

Population, Environment & [Fill in the blank]

Lessons from the Maya Heartland

By: Liza Grandia, Ph.D.

Assistant Professor,

Clark University

Department of International Development,

Community and Environment

&

ProPetén, emeritus advisor



Thomas Robert Malthus (1766-1834)



Decade	Population – environment AND	Ideology	Keystone event or publication	Slogan, central issue
Late 1960s	N/a – just population	Classical economists, environmentalists, “neoMalthusians”	Paul Ehrlich (1968) <u>The Population Bomb</u> , Donella Meadows (1972) <u>The Limits to Growth</u>	Evolved into $I = P * A * T$ Impact = Population * Affluence * Technology
1970s	Development	Neoclassical economists, “Cornucopian”	<ul style="list-style-type: none"> Ester Boserup’s (1965) <u>Conditions of Agricultural Development</u>, Bucharest, 1974, World Population Conference, 	“Development is the best contraceptive.”
1980s to mid 1990s	Women’s and reproductive health	Feminist	<ul style="list-style-type: none"> From Mexico City (1974) To Cairo (1994), UN Conference on Population and Development (ICPD) To Beijing (1995), Fourth World Conference on Women 	Women’s education, employment, empowerment, & the “girl-child.”
1990s	Inequality	Marxist & dependency theorists	Development of interdisciplinary field of “Political Ecology” in academia: <ul style="list-style-type: none"> e.g. Piers Blaikie’s (1985) <u>The Political Economy of Soil Erosion in Developing Countries</u> 	“Watermelons” (green on the outside, red on the inside)
mid-1990s	Security	Neocon	Robert Kaplan’s (1994) “The Coming Anarchy”	“Over”population leading to terrorism & political instability
Late 1990s	Biodiversity	Pragmatists	Population Action International’s <u>Plan and Conserve</u>	Overlap in population and biodiversity “hotspots”
2000s	Corporate power	Anti-(corporate) globalization	World Social Forums and civil society demonstrations at WTO rounds (e.g. Seattle)	Environmental justice “Earth provides enough to satisfy every man’s need, but not every man’s greed”- M.K. Gandhi





