

# Universal Health Coverage in Lower Mekong Countries

Are Vulnerable Populations Left Behind?

Piya Hanvoravongchai MD MSc ScD  
Chulalongkorn University, Thailand  
April 19, 2018 12:00 PM - 1:30 PM

# Greater Mekong Subregion



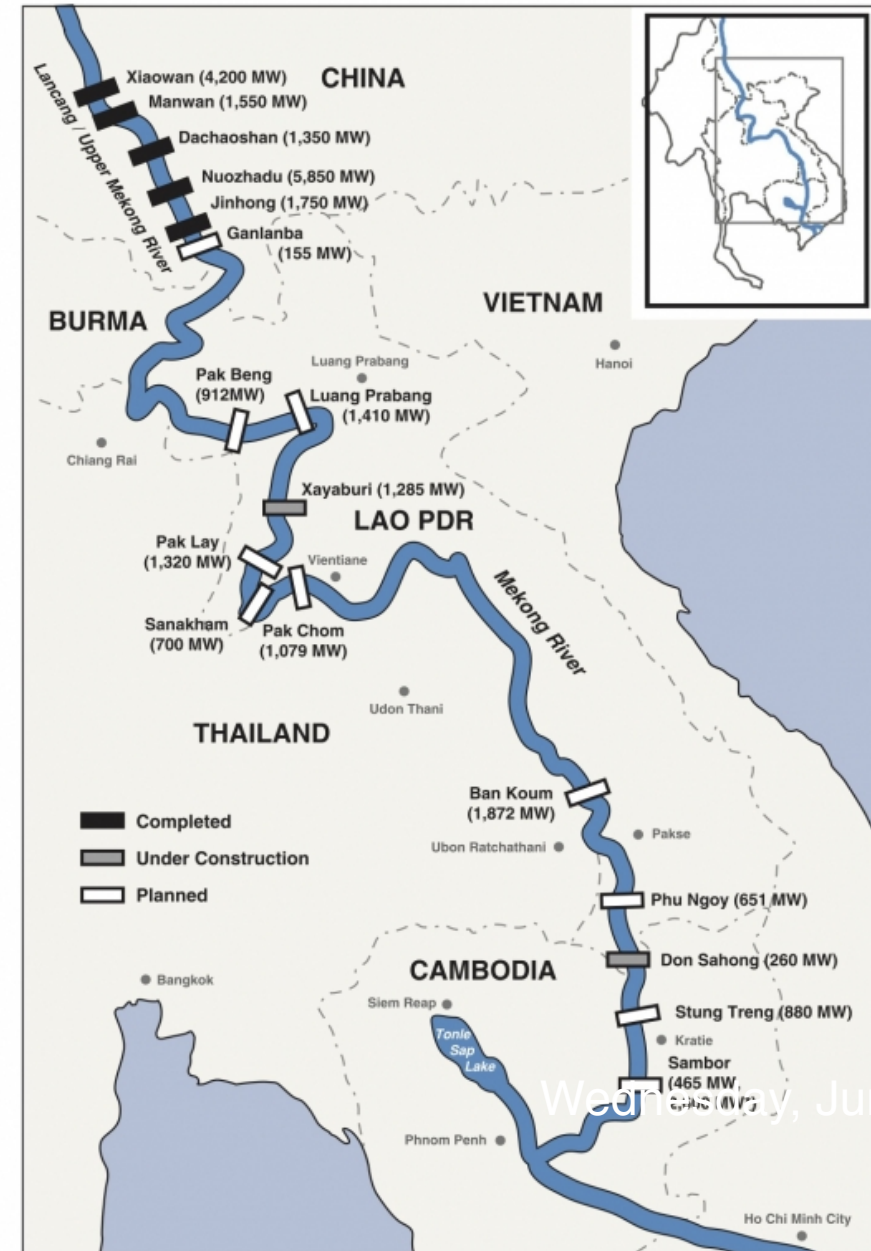
a diversity of economic, political and historical developments

The 12th longest river in the world ~ 2700 miles.

China, Myanmar,  
Laos, Thailand,  
Cambodia, Vietnam



Mekong giant catfish  
Photograph by Suthep Kritsanavarin

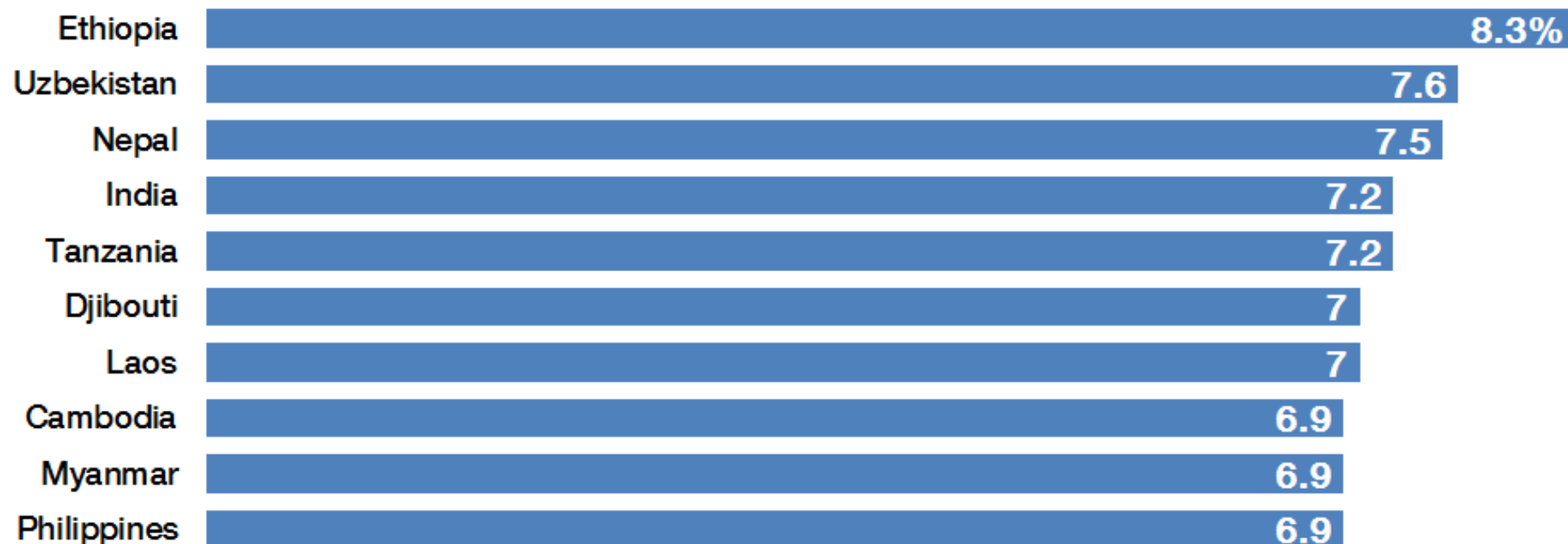


Source: MRC Strategic Environmental Assessment: ICEM, 2010

\*Initially proposed as a 3,300 MW project, 465 MW and 2,600 MW options have also been studied.

# The world's fastest growing economies

Forecast GDP growth, 2017



Source: World Bank



# Lower Mekong countries

	Cambodia	Laos	Viet Nam	Thailand
GDP per cap (US\$)	1,269 (2016)	2,338 (2016)	2,170 (2016)	5,910 (2016)
GDP growth %	6.95 (2016)	7.02 (2016)	6.21 (2016)	3.23 (2016)
Total population	16m (2016)	6m (2016)	92m (2016)	68m (2016)
Area (sq.km)	181,040 (2017)	236,800 (2017)	330,967 (2017)	513,120 (2017)
Urban pop %	20.95 (2016)	39.65 (2016)	34.24 (2016)	51.54 (2016)
Electricity access %	56.1 (2016)	78.09 (2016)	99.2 (2016)	100 (2016)
Pov % at \$1.9 a day	-	22.7 (2012)	2.8 (2014)	0 (2013)

Source: World Development Indicators

# Health development in the region

	Cambodia	Laos	Viet Nam	Thailand
Life expectancy at birth	68.5 (2015)	66.1 (2015)	75. 9 (2015)	75.1 (2015)
Total fertility rate	2.59 (2015)	2.76 (2015)	1.96 (2015)	1.50 (2015)
Under-5 mortality	30.6 (2016)	63.9 (2016)	21.6 (2016)	12.2 (2016)
% children underweight	24.2 (2014)	26.5 (2011)	12 (2010)	9.2 (2012)
% measles immunization	81 (2016)	76 (2016)	99 (2016)	99 (2016)
% access to improved water	75.5 (2015)	75.7 (2015)	97.6 (2015)	97.8 (2015)
% Death from Com Dz/MNC	28.2 (2015)		13 (2015)	18.3 (2015)

Source: World Development Indicators

# Selected Health System Statistics

	Cambodia	Laos	Viet Nam	Thailand
% Skilled birth attendance	89 (2014)	40.1 (2012)	93.8 (2014)	99.6 (2012)
Hospital beds per cap	0.7 (2011)	1.5 (2012)	2 (2010)	2.1 (2010)
Health exp % GDP	5.7 (2014)	1.9 (2014)	7.1 (2014)	4.1 (2014)
Health exp per cap (USD)	61.3 (2014)	32.6 (2014)	142.4 (2014)	227.5 (2014)

Source: World Development Indicators

# Universal Health Coverage

# Universal Health Coverage movement

From: WHO WB - Tracking universal health coverage: 2017 Global Monitoring Report



## Universal Health Coverage (UHC)

means that **ALL PEOPLE** can obtain the quality health services they need without suffering financial hardship.

**DESPITE SOME PROGRESS, THERE IS STILL  
A LONG WAY TO GO TO ACHIEVING UHC BY 2030  
—OUR COMMON GLOBAL COMMITMENT UNDER  
THE SUSTAINABLE DEVELOPMENT GOALS (SDGS).**



**AT LEAST  
HALF THE  
WORLD'S  
POPULATION  
STILL LACKS ACCESS  
TO ESSENTIAL  
HEALTH SERVICES.**





ABOUT  
**100 MILLION PEOPLE** FALL INTO  
**EXTREME POVERTY**

(LIVING ON

**\$1.90**  
**OR LESS A DAY)**

BECAUSE OF  
OUT-OF-POCKET  
HEALTH EXPENSES.



## HEALTH EXPENSES

ARE AN IMPORTANT REASON  
FAMILIES AROUND THE WORLD ARE  
**PUSHED INTO POVERTY.**

Mind the tipping point

**100 million people**  
fall into extreme poverty  
each year due to health  
expenses



www.who.int



How much is too much?

**800 million people**  
spend more than 10% of household  
budget on healthcare



www.who.int

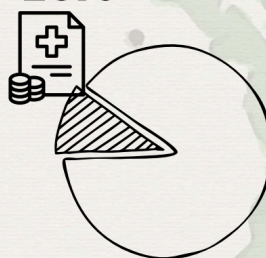


OVER  
**800 MILLION PEOPLE**

**SPENT AT LEAST  
10 PERCENT**  
OF THEIR  
HOUSEHOLD  
BUDGETS PAYING  
FOR HEALTH CARE.  
THIS NUMBER HAS  
GROWN BY OVER  
**3 PERCENT** ↑  
PER YEAR  
GLOBALLY.



10%

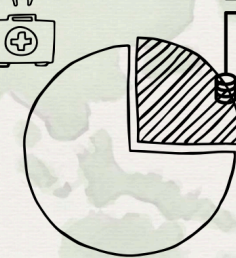


AMONG  
THEM,  
ALMOST

**180 MILLION PEOPLE**  
**SPEND A  
QUARTER**

**OR MORE OF  
THEIR HOUSEHOLD  
BUDGETS ON  
HEALTH EXPENSES  
—AND THEIR  
NUMBERS  
HAVE INCREASED  
BY ALMOST  
↑5 PERCENT**  
PER YEAR GLOBALLY.

