



Applied technology in health and sustainable development in Panama

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eHealth Pavillion at Telecom 2011

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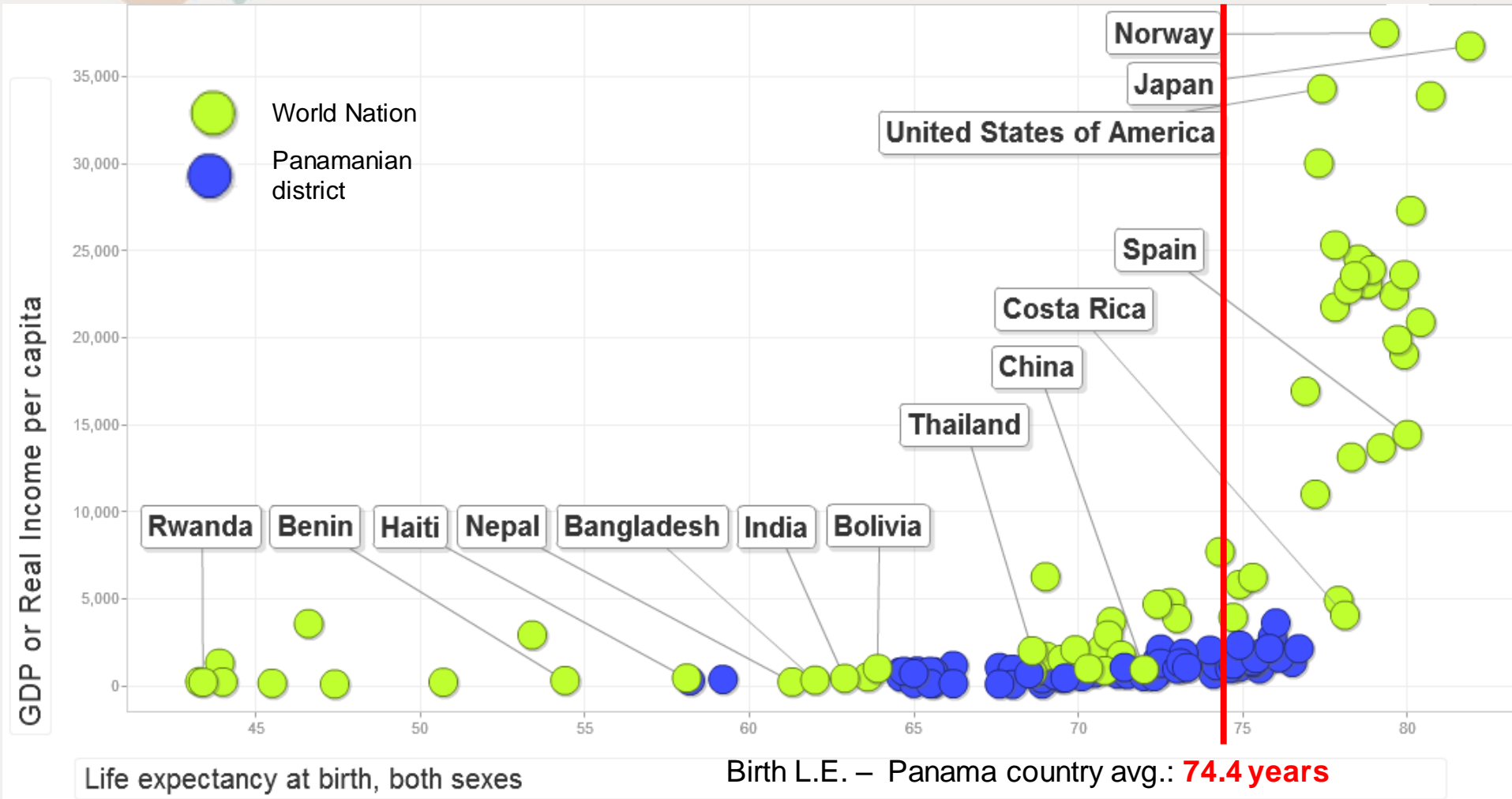
Panama



Panama

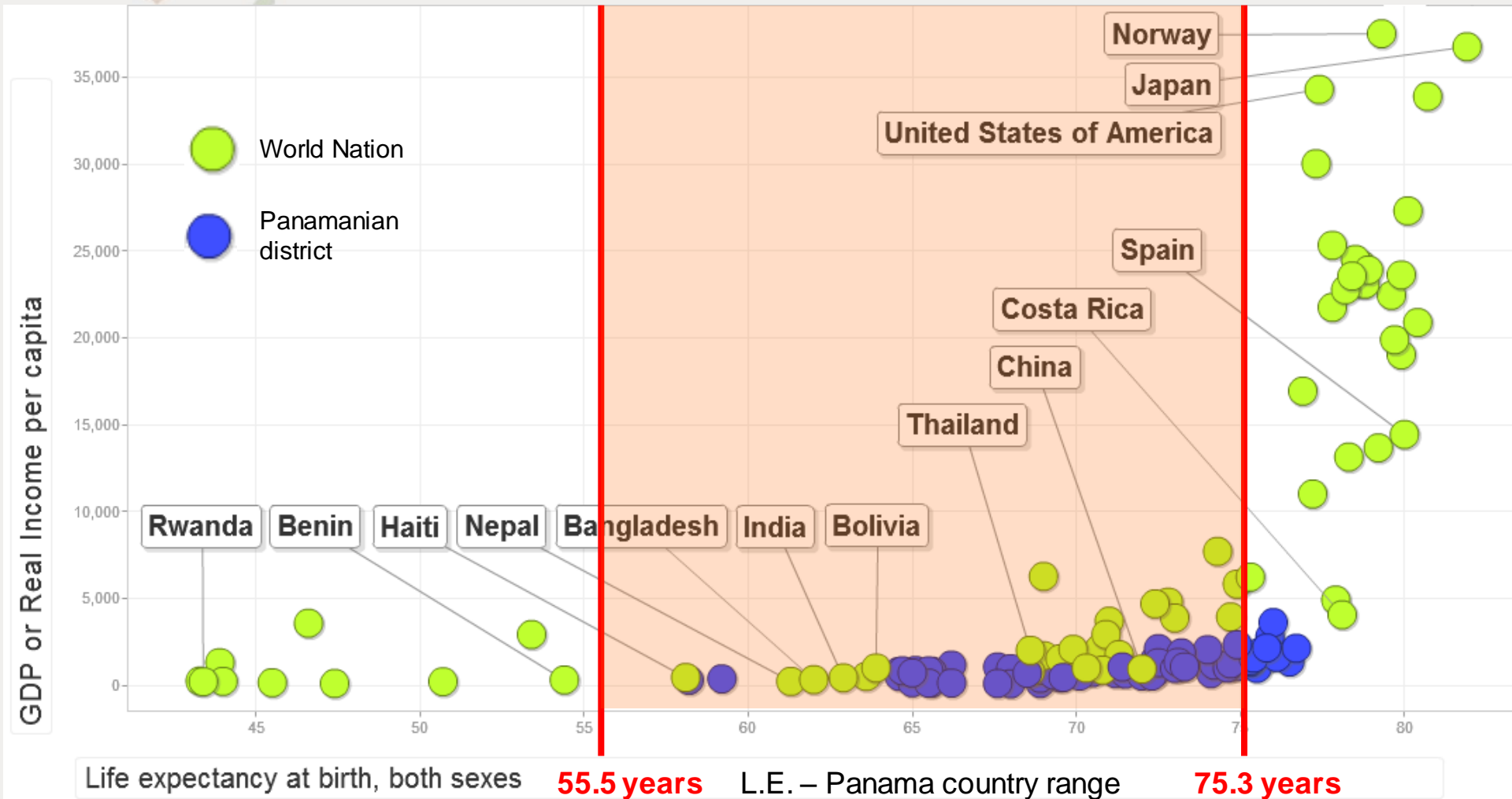
Panama in the World (2000)