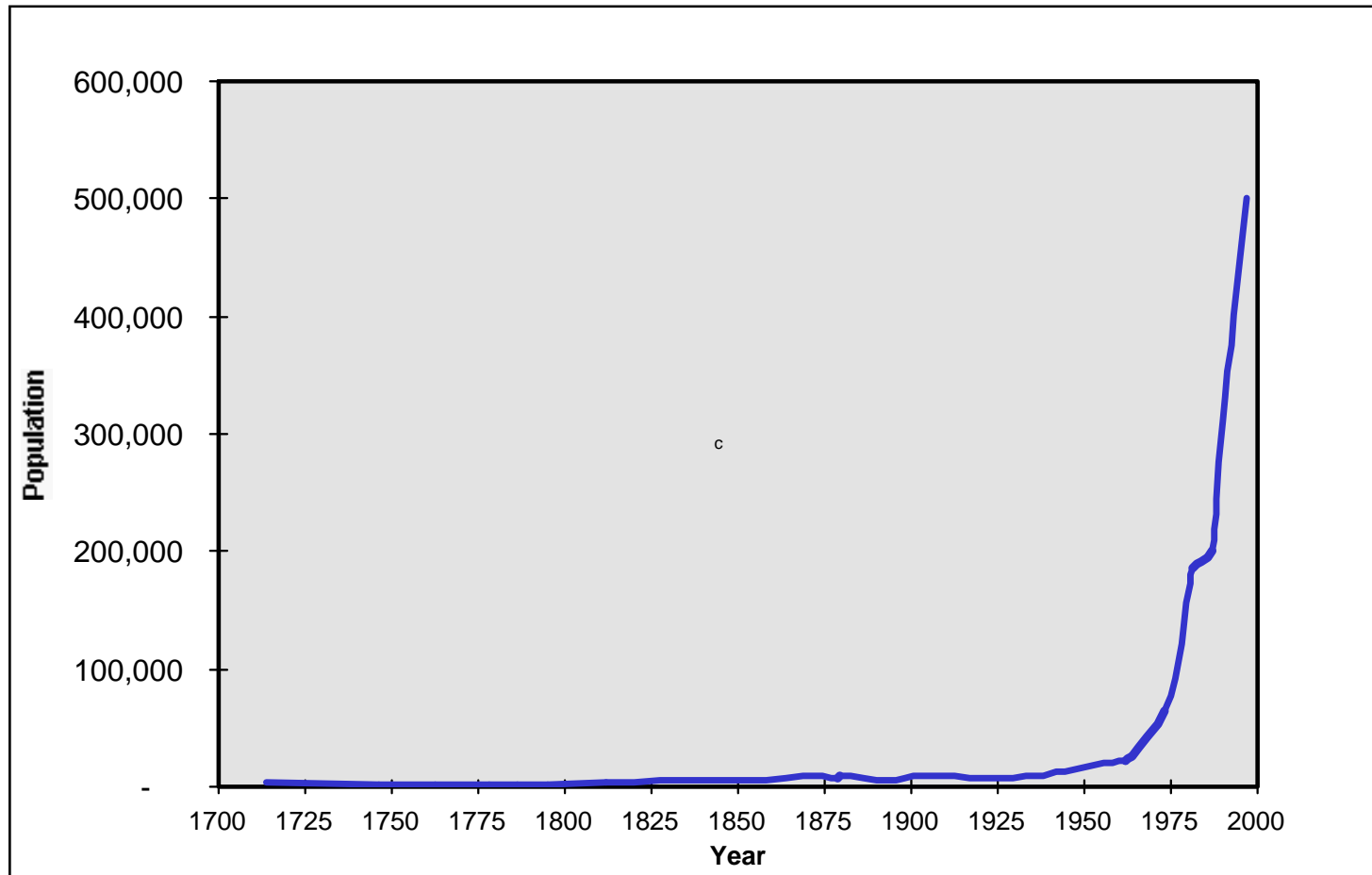
View over Tikal



Decade	Population – environment AND	Ideology	<i>Maya archaeology</i>
Late 1960s	N/a – just population	Classical economists, “neoMalthusians”	<i>Overpopulation -> collapse</i>
1970s	Development	Neoclassical economists, “Cornucopian”	<i>Never “collapsed”: Maya peoples continued living in the forests</i>
1980s to mid 1990s	Women’s and reproductive health	Feminist	<i>Concern with the remains of commoner households (leading to new population estimates)</i>
1990s	Inequality	Marxist & dependency theorists	<i>Climate change and migration → collapse</i>
mid-1990s	Security	Neocon	<i>Wars → collapse</i>
Late 1990s	Biodiversity	Pragmatists	<i>Deforestation → collapse</i>
2000s	Corporate power	Anti-(corporate) globalization	<i>Trade, politics, inter-state rivalry, & deforestation for temple building materials → downfall</i>