25%

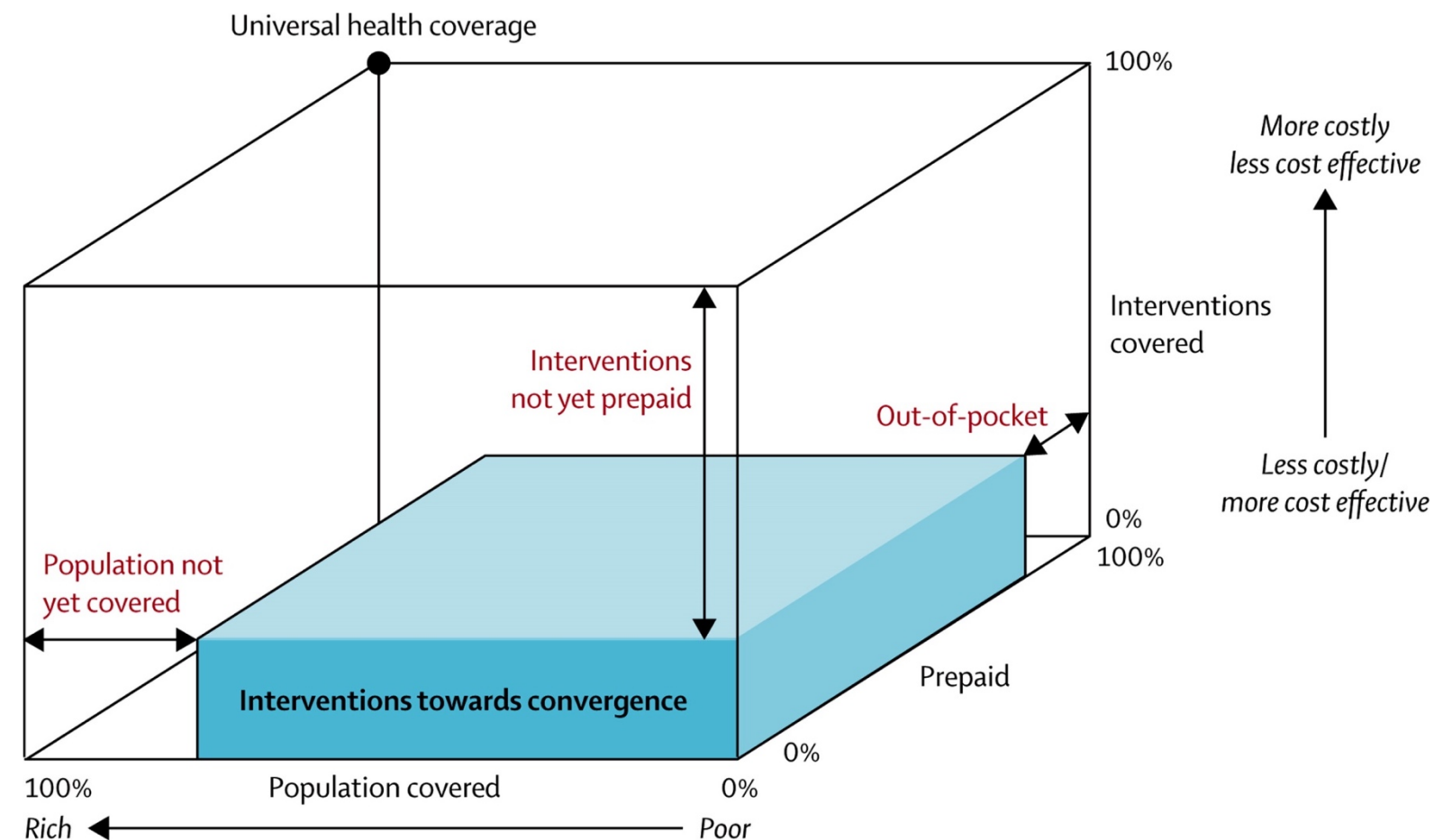


From: WHO WB - Tracking universal health coverage: 2017 Global Monitoring Report  
[http://www.who.int/healthinfo/universal\\_health\\_coverage/report/2017/en/](http://www.who.int/healthinfo/universal_health_coverage/report/2017/en/)

## WHO: three UHC objectives

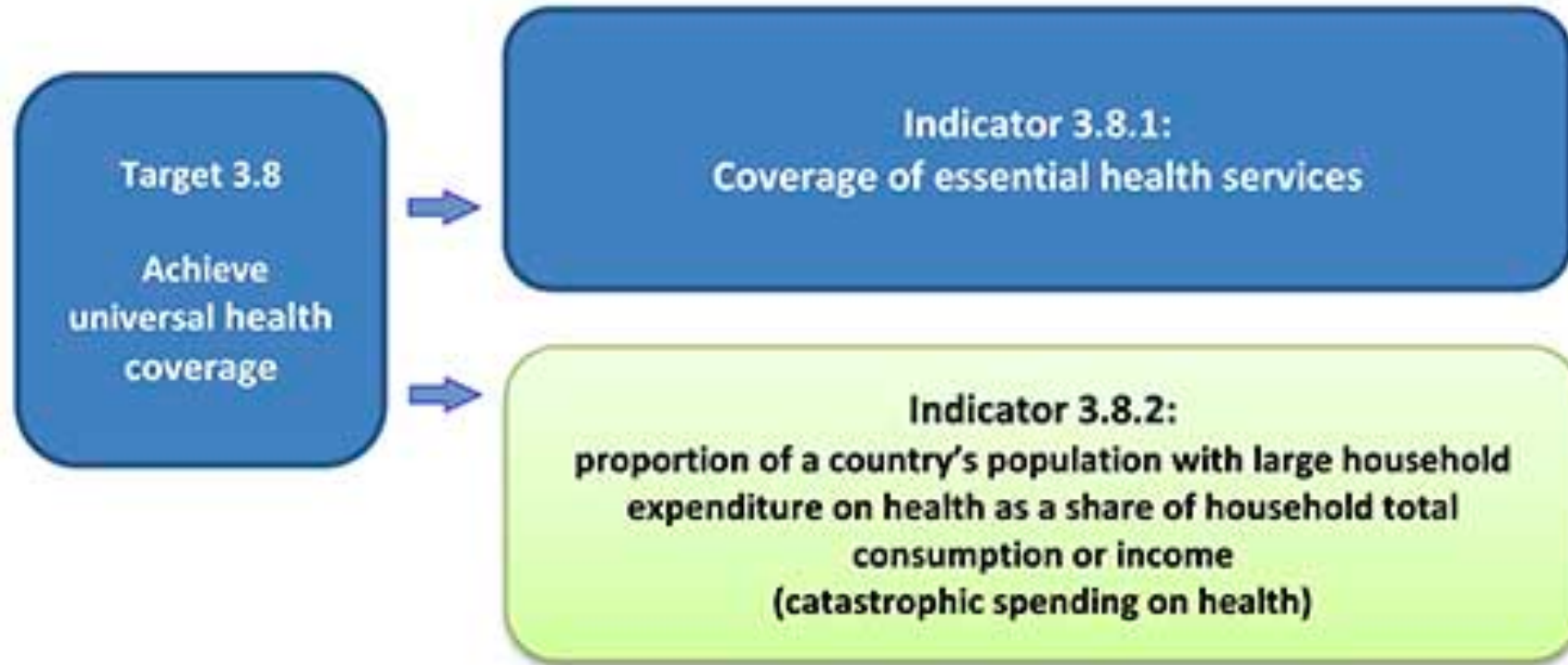
- Equity in access to health services
- Good quality of health services
- People should be protected against financial-risk





# The UHC Cube

“WHO illustrated the three essential elements of UHC with its now famous cube”

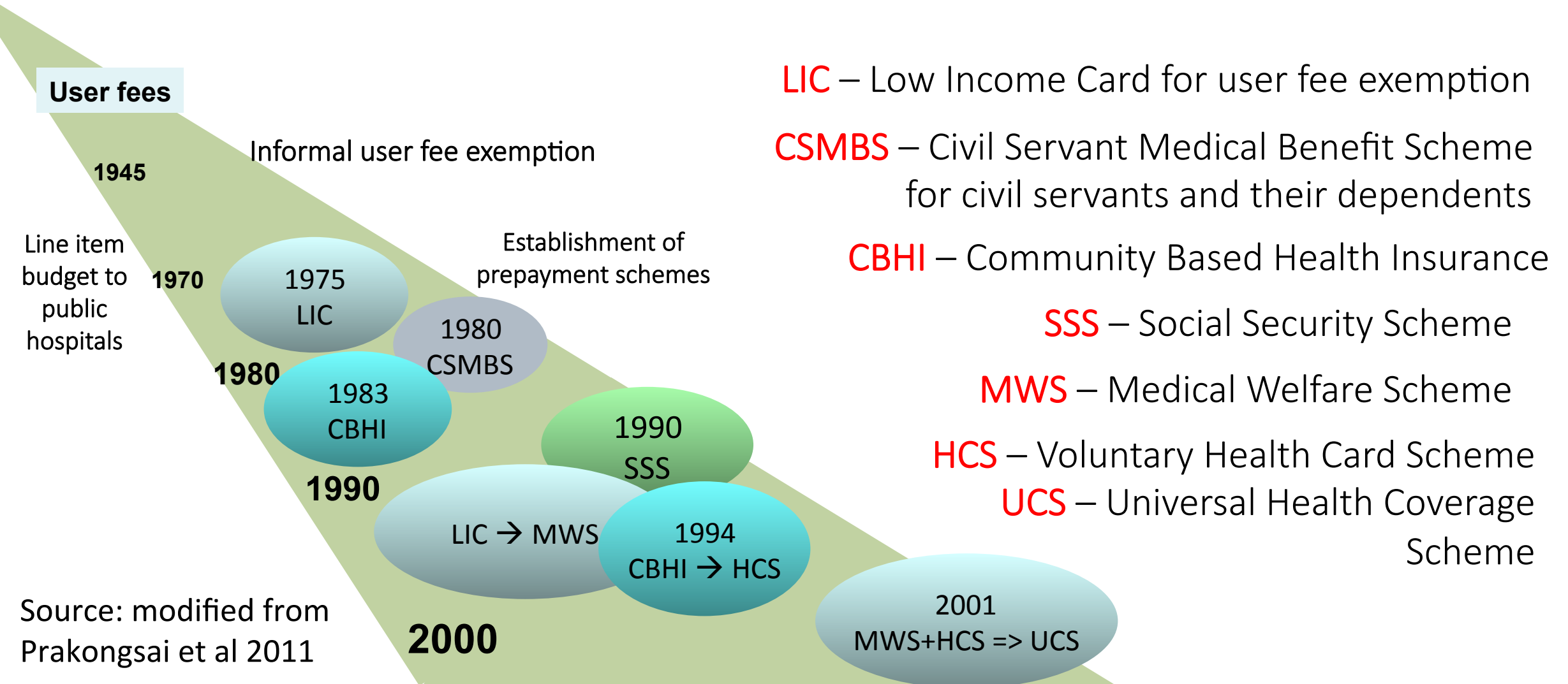


[http://www.who.int/health\\_financing/topics/financial-protection/monitoring-sdg/en/](http://www.who.int/health_financing/topics/financial-protection/monitoring-sdg/en/)

Achieving UHC is the target 3.8 of the UN Sustainable Development Goals (SDGs)

Moving towards  
UHC in Lower  
Mekong Region

# Expansion of Social Health Protection in Thailand



Source: modified from  
Prakongsai et al 2011

# The Poor Pay More

## Health-related inequality in Thailand 1997



Pergamon

PII: S0277-9536(96)00287-0

Soc. Sci. Med. Vol. 44, No. 12, pp. 1781-1790, 1997  
© 1997 Elsevier Science Ltd  
All rights reserved. Printed in Great Britain  
0277-9536/97 \$17.00 + 0.00

### THE POOR PAY MORE: HEALTH-RELATED INEQUALITY IN THAILAND

SUPASIT PANNARUNOTHAI<sup>1</sup> and ANNE MILLS<sup>2\*</sup>

<sup>1</sup>Buddhachinaraj Hospital, Phitsanulok, Thailand and <sup>2</sup>Health Policy Unit, Department of Public  
Health and Policy, London School of Hygiene and Tropical Medicine, Keppel Street,  
London, WC1E 7HT, U.K.