Income per capita vs. Life Expectancy at Birth



Panama in the World (2000)

Income per capita vs. Life Expectancy at Birth



Networked Readiness Index (NRI)

NRI measures the degree of readiness a country has to participate and take advantage of ICT.

This index has three basic components:

- Environment offered toward ICT in a country or community
- Involvement of key persons (individuals, businesses, governments) in ICT
- Use of ICT by these key individuals

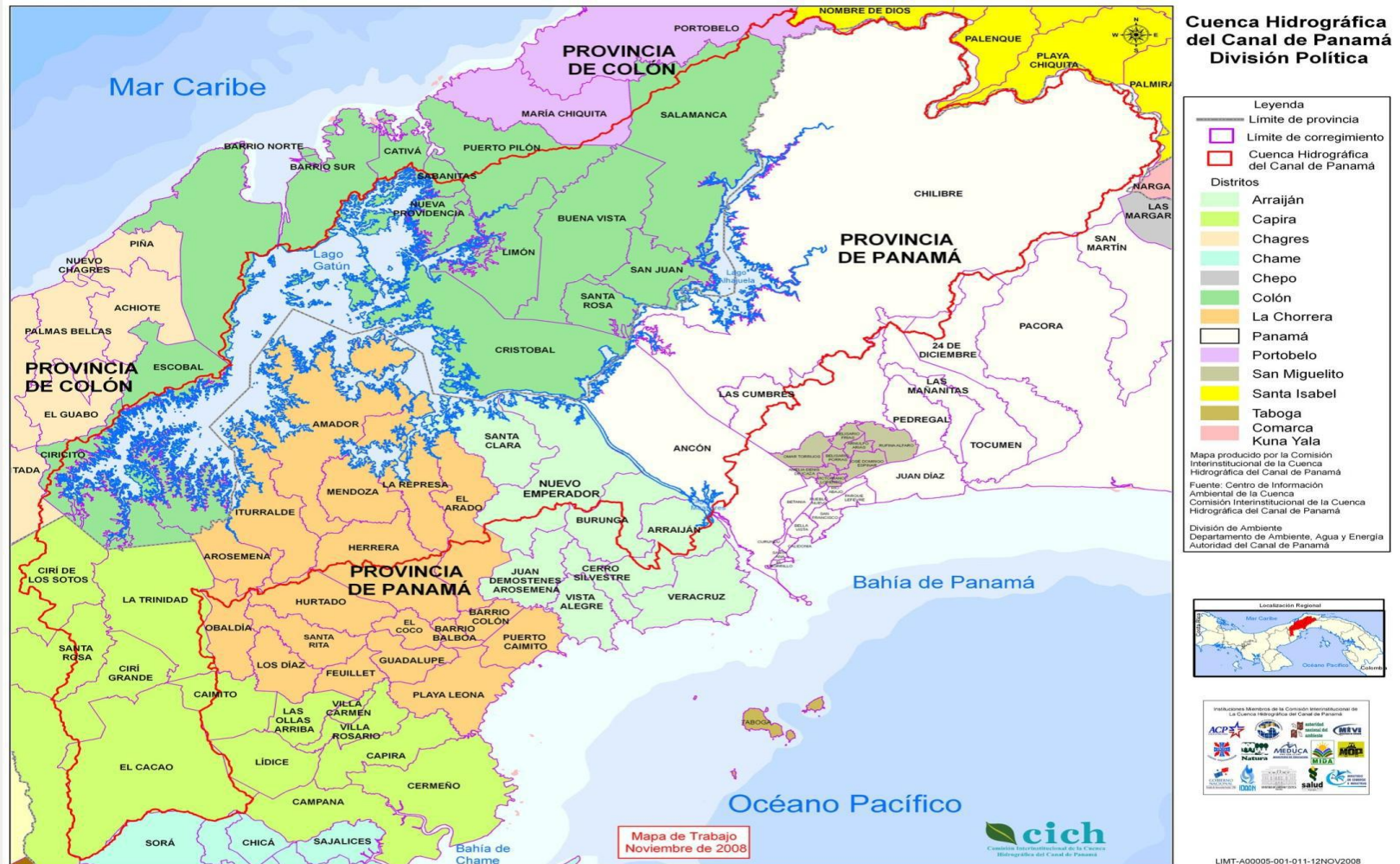
PANAMÁ

Año	NRI RANK
2002-2003	48
2003-2004	58
2004-2005	69
2006-2007	65
2008-2009	66
2009-2010	58