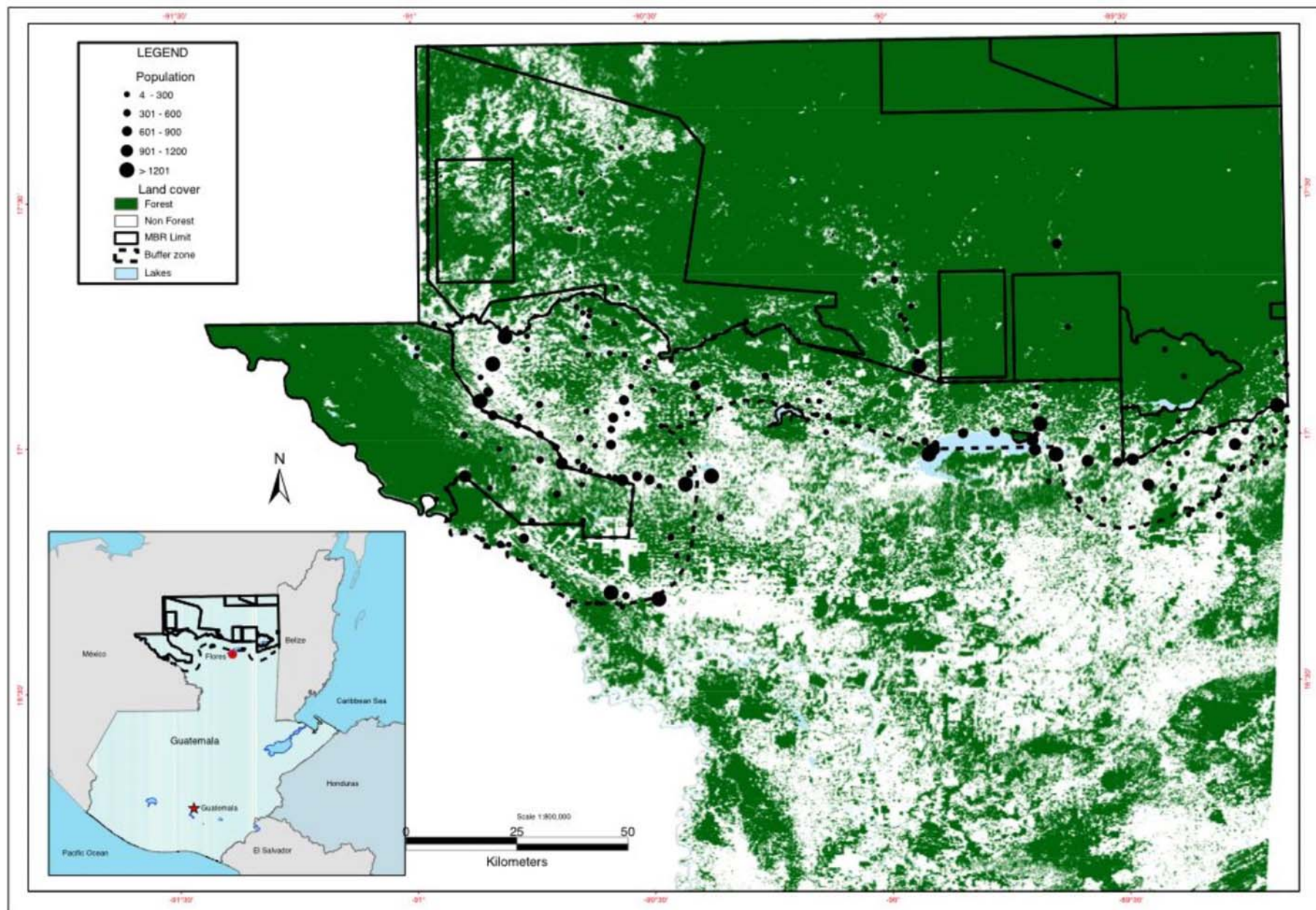


Petén's Population, 1714-present

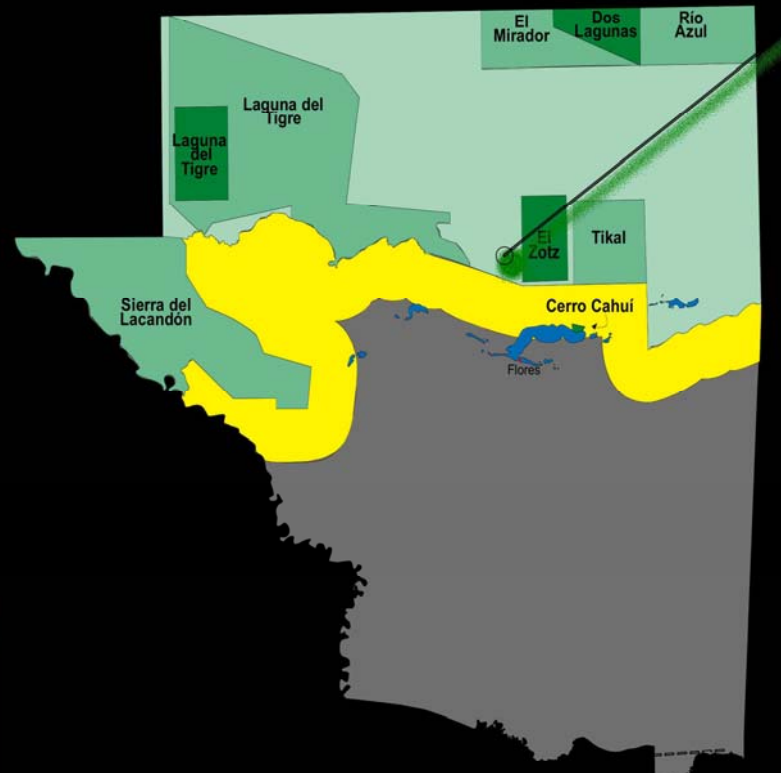


Source: Schwartz (1990) A Forest Society

Petén has grown by around 10% annually since 1960. Roughly 2/3 of that growth has been from in-migration and 1/3 from natural reproduction.



Maya Biosphere Reserve



- Parques Nacionales
- Biotopos
- Zona de Usos Múltiples
- Zona de Amortiguamiento

Petén DHS, special environmental module

- Migration
- Agriculture
- Wage labor and use of forest products
- Land claims
- Opinions about conservation
- Perceptions of population growth

GUATEMALA

**Instituto Nacional de Estadística
INE**

**Salud, Migración y Recursos Naturales
en Petén**

**Resultados
del Módulo Ambiental
en la Encuesta de Salud
Materno Infantil
1999**

Entidades Contribuyentes

Agencia de los Estados Unidos para el Desarrollo
Internacional (USAID)

Measure/DHS+, Macro Intemacional, Inc.

Julio de 2001

Decade	Population – environment AND	Ideology	<i>Petén DHS</i>
Late 1960s	N/a – just population	Classical economists, “neoMalthusians”	<i>Establishing baseline TFR Questions about population perceptions</i>
1970s	Development	Neoclassical economists, “Cornucopian”	<i>Questions on agricultural intensification</i>