**Abstract**—This paper examines the equality of utilization for equal need and equity of out-of-pocket expenditure for health services in a large urban area in Thailand. Data from a household health interview survey were used to explore patterns of perceived morbidity, utilization of various treatment sources, and out-of-pocket payment. Financial access to health care, as reflected in medical benefit/insurance cover, appeared to influence reported illness and hospitalization rates. Gross lack of access to health care amongst lower socio-economic groups was not the main problem in this densely populated urban area because people could choose and use alternative health services according to their ability and willingness to pay. The corollary, however, was an inequitable pattern of out-of-pocket health expenditure by income quintile and per capita. The underprivileged were more likely to pay out of their own pocket for their health problems, and to pay out of proportion to their household income when compared with more privileged groups. Furthermore, the underprivileged were least likely to be covered by government health benefit schemes, in contrast in particular to civil servants, who paid less out of pocket and did not contribute to their medical benefit fund. The private health sector (private clinics and private hospitals) was the major provider of health care to urban dwellers for both outpatient and inpatient services. Policy options for the short and long term to improve the equity of payment systems for health care are discussed. © 1997 Elsevier Science Ltd

**Key words**—equity, health finance, health expenditure, private health care, Thailand

Table 6. Out-of-pocket health expenditure per capita by socio-economic group and health benefit cover (Baht 1991/2)

Socio-economic group	Health expenditure/ capita		
	N	After reimbursement	% reimbursed
Household income quintile			
1	625	1734.9	35.2
2	707	436.6	35.1
3	749	482.1	62.6
4	761	325.8	69.8
5	862	1840.8	55.2
Household head's education			
No education	249	404.6	62.7
Primary	1313	834.4	30.7
Secondary	847	1012.7	44.4
Vocational	470	373.5	91.0
University	790	1107.3	44.4
Total	3849	932.4	52.0

About two-thirds of family members in the poorest quintile were not covered ... In contrast, 38% of the richest quintile were uncovered ... [H]igher-income families, with state assistance, received greater protection from out-of pocket payments than the poorer and lower occupational groups

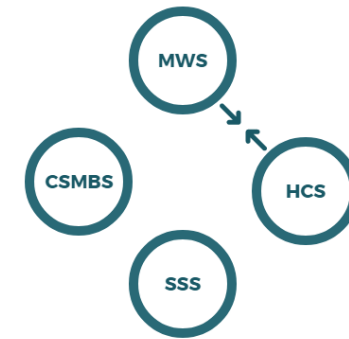
## Timeline

# Universal Health Coverage Scheme

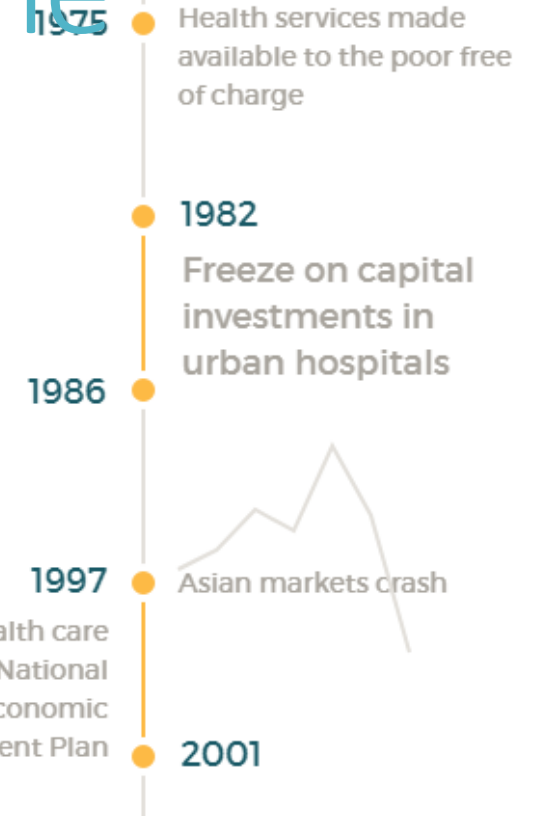
### National Health Security Act in 2002

- Merge MWS + HCS
- Coverage expansion to enrol additional 14m
- Major financing reform: purchaser provider split & “strategic” purchasing
- Supply side budgeting => outcome
- Comprehensive package – OP, IP, P&P, Medicines
- Introduction of additional benefits over time  
e.g. Anti-Retrovirals, Renal Replacement Therapy, new expensive medicines

### Merging Resources



The government decided to pool the budgets for the Medical Welfare Scheme (MWS) and the Health Card Scheme (HCS)

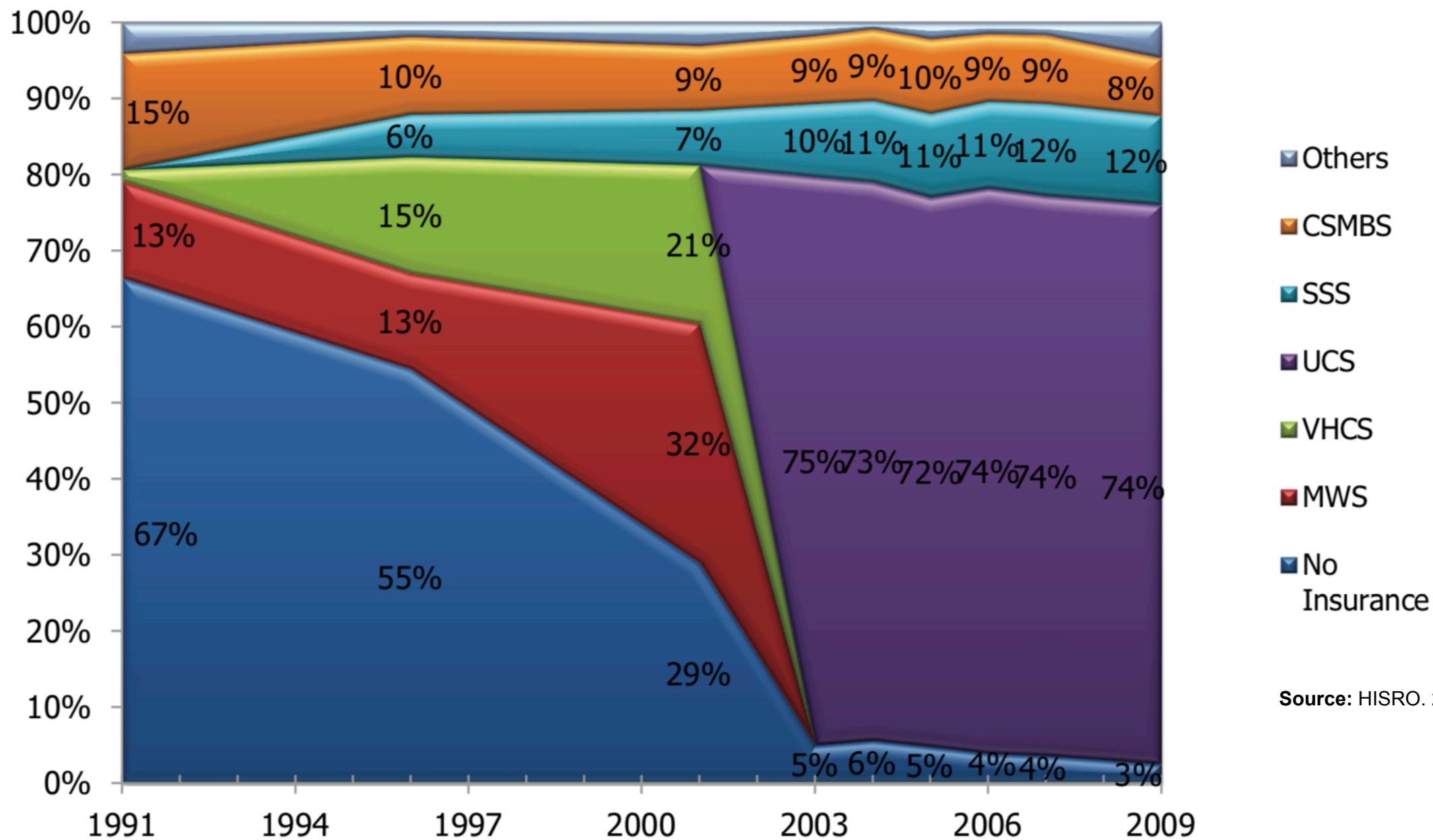


UCS was the knot at the end of a long string of efforts to improve equity in health

<https://openknowledge.worldbank.org/handle/10986/13297>

<http://millionssaved.cgdev.org/case-studies/thailands-universal-coverage-scheme>

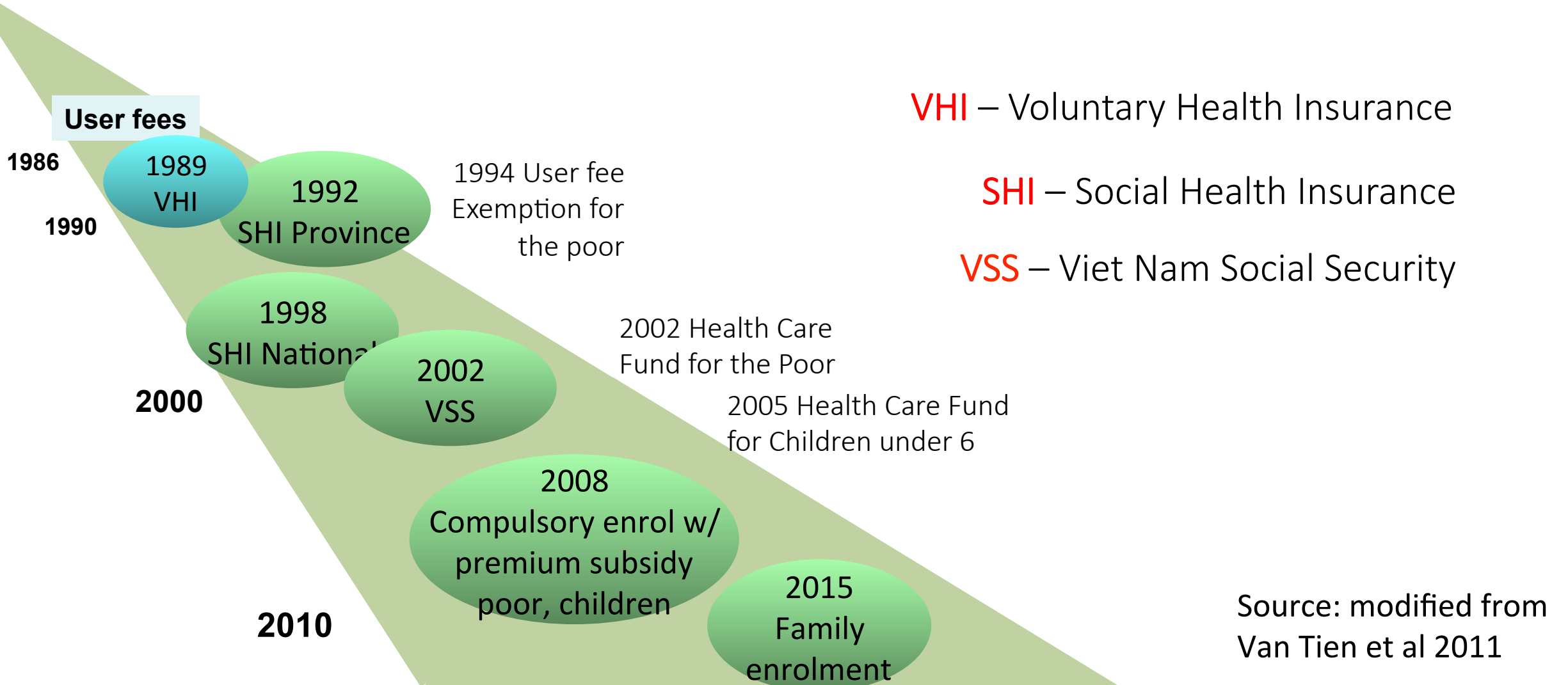
**Figure 1: Health insurance coverage by insurance scheme, 1991–2009**



