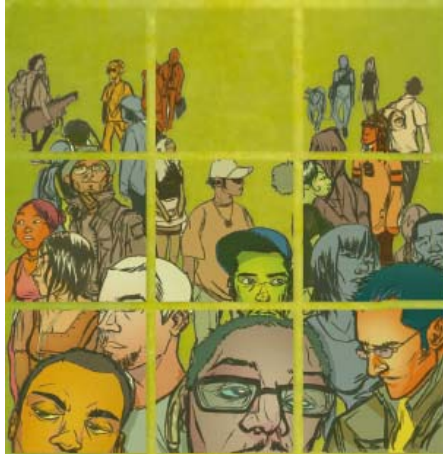


Community Health Insurance and Universal Coverage: Multiple paths, many rivers to cross

Werner Soors, Narayanan Devadasan,
Varatharajan Durairaj and Bart Criel

**World Health Report (2010)
Background Paper, 48**



© World Health Organization, 2010

All rights reserved.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement. The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters. All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The findings, interpretations and conclusions expressed in this paper are entirely those of the author and should not be attributed in any manner whatsoever to the World Health Organization.



Community Health Insurance and Universal Coverage: Multiple paths, many rivers to cross

World Health Report (2010) Background Paper, No 48

Werner Soors¹, Narayanan Devadasan², Varatharajan Durairaj³ and Bart Criel¹

¹ Unit of Health Policy and Financing, Institute of Tropical Medicine, Antwerp, Belgium

² Institute of Public Health, Bangalore, India

³ Department of Health Systems Financing, World Health Organization, Geneva, Switzerland

CONTENTS

Framing and assessing Community Health Insurance within universal coverage	1
The scope of Community Health Insurance in low- and middle-income countries	4
Community Health Insurance in Africa	7
<i>Community Health Insurance in West Africa</i>	9
Senegal	11
Mali	13
Guinea	19
Burkina Faso	21
Benin	22
Togo	24
Cameroon	25
Niger	26
Mauritania	27
Ghana	29
<i>Community Health Insurance in East and Central Africa</i>	35
The United Republic of Tanzania	36
Kenya	38
Uganda	39
Rwanda	41
Burundi	46
The Democratic Republic of Congo	50
Community Health Insurance in Asia	53
China	54
India, Nepal and Bangladesh	63
Cambodia	73
The Lao People's Democratic Republic	77
The Philippines	79
Indonesia	80
Community Health Insurance in Latin America	83
Promises and challenges of Community Health Insurance at the crossroads of universal coverage	84
References	88

ABBREVIATIONS

ACCORD	Action for Community Organisation, Rehabilitation and Development (development NGO, Gudalur, Tamil Nadu, India)
AMEL	<i>Assurance Maladie des Elèves</i> (CHI scheme for school children, Mali)
AMO	<i>Assurance Maladie Obligatoire</i> (mandatory health insurance, Mali)
AMV	<i>Assurance Maladie Volontaire</i> (standard CHI package from UTM, Mali)
ANC	Antenatal care
ASaCo	<i>Association de Santé Communautaire</i> (community health board, Mali)
Askeskin	<i>Asuransi Kesehatan Masyarakat Miskin</i> (Health Insurance for Poor Population, targeted through a health benefits card; Indonesia, 2004-2005 on)
ASHWINI	Association for Health Welfare in the Nilgiris (NGO, hospital and CHI scheme under ACCORD, Gudalur, Tamil Nadu, India, 1992 on)
BAIF	Bharat Agro Industries Foundation (development and research NGO in India, 1967 on; with a CHI scheme in rural Pune, Maharashtra, 2001 on)
BOF/FBS	<i>Belgisch Overlevingsfonds/le Fonds Belge de Survie</i> (Belgian Survival Fund)
BPL	Below-poverty-line (referring to the poverty threshold used by the government of India)
BTC/CTB	<i>Belgische Technische Coöperatie/Coopération technique belge</i> (development cooperation agency, Belgium)
BMI	Basic Medical Insurance (compulsory urban health insurance, also known as UEBMI, [formal sector and government employees], China, 1998 on)
CAAFW	Cambodian Association for Assistance to Families & Widows (Cambodian NGO, 1998 on; with a HEF, 2000 on, and a CHI scheme, 2003 on)
CAM	<i>Carte d'Assurance Maladie</i> (health insurance card, CHI scheme, Burundi, 1984 on)
CBHI	Community-based health insurance (widely used synonym for CHI)
CCS	Civil Servants' Scheme (social health insurance scheme, public formal sector, Lao PDR, 2006 on)
CGHS	Central Government Health Scheme (social health insurance scheme for civil servants, India, 1954 on)
CHE	Catastrophic Health Expenditure
CHF	Community Health Fund (district-based CHI scheme, Tanzania, 1996 on)
CHI	Community Health Insurance
CIC	Co-operative Insurance Company (Kenya, operates CHI schemes, 2001 on)
CIDR	<i>Centre International de Développement et de Recherche</i> (development and research agency, active in 12 African countries, France)

CMDT	<i>Compagnie Malienne pour le Développement des Textiles</i> (national cotton company, Mali)
CMS	Cooperative Medical Scheme (village CHI scheme, expression of RMCS, China)
CNC	<i>Cadre National de Concertation des acteurs du développement des mutuelles de santé</i> (national forum of exchange between CHI actors, several countries)
CONSAMUS	<i>Concertation Nationale des Structures d'Appui aux Mutuelles de Santé</i> (national forum of exchange between CHI actors, Benin)
CSCom	<i>Centre de Santé Communautaire</i> (community health centre, Mali)
Dana sakit	Sickness Funds (experimental CHI scheme, Solo, Indonesia, 1963-1969)
Dana sehat	Health Funds (CHI schemes, Indonesia, 1969 on)
DFID	UK Department for International Development
Dhan	Development of Human Action Foundation (development NGO, Tamil Nadu, India, 1997 on)
DPS	<i>Direction de la Protection Sociale et de l'économie solidaire</i> (directorate of social protection, Mali)
DWMHI	District Wide Mutual Health Insurance (district-based scheme under NHIS, Ghana, 2005 on)
EICV	<i>Enquête Intégrale sur les Conditions de Vie des ménages au Rwanda</i> (Integrated Living Conditions Survey, Rwanda; EICV1 2000-2001, EICV2 2005-2006)
ESIS	Employees' State Insurance Scheme (social health insurance scheme for formal-sector workers, India, 1948 on)
FAM	<i>Fonds d'Assistance Médicale</i> (social assistance in health, Mali, 2004 on)
Fbu	<i>Franc burundais</i> (Burundian franc, monetary unit)
GIS	Government Insurance Scheme (social health insurance scheme for civil servants, gradually integrated into the BMI from 1998 onwards, China)
GRET	<i>Groupe de recherche et d'échanges technologiques</i> (French NGO, implementing SKY in Cambodia)
GTZ	<i>Gesellschaft für Technische Zusammenarbeit</i> (development cooperation agency, Germany)
HEF	Health Equity Fund (social fund for free access to healthcare for the extreme poor)
HmI	Health micro-Insurance
HMO	Health Maintenance Organisation
ILO	International Labour Organization
ILO-STEP	Strategies and Tools against social Exclusion and Poverty (programme of the International Labour Organization)
IRDA	Insurance Regulatory and Development Authority (India)
JPKM	<i>Jaminan Pemeliharaan Kesehatan Masyarakat</i> (health maintenance organisations, Indonesia, 1992 on)
JRHIS	Jowar Rural Health Insurance Scheme (CHI scheme in Maharashtra, India, 1981 on)
Kartu sehat	Health benefits card for the poor

	(Indonesia, 1998 on)
Karuna Trust	Development NGO in Karnataka, India (with CHI scheme, 2002 on)
KCBHFA	Kenya Community Based Health Financing Association (platform for CHI actors, Kenya, 2002 on)
KKPKP	<i>Kagad Kach Patra Kashatakari Panchayat</i> (waste pickers collective in Pune, Maharashtra, India, 1993 on, with a CHI scheme, 2003)
KKVS	<i>Kadamalaj Kalanjiam Vattara Sangam</i> (micro-finance programme and CHI scheme of the Dhan Foundation, Tamil Nadu, India, 2000 on)
La Concertation	<i>La Concertation entre les acteurs du développement des mutuelles de santé en Afrique</i> (CHI network, francophone Africa)
LIS	Labour Insurance Scheme (social health insurance scheme for state-owned enterprise workers, gradually integrated into the BMI from 1998 onwards, China)
MSAG	<i>Mutuelles de Santé de l'Archidiocèse Gitega</i> (CHI network, Burundi)
MCSDN	<i>Mutuelle Communautaire de Santé de Dar-Naïm</i> (CHI scheme in Dar-Naïm, Nouakchott, Mauritania, 2003 on, with a HEF added, 2005 on)
MFA	Medical Financial Assistance (social assistance in health, 2003 on, urban & rural China)
MHO	Mutual Health Organisation (synonym for CHI scheme, analogue of the French <i>mutuelle de santé</i>)
MURIGA	<i>Mutuelle pour les Risques liés à la Grossesse et à l'Accouchement</i> (CHI scheme for pregnant women, Guinea)
MUSCABU	<i>Mutuelles de Santé des caféiculteurs du Burundi</i> (CHI network, Burundi)
MUTCO	<i>Mutuelle Cotonnière de Nongon</i> (rural CHI scheme, Mali)
Navsarjan Trust	Development NGO in Gujarat (with CHI scheme, 1999 on)
NCEUS	National Commission for Enterprises in the Unorganised Sector (originally called National Commission for Enterprises in the Unorganised/Informal Sector, India, 2004 on)
NCMS	New Cooperative Medical System <i>also known as</i> new Rural Cooperative Medical System (new RCMS, NRCMS) (voluntary rural health insurance, China, 2003 on)
NDC	National Democratic Congress (political party, Ghana; governed 1993-2000 and 2009-today)
new RCMS	<i>(also NRCMS)</i> new Rural Cooperative Medical System, <i>also known as</i> New Cooperative Medical System (NCMS) (voluntary rural health insurance, China, 2003 on)
NGO	Non-governmental organisation
NHIA	National Health Insurance Act (Ghana, 2003)
NHIC	National Health Insurance Council, 'the Council' (regulating body for health insurance, Ghana, following the 2003 NHIA)
NHIF	National Health Insurance Fund, 'the Fund'

	(financial pool, Ghana, following the 2003 NHIA)
	National Health Insurance Fund (social health insurance scheme for civil servants, Tanzania, 2001 on)
NHIL	National Health Insurance Levy (earmarked portion of VAT, Ghana, following the 2003 NHIA)
NHIS	National Health Insurance Scheme (Ghana, following the 2003 NHIA, started operations in 2005) (Uganda, still in design)
NHS	National Health Service
NIC	National Insurance Company (public insurer, India)
Nidan	Development NGO, social security programme and CHI scheme (Patna, Bihar, India; NGO 1996 on, CHI 1999 on)
NISR	National Institute of Statistics of Rwanda
NPP	New Patriotic Party (political party, Ghana; governed 2001-2008 and introduced the NHIS)
NRHM	National Rural Health Mission (national programme to improve the availability of and access to quality healthcare by the rural poor, India, 2005-2012)
NSHIF	National Social Health Insurance Fund (projected social health insurance scheme, enacted in 2004, Kenya)
NSSF	National Social Security Fund (Cambodia, 2008 on)
NUHM	National Urban Health Mission (national programme to improve the availability of and access to quality healthcare by the urban poor, India, announced in 2008)
PARESOC	<i>Programme d'action régionale pour l'économie sociale</i> (support initiative for the informal sector, in Benin, Burkina Faso and Mali)
PBF	Performance-based financing
PhilHealth	Philippine Health Insurance Corporation (national social health insurance agency, Philippines, 1995 on)
PHR	Partners for Health Reform (USAID project, until 2000)
PHRplus	Partners for Health Reformplus (USAID project, since 2000, also known as Health Systems 20/20)
Plan Sésame	Government exemption scheme for the elderly (Senegal)
PNDS	<i>Plan National de Développement Sanitaire</i> (national health sector development plan, Burundo, 2006-2010)
PNPMS	<i>Programme National de Promotion des Mutuelles de Santé</i> (national programme for the promotion of community health insurance, DR Congo)
PPS	Preferred Provider System
PRIMA	<i>Projet de recherche sur le partage du Risque Maladie</i> (CHI research project, Guinea)
PROMUSAF	<i>Programme d'appui aux Mutuelles de Santé en Afrique</i> (CHI support initiative, in Benin, Burkina Faso, Mali and Senegal)

PSDN	<i>Projet Santé Dar-Naïm</i> (primary health project in Dar Naïm, Nouakchott, Mauritania, with a CHI scheme [MCSDN] and a HEF)
QUIBB	<i>Questionnaire des indicateurs de base du bien-être</i> (Core Welfare Indicators Questionnaire, Burundi, 2006)
RAHA	Raigarh Ambikapur Health Association (NGO – 1969 on – and CHI scheme – 1980 on, Chhattisgarh, India)
RAMA	<i>La Rwandaise d'assurance maladie</i> (social health insurance scheme for civil servants, Rwanda)
RAMED	<i>Régime d'Assistance Médicale</i> (social health assistance for the extreme poor, Mali, 2010 on)
RAMS	<i>Réseau d'appui aux mutuelles de santé de Burkina Faso</i> (CHI support initiative, Burkina Faso)
RAS	<i>Réseau Alliance Santé</i> (CHI support initiative, Benin)
RCMS	Rural Cooperative Medical System (rural health services' financing and organisational design, China)
RMHC	Rural Medical Health Care (experimental voluntary rural health insurance, China, 2003-2006)
RSBY	<i>Rashtriya Swasthya Bima Yojana</i> (national health insurance scheme for BPL people, India, 2008 on)
SEWA	Self-Employed Women's Association (labour union, Gujarat and other states, India)
SHH	Student's Health Home (NGO, hospital and CHI scheme in West Bengal, India, 1952 on)
SHI	Social Health Insurance
SHIELD	Strategies for Health Insurance for Equity in Less Developed countries (research project in Ghana, Tanzania and South Africa, 2006-2010)
SHINE	Social Health Insurance Networking and Empowerment project (GTZ project, the Philippines, 1995-2001)
SKY	<i>Sokapheap Krousat Yeugn</i> (Khmer for Health for Our Families) (CHI scheme, Cambodia, 1998 on)
SSNIT	Social Security and National Health Insurance Trust (social insurance for formal sector workers, Ghana)
SSO	Social Security Organisation (social health insurance scheme, private formal sector, Lao PDR, 2001 on)
TNCHF	Tanzanian Network of Community Health Funds (CHI umbrella organisation, Tanzania, 2003 on)
UCBHFA	Uganda Community Based Health Financing Association (CHI umbrella organisation, Uganda, 1998 on)
UEBMI	Urban Employee Basic Medical Insurance (mandatory urban health insurance [formal sector and government employees], China, 1998 on)
UEMOA	<i>Union Economique et Monétaire Ouest Africaine</i> (West African Economic and Monetary Union)
UMU	Uganda Martyrs University
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund

UpLift	UpLift India Association (association of NGOs for social protection, grouped in UpLift Family, UpLift Health and UpLift Wealth, India, 2001 on)
UpLift Health	CHI branch of UpLift (first scheme in urban Pune, Maharashtra, 2002 on)
URBMI	Urban Resident Basic Medical Insurance (voluntary urban health insurance [for those not covered by (UE)BMI], China, 2007 on)
USAID	U.S. Agency for International Development
UTM	<i>Union Technique de la Mutualité Malienne</i> (CHI umbrella organisation, Mali)
VAT	Value-added tax
VHS	Voluntary Health Services (NGO, hospital and CHI scheme in Tamil Nadu, India, 1972 on)
WHA	World Health Assembly
Yeshasvini	Yeshasvini Cooperative Farmers Health Scheme (CHI scheme, Karnataka, India, 2003 on)
ZAER	<i>Zone d'Animation et d'Expression Locale</i> (local unit of the national cotton company CMDT, Mali)

CREDITS & ACKNOWLEDGEMENTS

Werner Soors did the literature review, drafted and finished this paper. **Narayanan Devadasan** and **Varatharajan Durairaj** gave inputs and commented in every stage of the writing. **Bart Criel** gave inputs, commented and took care of overview and coordination. All four authors contributed to and approved the final version of the text.

The authors express their gratitude for inputs and comments received from a number of colleagues, among them **Bart Jacobs**, **Bruno Marchal**, **Fahdi Dkhimi**, **Joris Michielsens**, **Josefien van Olmen**, **Maria-Pia Waelkens**, **Pascal Ndiaye** and **Prashanth NS**.

The authors thank **WHO** for the opportunity to produce this work, and for their patience. This document is not a formal publication of the World Health Organization.

The body of knowledge synthesised in this paper is the result of the efforts of thousands in this world. Omission and errors are the sole responsibility of the authors.

Framing and assessing Community Health Insurance within universal coverage

This paper examines community health insurance (CHI) as a means to an end, assessing CHI in the itinerary towards universal coverage. In 2005, the World Health Assembly (WHA) explicitly urged its member states to strive and plan for universal coverage, within the particular macroeconomic, socio-cultural and political context of each countryⁱ. The WHA did so adopting its secretariat's definition of universal coverage as "access to key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost"ⁱⁱ. The 2008 World Health Report defines universal coverage as "universal access to the full range of personal and non-personal health services they need, with social health protection"ⁱⁱⁱ. Earlier, Nitayarumphong had defined universal coverage as "a situation where the whole population of a country has access to good quality services according to needs and preferences, regardless of income level, social status, or residency"^{iv}, a definition later embraced by the Commission on Social Determinants of Health that added the requirement "that people are empowered to use these services"^v.

While these definitions differ in their precision of the scope of services to be covered – what Kutzin calls the relative concept of universal coverage with respect to healthcare services^{vi} – they are absolute with respect to population coverage. All three definitions refer to healthcare coverage in line with the ultimate goal of achieving health for all^{iv}, which is broader than mere insurance coverage. Indeed, as Mills pointed out, "inclusion within a financing scheme does not guarantee access to benefits"^{vii}. In each of these definitions, universal coverage evokes equity in access, through financial risk protection and implicitly associated with equity in financing. We explicitly adhere to these concepts of universal coverage as healthcare coverage when framing and assessing CHI, to avoid confusion with more restrictive but incrementally used terms as universal insurance coverage (and/or 'basic

universalism' in Latin America^{viii}).