1980s to mid 1990s	Women’s and reproductive health	Feminist	<i>Pairing with the regular DHS, which incorporates broader concerns for maternal-child health</i>
1990s	Inequality	Marxist & dependency theorists	<i>Questions on land ownership</i>
mid-1990s	Security	Neocon	<i>Questions about migration and its relationship to the civil war</i>
Late 1990s	Biodiversity	Pragmatists	<i>Oversampling in the Maya Biosphere Reserve Questions about conservation opinions</i>
2000s	Corporate power	Anti-(corporate) globalization	<i>Questions about pesticides use</i>



Remedios Phase I, 1997-2000

1. Baseline research, DHS and demographic training for government agencies
2. Primary and reproductive health care in the Maya Biosphere Reserve (training of midwives & health promoters)
3. Helping partners establish coordinated services
 - APROFAM – IPPF affiliate
 - “Tan Uxil” – youth education
 - Ministry of Health – public services
4. Medicinal plants and organic agriculture

Conservation with a human face!

www.propeten.org

Total Fertility Rate (TFR)

	1978	1987	1995	1999	2002	2008
Petén	n/a	n/a	n/a	6.8	5.8	4.3
Guatemala	6.8	5.6	5.1	5.0	4.4	3.6

Source: Demographic and
Health Surveys, Guatemala

Contraceptive Use

		1987	1995	1998	2002	2008
Petén		n/a	n/a	23.5	33.9	46.5
Guatemala		23.2	31.4	38.2	43.3	54.1