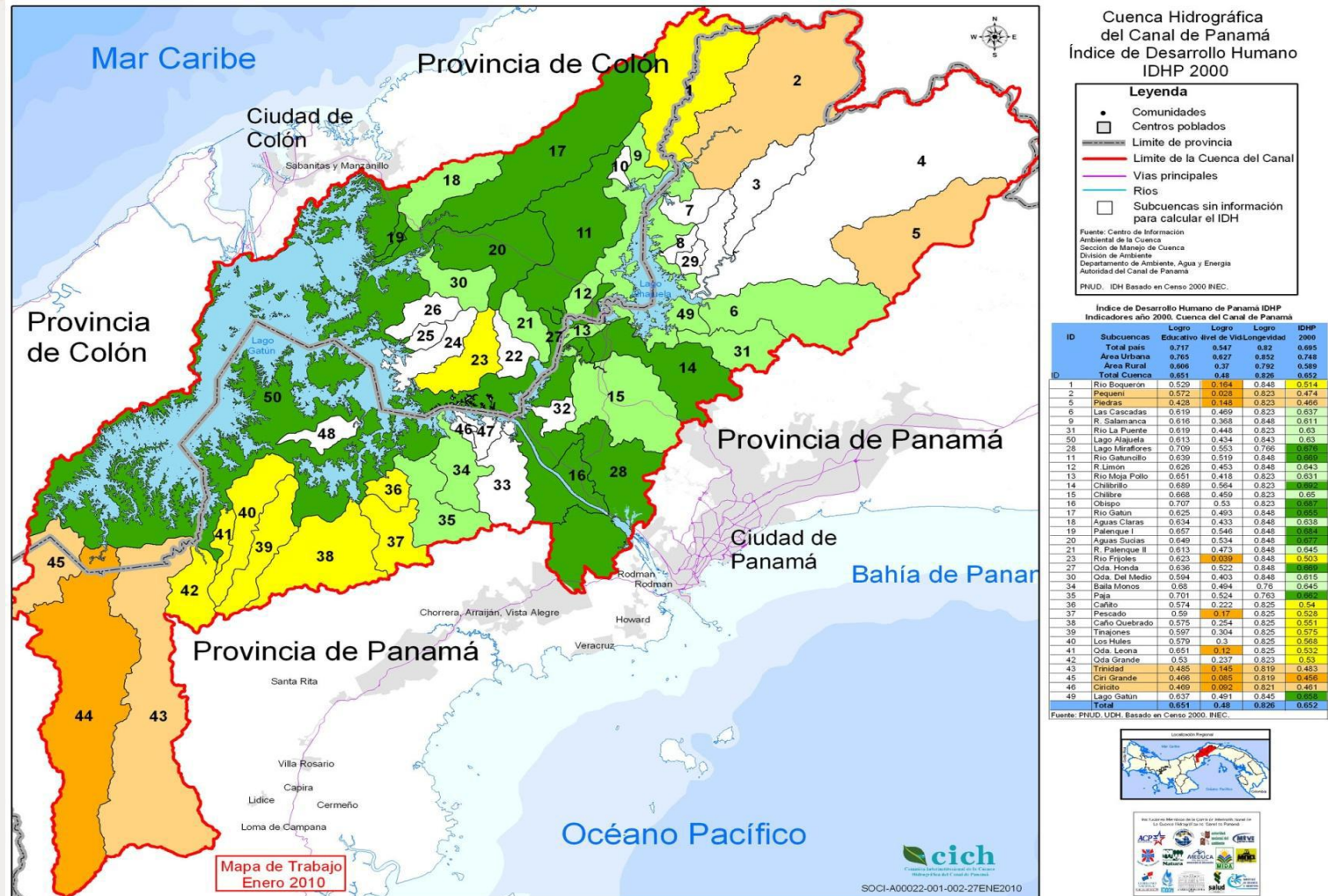
The Panama Canal watershed as an example of the complexities of the country

Political division

Panama Canal watershed



Human development index



Educational centers

Cuenca Hidrográfica del Canal de Panamá Centros Educativos

Legenda

- Centro poblados
- Límite de provincia
- Vías principales
- Ríos
- Cuenca Hidrográfica del Canal
- ▲ Escuelas (154 en total)

Mapa producido por la Comisión Interinstitucional de la Cuenca Hidrográfica del Canal de Panamá

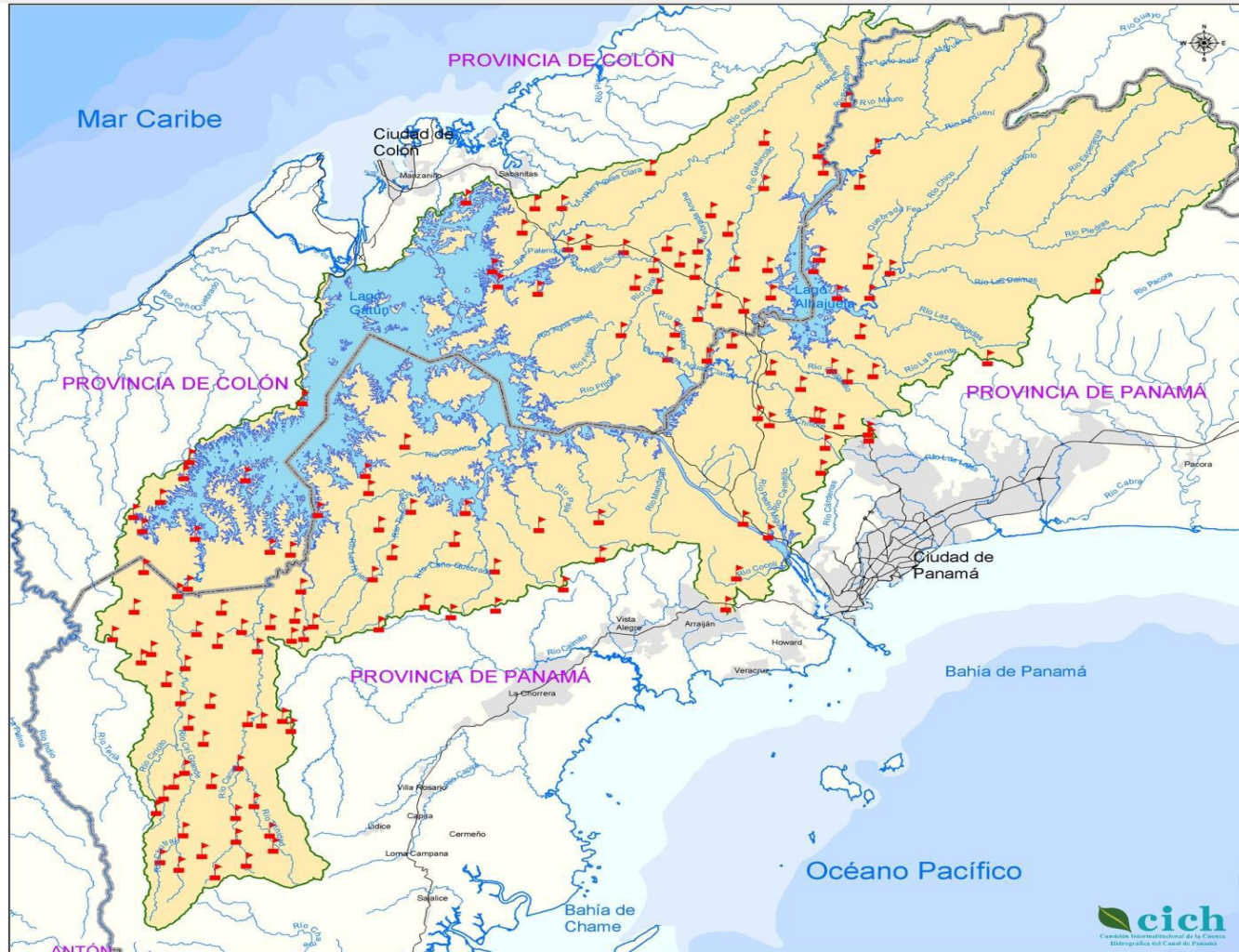
Fuente: Centro de Información Ambiental de la Cuenca
Comisión Interinstitucional de la Cuenca Hidrográfica del Canal de Panamá