Source: HISRO. 2012. 7

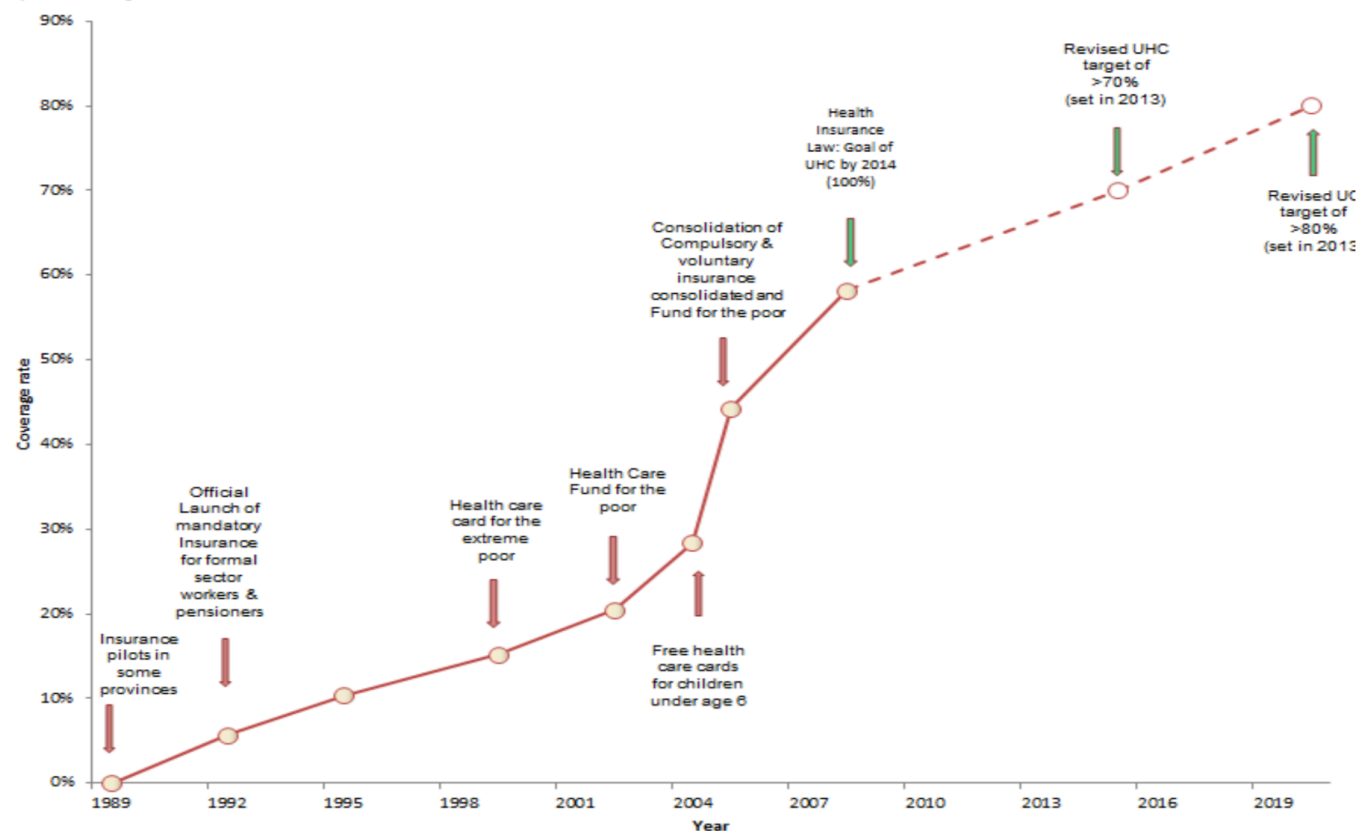


# Expansion of Social Health Protection in Viet Nam

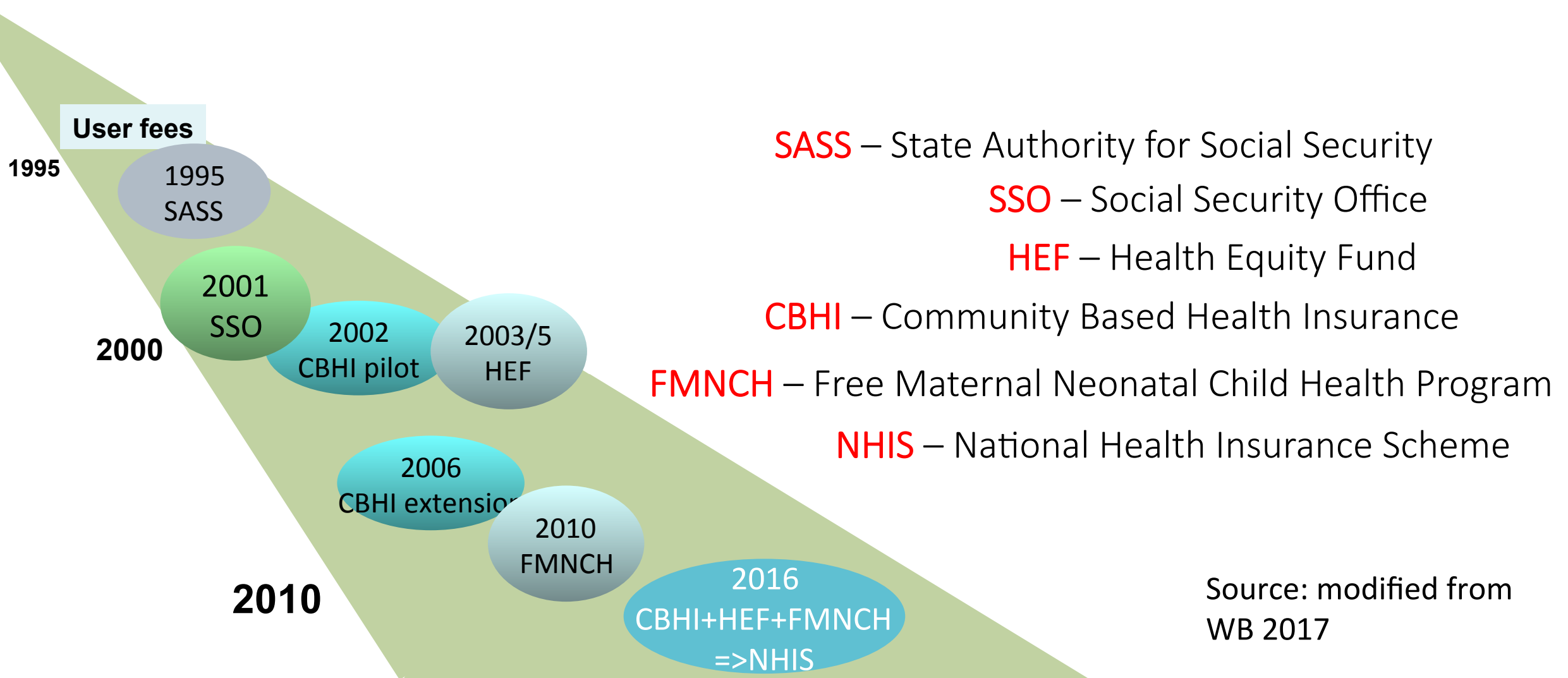


# Viet Nam: Achieving 80% coverage by 2020

Figure 2.1 Sequence of UHC-oriented Reforms

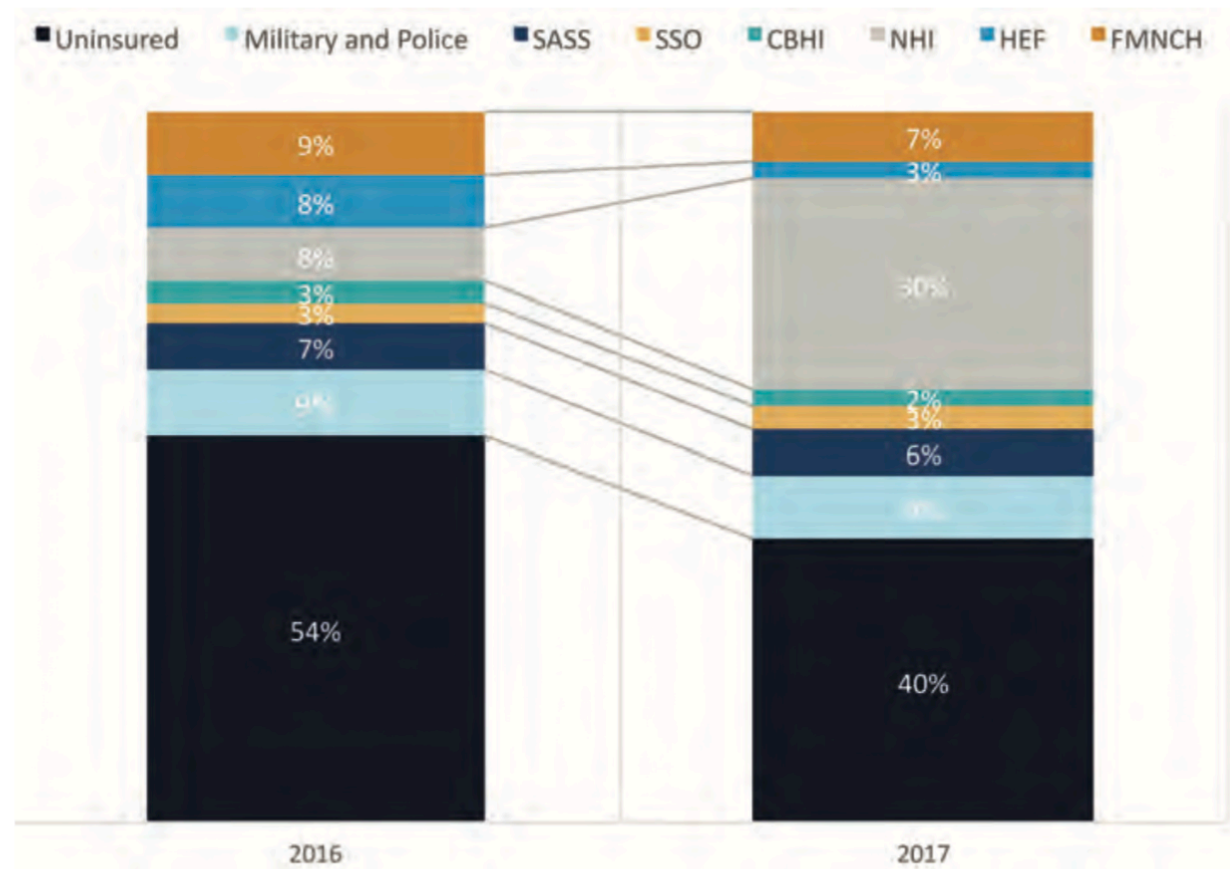


# Expansion of Social Health Protection in Laos



Laos's goal:  
Achieving  
80% coverage  
by 2020

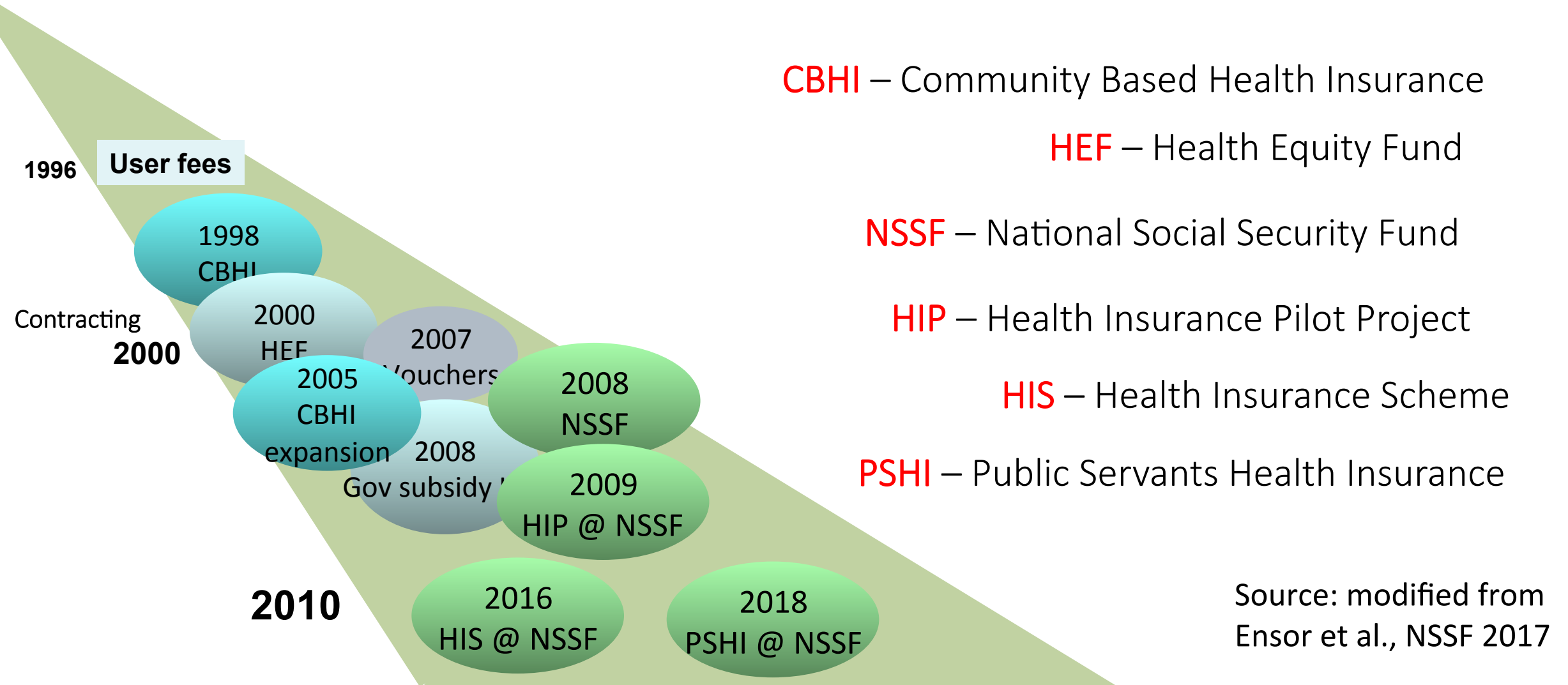
Figure 3-14: Population Coverage by SHI Scheme, 2016-17



Source: MoH 2017b.