We give a broad overview of the scope and origin of CHI in low- and middle-income countries, focusing deliberately on six country cases we deem to be of singular interest: Senegal, Mali, Ghana, Rwanda, China and India. We specifically consider three dimensions, two determinants and one specific dynamic within the itinerary towards universal coverage, applied to CHI.

The **three dimensions** we consider are the **breadth, depth and height of coverage**, as spelled out in the 2008 World Health Reportⁱⁱⁱ.

Breadth (alternatively called width) is short for population coverage; depth for service coverage, referring to the range of services covered; and height for financial coverage, referring to the proportion of costs covered. We start the description on breadth, depth and height of coverage in each country section with data from *World Health Statistics 2010*: the share of prepayment plans (including CHI, not including mandatory health insurance) in private health expenditure, and out-of-pocket expenditure as a proportion of private health expenditure, in the years 2000 and 2007³⁵. These data are obviously neither specific to CHI nor to healthcare coverage. We use them to frame CHI in a national picture of health financing, not as an indication of success or failure of CHI. Often they are the only available proxy for financial protection (or lack of it) through CHI at national level; never are they a comprehensive indicator of healthcare coverage.

The **two determinants** of universal coverage we consider are **institutional design and organisational practice**, as elaborated by Carrin, Mathauer and colleagues^{ix,x,xi} based on the conceptual work of North^{xii}. In line with Mathauer and Carrin, we posit that the progress towards universal coverage is contingent on interconnected rules and organisations^x. Otherwise stated, quoting North, "if institutions are the rules of the game, organisations are

the players”^{xii}.

The **specific dynamic** we consider is one of **empowerment and transformation**: a process of building capabilities and claiming rights, ultimately leading to a social compact of equity and solidarity^{xiii,xiv,xv,xvi,xvii,xviii}. In the case of CHI, part of this process is what Diop and Ba recently termed ‘political expansion for social inclusion’^{xix}.

Finally – based on our framework of three dimensions, two determinants and one dynamic – we aim at lessons learnt and summarise the promises and challenges of CHI at the crossroads of universal coverage.

The scope of Community Health Insurance in low- and middle-income countries

Community health insurance covers a wide variety of health insurance arrangements – with vast gradients in terms of ownership, management, membership, and service as well as financial coverage – in distinctive settings and designed for different population groups^{xx}. In theory, there are five characteristics that CHI schemes all share^{xxi}:

1. Community-based social dynamics and risk pooling, where the schemes are organized by and for individuals who share common characteristics (geographical, occupational, ethnic, religious, gender etc.);
2. Solidarity, where risk sharing is as inclusive as possible within a given community and membership premiums are independent of individual health risks;
3. Participatory decision-making and management;
4. Nonprofit character;
5. Voluntary affiliation.

The nonprofit principle, the premium calculation independent of individual risk and participatory decision-making clearly distinguish CHI from commercial health insurance, with which it shares voluntary affiliation. Participatory decision-making, community-based risk pooling, (usually) flat membership premiums, and voluntary affiliation distinguish CHI from social health insurance (SHI), with which it shares the nonprofit character. In practice however, CHI schemes apply the five mentioned principles to a greater or lesser extent. Schemes set up by healthcare providers, for example might not permit the full development of participatory decision-making and management. Schemes laid out by government within a roadmap towards universal coverage might maintain the principle of voluntary affiliation (in rural China^{xxii}) or make a deliberate choice for mandatory affiliation (in Ghana^{xxiii} and Rwanda^{xxiv}).

In the anglophone literature, the terms *Community Health Insurance* and *Community-Based Health Insurance* are used most frequently. Less common is the descriptor *Mutual Health Organisation*, although its French equivalent *Mutuelle de Santé* is widely employed in francophone Africa, thereby emphasising an underlying social dynamic. In West Africa especially, scheme management relies considerably on community participation. In East Africa, where provider-driven schemes are encountered more frequently, the financial dimensions of CHI attract more attention^{xxv}. This latter approach to CHI is reflected in the use of the term *Health micro-Insurance* (HmI). When Dror and Jacquier advanced this concept back in 1999^{xxvi}, they described HmI as insurance for those excluded from formal social security (which is often but not always the case in CHI), explained the ‘micro’ in HmI as lower than national level and admitted that some CHI schemes would fit into the HmI concept, and claimed that HmI would be less dependent on external subsidies and outside facilitators than CHI. Especially the latter characteristic is disputable, given the proactive involvement of international actors and donors over the last decade.

The International Labour Organization endorsed HmI from 2000 on in its programme *Strategies and Tools against social Exclusion and Poverty (ILO-STEP)*^{xxvii}, without major modifications. An influential joint publication on micro-insurance of ILO and the Munich Re Foundation^{xxviii} replaced “those excluded from formal social security” by “low-income people”, and explicitly stated two aims of micro-insurance: extending social protection to the poor and the creation of a new market for commercial insurers, including in the field of HmI. In the same publication, Radermacher and Dror propose a four-model typology of HmI: a charitable insurance model (somewhat at odds with the independence claimed seven years earlier), a community-based model, a provider-driven model, and a partner-agent model

(wherein the 'partner' can be a commercial insurance company)⁴. While the first three models encompass most CHI arrangements, the latter positions HmI much closer to commercial health insurance than to CHI. Gradual and overt commercialisation of HmI – and the fact that none of the HmI definitions over time refers to the independence of premium calculation from individual health risks – refrain us from using HmI as a substitute for CHI in the framework of universal coverage. Aware that many schemes are classified as CHI by some and as HmI by others – and that both CHI and HmI are umbrella terms with many offspring – we use the denominator CHI whenever possible and thereby deliberately exclude those schemes that do not plainly subscribe to the nonprofit principle.

⁴ Radermacher R and Dror I (2006) *Institutional options for delivering health microinsurance*. In: Churchill S [Editor] *Protecting the poor: a microinsurance compendium*. Geneva: International Labour Office²⁸; pp 401-423.

Community Health Insurance in Africa

During the 1970s, the African public health systems deteriorated in parallel with the deepening economic crisis^{xxix}. From the 1980s on, the introduction of user fees further impeded access to care and aggravated inequity^{xxx,xxxi}. Community Health Insurance in Africa must be seen in the context of large majorities within the population trapped in poverty and excluded from formal social security systems^{xxxii}. The African CHI movement was started out of a concern to either improve access to healthcare for a greater proportion of the population, or to ensure a stable source of income for healthcare provision, or both.

The first initiatives were developed under the direction of expatriate development aid workers who were most familiar with the history and operation of Europe's social health insurance systems. A well-known example is the provider-driven Bwamanda district hospital scheme in the Democratic Republic of Congo that commenced in 1986 with Belgian support^{xxxiii}. Also in 1986, the first community-based schemes emerged with the inauguration of the *Mutuelle Pharmaceutique de la Sainte Famille Tounouma* in Burkina Faso. Over time, different models and blends developed, first in West and Central Africa, followed later by East Africa^{xxi}.

From the early 1990s on the African CHI movement enjoyed increasing external support, often from organizations that had a strong attachment to the European SHI model. These organizations, like for example the International Department of the Belgian Christian Mutualities, organized training sessions for scheme managers, designed technical manuals and helped creating and developing local support organisations. Gradually, governments and donors became interested in the potential of Community Health Insurance to increase access to healthcare in adverse conditions.

It should be noticed however that CHI in Africa also generated critiques, reaching a climax in the 2008 publication of an Oxfam-led joint NGO briefing paper “Health Insurance in low-income countries: where is the evidence that it works?”^{xxxiv}.

Community Health Insurance in West Africa

In 1998 several African countries, international partners and local actors met in Abidjan to create the network *La Concertation entre les acteurs du développement des mutuelles de santé en Afrique*, known and referred to as *La Concertation*. This network supports and monitors the development of CHI, in francophone African countries^{xxxv}. Its 2004 inventory documented a nearly five-fold increase in functional *Mutuelles de santé* between 1997 and 2003 (from 76 to 366 schemes, of which 348 were CHI schemes) in West Africa alone^{xxxvi}. In 2007, *La Concertation* changed the methodology of its inventory, which does not allow comparison between pre-2004 and post-2007 figures. Independent researchers estimated the number of functional CHI schemes to have grown to 626 by 2006, an eight-fold increase since 1997^{xxxvii}.

This boost in number of schemes in French-speaking West Africa should not detract from the fact that the bulk of the schemes have less than 1,000 members each. Moreover, most of them remain firmly linked to a single social setting, such as a village, a neighbourhood or a professional body. These features lead to a high transaction cost and limited risk pooling with insufficient and unsustainable coverage of expensive risks, such as surgical interventions or treatment of chronic diseases.

On a more positive note, West African CHI schemes increasingly aim at improving their organisational practice by engaging in networks, federations, and unions^{xxxviii}. And from an institutional point of view, the West African Economic and Monetary Union's (UEMOA, *Union Economique et Monétaire Ouest Africaine*) call for a legislative framework in every West African country is promising^{xxxix,xl}.

A closer look at country level gives a more in-depth picture, disclosing different speeds of implementation, variations in the mode of implementation, and heterogeneous achievements.

Senegal

Based on the number of schemes, **Senegal** is where the West African CHI movement gained and maintained its strength. Senegal was home to one out of four West African CHI schemes in 1997, and to one out of five in 2003 and 2006^{xxxvii}. While most of the earlier schemes started in rural environments, CHI today is widespread in rural and urban settings. Innovative initiatives are emerging, such as complementary arrangements to poorly performing mandatory schemes for formal employees and – since 2007 – a scheme for school children (*AMEL, Assurance Maladie des Elèves*)^{xli}, reaching 20,000 enrollees to date.

In terms of financial and population coverage, gains at country level are sensible, and surpass those of most African countries: the share of prepayment plans (including CHI, not including mandatory health insurance for formal employees) in private health expenditure in Senegal rose from 7.1 to 17.9% between 2000 and 2007, while out-of-pocket expenditure as a proportion of private health expenditure dropped from 91.7 to 78.5% over the same period^{xlii}. Still, less than 20% of all Senegalese had any form of contributory health insurance in 2007, with 4% or less of the population being beneficiary of one of an estimated 130 CHI schemes^{xxxvii,xliii,5}. In the Thiès region, where CHI got first and firmly established, household survey data from the year 2000 indicated that CHI membership both increased access to hospital care and decreased out-of-pocket spending^{xliv}. A 2004 household survey in the same region confirmed the protective effect of CHI membership on out-of-pocket spending in inpatient care, but found no significant effect on out-of-pocket spending in outpatient care^{xlv}.

⁵ Both 4% and 130 are estimates, not counts. The estimated 4% national CHI coverage in 2007 is mentioned in a 2008 BTC/CTB report⁴³, which refers to approximately 420,000 beneficiaries but does not provide traceable substantiation. A 2008 article⁴⁹ mentions 2.4% national coverage, without stating in which year or substantiating this claim. The 2004 Strategic Plan⁴⁶ estimates CHI beneficiaries at 421,670 (possibly a source for the estimate from BTC/CTB four years later), but also specifies that only 122,970 (1.2% of the population) of them belong to population groups excluded from mandatory insurance. The estimation of 130 schemes comes from a 2007 overview article³⁷. If the average number of beneficiaries per scheme did not increase (as stated in the 2008 report⁴³), 130 schemes would have matched 3% national CHI coverage.

In terms of organisational practice and institutional design, Senegal's CHI progress has been slow. Despite the relatively small size of the country, CHI networks exist at regional but hardly at national level⁶. Support activities from multiple bilateral agencies follow a similar regional pattern^{xlvi,xlvii}. The constitution in 1998 of a support cell at ministerial level boosted the creation of new schemes^{xlvi} but had few consequences for design and functioning of the schemes. Such is also the case with a support cell created within the Ministry of Health and Prevention for the implementation of the 2004 strategic plan (*Plan stratégique de développement des mutuelles de santé*). A legal framework for CHI was established through the 2003 *Loi relative aux mutuelles de santé*, but this law is under revision and still lacks an implementation act. On a more positive note, CHI is increasingly seen by Senegalese policy-makers as one among a range of measures for social protection and healthcare coverage^{xliv}, such as removal of user fees for particular services (childbirth), treatments (antiretroviral and tuberculostatic drugs) and population groups (the elderly, through *Plan Sésame*)^{xlvi}. It should be noticed however that all these initiatives are experiencing organisational difficulties^{xliv,xlv,lvi}.

In terms of empowerment, evidence from Senegal is fragmentary and goes in opposite directions for different vulnerable groups. Data from the already mentioned 2004 household survey in the Thiès region show a positive association between CHI enrolment and female-headed households, and between CHI enrolment and institutional deliveries (which led the researchers to see a role for CHI in the empowerment of women), but a negative association between CHI enrolment and poverty (also within female-headed households)^{xlv,lvi}.

Interesting – definitely when framing empowerment as a step towards a compact of solidarity – are the findings of a 2002 study: Senegalese CHI promoters valued financial

⁶ At national level, a forum of exchange exists (CNC, *Cadre National de Concertation des acteurs du développement des mutuelles de santé*) for donor, CHI and state representatives. Up to today – limiting itself to exchange of information – the CNC cannot be considered a CHI umbrella organisation¹⁹.

sustainability of their schemes over solidarity; members were split between financial sustainability and solidarity. Among the members, men and respondents from families with greater health needs inclined towards solidarity; women towards financial sustainability of the scheme^{liv}.

Mali

In **Mali** – with an estimated 102 schemes in 2006^{xxxvii} – the CHI movement benefited from a permissive legal framework since 1996 and from the existence of a national umbrella organisation (UTM, *Union Technique de la Mutualité Malienne*) since 1998.

Gains in terms of financial and population coverage are of little account at country level: the share of prepayment plans (including CHI, not including mandatory health insurance) in private health expenditure rose from 0.1 to 0.5% between 2000 and 2007. Yet out-of-pocket expenditure as a proportion of private health expenditure rose from 99.1 to 99.5% over the same period^{xlii}. According to a 2004 report, less than 10% of all Malians had any form of contributory health insurance, with 0.31% of the population being beneficiary of one of an estimated 51 CHI schemes in 2003^{xxxvii,lv}.

Persistent low national coverage of social health protection led the Malian government to elaborate a 2005-2009 action plan⁷. Among the targets were the introduction of mandatory health insurance for government and formal sector employees (AMO, *Assurance Maladie Obligatoire*), of social assistance for the extreme poor (FAM, *Fonds d'Assistance Médicale*), and achievement of 3% CHI coverage at country level^{lv, lvi}. In 2006, national CHI coverage was

⁷ Announced in 2004 and initially called 2004-2008 action plan for extension of social health protection⁵⁵; partially operational since 2005⁵², and since referred to as 2005-2009 action plan for extension of social health protection⁵⁸.

estimated either at 0.29%^{lvi} or at 0.33%^{lvii,8}. In 2009 – with AMO and FAM still nonoperational and national CHI coverage still low – the Malian government launched a 2010-2014 action plan for extension of social health protection, with the same targets as the former one: introduction of AMO and FAM (now called RAMED, *Régime d'Assistance Médicale*) and achievement of 3% CHI coverage at national level^{lviii}.

Coverage by Community Health Insurance at the level of schemes and specific social settings provides a different story, with divergent characteristics and outcomes. One article based on a 2004 survey in two rural and two urban Malian CHI settings found evidence for overall gains in financial coverage – CHI members spending less of their income on health than non-members – without quantifying these gains nor differentiating them per contextual setting^{lix,lx}. Another article based on the same survey quantified the gains but found no significant difference, in outpatient care^{xlv}. Yet another article based on the same survey observed CHI members spending slightly more for childbirth care than non-members^{liii}. A 2005 independent evaluation of another CHI scheme found CHI members having a total direct cost of outpatient care twice as high as non-members^{lxi}. The variability in these findings confirms the key role played by contextual dimensions in determining outcomes of CHI, as highlighted before by Criel and colleagues^{lxii}. In the aforementioned five cases with five different contexts, the schemes differed not only in financial coverage but also in population coverage (ranging from 3.1 to 11.4% in the schemes included in the 2004 survey^{lix}; 11.7% in the scheme evaluated in 2005^{lxi}) and in service coverage.

⁸ All three estimates (0.31% in 2003; 0.29% and 0.33% in 2006) of CHI coverage at country level are either from or stem from Malian authors, who referred to 34,000³⁵, 35,000³⁶ and 40,000³⁷ CHI beneficiaries respectively. External authors have referred to 469,815³⁷ and 499,856³⁶ beneficiaries in 2003, which would correspond to 4.3 and 4.6% national CHI coverage respectively. A 2009 joint Government of Mali/UNICEF publication mentions 100,000 CHI beneficiaries – which would correspond to 0.79% national CHI coverage – but estimates national CHI coverage at 2%⁵⁸.

While these cases seem to indicate that CHI can push coverage in desired and undesired directions – or just leave it untouched – a sixth Malian case illustrates how a favourable configuration of intervention characteristics and context features can positively and sustainably impact all coverage dimensions. The health area of Nongon – comprising Nongon and neighbouring villages in the southern Sikasso region – is home to Mali's first rural CHI scheme, MUTCO (*Mutuelle Cotonnière de Nongon*). In 1994 the villagers seized the opportunity created by a recent move towards decentralised government^{lxiii}. Organised through a local unit of the national cotton company⁹, they constituted a community health board (ASaCo, *Association de Santé Communautaire*^{lxiii, lxiv}) and built a community health centre (CSCoM, *Centre de Santé Communautaire*^{lxiii, lxiv}), using a 33% levy on cotton sales^{lxv}. From the start, Nongon's CSCoM has been directed by medical doctors from the Malian rural doctors' movement (*Association des Médecins de Campagne*^{lxvi}) with a low turnover rate (1994-2000, 2000-2008, 2009-today), both conditions favouring optimisation of the quality of care. It was the CSCoM's first director who put forward the creation of a CHI scheme^{lxv}, of which he and his successors have remained active promoters. When MUTCO started in 1998, it was exceptional in making membership premiums proportional to cotton production, and in granting the extreme poor free membership^{lxvii}. Only in 2005 – at the height of the African cotton crisis – MUTCO shifted to flat-rate membership premiums.