Unidad de Sensores Remotos
Sección de Manejo de Cuencas
División de Administración Ambiental
Departamento de Seguridad y Ambiente
Autoridad del Canal de Panamá

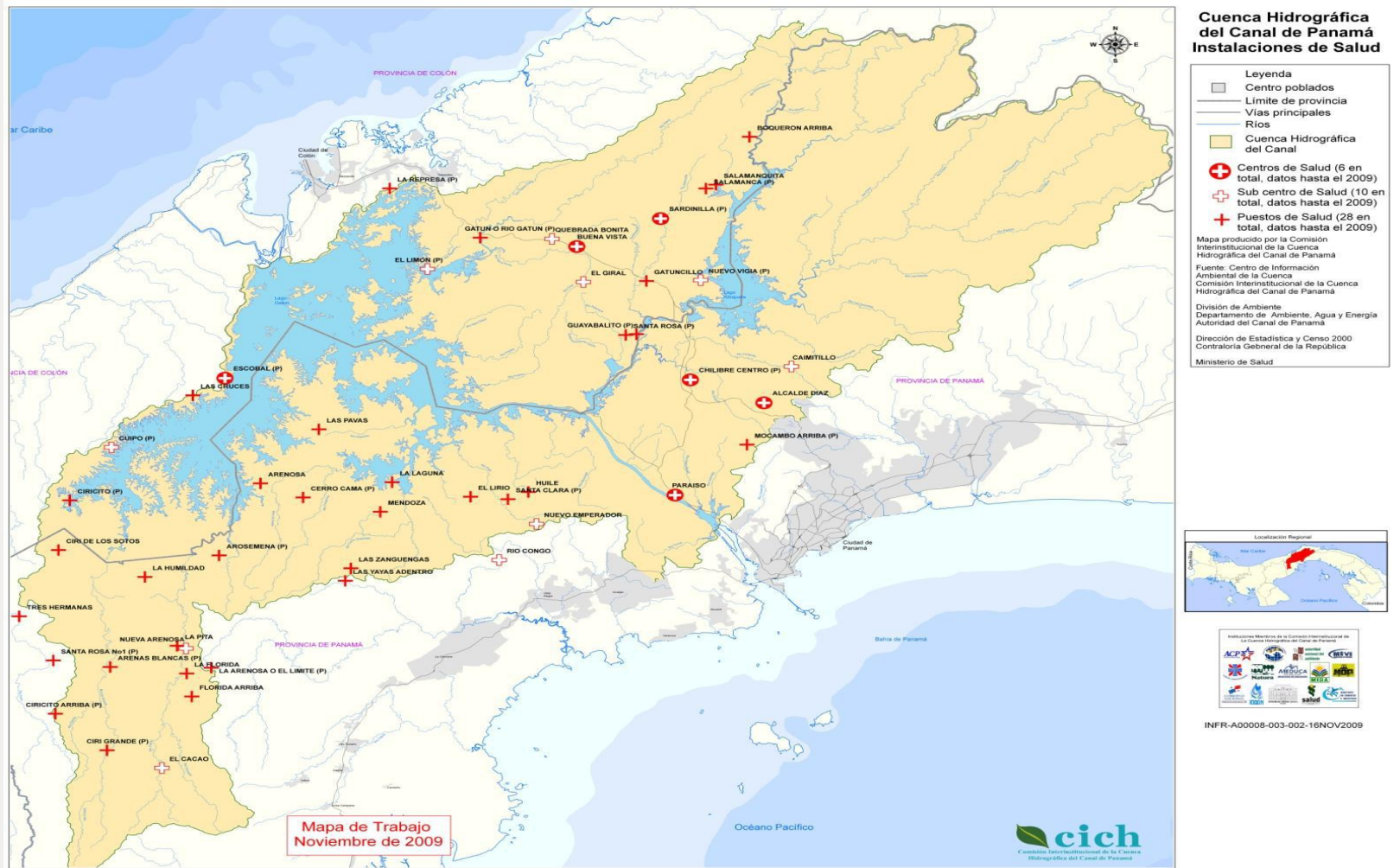
Dirección de Estadística y Censo 2005
Contraloría General de la República