HIV Knowledge

				1998	2002	2008
Petén				n/a	91.9%	93.3%
Guatemala				n/a	85.6%	88.8%

From the 1998 Petén DHS

	Indigenous	Ladino
Total Fertility Rate	8.6	6.1
Ideal Family Size	4.4	3.7
Percentage of women who do not want more children	37%	42%
Percentage of women who would be “happy” about another pregnancy	24%	14%
Percentage of women who would be “sad” about another pregnancy	60%	49%



Remedios Phase II, 2000→

“Edu-tainment”

*Conservation with a
human face!*

www.propeten.org

1. Mobile Biosphere
2. Radio soap opera,
“Between Two Roads”


Mobile Biosphere







“Between Two Roads”



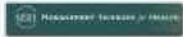


Entre Dos Caminos - Sa' Xxaal Li B'e'

Radionovela Bilingüe

Lunes a viernes, 5 de la mañana por
Radio Stereo San José - 89.3 FM (español)
Radio Ut'an Kaj - 106.9 FM (q'eqchi')

Lunes a viernes, 6 de la tarde por
Radio Nacional Tikal - 107.3 FM

Una producción de Fundación ProPetén con el apoyo de MSH y USAID







Radio soap opera

Donor	Theme	Episodes
USAID-Washington	Reproductive health, migration, domestic violence, community organization, organic agriculture, and various agrarian problems	100
Adam Albright	Continuation of above themes & in consultation with the Ministry of Health, malaria control	30
University of Boston's MACHI project	Cultural patrimony and migration to Belize	40
UNFPA	Reproductive health (HIV/AIDS, safe birth practices, prenatal control, birth spacing, community organization for emergency transport)	25
CONAP & SIPECIF (Guatemala's national park service)	Forest fire prevention and watershed conservation	5
The Nature Conservancy	Jaguar habitat protection	12
Action Aid and Catholic Church	Rural land sales and the incursion of African Palm plantations on peasant holdings	11
Total		223

Future Directions

- Continue Radio Soap Opera
 - climate change
 - land issues
 - new reproductive health themes from analysis of the 2008 DHS
- Work with men
 - Soldiers
 - Evangelical preachers
 - Salesmen
 - Bus drivers
 - Etc.

Decade	Population – environment AND	Ideology	ProPetén projects
Late 1960s	N/a – just population	Classical economists, environmentalists, “neoMalthusians”	Demographic training with government ministries
1970s	Development	Neoclassical economists, “Cornucopian”	Micro-enterprise development with communities in the Maya Biosphere Reserve; environmental education
1980s to mid 1990s	Women’s and reproductive health	Feminist	Reproductive Health Commission <ul style="list-style-type: none"> • HIV/AIDS education • emergency contraception • cervical cancer
1990s	Inequality	Marxist & dependency theorists	Migration studies; agricultural development programs in southern Petén to prevent migration; radio show for farmers, organic agriculture experiments;
mid-1990s	Security	Neocon	Studies on climate change & vulnerabilities to natural disasters; leadership on civil society governance, and narco-trafficking problems
Late 1990s	Biodiversity	Pragmatists	Facilitation of nonprofit & government family planning services across Petén; RH training with midwives, agroforestry promoters and park guards in the Maya Biosphere Reserve
2000s	Corporate power	Anti-(corporate) globalization	Documentary film on Q’eqchi’ Maya land dispossession by African Palm plantations; opposition to oil drilling in the reserve; etc.

Cross cutting

:

Integrated DHS &

Mass education projects:

1. Mobile Biosphere

&

2. Radio Soap

opera

“When any environmental problem is probed to its origin, it reveals an inescapable truth — **that the real root cause is to be found** in how men interact with each other; that the debt to nature . . . cannot be paid person by person, in recycled bottles or ecologically sound habits, **but in the ancient coin of social justice.**”

-- Barry Commoner

By: Liza Grandia, Ph.D.

Anthropologist and assistant professor

Department of International Development, Community and Environment

Clark University

Lgrandia@clarku.edu