What changes can be observed in population coverage, benefits coverage and financial coverage? One specific aim of the MUTCO initiators was to increase the utilisation of the CSCoM – 0.35 new cases per person in outpatient care – which they considered inadequate^{lxv}, even if higher than regional average. Ten years later, outpatient-care utilisation had

⁹ Respectively ZAER (*Zone d'Animation et d'Expression Rurale*) and CMDT (*Compagnie Malienne pour le Développement des Textiles*). Nongon's ZAER formally established the ASaCo; its boundaries became those of the CSCoM's area of responsibility⁶⁵.

increased to 0.8¹⁰ – an exceptional achievement in rural Mali, and sub-Saharan Africa. Underpinning this gain in access was a steady growth in CHI coverage reaching a penetration rate of 63% in 2004^{lxvii}, and maintaining an enviable 47% in conditions of widespread poverty¹⁰.

One would not expect equal gains in service coverage: the Nongon area has no higher-level service structure than a CScCom, and the responsibility of a CScCom is to deliver a nationally circumscribed minimal package of activities^{lxiv}. Yet collective action of Nongon's ASaCo, MUTCO and CScCom director enabled a functioning ambulance service for those in need of referral care, and decentralisation of services needed but not included in the standard package – most noteworthy screening and therapy for tuberculosis.

As far as financial coverage is concerned, out-of-pocket spending in outpatient care is significantly lower for CHI beneficiaries than for non-beneficiaries: four times lower for pregnant women and children up to age seven, two times lower for other users¹⁰. Within the particular setting of Nongon, all three dimension of coverage increased – including a breadth of coverage unparalleled in West Africa – and remained relatively high despite economic hardship.

In terms of organisational practice and institutional design, it is good to remember that Mali's 1996 mutual association law (*Régissant la mutualité en République du Mali*) was the first of its kind in francophone Africa. Contrary to what happened later in Senegal, the law – followed by two implementation acts in 1996 and one decree in 1997 – became operational without delay^{lvi, lxviii}.

¹⁰ Own calculations based on primary data from 2006, collected during a 2007 ITM/UTM study on CHI and quality of care in Mali.

From 1998 on, the *Union Technique de la Mutualité Malienne* (UTM) has been the main player within this legal framework. As an organisation it is one of a kind, exhibiting an amalgam of characteristics and functions. Besides being created in response to a government call to French development actors for promotion of CHI, it is not a government agency: it belongs to the CHI schemes who constitute it, yet is heavily dependent on external financing. Besides representing the bulk of the Malian CHI schemes in their relation with the government and the outside world, it gives the schemes technical support for tailor-made CHI suited to local needs, but also markets its own standard insurance package AMV (*Assurance Maladie Volontaire*). And to some degree it fills in for the government's deficient Directorate of Social Protection (DPS, *Direction de la protection sociale et de l'économie solidaire*) in supervising its own members^{lvii,lviii,lxvii,lxviii}. In fact, UTM's multifaceted nature and sizable external financing have been major forces and have given a voice to the CHI movement, greater than its numerical strength. By the same token, UTM's AMV – designed in close cooperation with the *Mutualité Française*, looked upon with criticism by other West African CHI promoters, yet accounting for 60% of all Malian CHI beneficiaries in 2005^{lvii} – more than only broadening the base for cross-subsidies, brought aboard vocal actors in modern Malian society, such as independent professionals and government employees.

Not surprisingly, when the Malian government elaborated its 2005-2009 action plan for extension in social health protection, UTM was the government's privileged partner. Over the next years UTM profiled itself as a serious candidate for implementing the mandatory-insurance component (AMO) of the action plan, for both technical and strategic reasons^{xlvi,lvii,lviii}. In the same few years, UTM's dependence on external financing – the latter contributing to its strength for almost a decade – became a weakness when one of its

¹¹ UTM repeatedly argued to be the only Malian actor with the sufficient professional capacity to handle the AMO. At the same time the AMO would reduce the demand for the AMV, UTM's main success story. So UTM had little other option than trying to become a central part of the future AMO.

main French donors withdrew. In the subsequent 2010-2014 action plan, the government restricted UTM's role to that of increasing CHI coverage to 3% in the informal sector for those who can pay for it. Supported by the *Mutualité Française*, UTM reacted by inviting the minister of Social Development to a seminar on the role of CHI in the extension of social health protection. Times had changed: after listening to UTM's renewed appeal for a more substantial involvement of CHI (and thus UTM) in the new action plan^{lxix}, the minister drily replied by inviting UTM to cover not only the planned 3% but also the remaining 80% of the population with CHI^{lxx}.

Letourmy^{xlvi} – building on a conceptual distinction made by McIntyre and colleagues^{lxxi} – describes the Malian government's approach to achieve universal coverage through health insurance as an example of a fragmented strategy, as opposed to a more comprehensive strategy relying on mandatory insurance for the whole population¹². With Mali defining its roadmap based on a separation of the population in three parts – aiming at mandatory insurance for the formal sector, voluntary insurance for groups able to pay for it in the informal sector, and social assistance for the extreme poor^{xlvi,lviii} – UTM today has the difficult task to reinvent its organisational practice within an institutional design much less favourable for CHI than it was a decade ago.

In terms of empowerment and in addition to the changing picture at national level, promising evidence at household and scheme level can be found in the case of Nongon presented above. In Nongon, a majority of women indicated that being a beneficiary of the CHI scheme had made irrelevant the authorisation of their husbands to seek consultation. According to the Nongon women, they now had autonomy of decision for which no more

¹² Letourmy (2010) gives the Ghanaian and Rwandan health insurance reforms in process as examples of a comprehensive strategy⁴⁸. See further for a more in-depth discussion of the Ghanaian and Rwandan reforms.

than pocket money was needed^{lxxii}. The importance of such impact cannot be underestimated in a country where only 18% of women in need of care receive their husband's authorisation to go for a consultation, compared to 53% who have the money to do so^{lxxiii}.

Guinea

Guinea – with an estimated 90 schemes in 2006 – comes close to Mali in number of schemes, but with significantly smaller schemes^{xxxvii}. The Guinean CHI movement presents two particularities: a research project that set out the stakes^{lxxiv}, and a series of schemes targeting pregnant women^{lxxv}.

Financial and population coverage at country level leaves much to be desired. No gains are apparent: the share of prepayment plans (including CHI, not including mandatory health insurance) in private health expenditure was reported 0% in 2000 and 2007; out-of-pocket expenditure as a proportion of private health expenditure remained at 99.5%^{xlii}. Less than 1.5% of Guineans were covered by CHI in 2006^{xxxvii}.

Organisational practice and institutional design present likewise weaknesses. Guinea has no legal framework for CHI; no national umbrella organisation exists^{lxxvi}. In one of Guinea's four regions a CHI coordination structure is in place: the *Union des mutuelles de santé de la Guinée forestière*, which brings together 25 schemes with a total of about 14,000 beneficiaries^{lxxvii}. It was in the same region that the research project PRIMA (*Projet de Recherche sur le Partage du Risque Maladie*) developed and tested a model of rural CHI (MUCAS, *Mutuelle Communautaire d'Aire de Santé*) between 1996 and 2000^{lxxiv}. From Dabola district in the neighbouring *Haute Guinée*, another model emerged: CHI schemes for safe

motherhood (MURIGAs, *Mutuelles pour la prise en charge des Risques liés à la Grossesse et à l'Accouchement*). Rolled out by the Guinean government with support of UNICEF, MURIGAs in 2006 covered 10% (about 16,000 women) of their target population in 17 out of 33 health districts. In a handful of districts children were added to the MURIGA's target group, with little effect so far. Management of the schemes is substandard and community involvement is minimal, the latter despite the fact that MURIGA's were intended to be a community participation mechanism^{lxxv}.

In terms of empowerment, both promising and discouraging evidence can be found at the level of the healthcare users/providers interface in the case of the Maliando scheme, in the area of Yendé. The Maliando scheme was the first realisation of the MUCAS model, which among other objectives aimed at improved service quality through a CHI-induced partnership between the community and the providers^{lxxiv}. Patients arrived at a good understanding of CHI as an insurance mechanism. They also gained voice through CHI and started claiming their right to good quality care^{xxviii, lxxviii}. Yet, contrary to what happened in the Nongon case (Mali, see above) where the doctor of the health centre became the CHI scheme's main activist, several local providers in Yendé did not internalise the partnership concept and appealed for a cap on CHI membership^{lxxix, lxxx, lxxxi}. Suggested explanations for the providers' reservation are a conflict between dominant medical culture and the need for transparency and accountability induced by CHI, and – in this particular case – the fact that up to 60% of the health centre's profits were based on informal payments^{lxxx, lxxxii}.

Burkina Faso

Burkina Faso had an estimated 60 schemes in 2006, most of minor size^{xxxvii}. One of them is the CHI scheme/research project of Nouna district – set up in 2004 – where determinants of membership and effect on healthcare utilisation have been extensively studied.

Gains in terms of financial, population and service coverage are marginal at country level: the share of prepayment plans (including CHI, not mandatory health insurance) in private health expenditure rose from 1.0 to 2.0% between 2000 and 2007, while out-of-pocket expenditure as a proportion of private health expenditure dropped from 94.4 to 91.3% over the same period^{xlii}. Less than 0.2% of Burkinans were covered by CHI in 2006^{xxxvii}. Coverage of the target population in the Nouna scheme reached 6%, but was plagued by dropout rates as high as 45%, mainly associated with affordability issues and perceived low quality of care^{lxxxiii}. When quality of care was perceived good, financial barriers might still have prevented people to enrol. In a context of manifest underutilisation, CHI membership significantly increased outpatient – but not inpatient – healthcare utilisation^{lxxxiv}.

In terms of organisational practice and institutional design, state and civil society actors move at different speeds: Burkina Faso has still no legal framework for CHI; yet a third-party CHI support organisation exists since 1999 (RAMS, *Réseau d'Appui aux Mutuelles de Santé du Burkina Faso*). Together with a national labour union and microfinance cooperative, plus a regional development organisation, RAMS constitutes a platform for the Burkinan social economy (PARESOC Burkina Faso, *Programme d'action régionale pour l'économie sociale*)^{lxxxv,13}.

¹³ PARESOC platforms – supported by the Belgian Survival Fund (BOF, *Belgisch Overlevingsfonds*; FBS, *le Fonds Belge de Survie*) – exist in Benin, Burkina Faso and Mali.

In terms of empowerment, evidence from the Nouna project highlights inequity in both CHI enrolment and healthcare utilisation: the very poor were less likely to enrol; once enrolled, they were less likely to utilise health services compared to their wealthier counterparts¹⁴. This led the researchers to the conclusions that CHI enrolment of the very poor needs to be subsidised, and that complementary measures are needed to enhance the capacity of the deprived to make use of the services^{lxxxiv}. From the Burkinan PARESOC initiative – which included from the start complementary measures within a broader development perspective – no evidence on empowerment is yet documented.

Benin

Benin had an estimated 120 schemes in 2006^{xxxvii}. Benin's CHI development shares several characteristics with that of Senegal.

Financial and population coverage are modest at country level: the share of prepayment plans (including CHI, not mandatory health insurance) in private health expenditure rose from 0.1 to 5.0% between 2000 and 2007, while out-of-pocket expenditure as a proportion of private health expenditure dropped from 99.9 to 94.9% over the same period^{xlii}. Less than 1.4% of Beninese were covered by CHI in 2006. In terms of numbers of schemes, Benin is West Africa's fastest grower after Senegal^{xxxvii}.

Organisational practice and institutional design hardly keep pace with the proliferation of schemes. Benin has no specific legal framework for CHI, although a CHI code is in the

¹⁴ Such finding is of course not new, but consistent with a course of action that Julian Tudor Hart had already identified back in 1971 in the British National Health System and led him to formulate his inverse care law: "The availability of good medical care tends to vary inversely with the need for it in the population served". See: *The Lancet* **297**(7696), 405-412.

making since 2005^{xix}. As in Senegal, a handful of regional networks exist – each supported by a different donor – but no national umbrella organisation^{xix,15}.

In terms of empowerment, evidence is mixed. Research on four CHI schemes within the *Réseau Alliance Santé* (RAS)¹⁶ reported that members had become aware of their right to complain as healthcare users – a privilege once enjoyed by the wealthy only – and highlighted the role of CHI to negotiate good quality of care^{lxxxvi}. A visit to the five schemes of the *Union Communale des Mutuelles de Santé de Bembèrèkè*¹⁷ returned with the message that networking had enabled dialogue with the healthcare providers, which among other things had reduced cost of care^{lxxxvii}. Yet both sources also mentioned non-inclusion of the extreme poor as an equity issue. For the managers of the RAS schemes, this was not a matter of concern: they were mainly interested in the financial viability of the schemes^{lxxxvi}. For the managers of the Bembèrèkè scheme, it was an unresolved problem: they had not been successful in claiming subsidies from national social assistance funds, and were financially unable to constitute a social assistance fund by themselves^{lxxxvii}.

¹⁵ At national level, a forum of exchange between the support structures is formally in place (CONSAMUS, *Concertation Nationale des Structures d'Appui aux Mutuelles de Santé*).

¹⁶ The *Réseau Alliance Santé* (RAS) – assisted by the French CIDR, *Centre International de Développement et de Recherche* – is a regional Beninese CHI network, comprising 29 schemes.

¹⁷ The *Union Communale des Mutuelles de Santé de Bembèrèkè* is a communal CHI network, assisted by the Belgian PARESOC and PROMUSAF initiatives, the latter giving support to a total of 20 schemes.

Togo

Togo is a late developer in CHI, its schemes appearing from 2000 on. In 2006, Togo had an estimated 12 schemes^{xxxvii}.

Gains in terms of financial and population coverage are marginal at country level: out-of-pocket expenditure as a proportion of private health expenditure dropped from 86.6 to 84.2% between 2000 and 2007, while the share of prepayment plans (including CHI, not including mandatory health insurance) in private health expenditure actually dropped from 5.4 to 4.3% over the same period^{xlii, lxxxviii, 18}. Less than 0.5% of Togolese were covered by CHI in 2006^{xxxvii}. At scheme level, progress in depth and height of coverage are noted: understanding and applying the principles of risk spreading, most schemes now include C-sections in their benefit package. Younger schemes do this without imposing a ceiling; one scheme is including emergency care for children with malaria as a second felt need^{lxxxix}.

Organisational practice and institutional design shows little development at national level. Togo has no legal framework for CHI; no national umbrella organisation exists. So far, no evidence of **empowerment** is at hand.

¹⁸ It should be remembered that Togo (together with Gabon) is one of the few West African countries where mandatory health insurance has not considerably eroded post-independence, maintaining 23% population coverage (29% in Gabon)⁸⁴.

Cameroon

Cameroon was home to a slow but steady CHI development since the 1990s and reached an estimated 30 schemes in 2006^{xxxvii}. Much has happened since. Intense promotion of CHI by both government and development partners led to an incremental growth in number of schemes, reaching 107 schemes in 2008^{xix,xc}. Enrolment rates are much less impressive.

Gains in financial and population coverage at country level are not apparent, at least not before 2008: the share of prepayment plans (including CHI, not including mandatory health insurance) in private health expenditure was reported 0% in 2000 and 2007; out-of-pocket expenditure as a proportion of private health expenditure remained at 94.5%^{xlii}. Less than 0.2% of Cameroonians were covered by CHI in 2006^{xxxvii,19}. In 2007, five schemes piloted an effort to extend benefits coverage with HIV/AIDS care, with support of the German Technical Cooperation (GTZ)^{xc}. The Cameroonian government has declared covering expensive risks a priority and wants to achieve this by establishing reinsurance funds, but financing is still lacking^{xix}.

Organisational practice and institutional design are scaling up relatively fast in Cameroon. Despite not having a specific legal framework for CHI, Cameroon has included CHI development explicitly in its 2001 and 2006 strategic plans. The 2001 strategic plan aimed at one CHI scheme per health district in 2010, and 40% population coverage by the same. These goals were not attained. The redressed 2006 strategic plan still aims at one CHI scheme per health district – now to be achieved by 2015 – and either 40% or a possibly more realistic 20%

¹⁹ It would obviously be interesting to have data on CHI population coverage following the boom in schemes after 2006. To our knowledge, such data are not yet available.

population coverage by the same year²⁰. Six donor-assisted and/or regional CHI networks are operating, but no national umbrella organisation is in place. Yet, in 2006 – in addition to the national forum of exchange (CNC) existing since a year earlier – a platform²¹ of 39 local, regional and national CHI promoters was established, in partnership with the Ministry of Public Health, the Ministry of Employment and Social Protection, and a range of bilateral and multilateral cooperation agencies^{xix,xc,xci}. As of today, the accent is on the development of schemes, in number and coverage. Problems in quality at the supply side – a hindrance itself for CHI enrolment as frequently mentioned by local actors – are much less addressed.

So far, no evidence of **empowerment** is at hand.

Niger

Niger is a late and slow developer in CHI, its schemes appearing from 2000 on. In 2006, Niger had an estimated 18 schemes^{xxxvii}; in 2008, 17 schemes were counted^{xix}. Extreme poverty and low government capacity encumber any development, including that of CHI.

Financial and population coverage at country level leave much to be desired. Niger in fact is loosing ground: the share of prepayment plans (including CHI, not including mandatory health insurance) in private health expenditure dropped from 11.3 to 3.2% between 2000 and 2007; out-of-pocket expenditure as a proportion of private health expenditure increased from 87.6 to 96.4% over the same period^{xlii}. Less than 0.7% of Nigeriens were covered by CHI in 2006^{xxxvii}; depth of coverage is minimal^{xix}.

²⁰ Unclear if the actual aim was 20 or 40%: 20% according to the francophone communication, 40% according to the anglophone communication. Compare <http://www.pplateformecm.org/plateforme/index2.php?cat=planstrategique> and <http://www.pplateformecm.org/plateforme/en/index2.php?cat=strategicplan>

²¹ Promuscam (*Plate-forme des Promoteurs de Mutuelles de Santé au Cameroun*).

Similarly, **organisational practice and institutional design** show little substantial development. No national umbrella organisation exists; one NGO-based network operates since 2002. A national forum of exchange (CNC) exists but shows little activity. A 2008 law advocates CHI development and expansion; the Ministry of Civil Services and Labour would be responsible for supervision and regulation, a support unit within the Ministry of Public Health for promotion of CHI. The law has no implementation act; the institutions lack financing and capacity^{xix}.

No evidence on **empowerment** is yet documented.

Mauritania

Financial and population coverage at country level leave much to be desired. No gains are apparent: the share of prepayment plans (including CHI, not including mandatory health insurance) in private health expenditure was reported 0% in 2000 and 2007; out-of-pocket expenditure as a proportion of private health expenditure remained at 100%^{xlii}.