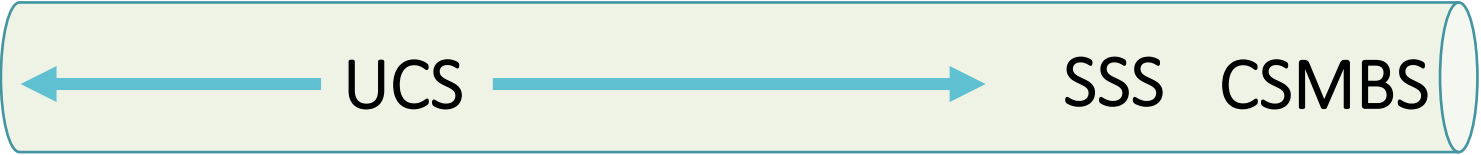
Source: WB 2017

# Expansion of Social Health Protection in Cambodia





Thailand



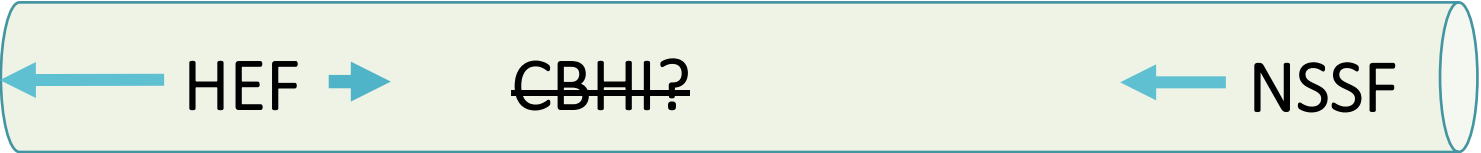
Vietnam



Laos



Cambodia



# Pathway for social health protection expansion

Usually start with formal sector, gov employees & the poor

Difficulty with informal sector

Adverse selection for voluntary financing, difficult even with subsidies

Political vs technical process



# Pathways towards UHC

	Initial pathway through cube			Efficiency in producing health or FRP	
	% of population covered by publicly financed interventions	Initial fraction of interventions covered by public financing	Copayments or premiums	Health	FRP
1. Progressive universalism (initially targets poor people by choice of interventions)	100%	+	No	++	+++
2. Progressive universalism (initially targets poor people by exempting them from insurance premiums and copayments)	100%	++	Yes (poor people exempt)	+++	++
3. Balanced pathway to universal health coverage	Depends on size and use of public finance	++	Yes	++	+
4. Private voluntary insurance (with some public finance)	Depends on size and use of public finance	+	Yes	+	+
5. Public finance of catastrophic coverage	Depends on size and use of public finance	+	Depends on design	+	++

Source: Jamison et al. [The Lancet 2013; 382:1898-1955](#) (DOI:10.1016/S0140-6736(13)62105-4)

# Evidence on Social Health Protection for Vulnerable Populations

# Prelim results from four-country study on social health protection among vulnerable populations

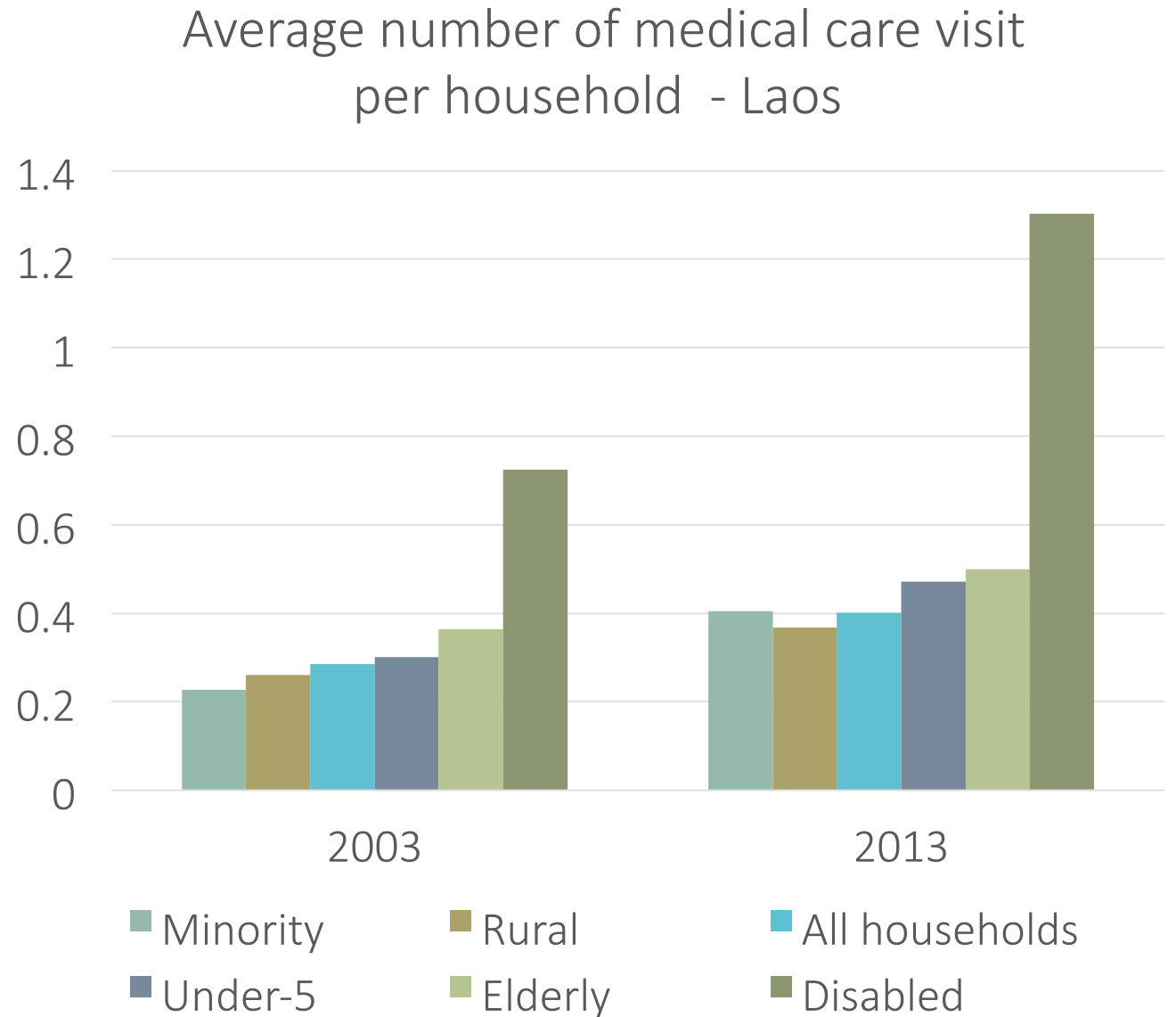
**Members:** Piya Hanvoravongchai, Bart Jacobs, Hoang Van Minh, Emiko Masaki, Eko Setyo Pambudi, Nirun Intarat, Wasin Laohavinij, Somil Nagpal

**Data source:** data from nationally representative cross-sectional socioeconomic and health surveys

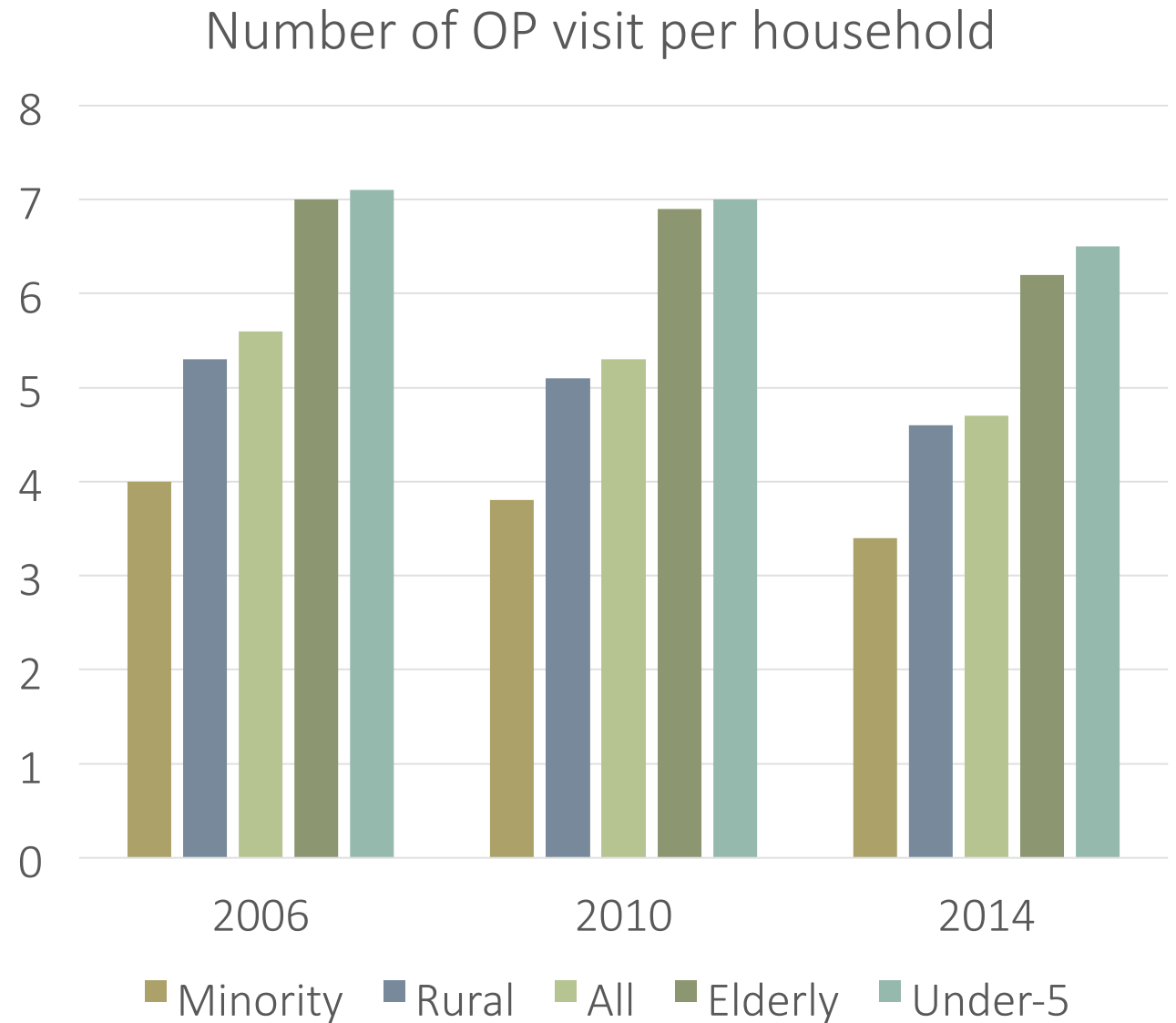
**Analysis:** incidence of self-reported illnesses, prevalence of health care utilization, and the magnitude of health care payments among vulnerable individuals and households across the four lower-Mekong countries

