the problem of determining future climate change in Africa due to human modification of the global atmosphere. Some of our main conclusions may be summarised as follows: * natural climate variability in Africa, particularly rainfall, is large. This variability can be manifest regionally as severe droughts on yearly time-scales or as more prolonged desiccation over one or more decades. An increasing difficulty with interpreting the historic climate record is knowing the extent to which these modes of variability are truly natural or are being altered by human activities. * the nature of future climate change for Africa is not known with any great confidence. Climate change scenarios have been constructed here in a systematic manner making clear their assumptions and uncertainties, but it remains impossible to attach specific probabilities to them. What is known is that temperatures are likely to continue to rise over most of Africa and that increases in rainfall will be necessary in order to compensate for the loss of moisture from the land surface due to elevated evaporation rates. Whether such increases in rainfall will occur continent-wide seems unlikely. * there is a paucity of detailed climate change impact case studies for Africa. This seems due to a combination of factors including: a lack of locally calibrated models, a shortage of observational data in computer-readable form and an exclusion of African scientists from accessing the results of global climate and climate impact models. Increased international support for indigenous studies is called for to release the expertise which resides within Africa to address these questions. * the level of vulnerability of African societies to climate change depends on their present-day vulnerability which is determined by their economic, political and institutional capabilities. Historical evidence shows that both natural and managed ecosystems in Africa face substantial adverse impacts from existing climate variability, the nature of which will almost certainly be altered by longer-term climate change. The severity of such impacts will be determined to a large extent by what happens to rainfall over the continent. This is largely unknown at the present time. * future demographic changes in Africa and the development path the continent pursues will determine the eventual significance of global warming for Africa. Whether technological innovation will enable the adaptive capacity of ecosystems and societies to develop at a rate commensurate with climate change and population growth is a key question for all world regions. The question is more pressing for Africa, however, because of her low investment base at present and higher population growth rate than other regions. * the scope for alternative African emissions trajectories to significantly alter global warming rates over the next 100 years is very limited. Differences of the order of only one or two tenths of a degree Celsius by the year 2100 due to alternative emissions contributions from Africa seem likely. The level of future vulnerability of African societies to climate change is relatively insensitive to such marginal changes in the rate of global warming. If the impacts of climate change on Africa are to be significantly reduced, substantial emission cuts are needed worldwide. (from the authors' abstract)

Hulme, M., Conway, D., Kelly, P. M., Subak, S. and Downing, T. E. The impacts of climate change on Africa. Global Environmental Change (GEC) working Paper 95-2. Center for Social and Economic Research on the Global Environment.

Link(s)

<https://cserge.uea.ac.uk/>, <https://cserge.uea.ac.uk/>

Working Paper

Year: 1995

Principles, Criteria and Indicators: Applying Ockham's Razor to the People-Forestry Link

This concept paper addresses those elements in the people-forest interface which we perceive as critical to sustainable forest management, based on our own training and experience, as well as two field tests of the conceptual framework (in Kalimantan and Cote d'Ivoire). Initially, we define our use of important terms, like sustainability, well being/needs, and people; and make clear some of our assumptions. We briefly allude to four pertinent conceptual and policy issues, including the role of people in relation to the forest; the significance of maintaining cultural diversity; the relationships among cultural integrity, culture change, and stakeholder participation; and finally, policy issues pertaining to land use, population, and people's participation. The body of the paper discusses two principles, each with three associated criteria. An appendix lists principles, criteria, indicators and verifiers found useful in our field tests. We conclude briefly by describing future research plans, focused on refining our definitions of stakeholders, testing the importance of inter-generational access to resources and people's participation in sustainable forest management, and testing the applicability of such criteria and indicators for community forestry contexts. (Authors' Abstract)

Colfer, Pierce; Prabhu, C. J., R.; et al. 1995. Principles, Criteria and Indicators: Applying Ockham's Razor to the People-Forestry Link. CIFOR Working Paper No. 8, Center for International Forestry Research (CIFOR).

Link(s)

https://www.cifor.org/publications/pdf_files/WPapers/WP-08.pdf 

Working Paper

Year: 1995

Food availability, entitlements and the Chinese famine of 1959-1961

The food availability decline and Sen's entitlement are two leading hypotheses for the causation of famine. Previous research based on case studies has given independent support to each of the accounts. This paper analyses the Chinese famine of 1959-61 by jointly considering entitlement arrangement and declines in food availability as complementary causes. We found that in the Chinese famine of 1959-61 both the food availability decline and entitlement arrangement contributed significantly to the increase of death rates in the famine. However, the differences in the entitlement arrangement were more important than the differences in food availability for explaining the observed differences in death rates across provinces.