These worrisome data at country level are reflected at scheme level. Of the five schemes active in 2006^{xxxvii}, and three in 2003^{xxi,xxxvi}, only one still exists: the *Mutuelle Communautaire de Santé de Dar-Naïm* (MCSDN). The scheme was conceived in 2002 and started in 2003 in a poor neighbourhood of the capital (Dar-Naïm, Nouakchott) within an existing primary health project (PSDN, *Projet Santé de Dar-Naïm*) of Caritas Mauritania^{xcii}. The uniqueness of MCSDN is not only on account of being the only one left; it is also merited by the scheme's

novel and successful combination with a health equity fund (HEF²², *Fonds d'indigence de Dar-Naïm*), since 2005^{xciii}.

Financial, service and population coverage of the MCSDN is documented and deserves a closer look. Financial coverage is limited and an intricate set of copayments is in place²³. Service coverage has been gradually expanded since 2003 and is today comprehensive as far as primary care is concerned, but still limited at referral level. Population coverage never reached 5% of the target population and converts the Dar-Naïm scheme in a showcase for the limits of CHI design (community-based and with voluntary affiliation) in a specific context (a society consisting of segregated social groups). Whatever efforts the MCSDN has made to grow, there seems to be no way to overcome the existing geographical and social boundaries. As a result, risk pooling remains equally limited, and further expansion of financial and service coverage is extremely difficult^{xciii,24}.

Institutional design deserves few comments: Mauritania has no consistent CHI framework in place. The government operates a *Fonds d'indigence* at national level, but leakage is the rule: beneficiaries are often privileged, not destitute, members of society.

Operational practice becomes interesting at Dar Naïm level, and especially so in the setup and implementation of MCSDN's health equity fund. At onset, identification of beneficiaries of the HEF was based on a list of criteria and resulted in the selection of a narrow group of

²² Health equity funds (HEF) – social assistance mechanisms based on third-party financing to guarantee the extreme poor access to healthcare – originated in Cambodia in 2000. For a discussion of HEF in Cambodia, see the section on Cambodia in this paper and the accompanying references: Hardeman and colleagues (2004)²²², Jacobs and Price (2006)²²³, Noirhomme and colleagues (2007)²²⁴, Annear and colleagues (2008)²²⁵, Meessen and colleagues (2008)²²⁵, and Bigdeli and Annear (2009)²²⁶. The *Fonds d'indigence de Dar-Naïm* was not the first HEF in Mauritania or Africa. In Mauritania, the HEF of *Hodh el Gharbi* and *Hodh el Chargui* started in 2003⁹³. But it has been the most successful, displays innovative design and practice, and subsists to date.

²³ Comprising a flat copayment for outpatient care, and proportional copayments ranging from 25% for delivery services to 70% for drugs for chronic diseases⁹³.

²⁴ External evaluators of the MCSDN have suggested the creation of new schemes as an alternative for scheme expansion. It can be noted that CHI in the Thiès region (Senegal) progressed along similar lines. From a pragmatic point of view, this can be considered a plausible way forward (though no guarantee for improved risk pooling, for which then networking could be a solution). From a conceptual point of view, this raises a question mark over the feasibility of voluntary solidarity.

permanently destitute. Over time – and in joint agreement between scheme management and the community – the programme has been extended to include the temporary poor, to prevent them from falling into destitution²⁵. Concurrently, the service coverage for the HEF beneficiaries has extended in two ways to respond to their specific needs: it covers a more comprehensive package of medical care than that proposed to CHI contributors, and it includes social services beyond the medical sphere. One more novelty is worth noticing: a HEF staff member is responsible for house visits and assessment of vulnerability of potential and actual beneficiaries. Such approach opens room for better understanding of needs and appropriate action^{26,xciv}.

Evidence on **empowerment** is limited to the boundaries of Dar Naïm and its health equity fund, where the assistance provided indeed seems to engender inclusion and autonomy among the most vulnerable^{xciii}.

Ghana

In anglophone West Africa, the case of **Ghana** is of particular interest. Since the introduction of user fees – called ‘cash and carry’ in Ghana – in the mid 1980s, both government and private actors have been exploring the feasibility of health insurance.

After lengthy consultations, the Ghanaian government piloted (and immediately abandoned) a National Health Insurance Scheme in 1997 and a Ghana Health Care Company in 1999. Already in 1989, a faith-based nonprofit service provider – inspired by the

²⁵ Coverage by the MCSDN’s HEF shows the following evolution over time: 51 persons in 2005; 200 in 2006; 293 in 2007 and 401 in 2008 – corresponding to 0,1 (2005); 0.3 (2006); 0.5 (2007) and 0.7% of Dar Naïm’s population⁹³.

²⁶ Both inclusion of non-medical services and the engagement of a skilled social worker are novelties in HEF practice. They bear similarities with effective modern social assistance practice in Western Europe⁹⁴.

Congolese Bwamanda scheme²⁷ – had designed the Nkoranza scheme, which became operative in 1992. Other schemes followed, either community-initiated or provider-initiated as Nkoranza, most them arising after a CHI workshop organised by PHR²⁸ in 1999. By 2001, 14 CHI schemes were fully functional. Yet most of them were small²⁹ and together they covered only a fraction of the population.

Also in 2001, a new government reaffirmed the aim to replace cash and carry by a National Health Insurance Scheme (NHIS)³⁰. This led to the 2003 National Health Insurance Act (NHIA), which significantly changed health financing across the country. By prescribing every district to set up a CHI scheme³¹, the NHIA paved the way for scaling up community health insurance within the NHIS, a social health insurance construct aiming at universal coverage in the long run. The NHIS became operational from 2005 on. By the end of 2005, 83 out of 138 districts boasted a CHI scheme, covering between 20 and 40% of their population^{xxiii,xcv,xcvi,xcvii,xcviii,32}.

Gains in terms of financial coverage at country level were not apparent by 2007, in contradiction with **the gains in population coverage** of (in principle) mandatory health insurance: out-of-pocket expenditure as a proportion of private health expenditure hardly

²⁷ In the DR Congo – or Zaire between 1971 and 1997 – the Bwamanda hospital-based scheme is active since 1986. See pp 57-58.

²⁸ Partners for Health Reform, USAID project for health policy and health systems strengthening, later PHRPlus (Partners for Health Reformplus). See <http://www.healthsystems2020.org/content/resource/detail/670/>

²⁹ The big exception being the Ghanaian CHI pioneer Nkoranza, which covered 48,000 people (30% of its target population) in 2001⁹⁵.

³⁰ Several authors explain the political context for the reappearance of the NHIS concept in 2001. Ghana has elections every four years since 1992; the last three times being in 2000, 2004 and 2008 – each time with health insurance prominently on the agenda. In 2000, the then oppositional New Patriotic Party (NPP) centred its electoral campaign on the promise of replacing cash and carry by NHIS. The NPP won the 2000 elections and remained in power through the 2004 elections^{23,98,102,103}. In 2008, the National Democratic Congress (NDC) made the introduction of a ‘one-time premium’ for the informal sector’s NHIS contribution a key element of its campaign, regained power and constituted the 2009-2012 government¹⁰³ (see further in the section on institutional design and organizational practice).

³¹ In Ghana since called District Wide Mutual Health Insurance schemes (DWMHI).

³² Ghana’s post-2003 insurance reform is the foremost example in Africa (the second one being Rwanda) of what Letourmy calls a comprehensive strategy⁴⁸.

dropped between 2000 and 2007 (from 79.6 to 79.3%)^{xlii,33}, whereas CHI population coverage as expressed by proportion of cardholders was reported 44% in 2007^{lxxi}, coming from 6.6% in 2005 and reaching one of two Ghanaians in 2008, more than 11 million people^{xxiii,lxxi,xcix,34}.

Witter and Garshong have further scrutinised available primary and secondary data on affiliation and utilisation, service coverage, and financial protection within the NHIS's district schemes (DWMHIs, District Wide Mutual Health Insurance schemes). Regarding affiliation, they noticed a pro-rich bias in enrolment and a pro-urban bias in renewal of membership. They reported utilisation rates of outpatient care in 2006 almost twice as high for members as for non-members³⁵. They described service coverage as high as 95%³⁶, but found no conclusive evidence on changes in financial coverage^{xxiii}.

Since the National Insurance Health Act lays down an institutional and financial framework, **institutional design and organisational practice** of CHI today are obviously intertwined in Ghana. The NHIA established the National Health Insurance Council (NHIC, the Council) and created the National Health Insurance Fund (NHIF, the Fund). The Council accredits and regulates both district-based CHI and commercial health insurance schemes. It also manages the Fund, whose main function is to subsidise the district-wide CHI schemes

³³ The share of non-mandatory prepayment plans in private health expenditure is no longer a relevant indicator for the impact of CHI in Ghana, since CHI in principle became mandatory in 2003. This share dropped from 6.1 to 5.9% between 2000 and 2007⁴².

³⁴ By December 2007, 55% of the population had registered for and 44% had received a membership card from one of 145 DWHIs (we assume that by then every district had a scheme, 145 exceeding the actual number of 138 districts)^{71,99}. Witter and Garshong report 45% cardholders in 2008²³. As mentioned before (see page 1) and noted by Mills, inclusion within a financing scheme does not automatically lead to benefits, such as actual access and financial protection⁷.

³⁵ 0.9 consultations/inhabitant/year for members vs. 0.49 for non-members, according to a 2006 ILO study. Utilisation among members further increased to nearly 1.5 consultations/inhabitant/per year in 2009, according to information from the Network of Mutual Health Organizations²³. A baseline study at the onset of the NHIS (in Nkoranza and Kwahu South, where CHI schemes were operative since 1992 and 2001 respectively) had also reported utilisation of outpatient care nearly twice as high for scheme members as for non-members⁹⁶.

³⁶ The service package offered under the Ghanaian NHIS is indeed comprehensive, when compared to service coverage elsewhere and certainly so in West Africa. It includes both primary and referral care, and drugs listed in a National Health Insurance Drug List. Among the main exclusions are cosmetic surgery, transplantations, cancer treatment (other than for cervical and breast cancer), and antiretroviral drugs²³. Notwithstanding this considerable depth of coverage foreseen by NHIS, availability of services and manpower disparately restricts access, especially in the poorer northern regions (in 2006 home to 18% of the population; served by 8% of all hospitals and 5% of all doctors)⁹⁷.

(DWHIs)³⁷ that constitute the NHIS. The Fund is financed by a combination of earmarked levy (NHIL, National Health Insurance Levy, consisting of 2.5% of VAT, value-added tax), other earmarked government funds, a transfer from the formal sector workers social security contributions (SSNIT, Social Security and National Insurance Trust, transferring a 2.5% payroll deduction), and individual premiums for enrollees from the informal sector^{xxiii,xcvii,xcviii,c}. Ghana has thus adapted a social health insurance model to facilitate the inclusion of informal sector workers, by envisaging a network of CHI schemes under a centralised authority and funding^c.

The NHIS design and its implications have been subject to both political controversy and scholarly research. In the 2001-2003 pre-legislation phase, formal workers – backed by the then oppositional National Democratic Congress – strongly opposed cross-subsidising health insurance for the informal sector with part of their SSNIT contributions. The 2003 NHIA compensated the formal workers by exempting them from premium payment for the DWHIs^{xcviii}. Yet a clash of interests between formal and informal workers with regards to the NHIS is persistent^c. The political debate raised again after 2008, when the National Democratic Congress³⁸ announced the introduction of a ‘one-time premium’ for the informal workers as a replacement of annual premiums. The debate further complicated when international actors urged the Ghanaian government to implement the ‘one-time premium’ immediately^{ci}, and is still ongoing^{cii}.

³⁷ But not non-district-wide schemes, which could still operate but were classified as private by the NHIA. This was one of the contested issues in the 2001-2003 pre-legislation phase⁹⁸.

³⁸ The National Democratic Congress (NDC) – which won the 2008 elections – tends to have a stronger following among the poorer northern and urban communities. The New Patriotic Party – which had implemented the NHIS – tends to have a stronger following among the more prosperous southern and urban communities⁹⁸.

Since its implementation in 2005, scholars have voiced equity concerns over NHIS because the bulk of NHIS' funding is from VAT³⁹, which is in principle a regressive form of taxation^{xxiii}. Recent research however shows that VAT is actually progressive in Ghana, as a range of goods largely consumed by the poor are purposely exempt from this tax^{cii,40}. Equity in uptake of insurance under NHIS is another issue. Membership is mandatory, but not enforceable in the informal sector^{cii}. In a 2008 household survey in one district, Sarpong and colleagues found 21% of poor households enrolled in NHIS, compared to 60% of those classified as rich. In addition to greater constraints to pay for the premiums, lack of consistent information on the NHIS contributed substantially to low coverage among the poor^{ciii}. Confusion over basic details of the NHIS – including the cost of premiums – was confirmed by Alferts through focus groups with women in the informal sector^c. Jehu-Appiah and colleagues confirm relatively low uptake of NHIS by the poor, due to implementation problems and despite the legal provision for premium exemptions for the extreme poor^{xcix}. According to McIntyre and colleagues, the implementation of these exemptions is likely to be more inapt in the lowest-income regions, which also have lowest staffing levels and weakest service delivery^{lxxi}. The Ghanaian policymakers and implementers are aware of these difficulties. At central level, both the amount and the modality of payment of the premiums are under revision, as are the conditions for exemption of premium payment⁴¹. At scheme level, efforts have been made for improved identification of the extreme poor.

A number of elements of actual organisational practice in line with the institutional design merit a short discussion. One already observed strength is the schemes' comprehensive

³⁹ In 2006, the National Health Insurance Levy amounted to 76% of the National Health Insurance Fund¹⁰⁰.

⁴⁰ See also the 2010 SHIELD information sheet 'Who pays for health care in Ghana?'

http://web.uct.ac.za/depts/heu//SHIELD/reports/SHIELD_Ghana_WhoPays%20forHealthCare.pdf

This policy brief however warns that VAT in Ghana is verging towards proportionality and could become regressive over time.

⁴¹ For example, exemption was extended to all pregnant women (in 2008) and to all children under five (in 2009). The promise was made to replace the informal workers' annual contributions with a 'one-time premium', which led to a wider political debate and is still an unresolved issue – as mentioned before^{23,102}.

benefit package. It should be noted however that this attractive feature urgently lacks improvements at the supply side of care to effectively translate population coverage into benefits coverage.

From their inception, the DWHIs under NHIS have been operating without copayments at the time and place of service, congruent with the aim of increasing utilisation. But providers are still paid on a fee-for-service basis, which is prone to supply-induced demand^{xcvii}. It should thus come as no surprise that several authors have pointed to the threats of cost escalation⁴² and financial instability^{xxiii,xcvi,xcvii,xcix}.

Indeed, Ghana – having come a long way – today still faces the difficult balance between the aim of equitable universalism and the limits of economic efficiency^{xcviii,xcix,cii}.

Acknowledging Ghana's explicit aim to make substantive improvements for the poor, the presence and nature of a specific dynamic of **empowerment and transformation** would be a proper subject of monitoring and research, which has barely received attention so far.

In her analysis of the NHIS, Alferts mentions the representation of organised workers by one member in the National Health Insurance Council, which she considers insufficient given the fact that one individual has to voice the interest of both formal and informal workers. Another identified deficiency is representation of the informal workers at scheme level. Witter and Garshong point to a closed corporate culture within the governing bodies of NHIS^{xxiii}.

⁴² A cost escalation further accentuated by poor gate-keeping in Ghanaian health service delivery (independent from NHIS), according to Witter and Garshong²³.

Community Health Insurance in East and Central Africa

In East and Central Africa, Community Health Insurance is lately enjoying increased attention. Both healthcare providers and governments tend to play a prominent role in the launch and management of CHI schemes. In the United Republic of Tanzania, Kenya and Uganda most schemes are of recent origin and their numbers remain small^{civ}. In Rwanda, the CHI – or *Mutuelles* – approach became a central government policy in 1999 and achieved remarkable population coverage in a less than a decade, which we will discuss in detail. In Burundi and the Democratic Republic of Congo, CHI has a long history (from which still valid lessons can be learnt), declined over time and is currently re-emerging.

The United Republic of Tanzania

In the United Republic of Tanzania, user fees have progressively replaced financing from general taxation since 1993. From 1996 on, the Tanzanian government introduced Community Health Fund (CHF) schemes, essentially a district-based CHI arrangement. Alongside, a dozen provider-driven CHI schemes originated. A 2001 CHF act made the creation of a Community Health Fund obligatory for every rural district within a two-year span⁴³ and introduced state subsidies for CHF schemes: member fees are matched by a 100% government grant.

Gains in terms of financial and population coverage are modest at country level: the share of prepayment plans (including CHI, not mandatory health insurance) in private health expenditure rose from 4.5 to 10.4% between 2000 and 2007, while out-of-pocket expenditure as a proportion of private health expenditure dropped from 83.5 to 75.0% over the same period^{xlii}.

Enrolment in CHF schemes remained far below expectations for over a decade. A study published in 2007 recorded an average enrolment rate of 10%, and identified inability to pay membership fees, low perceived quality of care and lack of trust in the scheme management as barriers to enrolment^{cv}. Where people are enrolled, members utilise services more than non-members and have better financial protection^{cvi,cvii}.

Regarding **organisational practice**, some features of the CHF schemes merit closer attention. First of all, service coverage in principle includes inpatient and outpatient care at both

⁴³ Five years later, in 2006, 69 out of 92 rural district councils had an operative CHF scheme^{108,110}.

dispensaries and first-referral level⁴⁴. Daily management of a scheme is the responsibility of the district council, composed largely of government officials. A fraction of the people too poor to pay a contribution gets free membership. Identification of those too poor to pay is the responsibility of the respective village councils, whereas the district council is expected to subsidise the membership fees of the exempted. Health care providers linked to a CHF scheme receive an advance capitation grant to allow for sufficient equipping of the facility^{cvi,cvii,cviii}.

Lately, innovative features were introduced in Tanzania's Mbeya region: the blending of a NGO driven community-based scheme with a CHF scheme⁴⁵, the transfer of CHF management functions from the district council to a member-based organisation⁴⁶, and the use of corporate subsidies to pay for premiums. The latter is an interesting example of the principle of corporate social responsibility. In the Mbeya's Rungwe district, the local tea company subsidises the premium of the tea farmers and workers, which has allowed the CHF scheme to reach 30,000 beneficiaries (18% of the target population) in two years time^{cix}.