Note: Limitation on data availability to identify vulnerable populations

# Medical care utilization: Laos

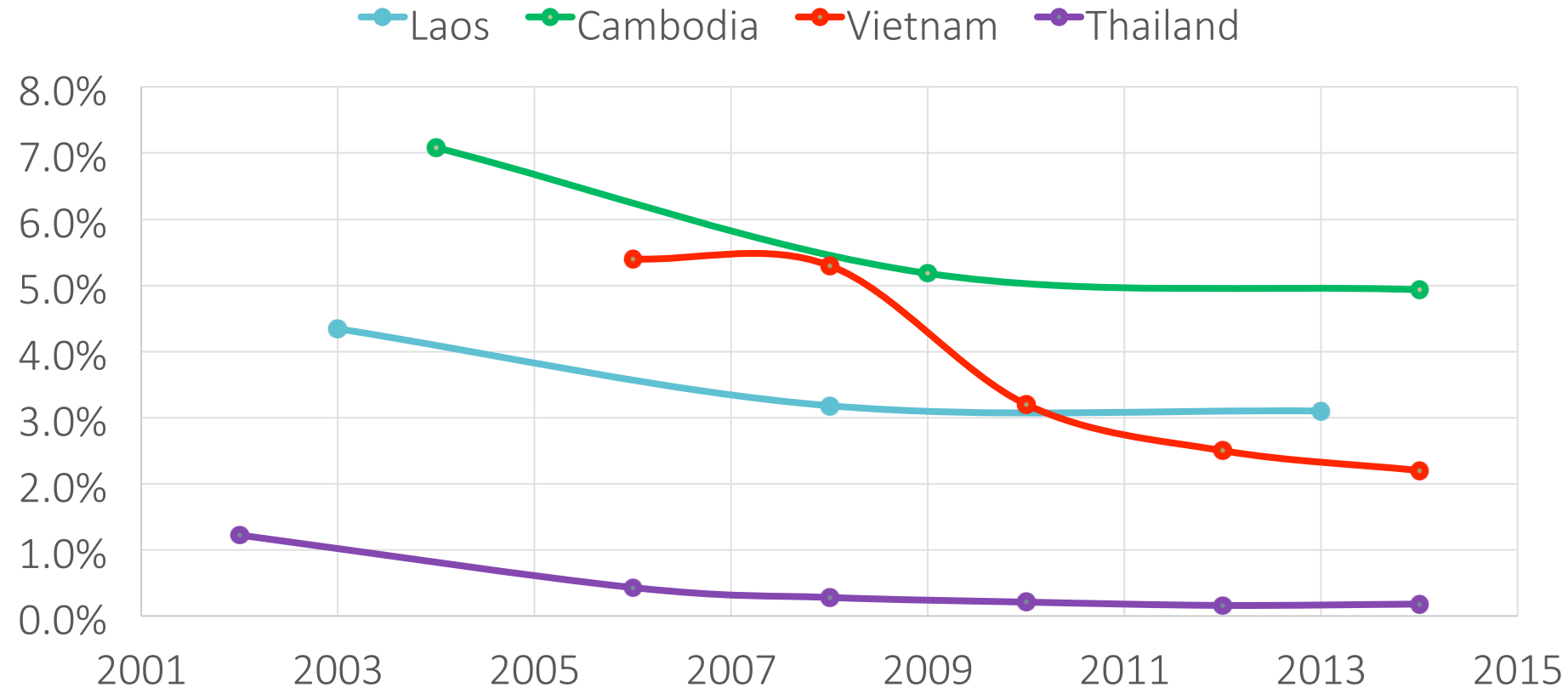


# OPD utilization: Vietnam



# % Households with catastrophic health spending

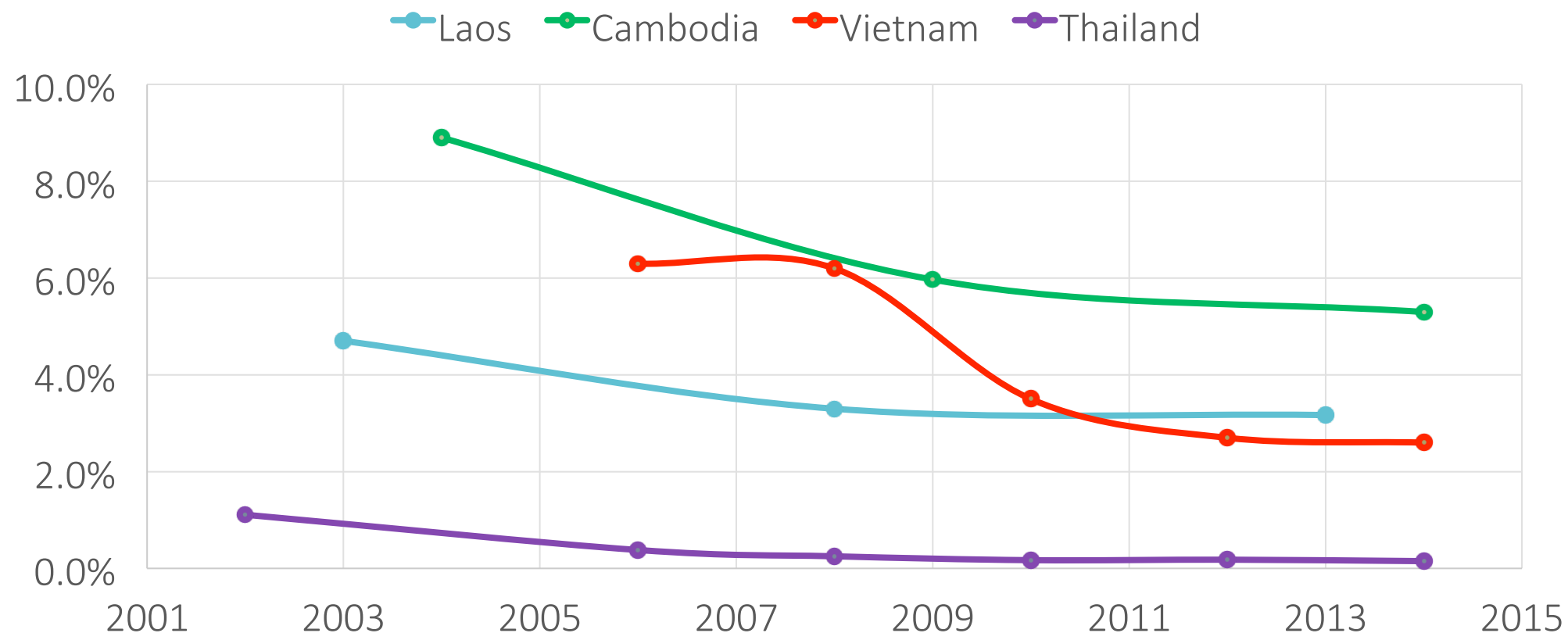
## All households



Note: threshold for catastrophic at 40% of non-subsistence household expenditure (WHO method)

# % Households with catastrophic health spending

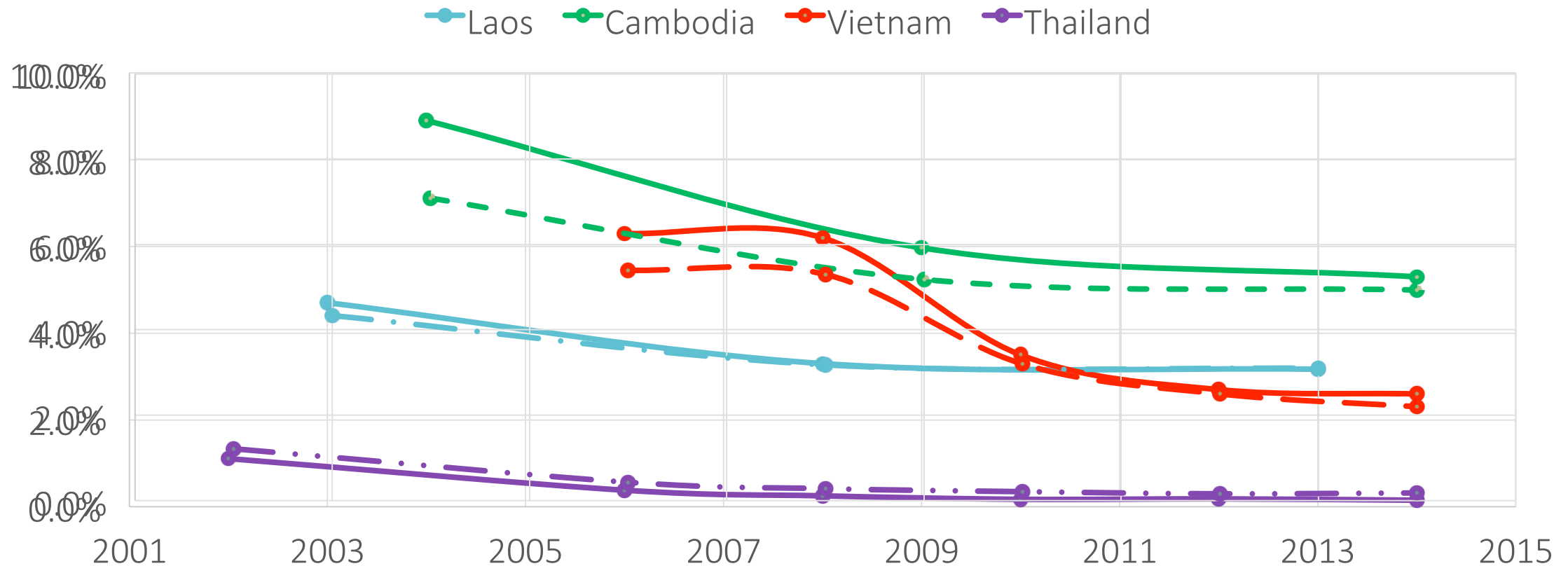
## Rural households



Note: threshold for catastrophic at 40% of non-subsistence household expenditure (WHO method)



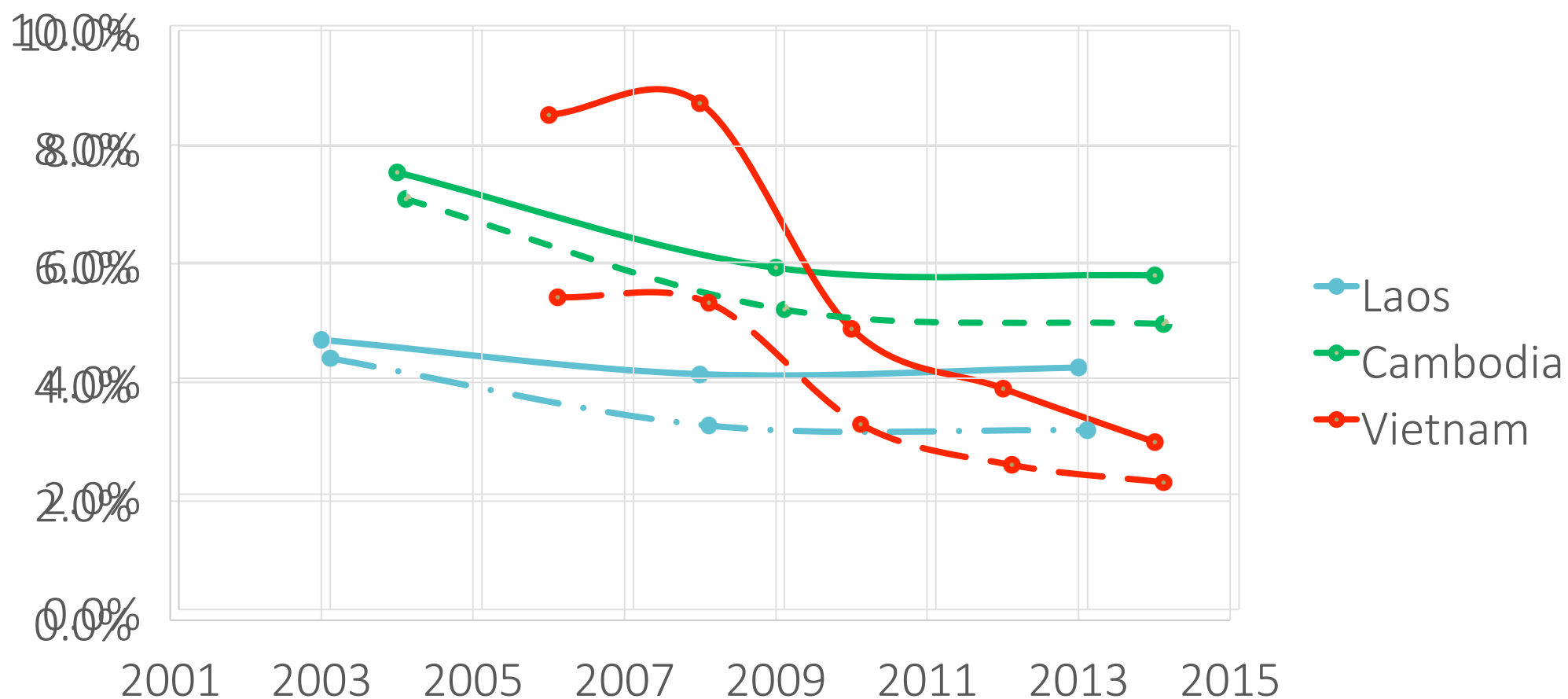
# Comparing % catastrophic rural vs all households