INFR-A00006-001-001-25AGO2009-PAI-II



Health services network

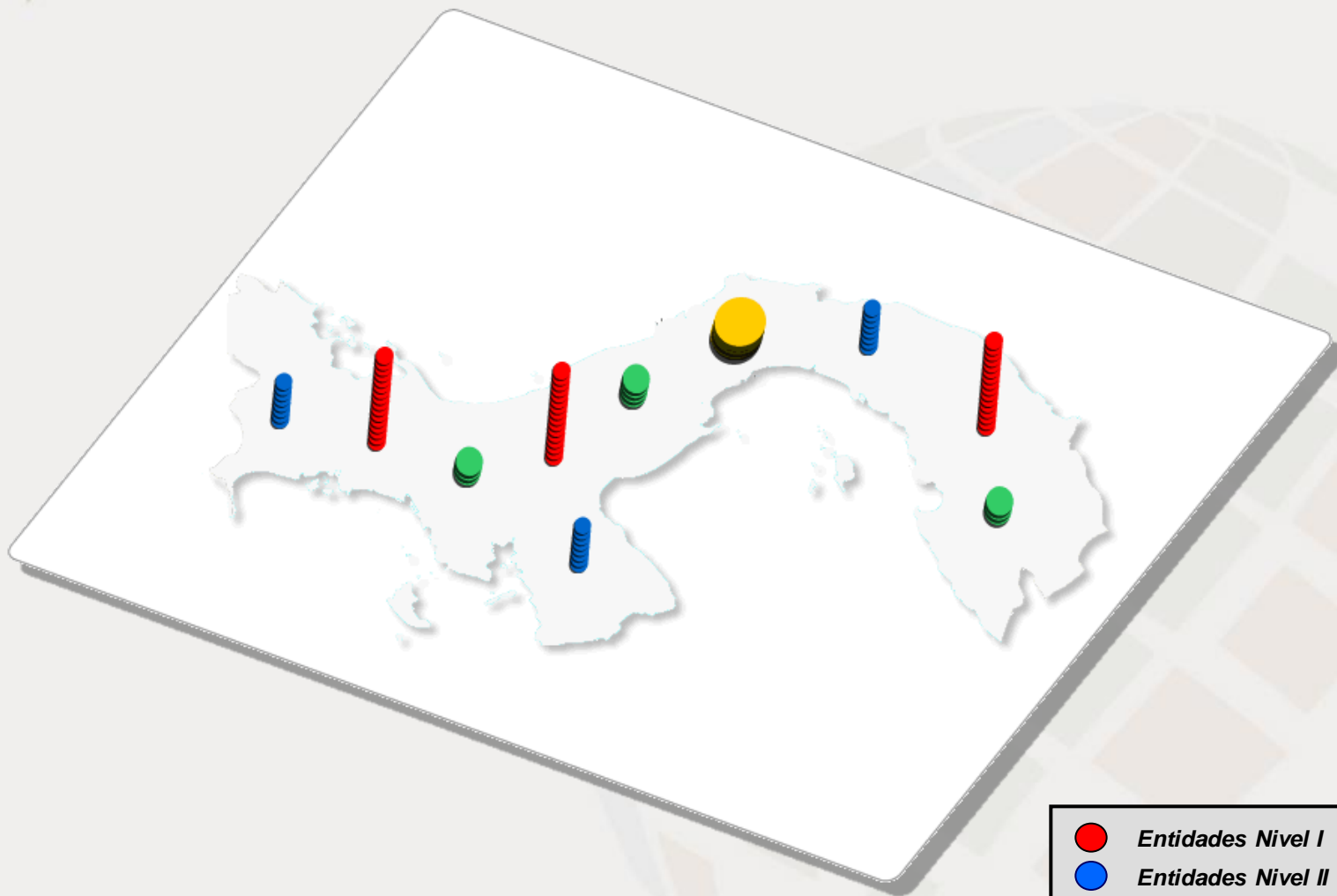


eEfforts of the government of Panama

- **National Authority for Governmental Innovation**
 - Modernize public administration
 - Free WiFi Internet access from border to border
- **Ministry of Education**
 - Digital equity project
- **Ministry of Health**
 - **Modernization of public health**
 - Evolution of telemedicine platform