At national level, the Tanzanian Network of Community Health Funds (TNCHF)⁴⁷ – assisted by the Tanzanian-German Programme to Support Health of the German development cooperation (GTZ)⁴⁸ – provides technical and managerial support since 2003.

Regarding **institutional design**, the interaction between the National Health Insurance Fund (NHIF) and CHF is worth noticing. Established in 1999 and operative since 2001, the NHIF is

⁴⁴ First-referral level being health centres in rural areas of the United Republic of Tanzania. Initially, coverage did not include hospital care. Over time, district councils started including hospital care in their CHF benefit package¹⁰⁸.

⁴⁵ Currently, two community-based scheme are notable in the United Republic of Tanzania: an NGO-driven scheme in Mbeya (about 12,000 beneficiaries) and a provider-driven scheme in Bukoba (about 8,000 beneficiaries). The blend with a CHF scheme allowed the Mbeya scheme to capitalise on the matching grant of the government for every member fee paid.

⁴⁶ This is a pilot project that aims at improved community participation in local CHF scheme management.

⁴⁷ See <http://www.tnchf.or.tz/>

⁴⁸ See <http://www.tgpsh.or.tz/>

a social health insurance scheme for civil servants^{cx}. Currently, the financial management of the CHF schemes has been centralised within the NHIF – thereby improving the CHF schemes' risk pooling function – whereas the daily management of each scheme remains a district responsibility.

The already mentioned government's decision of allocating a matching grant equal to member contributions has been an effective incentive for enrolment in CHF schemes in the long run. It has been argued however that these matching grants cannot be considered an equitable allocation mechanism, as relatively poor districts are less able to generate contributions in the first place^{lxxi}.

Regarding the dynamic of **empowerment and transformation**, it is worth noticing that the health financing programme component of GTZ's TGPSH has empowerment of users – at individual and community level – as a specific objective and has been piloting several projects to this end. Results of these efforts still need to be documented.

Kenya

Gains in terms of financial and population coverage are modest at country level: the share of prepayment plans (including CHI, not mandatory health insurance) in private health expenditure rose from 7.1 to 8.8% between 2000 and 2007, while out-of-pocket expenditure as a proportion of private health expenditure dropped from 80.1 to 77.2% over the same period^{xlvi}.

In Kenya, two features of **organisational practice and institutional design** are today of special interest.

On the one hand, the Kenya Community Based Health Financing Association (KCBHFA)⁴⁹ actively promotes the integration of CHI and its members in the National Hospital Insurance Fund (NHIF)⁵⁰ and in its projected successor, the National Social Health Insurance Fund (NSHIF)^{51, cxi, cxii}.

On the other hand, the Kenyan microfinance and cooperative movement becomes increasingly involved in CHI. An example of CHI introduced by a microfinance institution is that of the Jamii Bora scheme, since 2001⁵². This scheme currently has 91,000 beneficiaries. An example of CHI grafted on a cooperative movement is that of the Co-operative Insurance Company (CIC)⁵³, also since 2001, which currently operates 75 schemes with a total of 300,000 beneficiaries.

Uganda

In Uganda, faith-based hospitals started CHI schemes in the late 1990s⁵⁴. Some community-based schemes followed⁵⁵. Many collapsed in 2001 when user fees were abolished in the public health services. Community health insurance schemes survived where people seek

⁴⁹ Platform organization for CHI actors in Kenya since 2002. See <http://www.kcbhfa.org/>

⁵⁰ Social health insurance scheme, since 1966. See <http://www.nhif.or.ke/healthinsurance/>

⁵¹ Enacted in 2004, but not yet operative.

⁵² See <http://www.jamiibora.org/health.htm>

⁵³ See <http://www.cic.co.ke/Our-Policies/Micro-Insurance>

⁵⁴ These provider-driven schemes received support from DFID – the UK Department for International Development – in their start-up phase. DFID also helped establishing a CHI support organisation – UCBHFA, Uganda Community Based Health Financing Association, see <http://ucbhfa.org/> – in 1998. UCBHFA largely failed its capacity-building objective, and subsists mainly as a CHI umbrella organisation.

⁵⁵ These schemes received support from CIDR – *Centre International de Développement et de Recherche* – in their start-up phase. Their organization design is similar to the community-based schemes commonly found in West Africa.

care in private health services, particularly in faith-based hospitals and health centres⁵⁶. In 2006, 13 schemes were still active in this environment^{civ}, and their number is slowly growing. Of the community-based schemes, one is still active today⁵⁷.

Gains in terms of financial and population coverage are modest at country level: the share of prepayment plans (including CHI, not mandatory health insurance) in private health expenditure rose from 0.1 to 0.2% between 2000 and 2007, while out-of-pocket expenditure as a proportion of private health expenditure dropped from 56.7 to 51.0% over the same period^{xlii}. Population coverage at scheme level is not impressive either. In 2006, the existing schemes reached on average 8% of their target population. As reasons for not enrolling the usual suspects were identified: inability to pay the premium, perceived low quality of care, and lack of trust^{cxiii,cxiv}. Scheme-specific data on service and financial coverage are not available.

Organisation practice is documented in a 2009 evaluation of 9 CHI schemes in Kabale and Masaka diocese, southwest Uganda. Following identification of obstacles to expansion, these provider-driven schemes were redesigned from 2006 on, aiming at a switch towards a more community-based organisational culture. The evaluation concluded that such switch had not been made. Service providers still regarded and treated the schemes as their property. Besides, scheme managers still lacked necessarily knowledge and skills^{cxv}.

Institutional design became manifest from 2005 on, when the Ugandan government launched a programme to promote CHI. Currently the government is designing a National Health Insurance Scheme (NHIS), which contemplates the integration of existing schemes^{cxvi} and for which in 2009 a National Health Insurance Bill was drafted. Unlike the homonymous

⁵⁶ Faith-based hospitals make up half of all district hospitals in rural Uganda.

⁵⁷ This is case of the 'Save for Health' scheme in Luwero, central Uganda.

construct in Ghana, the Ugandan NHIS envisages a fragmented strategy, with separate insurance arrangements for different population groups and – a particularity of the Ugandan approach – introduction of these arrangements in a phased manner. According to the draft in circulation, the future NHIS' first building block would be the enrolment of public servants. Researchers have criticised this scenario for possibly resulting in too low initial coverage, little cross subsidisation and limited financial protection^{cxvii}. It should however be noticed that the design of the NHIS – although at an advanced stage – is not yet carved in stone. Also according to the present draft of the NHIS, CHI would be applied in both the private and the government sector. The latter option unveils the somewhat ambiguous position of Ugandan policymakers, who seem to have great difficulty to openly admit the limited success of user fee abolition in the country.

In recognition of the need for capacity building at CHI management level^{cxv} – and an expected even bigger need when the schemes will be integrated in the future NHIS – the Uganda Martyrs University (UMU)⁵⁸ will launch an advanced diploma course in health insurance management in 2011.

Data on **empowerment and transformation** through Ugandan CHI are lacking.

Rwanda

Gains in terms of financial coverage at country level seem to be in contradiction with the impressive gains in CHI **population coverage**: out-of-pocket expenditure as a proportion of

⁵⁸ See <http://www.fiuc.org/umu/>

private health expenditure rose from 40.7 to 44.4% between 2000 and 2007^{xlii,59} – while CHI population coverage had surpassed 75% in 2007^{cxviii}. This paradox – though significant – should not distract from the exceptional progress that Rwanda made in just one decade, or from the lessons that Rwanda has to offer.

Mutual organisations in Rwanda date back to pre-independence years; community health insurance schemes are a more recent phenomenon⁶⁰. In the early 1990s, a number of provider-driven schemes still subsisted or were reactivated after the reintroduction of user fees in 1996⁶¹, some of them more successful than others^{cxix}. In 1999, a state-driven approach – part of the national reconstruction effort following the 1994 genocide – took over. At that time population coverage by CHI was as low as 1.2% and health centres had an utilisation rate of 0.28 new cases/inhabitant/year on average^{cxviii}. With technical and financial assistance of Abt Associates and USAID, the government piloted 54 health centre-based *Mutuelles de Santé* in three districts from July 1999 on^{cxx}. After one year of piloting, the results were considered promising: 8% of the population in the targeted areas had enrolled; health service utilisation was six times higher for members than for non-members; members contributed per capita five times more to health services than non-members while spending less out-of-pocket per episode of illness than non-members^{cxx, cxxi}.

Following the 1999-2001 pilot phase, the *Mutuelles* approach was progressively spread out. In 2003, 102 schemes covered 7% of the national population. In 2004, 226 schemes covered 27%; in 2005, 354 schemes covered 44% – nearly four million people^{cxviii, cxxii, cxxiii, cxxiv, cxxv}. Utilisation

⁵⁹ The share of non-mandatory prepayment plans in private health expenditure is no longer a relevant indicator for the impact of CHI in Rwanda, since CHI in principle became mandatory in 2007. This share rose from 0.9 to 10.2% between 2000 and 2007⁴².

⁶⁰ Pioneers in Rwanda were the *Muvandimwe* scheme in Kibungo (1966) and the *Umubano mubantu* scheme in Butare (1975)^{122,123}.

⁶¹ In 1998 – before the government took the lead – a total of six schemes were counted¹²³.

rates of the health centres increased concomitantly, reaching 0.42 new cases/inhabitant/year in 2004 and possibly 0.65 in 2005^{cxviii,62,cxxvi,63}.

Alongside the striking gains in population coverage during the 2002-2005 expansion phase, a series of challenges remained. To name a few: affiliation was still voluntary, which implied a risk of adverse selection despite the large numbers; service coverage was still patchy and exclusive of big risks at referral level; overall financial stability and peripheral management capacity were weak. The Rwandan government recognised these challenges^{cxix}, adapted design and practice⁶⁴, and proceeded. In a third – still ongoing – phase of consolidation, Rwanda reported 73% population coverage in 2006⁶⁵, 75% in 2007, and 85% in 2008^{cxiv,cxxv,cxxvii}. Utilisation rates of curative services⁶⁶ reached 0.61 new cases/inhabitant/year in 2006, 0.72 in 2007, and 0.86 in 2008^{cxv}.

A closer look at data provided by the 2005-2006 Rwandan Integrated Living Conditions Survey (EICV2, *Enquête Intégrale sur les Conditions de Vie des ménages*^{cxviii}) reveals insight on the *Mutuelles'* financial coverage. Out-of-pocket payment for health⁶⁷ of CHI members was half that of non-members, both in absolute terms and as proportion of capacity to pay^{cxix,cxxx,68}.

⁶² Several records mention low service utilisation (0.28 new cases/inhabitant/year in 1998 at health centre level) as one of the drivers for the Rwandan CHI initiative^{118,121,122,127,128}. The Rwandan government explicitly names three objectives and one expected outcome of its CHI policy: “1) to improve financial access to health care, 2) to improve the financial situation of health facilities, and 3) to improve the overall health status of the population. Mutual health insurance should facilitate the utilization of services by the population”^{122,111}.

⁶³ Musango and colleagues reported an utilisation rate of curative services of 0.65 in 2005, based on figures from the 2007 Year Report of the Ministry of Health¹¹⁸. The 2009 Statistical Yearbook refers to 0.47 in 2005, based on figures from the 2008 Year Reports of the Ministry and the *Mutuelles*¹²⁵.

⁶⁴ More on this in the following section on institutional design and organisational practice.

⁶⁵ Within the sample of the 2005-2006 Integrated Living Conditions Survey (EICV2), CHI population coverage was 36%^{128,130}.

⁶⁶ Combined for health centres and referral hospitals, with the portion at hospital level being less than 5% of the total¹²⁵.

⁶⁷ Including the cost of consultation, hospitalization, drugs, tests and transport, but not the insurance premiums paid. The survey used a recall period of two weeks¹²⁸.

⁶⁸ The previous EICV (EICV1, 2001-2002) had no separate data for CHI members and non-members. Deduction allows however to assume an increase in financial protection between 2000 and 2006: in real terms, health expenditure for the total population had decreased; health expenditure for non-insured had remained the same¹²⁸.

Due to the Rwandan government's strong involvement in CHI since 1999, **institutional design and organisational practice** are manifestly intertwined. Furthermore, Rwanda's CHI policy is today part of a bigger aggregate including performance-based payments (PBF) and enforced donor coordination^{cxvii}. Analysis of design and impact of these interactions is of major interest.

Already in the pilot phase (1999-2000) important choices were made: linkage of each CHI scheme to a health centre and introduction of capitation payment; and affiliation to CHI per family and contributions linked to presumed capacity to pay⁶⁹. These measures had both positive and negative impact. While capitation payment and low personal contributions helped to control cost for members and schemes, health centres were neither prepared nor equipped to the consequences. Besides, limited benefits packages and insufficient involvement of local authorities were identified as serious weaknesses. While the overall impact of the pilot project was positive enough to decide for expansion, design and implementation improvements were deemed necessary^{cxviii,cxxi}.

The Rwandan government started the phase of expansion (2002-2005) making local authorities responsible for CHI development⁷⁰ and concluded it preparing a specific legal framework for health insurance. Operational roles and responsibilities for CHI at different levels were clearly laid out. Note was taken of the remaining financial barriers for the poorest of the poor. A system for identification of the extreme poor was established as well as prepayment of premiums through micro-credits at the community level. Note was taken also of the need of subsidies to strengthen the CHI schemes and to widen their benefits

⁶⁹ Estimated as a proportion of yearly income; not calculated on the basis of declared willingness to pay. In the pilot phase, the personal contribution of a family of seven corresponded on average with 8% of the family's yearly income, which was deemed fair^{118,121}.

⁷⁰ "Les préfets des provinces, les maires des villes et des districts administratifs ont reçu des directives de leur ministère de procéder à la mise en place des mutuelles de santé dans leurs zones respectives dans des délais aussi courts que possible. (...) La création des mutuelles de santé sera un des points de leur évaluation future." Minister of local administration and social affairs, 2003, cited by Musango and colleagues¹¹⁸.

package. Gradually, a comprehensive action plan for the coming years was drafted and budgeted^{cxviii}.

Government made major design adjustments entering the phase of consolidation. In 2006, it started subsidising part of the premium of the extreme poor, and succeeded in channelling Global Fund money through CHI^{cxviii,cxxiv,cxxxi}. It thereby intelligently bypassed a trade-off between extension of coverage and maximising revenues for the health system through CHI^{cxviii}. While the Rwandan CHI initiative had always been part and parcel of the national poverty reduction strategy, the latter was now reinforced with an agreement to integrate all donor funds within one fiscal framework. And hand in hand with CHI at the demand side, performance-based payment was introduced at the supply side^{cxvii}. These measures have certainly contributed to the gains in coverage and access over the last years. They have also made evaluation of CHI per se more complex⁷¹. Finally, following a 2006 ministerial decree, in 2008 a specific legal framework was established, making affiliation to health insurance in principle mandatory for nationals and residents alike^{cxviii}.

Clearly, this comprehensive and diverse package of measures was the start rather than the conclusion of a process. Recent research highlights persistent and newly discovered challenges. The contributions made to the extreme poor are insufficient to overcome their difficulty to adhere^{cxviii}. Despite the efforts made, quality of care on offer is far from optimal: a 2007 service provision assessment found a full package of basic services available in 44% only of all health facilities, and low staff adherence to treatment standards^{cxvii}. Integration with health insurance mechanisms for other population groups – especially with RAMA (*La Rwandaise d'assurance maladie*) serving the civil servants – is desired but not yet realised^{cxviii}.

⁷¹ This being an academic, more than a practical issue.

Financial sustainability remains a substantial, and monitoring of implementation remains a huge challenge^{xxxiv}.

The presence and nature of a specific dynamic of **empowerment and transformation** would be a proper subject of monitoring and research, which has barely received attention so far. One exception is to be found in the work of Kalk and colleagues on the Rwandan *Mutuelles* and health system. They describe how CHI scheme management by civil servants is a possible barrier to genuine community participation^{xxxix,xxxiii}.

Burundi

The Burundian government's effort to spread some form of community health insurance preceded the Rwandan state-driven approach by a decade and a half, but was far less successful. Of Burundi's *Carte d'Assurance Maladie* little remains but lessons from a remote past.

A prolonged political and humanitarian crisis left its mark on the country, and few international actors lent a hand. Today, the poorest Central African state is still in fragile conditions. Two local CHI initiatives are active; a few others are starting out.

Gains in terms of financial and population coverage are insignificant or at best marginal at country level: out-of-pocket expenditure as a proportion of private health expenditure dropped from 71.3 to 60.5% between 2000 and 2007, while the share of prepayment plans (including CHI, not including mandatory health insurance) in private health expenditure actually dropped from 0.4 to 0.2% over the same period^{xlii}.

In 1984, the Burundian government installed the CAM scheme (*Carte d'Assurance Maladie*). This was a national programme, with revenue collection and management at community level. In the initial setup, purchase of a card (CAM) for a fixed annual premium of less than two dollar in principle entitled a household (up to two adults, plus all children under 18) to one year of inpatient and outpatient care – without copayment and including drugs – in all public facilities, at both primary care and referral level. Despite its apparent attractiveness, the CAM never reached more than 10-25% of the population.

In 1996, a differential annual premium (three categories⁷²) and a 20% copayment were introduced. All along successive crises from 1993 on, the CAM waned into near oblivion, for potential users and service providers alike. Failing protection went to extremes. In 2006, human rights activists reported detention of insolvent patients as routine practice in Burundian hospitals. Of those detained with information of insurance coverage available, 59% had in vain presented a CAM card^{cxxxiv,cxxxv,cxxxvi,cxxxvii}.

Burundi's unsuccessful CAM experience provides important lessons in terms of **institutional design and organisational practice**. As early as in 1993, Baza and colleagues described the CAM as both a success and a failure: a success because as many as 95% of users of public health centres had a card, and a failure because as few as 10% of the population procured a card. They further inquired why uptake of the CAM – all in all an insurance arrangement that promised extensive benefits – was so low. Above all, people perceived the CAM as no value for money, as drugs were out of stock more often than not. Besides, no supply-side measures complemented the top-down design of the scheme. In fact, no link was foreseen

⁷² The 1996 amendment restricted the CAM to the self-employed and set differential premiums according to strata within this group: 500 Fbu (Burundian francs) a year for farmers, pastors and fishermen; 1,500 Fbu a year for artisans, retailers and shopkeepers not registered with the tax services; and 3,000 Fbu a year for artisans, retailers, shopkeepers and other self-employed registered with the tax services¹⁴⁰ (respectively 2.25, 4.5 and 13.5 US\$ a year at 1996 exchange rates; the Fbu has since devaluated more than 500%).

between payment for the CAM and financing of the health services. People regarded the CAM both as a gift and as a tax, albeit a useless one^{xxxiv}. Arhin, in her 1994 study, came to similar conclusions^{xxxv}. Both authors pled for improvements in quality of care, among other means by linking CAM revenues to supply-side investments^{xxxiv,xxxv}, but no action was taken.