Lin, J. Y. and Yang, D. T. 1995. Food availability, entitlements and the Chinese famine of 1959-1961. Duke Economics Working Paper 95-24.

Link(s)

<https://econ.duke.edu/Papers/Abstracts/abstract.95.24.html> 

<http://public.econ.duke.edu/webfiles/yang/foodav.ps> 

Working Paper

Year: 1995

A model of transmigrants in a rain forest setting: Adaptive strategies, living conditions, and environmental consequences and feedbacks.

This is an account of Javanese transmigration to Sumatra and their experience in and impact on their new environment. Land degradation and pest problems were among the most difficult challenges.

Holden, S. T. and Simanjuntak, R. 1994. A model of transmigrants in a rain forest setting: Adaptive strategies, living conditions, and environmental consequences and feedbacks. Discussion Paper D-12/1994. Department of Economics & Social Sciences, Agricultural University of Norway.

Link(s)

<http://www.nlh.no/ios/Publikasjoner/ABSTRACT/D9412.HTM> 

Working Paper

Year: 1994

Population and the environment: Frameworks for analysis.

This working paper is one of a series the EPAT/MUCIA Population and Environmental and Natural Resources team is producing. It examines major ways of thinking about the population-environment relationship over the past two centuries. The paper begins with Malthus and reviews developments to the present. Then it examines in detail six current frameworks or models for analyzing population-environment relationships. The six models include Bongaarts', Clark's, and Harrison's attempts to identify the relative impact of population growth on a limited number of forms of environmental degradation. It also examines the more complex Meadows, Meadows, and Randers WORLD3 dynamic model of the global system and International Institute of Applied Systems Analysis (IIASA) population-environment model now being applied to Mauritius. A basic finding of these models is that population growth can have a major impact on the environment. However, the impact is never simple and direct, and human organization always moderates its effect. Further, we cannot expect that slowing population growth will alleviate environmental pressures in the near term. Finally, achieving sustainable development will require a combined attack on population growth, consumption, and a variety of other human patterns of production. (Author's abstract)

Ness, G. D. 1994. Population and the environment: Frameworks for analysis. Working paper/EPAT/MUCIA No. 10.

Link(s)

<https://www.wisc.edu/epat/.pop-env/.frame/index.html> 

Working Paper

Year: 1994

Demographic responses to resource constraints in Rwanda.

This paper examines two demographic processes, changing fertility rates and migration patterns, in the context of rapidly evolving circumstances in Rwanda during the past fifteen years. Various economic, social, political and environmental factors from the local to the international merged to create a situation of worsening pressure on resources in rural Rwanda. Some of the factors profoundly affected the subsistence agriculture sector which was the mainstay of the national and household economy in Rwanda, but perhaps more importantly they also limited the ability of farmers to engage in profitable non-subsistence activities in both commercial agriculture and non-agricultural activities. The combined result was a general decrease in household incomes and, poignantly, a painful decline in opportunities for young people. The Rwandan population responded to the various changes with a variety of economic adjustments, both in the agricultural sphere and in non- and off-farm employment. It also responded with fundamental demographic changes that altered the family structure and the distribution of the population. These demographic responses are the focus of this paper. (author's abstract)

Olson, J. M. 1994. Demographic responses to resource constraints in Rwanda. Rwanda Society-Environment Project, Working Paper 7.

Link(s)

https://geo.msu.edu/rwanda-soc-env/Rwanda_Paper_7.pdf 

Working Paper

Year: 1994

Parks, population and resettlement in the Dominican Republic.

Population projections depend on censuses, vital statistics, and sample surveys, all of which have deficiencies that are most marked in developing countries' This paper suggests that high and constant fertility projections should receive more attention from policymakers. They should treat medium estimates as targets achievable only through considerable programmatic effort. At the same time, they should plan economic and environmental efforts to deal with the population sizes implied by the high projections. (Author's abstract)

Stycos , J. M. and Duarte, I. 1994. Parks, population and resettlement in the Dominican Republic. University of Wisconsin, Madison,WI.

Link(s)

<https://www.wisc.edu/epat/.pop-env/.parks/index.html> 

Working Paper

Year: 1994

Population, projections and policy: A cautionary perspective.

Population projections depend on censuses, vital statistics, and sample surveys, all of which have deficiencies that are most marked in developing countries' This paper suggests that high and constant fertility projections should receive more attention from policymakers. They should treat medium estimates as targets achievable only through considerable programmatic effort. At the same time, they should plan economic and environmental efforts to deal with the population sizes implied by the high projections. (Author's abstract)

Stycos , J. M. 1994. Population, projections and policy: A cautionary perspective. University of Wisconsin, Madison, WI.