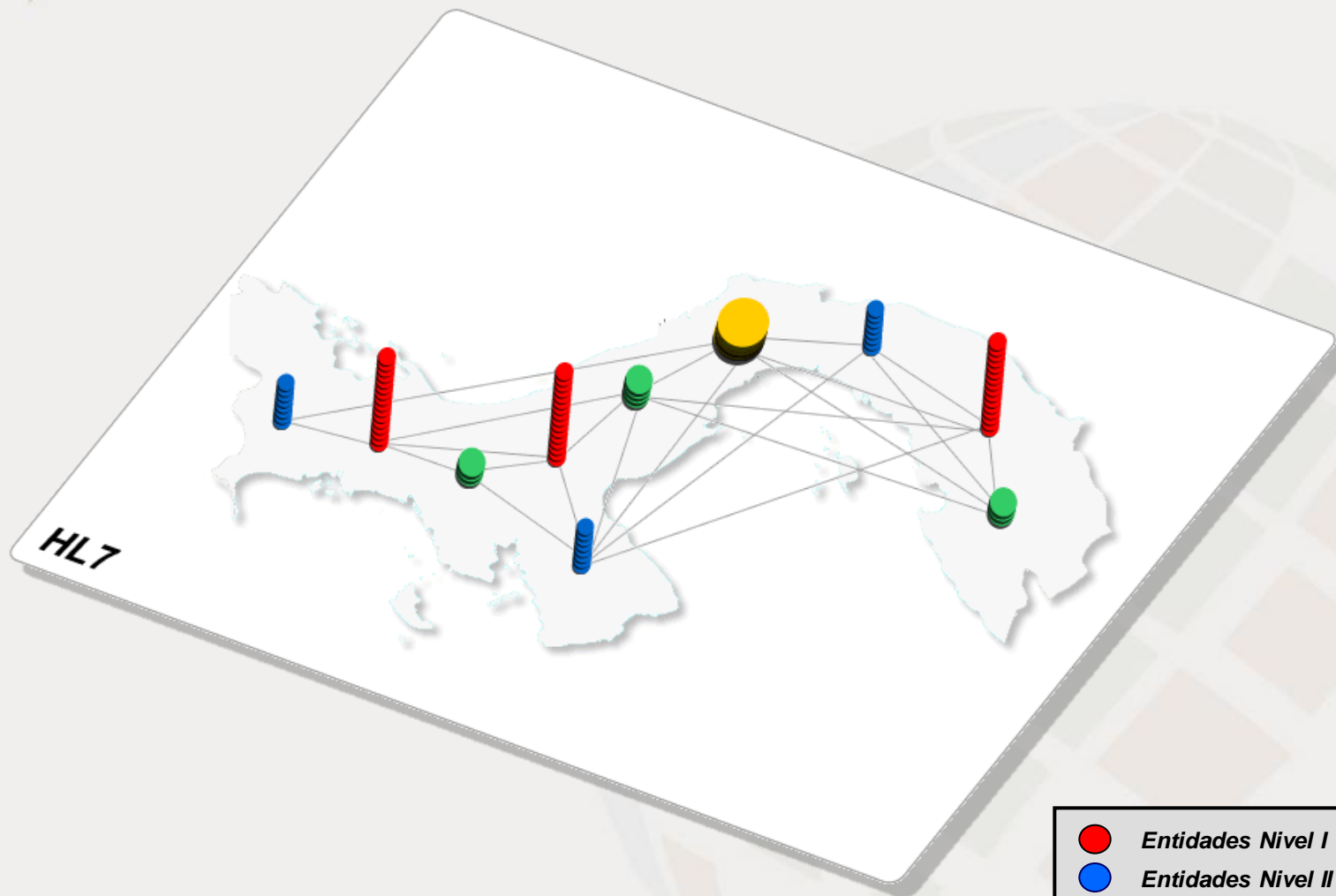
MINISTRY OF HEALTH

Information exchange network

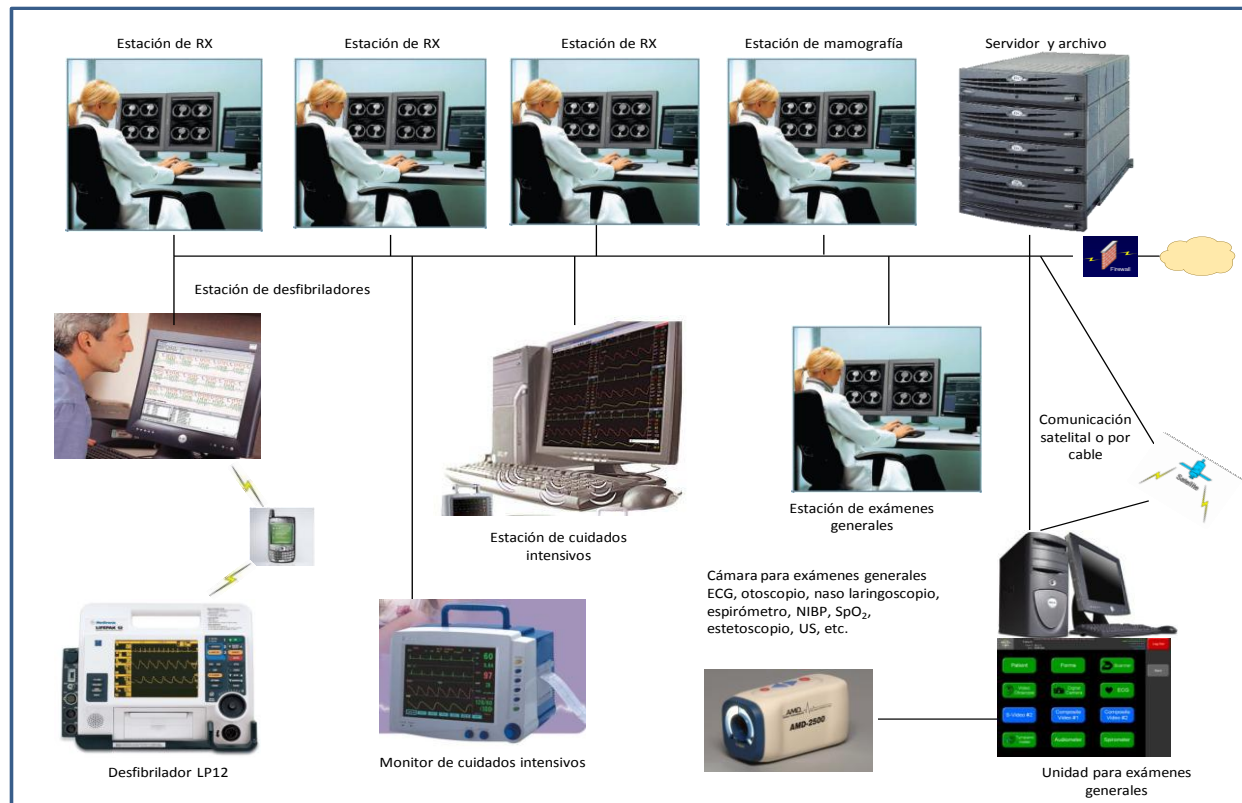


- *Entidades Nivel I*
- *Entidades Nivel II*
- *Entidades Nivel III*
- *Entidades Nivel IV*

Information exchange network



- Entidades Nivel I
- Entidades Nivel II
- Entidades Nivel III
- Entidades Nivel IV



Offers technological support to 22 Radiology nodes and 9
Telemammography nodes

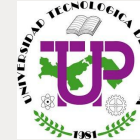
First Lady's Tele mammography Initiative

- Joint effort with Ministry of Health
- Aims at increasing mammograms in 65%



UNIVERSITIES

Synergies between Public Universities




Jornada Internacional de Actualización en Informática Médica y Tecnología Aplicada a la Salud y el Desarrollo Social y Primer Curso Nacional de Introducción a la Informática Médica y Telesalud

Objetivo General:
Desarrollar las habilidades necesarias en el uso de servicios que brindarán las plataformas virtuales y las tecnologías aplicadas a la salud, disponibles al Sistema de Red de Hospitales para Educación e Investigación que favorezca la apropiación y ejecución de las mismas dentro del ejercicio.

17 al 21 de octubre de 2011

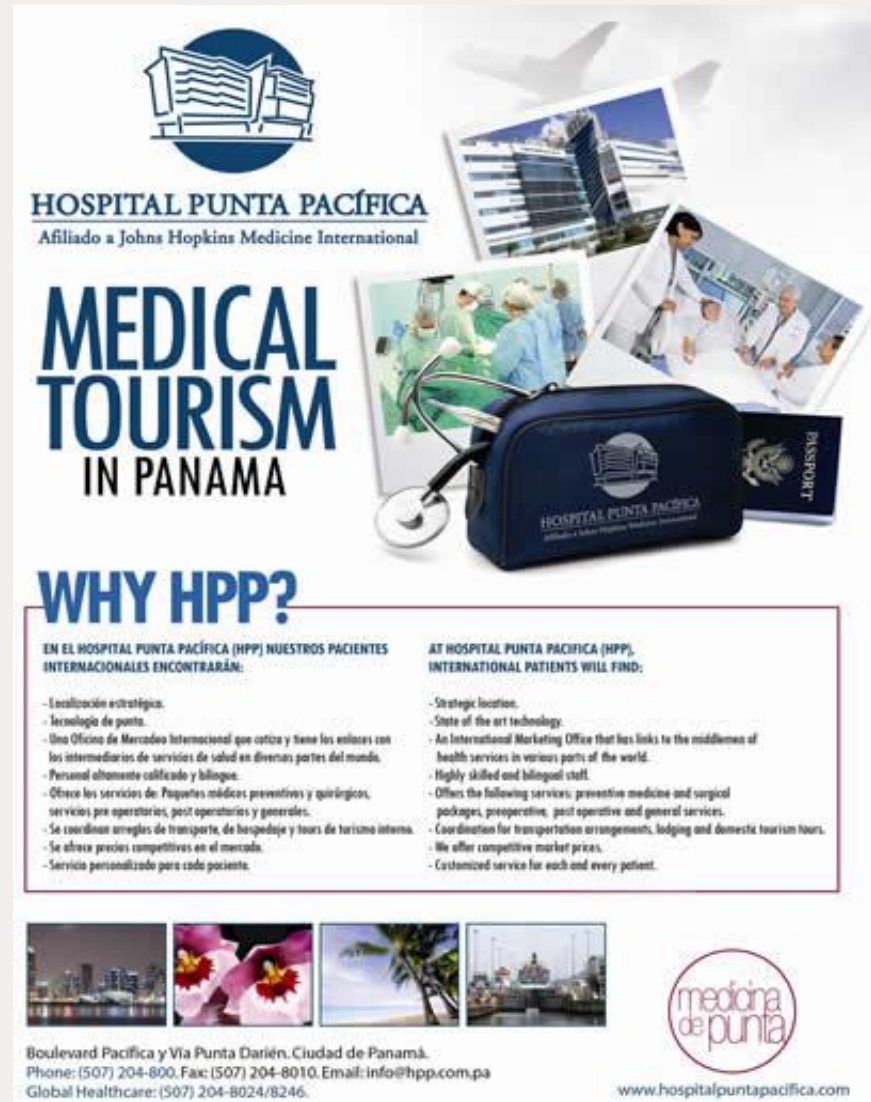
17 y 18 de octubre: Hospital Santo Tomás - Elefante Blanco, 2do piso / Centro Regional de Capacitación en Salud)

19 al 21 de octubre: Paraninfo Universitario

Inscripción: 523-5324
Jornada gratuita

Logos of participating institutions: SENACYT, GENOS, RNP, esba, RUTE, Instituto EduMed, Johns Hopkins University.