By 1999, an in-depth World Bank poverty note described Burundi as on its way “to a full-scale humanitarian emergency”. Regarding social protection in health, it described how lack of public resources⁷³ and escalating needs had ruptured the CAM. By the time, all public health centres were charging for drugs despite the CAM⁷⁴. In its conclusion, the document pled for urgent action in social protection, to be designed and implemented with community involvement and ownership^{xxxviii}. Such did not happen.

From 2006 on, first attempts of recovery were noted at country level. At that time – according to data from a Core Welfare Indicators Questionnaire (QUIBB, *Questionnaire des indicateurs de base du bien-être*)⁷⁵ – one out of three Burundians did not seek healthcare when in need, of which eight out of ten because they could not afford it. Burundi engaged in a poverty reduction strategy, launched its 2006-2010 National Health Sector Development Plan (PNDS, *Plan National de Développement Sanitaire*) and abolished user fees for under-five and maternal healthcare. The 2006-2010 development plan mentions – among a total of 68 strategic actions – promotion of CHI to improve financial access, in particular for the extreme poor^{xxxix,76}.

⁷³ The 1999 poverty note also attributed part of the health systems crisis to the withdrawal of donors¹³⁸. This withdrawal would continue in the next decade.

⁷⁴ Whereas some nonprofit providers (who never subscribed to the CAM) temporarily reduced or eliminated cost-recovery measures¹³⁸.

⁷⁵ Cited in a World Bank project appraisal document for health sector development support; see http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2009/05/21/000333038_20090521015520/Rendered/PDF/472600PAD0P101101Official0Use0Only1.pdf

⁷⁶ This portion of the population is estimated at above 80%, since over a decade. Gross national income was as low 380 US\$ per capita in 2008. See <http://siteresources.worldbank.org/INTWDR2010/Resources/5287678-1226014527953/Statistical-Annex.pdf>

A 2009 inventory of social protection documented two active CHI networks in Burundi: the provider-driven MSAG (*Mutuelles de Santé de l'Archidiocèse Gitega*) – integrating 14 schemes, jointly covering 18,074 people – and the union-based MUSCABU (*Mutuelles de Santé des caféiculteurs du Burundi*) – integrating 15 schemes, jointly covering 39,175 people. Others are starting or preparing to do so. All receive assistance from Belgian nongovernmental development partners^{cxl}.

Currently, Burundi sets out for a health sector reform. Elements included are performance-based financing and donor coordination within a sector-wide approach. Among the few donors active in the Burundian health sector is the Belgian Technical Cooperation (BTC/CTB). Among other projects, BTC/CTB will focus in 2011 on social health protection, aiming at coordinating the already existing CHI efforts and at revitalising the *Carte d'Assurance Maladie*.

Not unsurprisingly, the largely disappointing early CAM experience still offers positive evidence on **empowerment**. As stated by Arjin in 1994, women reported that the CAM empowered them to decide the need for – and the timing of – healthcare consumption. This finding bears a striking resemblance to what Soors and Criel recorded in Nongon (Mali) more than a decade later^{lxxii,77}, and highlights the potential of CHI as a social investment^{xviii,xxxv}.

⁷⁷ See also page 21.

Democratic Republic of Congo

The Democratic Republic of Congo (hereafter called DR Congo) is today possibly one of the most challenging contexts for any kind of development, including that of CHI. Yet new CHI initiatives in the DR Congo are common. A 2004 survey of 28 Congolese schemes highlighted evidence of a countrywide renewal in CHI activities since 2000, and to a great variety of CHI models^{cxli}.

Little can be said **in terms of financial and population coverage** at country level: out-of-pocket expenditure as a proportion of private health expenditure dropped from 97.0 to 51.7% between 2000 and 2007, apparently without relation with the share of prepayment plans (including CHI, not mandatory health insurance), which was reported 0% in 2000 and 2007^{xlii}.

While the DR Congo witnesses a boom of CHI activity, scheme-specific data are rare. One notable exception is that of the Bwamanda scheme. This African CHI pioneer – active since 1986 as part of a broader development project^{xxxiii,78} – survived political instability, economic decline and war, and has information on **population and service coverage** to offer.

Within three years, the scheme's coverage had increased from (an already impressive) 28% to 60-65% of its target population, where it stabilised for a decade^{cxlii}. Subscription declined during wartime, but began to increase again from 2003, peaking at 64% (114,465 beneficiaries) in 2004 before settling around 55% until 2008^{cxliii}.

⁷⁸ The CDI (*Centre de Développement Intégral*) Bwamanda is a Congolese NGO – supported by a Belgian counterpart and several development partners – with agricultural, educational, infrastructural, ecological and medical activities, in the northwestern part of the Equator province, since 1969.

Service coverage of the Bwamanda scheme is limited to hospital care, contingent on referral from a health centre⁷⁹. The scheme improved significantly hospital utilisation for its members^{cxlii}, and more so in case of priority interventions, to the extent that scheme membership was to overcome geographical barriers for patients considered in high need^{cxliv,80}.

Elements of **organisational practice** – and wider contextual elements – proved substantial for the success of the scheme in terms of coverage and access. The Bwamanda scheme was launched in a setting where the quality of the care supplied was of a relatively high standard, where people basically trusted the management of the scheme and where the management team had the freedom, willingness and skills to test change⁸¹. The set-up of the scheme was exhaustively negotiated with the community and comprised collection of membership fees coinciding with annual crop sales, community-rated flat membership fees, coverage contingent on referral, low co-payments and a cashless system at the time and place of utilisation for the proportion of cost covered⁸², and scheme management by the district health team^{lxii,cxlii}. It can be argued that the fit of organisational practice to the community's expectations has been key for the scheme's exceptional success, survival during and revival after the war.

⁷⁹ The scheme's environment being a two-tier health district with 23 health centres and one referral hospital¹²⁷.

⁸⁰ Criel and colleagues' in-depth study on hospital utilization at Bwamanda considered C-sections and strangulated hernias as priority interventions¹⁴⁴.

⁸¹ The Bwamanda health district was already relatively successful before the insertion of the CHI scheme (0.6 new cases/inhabitant/year utilisation rate of outpatient care and 84% ANC coverage in the health centres; 30/1,000 admission rate in the hospital). Paradoxically, decay of the (at the time) Zairese state and the resulting isolation of the district was a main driver in the search of self-reliance, including the CHI scheme¹⁴².

⁸² The community had expressed a preference for no co-payments at all. Eventually, a consensus was reached on no co-payment for maternity services, and a 20% co-payment for all others. The 100 and 80% coverage by the scheme was directly transferred from scheme to hospital upon utilisation of care, thereby avoiding the hassle of retrospective reimbursement for the users¹⁴².

From 2008 on, new conflicts and resulting crisis in the region started taking their toll. Provision of drugs became problematic^{cxlv}. The scheme's population coverage dropped to 26% (49,858 beneficiaries) in 2009^{cxliii} and is slowly recovering^{cxlv}.

All over the DR Congo, new schemes keep popping up in recent years. While part of this occurrence can be seen as a reaction to a failing health system, **institutional design** is slowly lending a hand: the Congolese government today encourages CHI development, as expressed in the 2009-2011 action plan of its National Programme for the Promotion of Community Health Insurance (PNPMS, *Programme National de Promotion des Mutuelles de Santé*)^{cxlvi,83}. What the long-term effect of these many new schemes will be remains to be seen.

Understandably, effects on **empowerment and transformation** are yet undocumented.

⁸³ See also the PNPMS' 2009-2010 logframe: *Cadre logique du Programme National de Promotion des Mutuelles de Santé*. http://www.coopami.org/fr/countries/countries_partners/drc/projects/2009/pdf/20092010programnpms.pdf

Community Health Insurance in Asia

Unlike in Africa, the earliest CHI initiatives in Asia were rooted in deliberately political processes. In China, the first Medical Cooperatives saw the light of day in a few communist-controlled rural areas as far back as the 1940s. Once an isolated innovation, these schemes eventually led to the nationwide implementation of the Rural Cooperative Medical System (RCMS) in the 1960s. By the 1970s, RCMS covered 90% of China's rural population. However, the RCMS collapsed following the market-oriented reforms of the early 1980s. A new RMCS was created in 2003 and is in expansion.

In the Indian subcontinent, the Students Health Home (SHH) was the first CHI scheme to be recorded, set up by a communist movement in West Bengal back in 1952^{cxlvii}. It was not until the late 1990s however that a crossover between the micro-finance movement (which originated mainly as micro-credit, but now encompasses a variety of products including micro-credit, micro-savings and micro-insurance) and CHI initiatives led to a spurt of CHI schemes, mainly in India and Bangladesh.

As is the case with CHI in all contexts, different speeds of implementation, variations in the mode of implementation and heterogeneous achievements can be observed. With regard to country patterns, roughly three groups can be distinguished – of which we discuss two examples each: **early CHI developers, where CHI today plays again** (China, *page 62 onwards*) **or still** (India, *page 71 onwards, with brief mention of Nepal and Bangladesh*) **a prominent role; late and possibly innovative developers** (like Cambodia and Lao People's Democratic Republic, *pages 82 and 86 onwards*); and **early developers where CHI actually only plays a minor role** (like the Philippines and Indonesia, *pages 88-89 and 90-91*).

China

The early Medical Cooperatives in the Shanxi, Gansu and Ningxia provinces were established as a mechanism to help defray cost of medical treatment and drugs. A first set up as mutual prepayment funds, they subsisted on the peasants' voluntary contributions in the form of both cash and in kind, as well as initial drug stocks provided by the ruling communist local governments. These initiatives proliferated and gained financial strength during the 1950s, when the communist state organised the agricultural workers into farmer cooperatives and consequently was able to introduce welfare funds at community level. As an integral part of the collective system for agricultural production and social services, the Rural Cooperative Medical System (RCMS) became a nationwide structure of prepayment schemes for healthcare financing during the 1960s. Most villages funded their Cooperative Medical Scheme from three separate sources: household health insurance premiums, a collective welfare fund and state subsidies. Depending on the plan's benefit structure and the village's economic status, the household premium was usually fixed at between 0.5 and 2% of a peasant's family annual income. The welfare fund was a state-defined portion of the village's collective income from agricultural production. Subsidies from upper-level tiers of governments were typically earmarked to compensate health workers and purchase medical equipment. In 1965, the state explicitly encouraged the entire rural sector to adopt the Cooperative Medical Scheme (CMS) as the mode of financing and organizing healthcare services. The resulting community financing and organization model is believed by many to have contributed significantly to the achievements of the Chinese primary care of that era^{cxlviii}. Between 1949 and 1973, the infant mortality rate was reduced from about 200 per 1,000 to 47 per 1,000 live births and life expectancy increased from 35 to about 65 years. From

the late 1960s until 1979 – when the process of collectivization began to be reversed – the RCMS covered 90% of China’s rural residents^{cxlix,cl,84}.

Due to market-oriented reforms both the communal administrative structure that employed the health workers and the collective welfare funds – once counting for 30 to 90% of the schemes’ funding – disappeared. By 1984, RCMS population coverage had dropped to less than 5%. Between 1981 and 1993, the contribution made by the RCMS to national health expenditure fell from 20 to 2%. Besides, poor management practices and corruption had eroded the population’s trust in the once successful schemes^{cl,cli}. Attempts to re-establish the RCMS based on voluntary affiliation and without substantial co-funding by central government had limited success. By the end of the century, 90% of China’s rural residents were uninsured^{clii,85}.

Still, the Rural Cooperative Medical System never disappeared entirely from the political agenda. In 2002, the Asian Development Bank made an appeal for its reinstatement, at least in China’s middle-income regions, a plea contingent on renewed and committed government support^{cxlix}. In 2003, China created a new RCMS – also known since as NCMS, New Cooperative Medical System – projected to cover the whole of rural China by 2008^{cliii,86}. The NCMS is based on voluntary affiliation (unlike the RCMS before the reforms of the 1980s), is co-funded by the local and central government (as had not been the case since the reforms of the 1980s), and is managed on county level. Central government declared coverage of

⁸⁴ In the pre-reform period almost all Chinese citizens were covered by some form of health insurance: besides RCMS covering most of the rural population, the urban population benefited either from the Labour Insurance Scheme (LIS, for state-owned enterprise workers) or from the Government Insurance Scheme (GIS, for civil servants)¹⁵⁷.

⁸⁵ Insurance coverage (LIS and GIS) of the urban population declined to a less extent, arriving at around 50% in 1998¹⁵⁷.

⁸⁶ At inception, this projection was made for 2010. Rapid expansion of insurance coverage (86% of the rural population in 2007¹³⁹) led to reformulation of this deadline¹⁵³.

catastrophic illnesses⁸⁷ a key aim of the NCMS; but the actual decisions on benefit package and provider payment method are left to the local management structure^{xxii,cliv,clv,clvi}.

The creation of the NCMS for the rural population was part of a broader health insurance and social assistance reform in China^{clvii,clviii,clix,clx}, including a Basic Medical Insurance (BMI) initially aiming at covering all urban workers, since 1998⁸⁸; a Medical Financial Assistance (MFA) safety-net programme for the urban and rural extreme poor, since 2003 and closely linked to the NCMS^{clxi,clxii,clxiii,clxiv,89}; and an Urban Resident Basic Medical Insurance (URBMI) for urban residents not covered by the BMI, since 2007^{clxv,90}.

Gains in terms of financial coverage are modest at country level: the share of prepayment plans (including CHI, not mandatory health insurance) in private health expenditure rose from 1.0 to 7.1% between 2000 and 2007, while out-of-pocket expenditure as a proportion of private health expenditure dropped from 97.3 to 92.0% over the same period^{xlii}.

This indication of an elusive impact on financial protection contrasts remarkably with the reported expansion in population coverage: according to official data, the NCMS covered 73% of the targeted rural population in 2004^{clvii}, 86% in 2007^{xxii} and 95% in 2008^{clv}. Yet insurance coverage not automatically leading to financial protection is no new phenomenon in China. As early as 1996, Bogg and colleagues had reported increased out-of-pocket

⁸⁷ Called *dabing*, literally severe illnesses¹⁵⁵. Commonly defined as acute illnesses associated with inpatient care¹⁵⁶.

⁸⁸ The BMI – also known as UEBMI (Urban Employee Basic Medical Insurance – was piloted from 1995 on and spread out from 1998 on. Classified by most scholars as a social health insurance scheme and based on mandatory affiliation, it aimed at covering all urban formal-sector and government workers, but not their dependents. Coverage of the urban population was still below 40% in 2003¹⁵⁸. The large rural-to-urban migrant population – and informal-sector workers in general – is not eligible for BMI¹⁶⁵.

⁸⁹ Strictly speaking, the MFA is no insurance, but a safety net. Because however it is closely linked to – and dependent upon – the NCMS, it makes sense to pay closer attention to MFA in this overview. Indeed, MFA was designed as complementary to NCMS (being an entry point to NCMS by paying the premium for those too poor to contribute, or acting as ‘second assistance’ by transferring cash after reimbursement by NCMS), and its implementation and effectiveness depend on the performance of NCMS (and of present social assistance schemes like *Wubao* [‘Five Guarantee Programme’], *Dibao* [‘Minimum Income Guarantee Scheme’] and *Tekun* [‘Assistance for the Extremely Poor Households’])¹⁶².

⁹⁰ As NCMS and unlike (UE)BMI, URBMI – which according to the official guidelines targets “primary and secondary school students who are not covered by the urban employee medical insurance system (...), young children, and other unemployed urban residents” – is based on voluntary affiliation¹⁶⁵.

spending in a county after introduction of one of the predecessors of NCMS^{cl}. Based on survey data reaching from 1991 to 2003, Wagstaff and Lindelow found that health insurance in the pre-NCMS era not only increased out-of-pocket but also the risk of high and catastrophic spending^{clviii}. Wagstaff and colleagues argued that insurance had led to these unexpected effects by allowing healthcare providers to deliver more costly care and by pushing healthcare users towards higher level (and more costly) providers^{clix}. There is today no evidence that the NCMS would have reversed these perverse incentives, and at most evidence for a marginal positive impact on financial protection.

A 2005 study in rural Shandong provides evidence that NCMS adversely influences prescribing behaviour of village doctors^{clxvi}. Sun and colleagues' impact evaluation based on data from the same county under study found that NCMS reduced the incidence of catastrophic health expenditure (CHE) by no more than 8.2% in 2004 (from 8.98 to 8.25% of households) and the severity of CHE by 18.7% (from 8.95 to 7.28 times a household's disposable income) in 2004⁹¹. As the authors recognized, a CHE incidence of 8.25% is yet high, and still spending a 7-fold of the disposable income is a disaster^{clxvii}. A simulation based on 2006 survey data assessed the effectiveness of NCMS in financial protection. The authors computed a 3.5-3.9% reduction in poverty headcount, and concluded that the NCMS offered only limited financial protection^{clxviii}. Yet another simulation compared out-of-pocket spending before and after the introduction of NCMS, and concluded that NCMS had not reduced out-of-pocket expenses per outpatient visit or per inpatient episode^{clxix}. Wagstaff and colleagues repeated this conclusion in a comprehensive review of recent studies of China's healthcare reform^{clix}. A more focused review – on the NCMS only, by You and Kobayashi – likewise found no effect of the NCMS on out-of-pocket expenditure^{clxx}.

⁹¹ The authors used the term catastrophic health *payment* as identical to catastrophic health *expenditure* and applied five thresholds (spending more than 10, 20, 30, 40, 50 or 60% of disposable income on healthcare). For this simulation, they applied the 40% threshold¹⁶⁷.