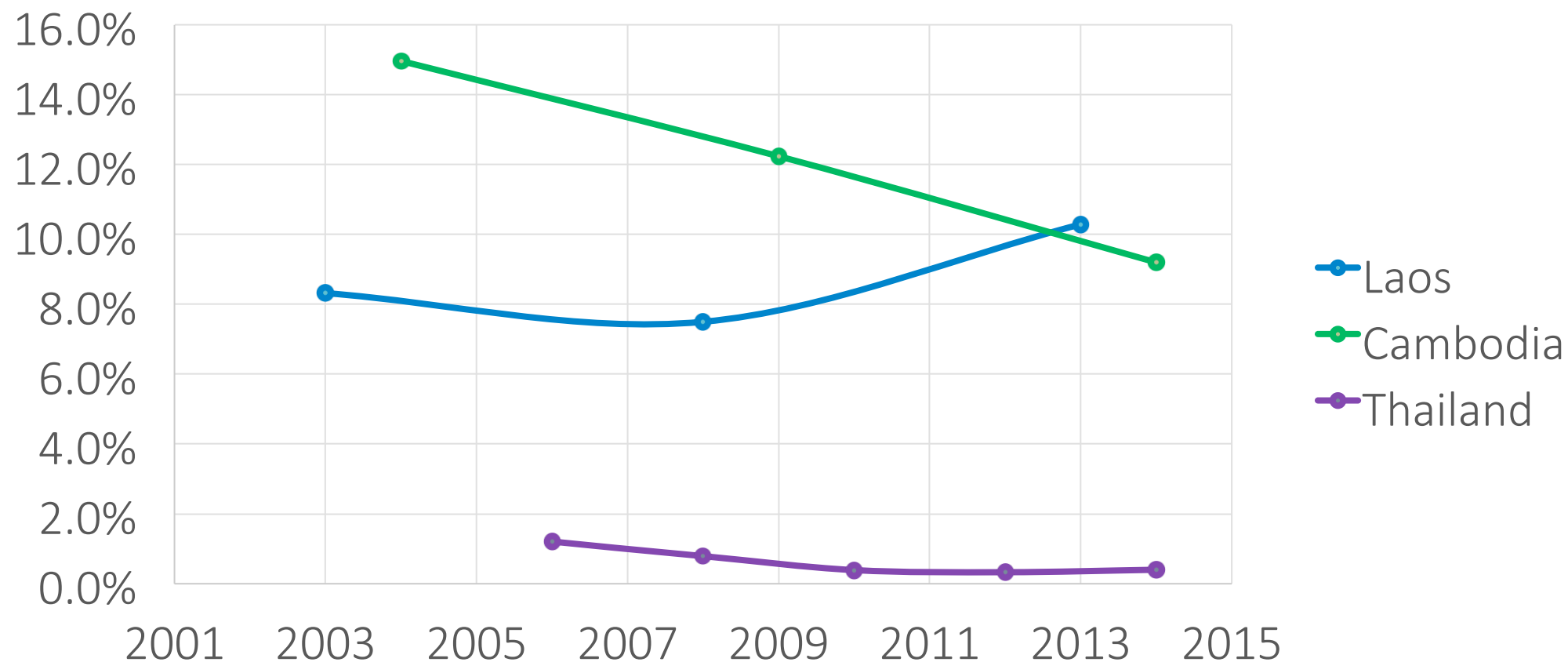
Note: threshold for catastrophic at 40% of non-subsistence household expenditure (WHO method)

# % Households with catastrophic health spending

## Households with elderly member vs all



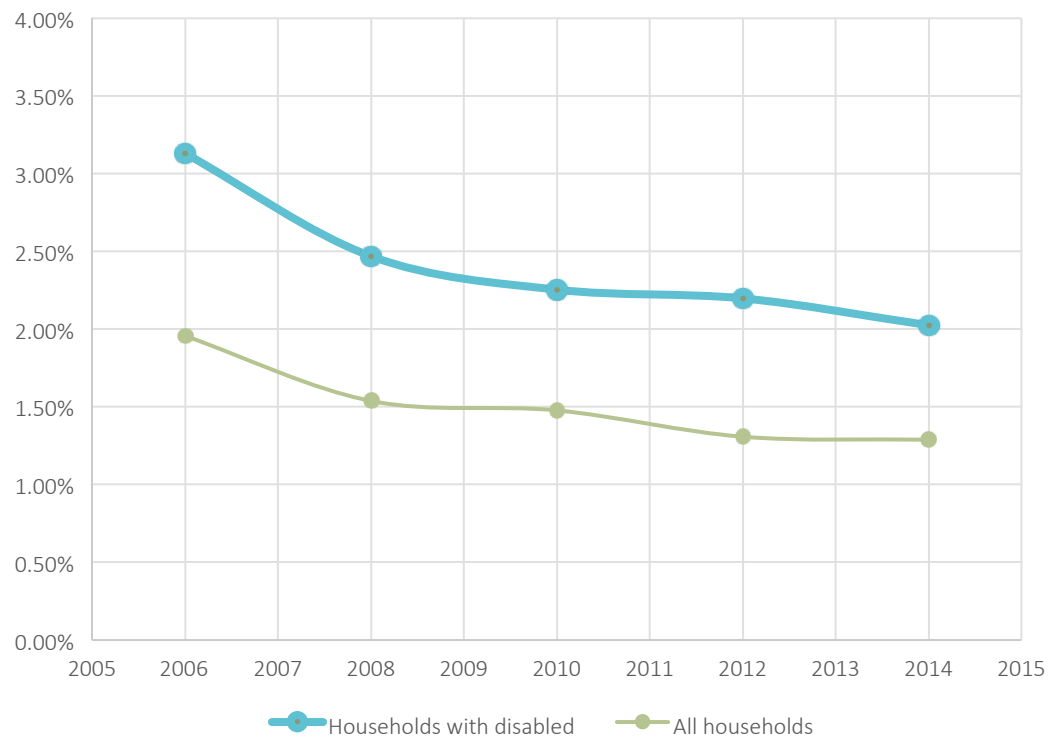
# % Households with catastrophic health spending Households with disabled family member



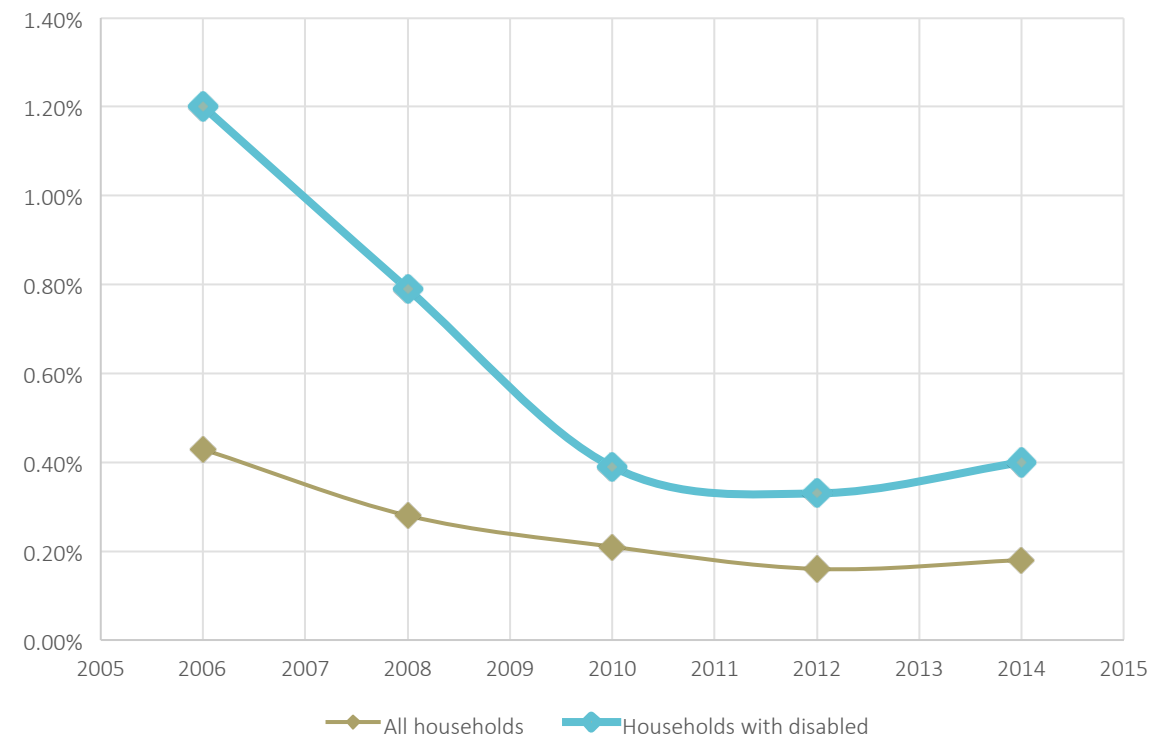
Note: threshold for catastrophic at 40% of non-subsistence household expenditure (WHO method)

# Thailand – household with disabled members vs all households

% OOP shared Consumption Expenditure



% Household with catastrophic health spending



# Those not being counted: Immigrant and emigrant populations

Country	Cambodia	Lao PDR	Myanmar	Viet Nam	Thailand
General trend	Sending	Sending	Sending	Sending	Receiving
Number of immigrants	73,963	22,244	73,308	72,793	3,913,258
Immigrants as % of national population	0.5	0.3	0.1	0.1	5.8
Estimated number of emigrants	1,187,842	1,345,075	2,881,797	2,558,678	854,327
Main destination countries for emigrants	Malaysia, Thailand	Thailand	Thailand	Japan, Republic of Korea, Malaysia	Brunei, Malaysia, Myanmar, Saudi Arabia, Singapore

Source: McMichael & Healy 2016 <https://doi.org/10.1080/16549716.2017.1271594>

# Health Service System Expansion in Public Sector

## Review

### Health systems development in Thailand: a solid platform for successful implementation of universal health coverage

Ving Tangcharoensathien, Waranan Witotharpapongpakdi, Warisa Panichkriangkrai, Walaiyorn Patcharamasatit, Anne Mills

Thailand's health development since the 1970s has been focused on investment in the health delivery infrastructure at the district level and below and on training the health workforce. Deliberate policies increased domestic training capacities for all cadres of health personnel and distributed them to rural and underserved areas. Since 1975, targeted insurance schemes for different population groups have improved financial access to health care until universal health coverage was implemented in 2002. Despite its low gross national income per capita in Thailand, a bold decision was made to use general taxation to finance the Universal Health Coverage Scheme without relying on contributions from members. Empirical evidence shows substantial reduction in levels of out-of-pocket payments, the incidence of catastrophic health spending, and in medical impoverishment. The scheme has also greatly reduced provincial gaps in child mortality. Certain interventions such as antiretroviral therapy and renal replacement therapy have saved the lives of adults. Well-designed strategic purchasing contributed to efficiency, cost containment, and equity. Remaining challenges include preparing for an ageing society, primary prevention of non-communicable diseases, law enforcement to prevent road traffic mortality, and effective coverage of diabetes and tuberculosis control.

#### Thailand: context, health achievements, and challenges

Thailand has become internationally known for its success with universal health coverage (UHC) policy and health development.<sup>1</sup> In this Review, we analyse the historical evolution of health systems development that culminated in the implementation of UHC in 2002, focusing on the primary health-care infrastructure, health workforce training and distribution, and the extension of financial risk protection to different target populations. We also analyse the achievements of UHC and factors contributing to these achievements. Although the six building blocks of health systems<sup>2</sup> are interlinked and contribute collectively to the successful implementation of UHC, here we focus on the important elements of the health delivery system, health workforce development, and financing reforms towards UHC.

We draw on an extensive review, analysis, and synthesis of evidence from published and grey literature (eg, government reports) in the areas of health systems development, health workforce, financial risk protection, outcomes of UHC, and health and health systems challenges. Lessons drawn from this Review will aid policy makers in low-income and middle-income countries in their quest to achieve UHC as part of their commitment to the Sustainable Development Goals (SDGs).

The Kingdom of Thailand is at the centre of the Indochina peninsula, with land bordered by Myanmar, Laos, Cambodia, and Malaysia (figure 1). In 2017, the total surface area of 513 120 km<sup>2</sup> housed a population of 68.9 million people.<sup>3,4</sup> Politics have been quite unstable, with frequent military takeovers since the 1932 democratic revolution. The current military government has been in power since 2014. According to the Worldwide Governance Indicators, political stability has deteriorated, with the percentile rank down from 58% in 1996, to 16% in 2015 (the higher the rank, the better the governance). Ranking for control of corruption is low and deteriorated from

55% to 43% between 1996 and 2015. Although the Thai Government has been relatively stable, the ranking of its effectiveness only increased from 66% to 65% during the same period.<sup>5</sup>

#### Economic and health development

Periods of rapid economic growth between the 1960s and 1990s resulted in a 7.5% per annum increase in gross domestic product (GDP). However, Thailand had three macroeconomic crises and related structural adjustments between the 1970s and the 2000s: the first (1973–75) and second (1979–85) oil crises; and the 1997–99 currency crisis. The second oil crisis, which saw oil prices in 1979 increase by 131% to US\$29.92 per barrel, lasted longer than the first oil crisis and resulted in macroeconomic instability and slow GDP growth. The 1997 Asian economic crisis was triggered by the collapse of Thailand's financial stock market. It took more than a decade for the

#### Search strategy and selection criteria

We searched the scientific literature systematically and within the framework of this Review's main objectives: how health systems development has contributed to the implementation of universal health coverage; what are the outcomes of universal health coverage; what were the processes of expansion of financial risk protection to different population groups until the whole population was covered. We searched Google Scholar for literature relating to health systems development, with a specific focus on health delivery systems, primary health-care development, and health workforce training and retention. We reviewed both published and grey literature in English and Thai. Literature related to socioeconomic development, burden of disease, challenges associated with non-communicable diseases, alcohol, and road safety, adult mortality, and the contextual background were searched for and synthesised from World Health Statistics and from global reports on tuberculosis, road safety, and non-communicable diseases. World Development Indicators were used for international comparisons. Evidence related to outcomes of universal health coverage and the Universal Health Coverage Scheme was retrieved only from peer-reviewed, published literature that was scrutinised for quality of analysis before use.