- First International Meeting on Medical Informatics and Technology Applied to Health and Social Development
- Creation of the Panamanian Society of Medical Informatics and Telemedicine
- Creation of the eHealth Center of Excellence to support national plan
- Creation of joint degrees in medical informatics and telemedicine



HOSPITAL PUNTA PACÍFICA
Afiliado a Johns Hopkins Medicine International

MEDICAL TOURISM IN PANAMA

WHY HPP?

EN EL HOSPITAL PUNTA PACÍFICA (HPP) NUESTROS PACIENTES INTERNACIONALES ENCONTRARÁN:

- Localización estratégica.
- Tecnología de punta.
- Una Oficina de Mercadeo Internacional que cotiza y tiene los enlaces con los intermediarios de servicios de salud en diversas partes del mundo.
- Personal altamente calificado y bilingüe.
- Ofrece los servicios de: Paquetes médicos preventivos y quirúrgicos, servicios pre operatorios, post operatorios y generales.
- Se coordinan arreglos de transporte, de hospedaje y tours de turismo interno.
- Se ofrece precios competitivos en el mercado.
- Servicio personalizado para cada paciente.

AT HOSPITAL PUNTA PACÍFICA (HPP), INTERNATIONAL PATIENTS WILL FIND:

- Strategic location.
- State of the art technology.
- An International Marketing Office that has links to the middlemen of health services in various parts of the world.
- Highly skilled and bilingual staff.
- Offers the following services: preventive medicine and surgical packages, preoperative, post operative and general services.
- Coordination for transportation arrangements, lodging and domestic tourism tours.
- We offer competitive market prices.
- Customized service for each and every patient.

Boulevard Pacífica y Vía Punta Darién, Ciudad de Panamá.
Phone: (507) 204-800, Fax: (507) 204-8010, Email: info@hpp.com.pa
Global Healthcare: (507) 204-8024/8246.

www.hospitalpuntapacifico.com

To make-shift solutions





Darien province and Emberá- Wounaan Comarca

Socio-Economic Situation in Darien Province and Emberá Wounaan District

Avg income is US\$118.50/mo in Darien, US\$86.10 in Emberá-Wounaan District vs US\$270.90 natl avg

48,533 inhabitants in 695 communities

53% live in extreme poverty

13,406 households, 6,987 wo/ electricity

3,426 get their drinking water from rivers

1,559 households dispose garbage in the rivers

3,444 do not have toilets or latrines

39.9% of children are malnourished

Ecological Problems in Darien Province

A large logging truck is shown from a side-rear perspective, carrying a massive load of cut logs. The logs are stacked high, with some showing significant decay and peeling bark. The truck is on a dirt road, and the background shows a hazy, wooded area.