Examining data from the nationwide 2000, 2004 and 2006 China Health and Nutrition Surveys, Lei and Lin found no effect of the NCMS on out-of-pocket expenditure either^{cliii}. Examining data from more recent national surveys in a 2005-2008 panel study, Yi, Zhang and colleagues found that reimbursement by NCMS has an increasing tendency of favouring low-level expenditures, and fails to cover its objective of minimising the financial implications of catastrophic illnesses^{clv,clxxi}. Examining data from a 2008 survey in Western and Central China, Shi and colleagues observed that NCMS reduced the incidence of catastrophic health expenditure (CHE) by no more than 9.9% and the intensity of CHE by 16.9%^{clxiii,92}. A 2010 analysis of 2004 and 2007 data, by Babiarz and colleagues, arrives at the more positive picture of a 19% reduction in out-of-pocket payment but gives no conclusive evidence on catastrophic health expenditure^{clxxii,93}. As stated in an accompanying editorial, the results at which Babiarz and colleagues arrive should be interpreted with caution, in view of their rather thin evidence base and the contradictory findings from other studies^{clxxiii}.

Several articles attribute the NCMS' past and current failure of providing its essential function of financial protection (at least partly) to insufficient funding^{clv,clxiii,clxvii,clxviii,clxxi}. One article sees improved performance over time, attributable to a variety of policy modifications including increased governmental funding^{clix}. In 2006, the Chinese government committed to increasing healthcare funding by 1-1.5% of its gross domestic product – which would represent a triple of government spending on health – subsidizing both the supply and demand side, including increased subsidies for the NCMS^{xxii}. There is today a growing consensus that increasing funding alone will not be sufficient, and could even be

⁹² The 2008 figures on reduction of *incidence* of CHE provided by Shi and colleagues (9.9%) are similar to the 2004 figures on the same provided by Sun and colleagues (8.2%), and comparable: both groups of authors used a 40% threshold to esteem *incidence* of CHE. The 2008 figures on *intensity* of CHE should not be compared with the 2004 figures on *severity* of CHE: Shi and colleagues utilised *intensity* of CHE as the degree by which health expenditure exceeds the 40% threshold, whereas Sun and colleagues utilised *severity* of CHE as the relation of health expenditure to disposable income at the 40% threshold^{163,167}.

⁹³ Instead of using CHE as indicator, the authors calculated the probability of financing healthcare through asset sales or borrowing, for which they observed a 45% reduction¹⁷³.

counterproductive as far as financial protection is concerned. Both Yip and Hsiao^{xxii} and You and Kobayashi^{clxx} argue that more money will most likely end up as income and profits for providers, unless cost inflation and inefficiencies will be carefully tackled. This hypothesis highlights the importance of institutional design and organisational practice, which we will deal with more in detail in a following section.

Financial coverage by the Medical Financial Assistance (MFA) displays a yet bleaker picture. With its implementation decentralised to county level⁹⁴, as is the case with the NCMS to which it is complementary, MFA in most counties covered only a small fraction of actual medical costs and faced sustainability problems already in its development stage^{clxi}. A 2006 study in four counties affirmed insufficient financial protection of MFA, due to exclusive retrospective reimbursement⁹⁵ and lack of funding^{clxii}. A 2008 survey in Western and Central China documented only one case of prevention of impoverishment – and no protection against catastrophic health payment – by MFA after three years of implementation. The authors of the study advocate a range of design improvements, contingent on increased funding^{clxiii}. Another study found a positive impact on utilisation of care – but not on impoverishment – in a pilot setting with an extended benefit package. The authors of this study advocate a more substantial extension of the MFA benefit package, and regard the government's commitment to increased healthcare funding as an opportunity to explore this possibility^{clxiv}.

Impact by the NCMS (and MFA) on utilisation of care – and the interaction of utilisation of care with financial coverage – is worth a closer look. There is indeed ample evidence of a positive overall impact of both NCMS and MFA on utilisation of care, which might suggest a

⁹⁴ This resulted in a marked variation across counties in all three dimensions of coverage, due to considerable discretion over financing, eligibility, the range of services covered, the proportion of costs covered and payment methods¹⁶¹.

⁹⁵ A non-quantified fraction of the enrolled poor could not afford to pay for medical services in advance, and could thus not benefit from MFA in these four counties¹⁶².

reduction in unmet needs. Wagstaff and colleagues, in their simulation exercise before and after the introduction of NCMS, found that outpatient visits had increased by 52%, and inpatient stays by 47%^{clxix}. Hao and colleagues examined data from a 2004 survey and found increased utilisation after introduction of MFA, especially for inpatient care and more so when the benefit package was extended^{clxiv}. Zhang and colleagues, in their panel study on data from 2005 and 2008 surveys, found that outpatient care in case of need had increased from 90 to 95%, and the share of those who used inpatient services from 7 to 10%^{clxxi}. Lei and Lin examined data from 2000, 2004 and 2006 survey and came up with mixed findings: uptake of preventive services had increased, utilisation of curative services had not. They ascribed the latter among other factors to the NCMS' prohibitive deductibles and insufficiently funded saving accounts^{cliii}. In their 2009 review, Wagstaff and colleagues confirmed a positive impact on service utilisation, but warned that without tight measures to alter the persistent and perverse incentives for healthcare providers, broader and deeper insurance coverage would continue to translate in more resource-intensive care, and in possibly less instead of more financial protection^{clix}.

Accumulating evidence from the interplay of reproductive health and current Chinese insurance efforts provides a similar warning. Back in 1995, Bogg and colleagues conducted an extensive study on the determinants of uptake of maternal care services in Central China. One of their findings was that cost recovery was a strong barrier for the use of antenatal care services (ANC). While only few women at the time benefited from existing maternal insurance schemes⁹⁶, those that did had a 1.6 times higher possibility to use ANC than those that had no insurance coverage^{clxxiv}. Another finding was a strong association between home delivery and having no insurance coverage. Fifteen years later and with the NCMS spread

⁹⁶ Between 0 and 15% of eligible women in five out of six counties under study; 43% in the sixth¹⁷⁴.

out over rural China, the situation looks different. Comparing a county where NCMS covered ANC with two counties where ANC was not included in the NCMS benefit package, Long and colleagues found no significant difference in ANC uptake between covered and uncovered. Besides, of the group with ANC coverage, less than half of the women were aware that ANC was covered and only 20% claimed reimbursement. Out-of-pocket expenditure for ANC remained at 8% of an average woman's annual income, and was as high as 26% of the annual income of a woman in the poorer third of the population. Regardless of ANC coverage, providers under NCMS did not abide with national ANC guidelines: they rarely prescribed all recommended tests (and less so in the county where ANC was covered), yet exceeded in 90% of the cases the recommended number of ultrasounds (in all three counties)^{clxxv}. Bogg and colleagues in 2010 report an alarming increase in C-section rates after introduction of the NCMS (2004-2007)⁹⁷. While the authors do not claim that NCMS funding was the sole or primary cause, they do suspect that the NCMS provider payment mechanisms in combination with the dependence of doctors' income on hospital revenues are the culprits^{clxxvi}.

In terms of organisational practice and even more so of institutional design, China's early 21st century post-reform reforms are certainly one of the richest sources for health policy and social security researchers today. They are also one of the most complex, and difficult to interpret. From a theoretical policy view, China's course to universal coverage can be described as the biggest ongoing experiment of a fragmented approach^{xlvi, lxxi}, with CHI-like initiatives (NCMS, URBMI) being part of an aggregate including social health insurance (UEBMI) and social assistance in health (MFA). From an operational research perspective, China's myriad of designs and implementation modes within the established NCMS and

⁹⁷ An increase of between 36 and 131% in four of the five counties under study; a status quo in the sixth where C-section rate already was at an unacceptable 60%¹⁷⁶.

MFA schemes is innovative and provides a wealth of policy lessons^{clxix,98,clxxvii,clxxviii}. From the angle of many low-income country planners and policymakers, China's impressive and fast achievements in insurance population coverage are desirable, if not exemplary. Yet the non-translation of population coverage in financial protection is a challenge for policy theorists, and more so for Chinese policymakers^{xxii,clix,clxviii,clxix}. And eventually, the mere feasibility of reaching universal coverage through a fragmented approach is at stake.

The specific dynamic of empowerment seems not to have captured the interest of scholars of China's healthcare and social health protection reforms. While a multitude of authors have described how China's social and economic transformations led to a felt need for social protection in health including community health insurance⁹⁹ and many have pointed to a reinforcement of existing patient-provider asymmetries after introduction of insurance schemes^{clxxix,100}, no research specifically addresses the question if the schemes have led to any positive transformation and patient empowerment. One group of researchers – in an overview article on regulation of the healthcare markets in China and India – observes that in China “the role of civil society organizations (...) is very underdeveloped, and the degree to which schemes can be influenced to reflect the interests of their beneficiaries is uncertain”^{clxxx}. With reference to the NCMS, a recent BMJ editorial brings up an underlying

⁹⁸ Wagstaff and colleagues (2009) described the piloting of NCMS as a policy of “letting a thousand flowers boom”, and saw this characteristic as a deliberate design feature, to ensure that lessons could be learnt from local experimentation¹⁶⁹. Studying the emergence of the MFA programme, Xu and colleagues (2008) noted that its implementation process typifies the Chinese approach to deliver social protection programmes: experiment first and adjust policies later through learning-by-doing¹⁶¹. Taking an urban social assistance programme (known as the Minimum Living Standard Guarantee System) as an example, Leung (2006) described how local governments were encouraged to experiment with different models, and central government would evaluate and attempt to unify diversified practices by promoting one of the more successful models¹⁷⁷. In fact, this particular way of gradual reform – cast in Deng Xiaoping's metaphor “crossing the river by groping for stones” – can be seen as an intrinsic part of most Chinese policymaking and reform¹⁷⁸.

⁹⁹ See amongst others Hsiao (2001)¹⁵¹, Gong, Walker and Shi (2007)¹⁵⁷, Yip and Hsiao (2008)²², Lei and Lin (2009)¹⁵³, Wang and colleagues (2009)¹⁵⁶, Wagstaff and colleagues (2009)¹⁵⁹, Lin, Liu and Chen (2009)¹⁶⁵, Sun and colleagues (2009b)¹⁶⁷, Yip and Hsiao (2009)¹⁶⁸, You and Kobayashi (2009)¹⁷⁰, Shi and colleagues (2010)¹⁶³, Zhang, Yi and Rozelle (2010)¹⁷¹, Babiarz and colleagues (2010)¹⁷², Feng (2010)¹⁷³, and Long and colleagues (2010)¹⁷⁵.

¹⁰⁰ See amongst others Yip and Hsiao (2008)²², Wagstaff and Lindelow (2008)¹⁵⁸, Lei and Lin (2009)¹⁵³, Wagstaff and colleagues (2009)¹⁵⁹, Sun and colleagues (2009a)¹⁶⁶, You and Kobayashi (2009)¹⁷⁰, and Long and colleagues (2010)¹⁷⁵.

unanswered question: “(...) has the new scheme attenuated (as it should) or accentuated (as it shouldn’t) disparities in access and care between the haves and have-nots?”^{clxxiii}.

India, Nepal and Bangladesh

Community Health Insurance in the Indian subcontinent emerged as an effort to improve access to healthcare and to protect households from catastrophic medical expenditure, most often embedded in a broader agenda. Of the 49 Indian, Nepalese and Bangladeshi health-related schemes listed in the 2005 and 2003 inventories of the International Labour Organization^{clxxxi,clxxxii,clxxxiii}, all but three piggybacked onto existing organisations drawn from a spectrum that ranged from healthcare providers to micro-finance institutions, though consisted mainly of broad-spectrum development organisations. Typically, the resulting schemes took the form of NGOs and were able to build on a foundation of trust and financial capability. Most schemes are of relatively recent origin. Out of the 49 schemes mentioned, 30 were started after 1995 and so coincided with the shift of interest by the micro-finance sector from micro-credits to micro-insurance. Across the whole Indian subcontinent, CHI focuses on the poorer sections of society: small farmers, landless labourers, women’s groups, self-employed vendors, in fact all communities within the informal sector. The most comprehensive Indian social security report to date – after highlighting that more than 90% of the Indian workforce is to be found in the informal sector¹⁰¹ – listed more than 50 NGO-driven social security schemes in India alone, of which 34 provided health insurance^{102,clxxxiv}.

¹⁰¹ In India, the term generally used to denote the informal sector is the ‘unorganised sector’. The NCEUS (National Commission for Enterprises in the Unorganised Sector) in its 2006 social security report used the terms informal sector and ‘unorganised sector’ interchangeably¹⁸⁴.

¹⁰² In terms of population coverage, the 2006 NCEUS report estimated a total of 5 million people covered by NGO-driven social security schemes of any kind in India (accounting for 1.5% of the workforce in the informal sector). It provided no separate data on population coverage for those schemes offering health insurance. Of all NGO-driven schemes with data available, 15% covered more than 100,000, 40% between 10,000 and 100,000, and 45% less than 10,000 individuals¹⁸⁴.

Gains in terms of financial coverage in **India** are modest at country level: the share of prepayment plans (including CHI, not mandatory health insurance) in private health expenditure rose from 1.0 to 2.1% between 2000 and 2007, while out-of-pocket expenditure as a proportion of private health expenditure dropped from 92.2 to 89.9% over the same period^{xlii}.

Gains in terms of financial coverage in **Nepal** are likewise modest at country level: the share of prepayment plans (including CHI, not mandatory health insurance) in private health expenditure rose from 0.1 to 0.4% between 2000 and 2007, while out-of-pocket expenditure as a proportion of private health expenditure dropped from 91.2 to 90.8% over the same period^{xlii}.

Financial coverage at country level in **Bangladesh** leaves much to be desired. Bangladesh in fact is losing ground: the share of prepayment plans (including CHI, not mandatory health insurance) in private health expenditure dropped from 0.1 to 0% between 2000 and 2007; out-of-pocket expenditure as a proportion of private health expenditure increased from 95.9 to 97.9% over the same period^{xlii}. Nationwide data on CHI population and service coverage are not available.

In the Indian subcontinent, scheme enrolment ranges from a few thousand to several millions. In India, the main benefit on offer is reimbursement of hospital costs, whereas most of the Nepalese and Bangladeshi schemes focus on first-line healthcare services. One author has argued that the risk protection in Bangladesh can therefore not be sufficient to reduce catastrophic health expenditure^{clxxxv,103}. In all the three countries – and particularly in Nepal and Bangladesh – considerable copayments are often required.

¹⁰³ The author however recognises that this is a conclusion based on secondary data only¹⁸⁵.

A closer look at scheme level offers additional insight.

A 2006 overview based on 10 Indian case studies found enrolment rates ranging from 10 to 90%^{clxxxvi}. A study on the ACCORD¹⁰⁴ and the SEWA¹⁰⁵ schemes reported enrolment rates of 35 and 20% respectively (4,268 and 101,809 members) in 2003¹⁰⁶. Significant population coverage within their target groups was not the only gain. Both schemes reduced the number of households that would have experienced catastrophic health expenditure (CHE)¹⁰⁷ because of hospital expenses, by 57 and 52% respectively. The study also identified ways to further increase financial coverage^{clxxxvii}.

A second study on the ACCORD scheme showed that members had a hospital admission rate 2.2 times higher than non-members, independent of pre-existing conditions and other confounding factors^{clxxxviii}.

A study on the Yeshasvini scheme¹⁰⁸ reported an enrolment rate of 15% (approximately 3,000,000 members) in 2009¹⁰⁹. Using rigorous statistical methods to minimise selection bias, the study analysed the impact of the scheme and documented increased healthcare

¹⁰⁴ ACCORD (Action for Community Organisation, Rehabilitation and Development) is a development NGO in Gudalur, Tamil Nadu, South India, active since 1985. The organization gives support to the indigenous population, commonly known as *adivasis* (literally “original dwellers”) and recognised as scheduled tribes by the Indian constitution. Among several fields of action, health is one, for which ACCORD constituted the ASHWINI (Association for Health Welfare in the Nilgiris), with a hospital (since 1990) and a CHI scheme (since 1992) to make hospital cost accessible. See also <http://www.adivasi.net/accord.php> and <http://www.ashwini.org/>

¹⁰⁵ SEWA (Self-Employed Women’s Association) is a trade union for women in the informal sector, which started in 1972 in Gujarat. Among its many activities, it offers the community of self-employed women an insurance package, comprising life, asset and medical insurance, since 1992. See also <http://www.sewa.org/> and <http://www.sewainsurance.org/vimosewa.htm>

¹⁰⁶ Up to 2003 – when it reached an enrolment rate of 20% – SEWA’s CHI scheme targeted its union members only. From 2004 on, CHI was also offered to the members’ husbands. This explains why the 2006 overview reported an enrolment rate of 10% for the SEWA scheme in 2004¹⁸⁶: the denominator had suddenly doubled. In 2006, the target population was further expanded to all dependents under age 18.

¹⁰⁷ Several definitions and proxies of CHE exist. This study used household expenditure for hospitalization exceeding 10% of the total annual household income as a pragmatic cut-off point¹⁸⁷.

¹⁰⁸ Yeshasvini – short for Yeshasvini Cooperative Farmers Health Scheme, also known as Yeshasvini Health Insurance, introduced in 2003 by the Karnataka State Department of Co-operation for cooperative rural farmers and informal sector workers, and operated by the Yeshavini Trust – is a nonprofit health insurance scheme with voluntary affiliation.

¹⁰⁹ Enrolment rate calculated as proportion of all registered rural cooperative members in Karnataka. Expressed as proportion of the target fixed for the Indian administrative year 2008-2009, this would be 48%. Expressed as proportion of the total rural population in the state, this would be 9%. Yeshasvini started with 1.6 million members in 2003-2004. The number of members augmented every year, except in 2005-2006 when it dropped to 1.5 million.

utilisation, better treatment outcomes, reduced out-of-pocket spending and improved annual income growth among scheme members compared to non-members^{clxxxix}.

A study on two community-based schemes and one commercial scheme¹¹⁰ in India found a positive impact on financial protection¹¹¹ in all three schemes, and more so in the community-based ones^{cxc}.

In Bangladesh, a study showed that the addition of a Hml scheme to Grameen Bank's micro-credit scheme was instrumental in increasing the households' food sufficiency, but not their income or non-land assets^{112,exci}.

In terms of organisational practice and institutional design, the experiences in the Indian subcontinent – and particularly the interplay of civil society innovations and state policy making in India – have important lessons to offer.