Link(s)

<https://www.wisc.edu/epat/.pop-env/.ppp/index.html> 

Working Paper

Year: 1994

Population and land degradation.

In this paper, we argue that there exist no significant direct links between human populations and their environments and that the intervening processes create the context within which land degradation occurs. We examine some of the intermediate mechanisms through which mounting demographic pressure leads to soil erosion and the depletion of soil fertility. The focus of attention is on set of variables defined in this paper as the structure of landholding (size of holdings, fragmentation/ dispersion, fragility, tenure, etc.). How demographically-induced changes in the structure of land-holding affect land management strategies (investments and land use) is key to understanding land degradation. (Author's abstract)

Clay, D. C., Guizlo, M. and Wallace, S. 1994. Population and land degradation. University of Wisconsin, Madison, WI.

Link(s)

<https://www.wisc.edu/epat/.pop-env/.land-deg/index.html> 

Working Paper

Year: 1994

Reflections on agricultural development, population growth and the environment.

Approximately 80% of the world's 5.7 billion people live in countries in which 50% or more of the economically active population is engaged in agriculture. These countries are overwhelmingly poor, with low per capita GNP and high rates of population growth. Of these 5.7 billion people, 3.4 billion live in Asia, 2.2 billion of them in China and India alone. Although the worse problems of population growth and environmental degradation are to be found in sub-Saharan Africa, what happens in Asia is of overwhelming importance in terms of the sheer

numbers involved (from Introduction). This paper was prepared for the Third Conference on Development Economics, Asian Development Bank, Manila, 23-25 November, 1994.

Nerlove, M. 1994. Reflections on agricultural development, population growth and the environment. Prepared for the Third Conference on Development Economics, Asian Development Bank, Manila, November 23-25, 1994.

Link(s)

<https://arec.umd.edu/AREC445/Reflections.pdf.prn.pdf> 

Conference Paper

Year: 1994

Social and economical aspects of Miombo Woodland Management in Southern Africa: Options and opportunities for research.

Author's Intro: There is relatively little research which has been carried out on longer term patterns of social, economic, and environmental change in southern Africa. That which has been carried out provides compelling evidence that contemporary patterns of land-use and woodland cover are the outcome of much longer term processes. While the short term impacts of rapid population growth seem quite clear -- that natural systems are often placed under extremely heavy stress as a result of population increase -- longer term impacts are more encouraging. Longer term studies, which have relied on historical and archival records rather than on remote sensing data, suggest that even amongst the most intact of woodlands, there is very little unmodified miombo anywhere. In Malawi, for instance, heavily modified miombo accounts for over 95 percent of existing woodland cover (Hardcastle 1993). Mature miombo in the Tabora region of Tanzania is mostly regenerated, having been agricultural land in the 1860s which was subsequently abandoned because of an outbreak of sleeping sickness in the early 1900s (Lawton 1982). These types of transitions in land-use are extremely enlightening for the policy process because they suggest that miombo woodlands are very resilient to many of the pressures placed on them. Much of the policy dialogue about the environment at the regional and national level in southern Africa (as well as internationally) is very negatively oriented: population growth will place increasing and inexorable pressures on natural environments, and there are few approaches which can be taken to mitigate the impacts of these pressures. Policy and legislation, rather than mitigating these impacts, has in some instances, amplified them. Longer term studies, can help to identify both the positive steps which have been taken in response to these pressures as well as the policy initiatives which should be avoided in the future.

Deweese, P. A. 1994. Social and economical aspects of Miombo Woodland Management in Southern Africa: Options and opportunities for research. Center for International Forest Research (CIFOR).

Link(s)

<https://www.cifor.org/publications/html/occpaper2/chapter1.html> 

Working Paper

Year: 1994

Factors Behind the Recent Tragedy in Rwanda.

Olson argues that poverty, not population pressure, contributed to the massacre in Rwanda.

Olson, Jennifer M. 1994. Factors Behind the Recent Tragedy in Rwanda. Paper presented at "The Contribution of Key Factors in the Recent Tragedy in Rwanda: Poverty, Population, and Environment." The World Bank. Washington, DC November 2, 1994.

Link(s)

http://www.ciesin.columbia.edu/repository/pern/papers/Rwanda_Paper_Tragedy.pdf 

Conference Paper

Year: 1994

The potential effects of climate change on winter mortality in England and Wales.