Forests: from 69.5% in 1947 to 40.4% in 1998

Loss of fertile soil

Sedimentation of rivers

Loss of biodiversity

Change in watersheds

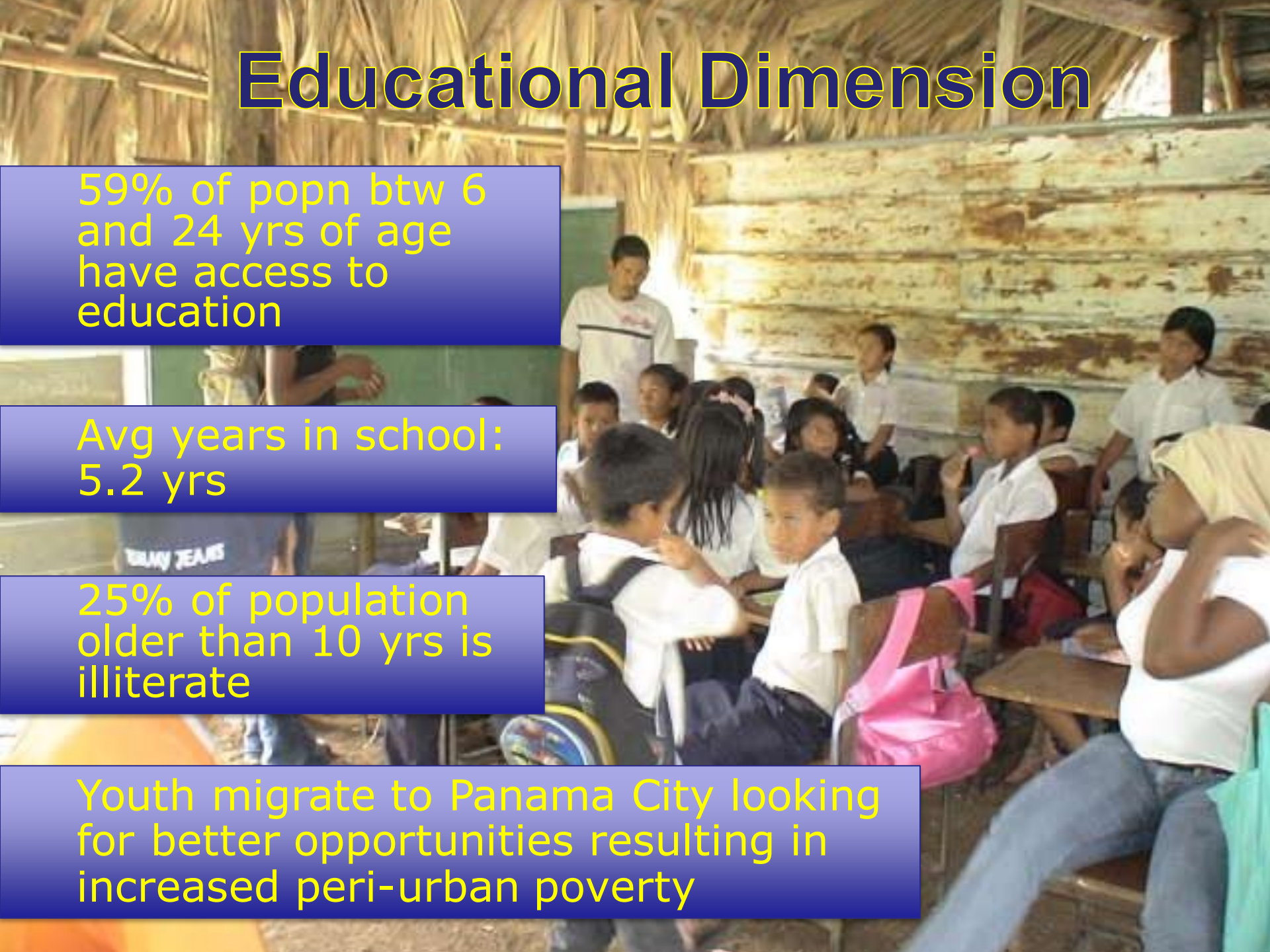
Educational Dimension

59% of popn btw 6 and 24 yrs of age have access to education

Avg years in school: 5.2 yrs

25% of population older than 10 yrs is illiterate

Youth migrate to Panama City looking for better opportunities resulting in increased peri-urban poverty



Security

- Armed conflict in the border with Colombia generates a migration explosion of displaced persons
- Broad border facilitates drug and arm trafficking
- Darien youth recruited by Colombian guerilla and drug lords
- Darien youth migrate to the capital to live in neighborhoods with high levels of urban violence, delinquency, alcohol and drug abuse and gangs



Tierra Nueva Foundation

**“Teaching, Promoting and
Conserving”**

Our forest



Community outreach projects

Established Emberá-Wounaan women-run arts and crafts micro-enterprises



Trained 508 teachers in reading and mathematics



Awareness raising against child labor (reached 441 people in 13 indigenous communities)



Instituto Forestal Agropecuario de Darién



Agro-forestry vocational high school

CLASSROOMS



DORMS











Learning to recycle













Students from IFAD tutor and give lectures to children from various communities.

**For most families, this is the
first generation to graduate
from high school**



What happens next?

- Some get scholarships
- Most need to work and do not continue studying or drop out of college
- Girls get pregnant

Need to cut the circle of poverty and introduce new perspectives.



**THE PLAN: TRANSFORM IFAD
INTO A HUB FOR REGIONAL
DEVELOPMENT USING ICT**

***LEAPFROG THROUGH
CUTTING-EDGE
TECHNOLOGICAL TRANSFER***

Step 1: Education

- A university inside the campus
 - Establish a collaborative agreement with the Technological University of Panama to establish an outpost at IFAD
 - Enhance quality of education and reinforce technological competencies
 - ICTD perspectives



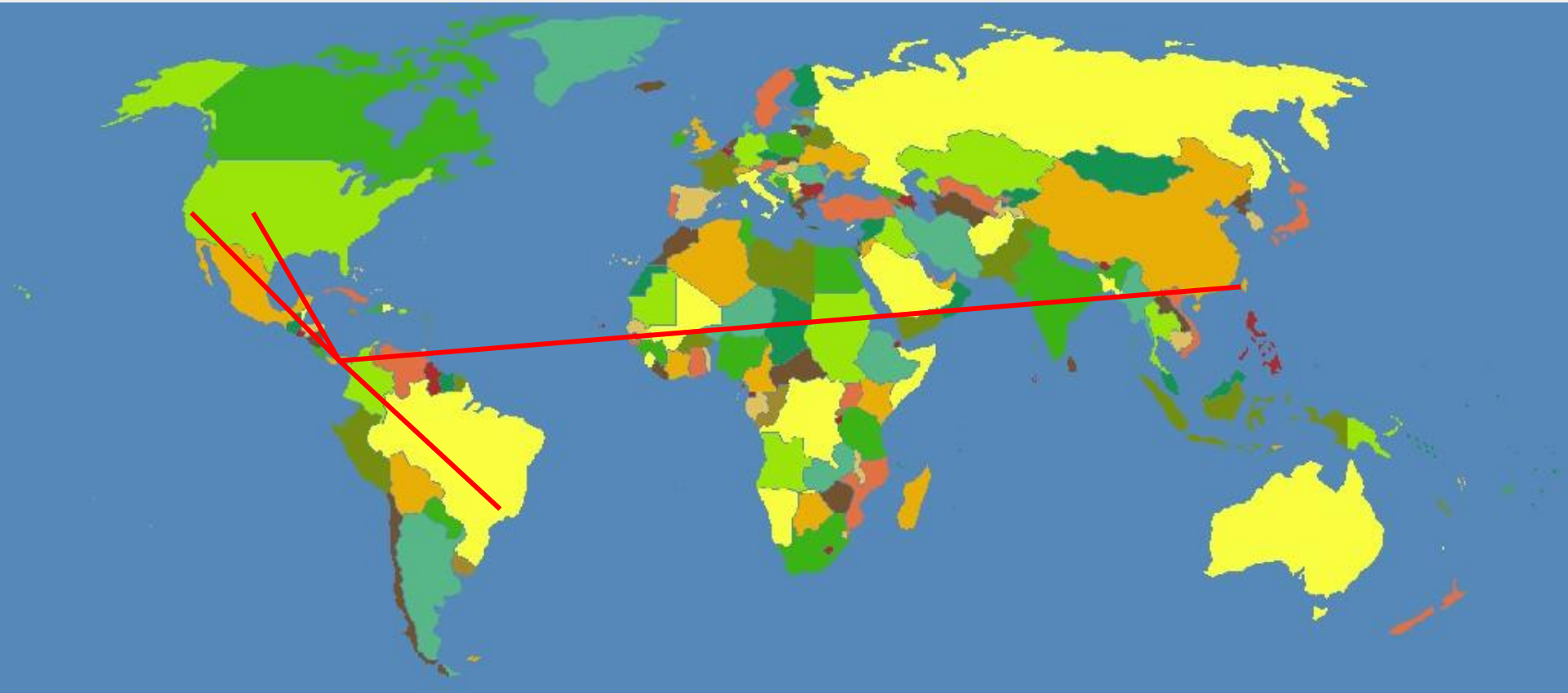
Step 2: Participatory rural assessments in communities of origin





Step 3: Develop technological solutions to address community needs

- Establish a para-curricular online and blended educational program using the University's business incubator
- Develop business plans that establish income-generating solutions to identified development problems (e.g., health, water, environment)
- Establish a fund for SMEs that alumni can establish in their communities
- Link their solutions to public and private initiatives





Thank you!
¡Gracias!