Published Online  
January 23, 2018  
[http://dx.doi.org/10.1016/S2468-2667\(18\)30198-3](http://dx.doi.org/10.1016/S2468-2667(18)30198-3)  
International Health Policy  
Program, Ministry of Public  
Health, Northumbria, Thailand  
(V Tangcharoensathien PhD,  
W Witotharpapongpakdi MSc,  
W Panichkriangkrai PhD,  
W Patcharamasatit PhD,  
and A Mills PhD of the  
Department of Health, Behavior,  
and Society, Johns Hopkins  
University, Baltimore, MD, USA)  
Correspondence to:  
Dr Ving Tangcharoensathien,  
International Health Policy  
Program, Ministry of Public  
Health, Northumbria, 12000,  
Thailand;  
[ving@happ.jhu.edu](mailto:ving@happ.jhu.edu)

1962–76 Expanding Coverage of Provincial Hospitals

1977–1987 4<sup>th</sup> & 5<sup>th</sup> National Economic and Social Development Plan – strengthening primary health care – building more district hospitals & health centres

1990 Full coverage of district hospitals (3–50,000)

1992–2002 Decade of health centre development

2000s Health centres in all subdistricts (3,000–5,000)

# Those usually not considered - migrants

Increasing movement within & across countries

- Rural - urban migration
- Cross country migration

Majority engaged in informal sector work

Potential areas of action:

- Flexibility in location for social health protection / benefits
- Migrant health insurance scheme – Thailand
- Roaming health insurance – cross border health coverage: ADB Eduardo Banzon



# Overseas Migrants

- (1) social security system 0.5 million
  - (2) temporary permission – one stop service compulsory migrant health insurance
  - (3) Other undocumented / illegal migrants – purchase at public hospitals
- MOPH Migrant Health Insurance Scheme
- Benefit: medical care, P&P
- Cost in 2018: 3,200 Baht per adult,  
730 Baht for each migrant's child

## Results of 'One-stop-service' in 2014 Migrant Registration During NCPO Policy

- 1,626,235 cards issued
- MWs= 1,533,675 (94%), Dependents= 92,560 (6%)
  - Myanmar 623,648 (40.6%)
  - Cambodia 696,338 (45.4%)
  - Lao PDR 213,689 (13.9%)



Source: Sirilak & Prakongsai 2015



# Beyond health insurance:

## ILO - Deficits in universal health protection

Country	% without health coverage (1)				% not covered due to financial deficit (2)				% not covered due to health staff deficit (3)			
	Total	Urban	Rural	Year*	Total	Urban	Rural	Year*	Total	Urban	Rural	Year*
Cambodia	73.9	65.7	75.9	2009	90.8	87.7	91.4	2010	75.2	67.3	77.2	2010
Viet Nam	39	1	56	2010	82.4	81.3	82.9	2010	47.7	44.5	49.1	2010
Thailand	2	1	3	2007	27.1	25.5	27.7	2005	57.9	57	58.3	2005
Laos	88.4	85.2	90	2009	90.7	81.5	92.9	2011	76.1	55.8	86.7	2011

(1) % of population without legal health coverage (health insurance or stat provided free health care)

(2) % of population not covered due to financial resource deficit (threshold: US\$239 per person per year)

(3) % of population not covered due to health professional staff deficit (threshold: 41.1 per 10,000 population)

# Final notes

UHC not only about health insurance coverage

But access to health care not easy to measure

Low catastrophic health spending could be due to access barriers not captured

Other factors affecting health access beyond social health protection should be considered

Assessing implications on informal sector and vulnerable populations – necessary even though hard to identify and measured



# Thank You!

Piya.h@chula.ac.th

# Informal Employment in Thailand

STATISTICS	THAILAND
Informal employment as % of total employment (2013)	64%
Self-employment as % of total employment (2014)	54%
Informal employment as % of agricultural employment (2013)	94%
Informal employment as % of non-agricultural employment (2013)	43%



# Health Workforce Strategies



1967 - 3 year mandatory rural health-service placement

1975 – Rural hardship allowance

1994 Rural recruitment, training and hometown placement e.g. Collaborative Project to Increase Production of Rural Doctors, CPIRD

1995 - Non-private practice allowance

2000s – Training capacity expansion including ODOD ONOT, Regional & district hospitals as clinical training centres

## **Remedies**

### **Development of rural infrastructure**

- communication
- schools
- facilities/logistics

### **Education**

- rural recruitment/training/placement
- opportunity for continuous education
- special quotes for training
- support R&D and qualification

### **Social**

- special award; career path
- civic movement

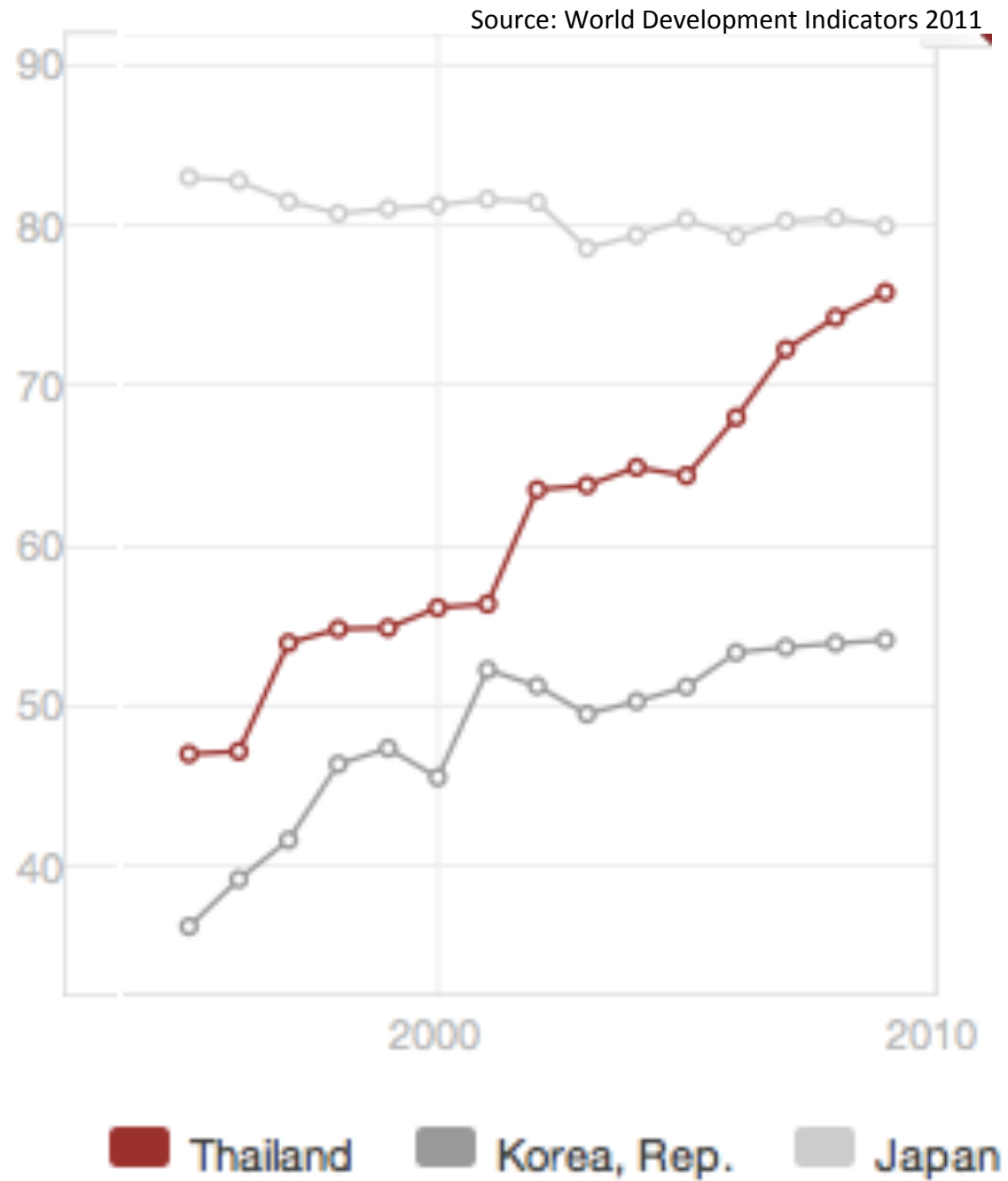
### **Financial**

- hardship allowance plus other incentives
- capitation payment systems
- high tuition fees paid by rural works
- compulsory public work

Wibulpolprasert 2003

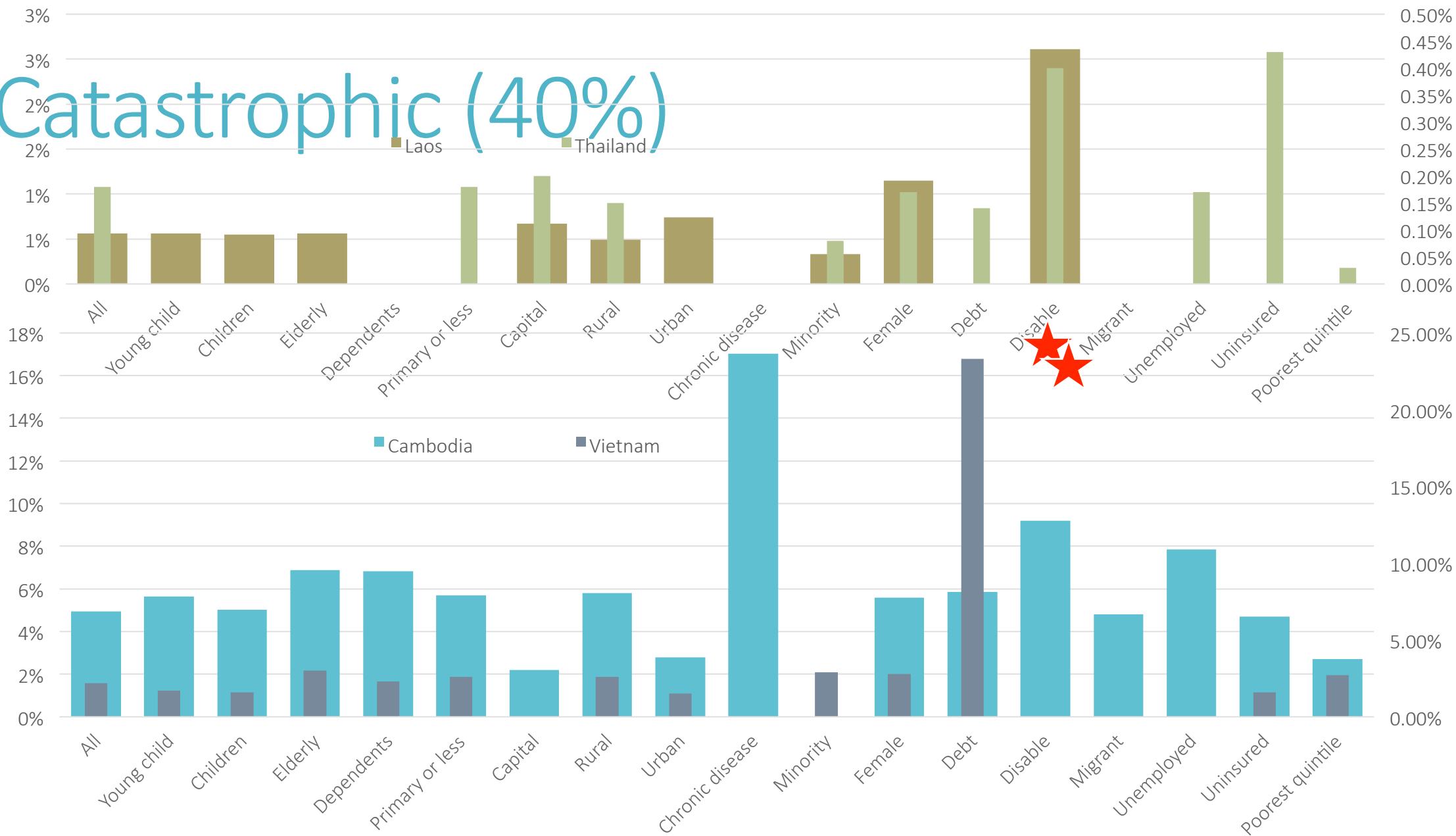
<https://human-resources-health.biomedcentral.com/articles/10.1186/1478-4491-1-12>

# Public Health Expenditure % of Total Health Expenditure





# Catastrophic (40%)



# Impoverishment %