In Britain death rates from several important causes, particularly circulatory and respiratory diseases, rise markedly during the colder winter months. This close association between temperature and mortality suggests that climate change as a result of global warming may lead to a reduction in excess winter deaths in the future. This paper begins with a brief review of the literature on the links between cold conditions and health. It goes on to develop statistical models of the associations between monthly mortality rates for the period 1968 to 1988 for England and Wales, and temperature. Other factors, particularly the occurrence of influenza epidemics are also taken into account. Highly significant negative associations were found between temperature and death rates from all causes and from chronic bronchities, pneumonia, ischaemic heart disease and cerebrovascular disease. The statistical models developed from this analysis were then used to compare death rates for current conditions with those that might be expected to occur in a future warmer climate. The results indicate that the higher temperatures predicted for 2050 might result in nearly 9000 fewer winter deaths each year with the largest contribution being from mortality from ischaemic heart disease. It should be stressed that these are preliminary estimates that might change when further research is able to take into account a number of additional factors affecting the relationship between mortality and climate. (authors' abstract)

Langford, I. H and Bentham, G. 1993. The potential effects of climate change on winter mortality in England and Wales. Global Environmental Change (GEC) working Paper 93-25. Center for Social and Economic Research on the Global Environment.

Link(s)

<https://cserge.uea.ac.uk/> , <https://cserge.uea.ac.uk/> 

Working Paper

Year: 1993

Population Pressure, Agricultural Productivity and Land Degradation in Rwanda: An Agenda for Collaborative Training, Research and Analysis

This working paper addresses natural resources management in an environment of population pressure, agricultural productivity, and land degradation in Rwanda.

Campbell, David J.; Olson, Jennifer M.; Berry, Len. 1993. Population Pressure, Agricultural Productivity and Land Degradation in Rwanda: An Agenda for Collaborative Training, Research and Analysis. Rwanda Society-Environment Project, Working Paper 1.

Link(s)

http://www.ciesin.columbia.edu/repository/pern/papers/Rwanda_Paper_1.pdf 

Working Paper

Year: 1993

Population and water resources: A delicate balance

This bulletin looks at water's role in the Earth's life systems, how environmental preconditions, like climate and geography, limit human access to water and how society is both a manipulator of the water cycle and a consumer dependent on a constant supply.

Falkenmark, M. and Widstand, C. 1992. Population and water resources: A delicate balance. Population Bulletin 47(3)3. Population Reference Bureau.

Link(s)

<https://www.ircwash.org/sites/default/files/276-92PO-10997.pdf> 

Working Paper

Year: 1992

The intrusion of human population into forest and range lands of California

Demographic and economic growth are pushing deeper into California's forest and range lands, making effective fire protection and traditional industrial uses of the land more difficult. Urban forces that will increase the difficulties in the future include: increasing urban population pressures, selective migration, low-priced housing, adequate infrastructure, decentralized development, and government inadequacies. Some compensating trends that will tend to restrict growth and minimize problems include a near-term weakening of the rural economy, few major planned developments, growth opposition, more integrated recreation uses, zoning for larger parcel sizes, and stabilization of tax benefits such as the Timber Production Zone. (Author's abstract)

Bradshaw, T. D. 1987. The intrusion of human population into forest and range lands of California. In: Davis, James B.; Martin, Robert E., technical coordinators. 1987. Proceedings of the Symposium on Wildland Fire 2000, April 27-30, 1987, South Lake Tahoe, California. Gen.

Tech. Rep. PSW-GTR-101. Berkeley, CA: Pacific Southwest Forest and Range Experiment Station, Forest Service, U.S. Department of Agriculture; p. 15-21

Link(s)

<https://www.fs.usda.gov/research/treesearch/28087> 

Conference Paper

Year: 1987

Rapid population growth and human carrying capacity : two perspectives

The most dire consequences of rapid population growth are thought by some to emerge in places where the size of the human population exceeds the carrying capacity of the land. This paper explores the possible meanings of the idea of carrying capacity under developing country conditions, looks at historical and present-day cases of alleged overpopulation in relation to carrying capacity, examines some of the systems and effects where such situations may be present, reviews some of the dynamic adaptations made by populations living under such pressures, and suggests some of the consequences for economic development and some of the options for public policy. (Authors' Abstract)

Mahar, D.; Muscat, R.; Goodland, R.; Kirchner, J.; Ledec, G.; Drake, J.. 1985. Rapid population growth and human carrying capacity : two perspectives. Staff working paper ; no. SWP 690. Washington, D.C. : The World Bank

Link(s)

<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/...> 

Working Paper

Year: 1985