The fact that most CHI schemes are NGO-driven leaves room for organisational diversity. Where the NGO is also the healthcare provider – as is more frequently the case in Nepal and Bangladesh than in India¹¹³ – the provider usually runs the scheme. Where the NGO has no healthcare functions, it may act as an insurer for the community and purchase care from

¹¹⁰ The community-based schemes were UpLift Health in urban Pune, Maharashtra, and Nidan in Patna, Bihar. The so-called commercial scheme was that of the Bharatiya Agro Industries Foundation (BAIF) in rural Pune¹⁹⁰. Actually the BAIF scheme can be called a partner-agent scheme (see further) from a development NGO¹⁸⁶. See also: <http://www.upliftindia.org/programmes/community-based-health-mutual-fund/>, http://www.nidan.in/otherpage.php?page_code_no=15, http://www.baif.org.in/asp_x_pages/index.asp

¹¹¹ The authors assessed financial protection by measuring 'financial exposure', defined as the fraction of cases among the insured with costs above the ceiling, multiplied by the mean actual costs above the ceiling for the insured, divided by the mean income per insured¹⁹⁰.

¹¹² The authors saw flaws in the health insurance scheme design and functioning as a possible explanation of the scheme influencing significantly food sufficiency but not other poverty indicators¹⁹¹.

¹¹³ Two already mentioned Indian examples are the Students Health Home (SHH) in West Bengal since 1952, and ACCORD's ASHWINI scheme in Tamil Nadu since 1992. Others are the Voluntary Health Services (VHS) in Tamil Nadu since 1972 (see <http://www.vhs-chennai.org/>), and the Jowar Rural Health Insurance Scheme (JRHS) in Maharashtra since 1981¹⁸⁶.

independent providers¹¹⁴. In a third option, which became increasingly popular in India¹¹⁵, the NGO purchases insurance – not care – from a formal insurance company. In this so-called partner-agent¹¹⁶ or linked model, augmented pooling can lead to wider risk sharing^{clxxxvi}.

This gain may be overshadowed by several drawbacks: where the premium and the benefit package are based on actuarial calculations, the premium may be prohibitive or the benefit package too limited. The resulting insurance product cannot be tailored to meet local conditions, whilst the patient still has to pay up front and reimbursement is often cumbersome.

However these models are still in evolution: insurance companies are continuously adapting their products, and several NGOs are either making a case for innovative benefit packages and/or improving their negotiating capacity with insurance companies and providers.

One salient example of an innovative benefit package within a linked model is that of Karuna Trust in Karnataka. From 2002 on, this NGO offers poor communities a tailored health insurance package from the National Insurance Company (NIC, a public insurer). Only public service providers, which in theory are free of charge, are eligible in the scheme. Aware of the impact of indirect cost on access to care, Karuna Trust negotiated an insurance package consisting of compensation for income loss and for drug procurement. It fixed a premium below the estimated willingness to pay of the below-the-poverty-line (BPL) target

¹¹⁴ Indian examples are the Raigarh Ambikapur Health Association (RAHA) scheme in Chhattisgarh since 1980, and the Dhan (Development of Human Action) Foundation's *Kafamalai Kalanjiam Vattara Sangam* (KKVS) scheme in Tamil Nadu since 2000¹⁸⁶. See <http://rahaindia.org/> and <http://www.dhan.org/>

¹¹⁵ Two already mentioned Indian examples are the SEWA scheme, originating in Gujarat in 1992, and the Bharatiya Agro Industries Foundation (BAIF) in Pune since 2001. Others are the Navsarjan Trust scheme in Gujarat since 1999, and the Karuna Trust scheme in Karnataka since 2002¹⁸⁶ (for the last two schemes, see also <http://navsarjan.org/> and <http://www.karunatrust.com/wiki/index.php/Health>)

¹¹⁶ Classified as a subcategory of HmI by Radermacher and Dror (*Institutional options for delivering health microinsurance* in Churchill (2006) *Protecting the poor: a microinsurance compendium*²⁸, pp 401-423; see also page 6 of this document), distinct from their community-based (CHI) subcategory of HmI. Here discussed as a variety of CHI.

population, convinced the United Nations Development Programme (UNDP) to subsidise the premium for the first two years, and the NIC to bear the eventual loss.

While an evaluation of the scheme commissioned by the CGAP¹¹⁷ Working Group on Microinsurance questioned the Karuna Trust scheme for its dependence on external subsidies^{cxcii}, the still functioning scheme all the same focused the interest of national policy-makers on the specific insurance needs of BPL families¹¹⁸.

One salient example of strategic purchasing^{cxci},¹¹⁹ within a linked model is that of the SEWA scheme in Gujarat. From 2004 on, the Self-Employed Women's Association piloted a preferred provider system (PPS). Aware of a variety of barriers for their scheme members in assessing benefits and submitting claims^{cxci}, SEWA introduced a PPS to facilitate access by making payment to their members prior to discharge from the hospital, to shift the burden of compiling a claim to the scheme staff, and to direct members to inpatient facilities of acceptable quality. Selection of preferred providers was based on the assessment of an elementary list of structural quality indicators in a set of hospitals already used by SEWA members, and led to an informal agreement (no contract or memorandum of understanding was signed) between SEWA Insurance and 16 selected hospitals in 8 rural sub-districts¹²⁰.

¹¹⁷ Consultative Group to Assist the Poor, a policy and research centre dedicated to advancing financial access (savings, credit, money transfers, insurance) for the world's poor, World Bank based. See <http://www.cgap.org/p/site/c/aboutus/>

¹¹⁸ The National Rural Health Mission's 2007 framework for developing health insurance programmes declared compensation for loss of wages an imperative for any scheme insuring BPL families²⁰⁶. The Planning Commission's working group on healthcare financing in its 2006 report mentioned the Karuna Trust scheme as one example of providing protection against catastrophic health expenditure^{207, p15}, and the Planning Commission's 2007-2012 five-year plan used the example of the Karuna Trust scheme to plead for schemes developed according to local requirements, tailored to the reality of the poor and organised according to their convenience^{208, p83}.

¹¹⁹ The World Health Organization defined strategic purchasing (as opposed to passive purchasing) as "deciding which interventions should be purchased, how, and from whom"^{193, p97} "to improve the (*health*) system's responsiveness and financial fairness"^{193, p104}.

¹²⁰ SEWA – among structure, process and outcome indicators of service quality – focused on structural indicators because of the difficulty to assess process and outcome indicators in an environment with only rudimentary hospital information systems, and because it felt that it did have not the required technical skills. SEWA decided not to go for formal contracts or memoranda of understanding because this would have been legally impossible with government providers, and deemed not worth the effort with private providers (as the anticipated number of patients per hospital would be small)¹⁹⁵.

The PPS was successful to the extent that it indeed directed patients to providers of acceptable quality, and lessened the members' burden of submitting their claims. Despite the abolition of retrospective reimbursement however, user fees continued to pose financial barriers to the insured. An evaluation of the pilot PPS also suggested that SEWA had not the critical mass of members to express a consolidated purchasing power^{121,xcv}.

In 2006, SEWA introduced a project with identical objectives and features (prospective reimbursement plus PPS) – but at that time renamed 'cashless hospitalisation'¹²² – in the city of Ahmedabad. During the first year, members were left the choice between the new prospective and the traditional retrospective reimbursement. In 2007, 'cashless hospitalisation' became in principle mandatory. Evaluation after 20 months revealed improved use of low-cost quality care, as in the earlier rural pilot project. Besides, the average claim cost and the cost of servicing the claims had decreased. SEWA's 'cashless hospitalisation' thus became a win-win for both the scheme members and the organisation^{xcvi,123}.

In most schemes, the providers operate either in the private nonprofit or the private-for-profit sector, seldom in the public sector. Though most of the operating NGOs lack technical expertise and a health-systems perspective, many of them have evolved mechanisms to manage risks, hold providers accountable and increase access to services of acceptable quality. Interestingly, a recent realist review of eight Indian CHI schemes found that while all schemes used a mix of measures – that can be classified as long route and exit

¹²¹ The authors of the article opined so for the rural environment in which SEWA piloted its PPS. They expected a bigger potential for PPS in urban areas, where SEWA has a larger and more concentrated membership¹⁹⁵.

¹²² Strictly speaking, SEWA replaced retrospective by prospective reimbursement (that is before discharge from the hospital), not by a cashless system.

¹²³ The success of SEWA's 'cashless hospitalisation' was quickly noticed by national policy-makers. When it was still piloted, the Planning Commission's working group on healthcare financing described it as an "impressive model"²⁰⁷. From 2008 on, an upgraded cashless model would become a foremost feature in the national *Rashtriya Swasthya Bima Yojana* scheme²¹¹.

strategies^{124,cxcvii,cxcviii} – to improve access to quality healthcare, most of these measures were not very effective. Contrastingly, those schemes¹²⁵ that strengthened the short route by empowering their members at the provider-patient interface seem to successfully improve access to quality healthcare^{cxcix}.

Over the last decade, the lack of technical expertise has been instrumental in establishing micro-insurance training centres in India (six by 2006), encouraged by donors and the insurance industry. Whatever gains in technical expertise at the insurers' side this may have produced, at the providers' side quality of care often remains sub-standard and fee-for-service payment and over-prescribing ubiquitous. Recent research in two Indian CHI schemes¹²⁶ found no significant difference in patient satisfaction (as one outcome of service quality) between scheme members and non-members^{cc}. In this scenario, the need for provider regulation is obvious to ensure service quality and to control costs. Still, while India has come a long way in terms of institutional design to guide organisational practice at the insurers' side, it has been much less successful in the domain of provider regulation. India has not yet found an effective way to regulate its increasingly complex health service delivery system^{cci}.

When India opened up its insurance market in 1999, it did so by laying down a cautiously elaborated institutional framework and establishing its Insurance Regulatory and

¹²⁴ Building upon the accountability framework proposed by the World Bank in its 2004 World Development Report¹⁹⁷, the authors of the review distinguish short (direct) and long (through politicians and policy-makers) routes of accountability. In line with the earlier conceptual work of Albert Hirschman¹⁹⁸, they differentiate further between voice and exit mechanisms. They end up with four underlying mechanisms in the field of CHI: (M1) providing an exit route; (M2) co-producing a long route; (M3) guarding over the long route; and (M4) strengthening the short route by transforming the power imbalance at the provider-patient interface¹⁹⁹.

¹²⁵ This is the case for four of the eight schemes under review: the Action for Community Organisation, Rehabilitation and Development (ACCORD) scheme in Tamil Nadu (see <http://www.ashwini.org/>) and the Jowar Rural Health Insurance Scheme (JRHS), UpLift Health (see <http://www.upliftindia.org/programmes/community-based-health-mutual-fund/>) and the *Kagad Kach Patra Kashatakari Panchayat* (KKPKP) scheme (see <http://www.wastepickerscollective.org/>) in Maharashtra¹⁹⁹.

¹²⁶ These schemes were the Action for Community Organisation, Rehabilitation and Development (ACCORD) scheme (see <http://www.ashwini.org/>) and the Dhan (Development of Human Action) Foundation's *Kafamalai Kalanjiam Vattara Sangam* (KKVS) scheme (see <http://www.dhan.org/>), both in Tamil Nadu²⁰⁰.

Development Authority (IRDA). Main functions of the IRDA – as specified in section 14 of the 1999 IRDA act – are regulating and promoting any type of insurance, in the best interest of the policyholders^{ccii}. In the field of CHI (and beyond), the IRDA has made plain use of its institutional power by imposing on all public and private insurers the duty to serve incremental quotas of rural and BPL populations^{cciii}.

The Indian government provided a further impetus for pro-poor and community-based insurance through the establishment of its National Rural Health Mission (NRHM) in 2005. Up to 2012 the NRHM lays out a vast plan of action aiming at improving the availability of and access to quality healthcare by the rural poor^{cciv}. While the declared first priority of the NRHM is to put in place an enabling public health infrastructure, its framework for implementation also encourages community-based organisations to involve – either as insurance provider or as third-party administrator – in pro-poor risk pooling arrangements^{ccv}. The NRHM further elaborated the latter policy in its 2007 framework for developing health insurance programmes^{ccvi}.

Likewise the national Planning Commission set up a working group on healthcare financing. Among its tasks was to suggest management strategies and process and impact assessment parameters for community-based health insurance. In its 2006 report, the working group drew lessons from past experiences, welcomed the call of the NRHM, described the role of community-based organisations as vital for articulating poor peoples' needs and stated that participation of government healthcare providers would be critical for health insurance not to become a subsidy for private care^{127,ccvii}.

¹²⁷ Similarly, the NRHM's framework for developing health insurance programmes stated "that NRHM strategy for health insurance for vulnerable groups is primarily to reduce out of pocket burden of poor families when they go to a government hospital. This will also improve the utilization of government hospitals. The intent of health insurance under NRHM is not to weaken the public system in any manner"²⁰⁶.

Subsequently, the Planning Commission's eleventh five-year plan (2007-2012) encouraged the development of CHI, tailored to the reality of the poor and organised according to their convenience. At the same time the Commission recognised that community organisations still play a "very small (though important) role" in the Indian health system, and that "coverage of health insurance in India is pathetically limited"^{ccviii}.

The support of Indian government for CHI goes beyond laying down rules for implementation. In both the case of the Yeshavini and the Karuna Trust scheme, government subsidies have been essential for survival and success^{clxxxix,cxcii,128}. In the case of the Yeshavini scheme, the fast enrolment of large numbers of members would not have been possible without the energetic engagement of a government agency^{ccix,129}.

Indian government welcomes CHI both as a pragmatic way forward¹³⁰ and as a source of inspiration. It encourages CHI on the road to universal coverage under the framework of NRHM (and NUHM, conceivably^{ccx,131}), but also increasingly commits itself to large-scale financial protection in health^{ccxi,132}, thereby applying lessons learnt from CHI experiences.

The most recent and ambitious example is the *Rashtryia Swasthya Bima Yojana* (RSBY) scheme for the BPL population, launched in 2007 and rolled out from April 2008 on^{ccxii,133}. Several of

¹²⁸ These subsidies have different forms and origins: the Yeshavini scheme has received yearly and direct support from the Karnataka state government¹⁸⁹; the Karuna Trust scheme has received support from year 3 on through the assumption of losses by the National Insurance Company¹⁹².

¹²⁹ As mentioned before^{cv}, the Yeshavini scheme belongs to a private nonprofit organisation. But it was the Karnataka State Department of Co-operation (and its Registrar of Co-operative Societies) that provided and enforced the vehicle for communication and enrolment, to the extent that Yeshavini came to be known as a 'government' scheme. While the directive involvement of a government agency may have reduced the principle of voluntary affiliation, it was key for fast and broad population coverage²⁰⁸.

¹³⁰ Particularly the Planning Commission's eleventh five-year plan makes a definite statement: "These schemes can be implemented where institutional capacity is too weak to organize mandatory nation-wide risk pooling"^{208, p82}.

¹³¹ Designed on the lines of the NRHM, a National Urban Health Mission (NUHM) was announced in the 2007-2012 five-year plan¹⁹³ and a draft mission document was circulated in 2008²¹⁰. As of end 2010, NUHM has not been launched.

¹³² Government commitment to health insurance is no new phenomenon in India. The Employees' State Insurance Scheme (ESIS) for formal-sector workers and their dependents was a first of its kind in 1948; the Central Government Health Scheme (CGHS) for government employees and their families was introduced in 1954. Schemes targeting state- or nation-wide coverage of vulnerable populations however were unknown until the beginning of the present century²¹¹.

¹³³ See also http://rsby.gov.in/about_rsby.html

its features reflect innovations pioneered by CHI schemes: premiums are subsidised (as in the Karuna Trust scheme), the system is entirely cashless for the patient at the place and time of use (perfecting the model introduced in the SEWA scheme), and exclusions are minimised.

In terms of empowerment, evidence from India is still scarce, yet complementary to the rich experiences in design and practice. Michielsen and colleagues did both field research on^{ccxiii} and a realist review of the transformative dimension of CHI in India^{ccix}. Focusing on possible transformative effects of CHI at the patient-provider interface in Mumbai and Pune slums, they identified how slum dwellers capitalised on their membership and on the mediation by social workers of CHI schemes to have a say in service quality^{ccxiii}. Confirmation of this bottom-up empowering effect in their review of eight schemes led the researchers to criticise the RSBY's concept of empowerment¹³⁴ as insufficient, and concluded that government – in addition to its top-down approach – should tap the potential of community organisations to transform the RSBY target groups from passive beneficiaries into active participants^{ccix}.

Cambodia

Community Health Insurance in Cambodia started with the introduction of the SKY scheme (Khmer acronym for Health for Our Families) in 1998. SKY was designed and is implemented by the French NGO GRET (*Groupe de recherche et d'échanges technologiques*)¹³⁵ as

¹³⁴ "Empowering the beneficiary: RSBY provides the participating BPL household with freedom of choice between public and private hospitals and makes him a potential client worth attracting on account of the significant revenues that hospitals stand to earn through the scheme" (http://rsby.gov.in/about_rsby.html).

¹³⁵ See <http://www.gret.org/>

a complement to a micro-credit scheme run by the same organisation since 1991¹³⁶. In its pilot years, SKY suffered from high dropout rates and was redesigned several times^{ccxiv}. Since 2004 the scheme offers a benefit package including primary and referral care, transport, and a grant for funeral expenses when needed^{ccxv}. By end 2008, SKY was active in four out of twenty-four rural provinces plus the capital Phnom Penh, and had enrolled nearly 35,000 members^{ccxvi}. By mid 2010, SKY covered 61,000 individuals¹³⁷. Next to SKY, only a handful of CHI schemes are operational in Cambodia^{ccxvii,ccxviii}. Most noticeable is the Cambodian Association for Assistance to Families & Widows (CAAFW) scheme in Banteay Meanchey province, covering nearly 39,000 individuals by mid 2009^{ccxix}.

Gains in terms of financial and population coverage are of little account at country level: the share of prepayment plans (including CHI, not mandatory health insurance) in private health expenditure remained at 0% between 2000 and 2007, while out-of-pocket expenditure as a proportion of private health expenditure dropped from 97.1 to 84.7% over the same period^{xlii}. According to 2008 data, national population coverage of CHI was still below 1% at that time^{ccxx}.

The scheme-specific accounts behind the national figures are more encouraging. SKY in 2008 covered between 3 and 14% of its target populations, respectively in districts where the scheme was most recently introduced and where the scheme was introduced a decade earlier^{ccxvi}. Between 2008 and 2010, SKY almost doubled its number of beneficiaries^{ccxvi,137}. The CAAFW scheme in 2009 covered 31% of its target population in its original location, and 13% in Oddar Meanchey province where it had been introduced half a year earlier^{ccxix}. Between 2005 and 2008, CAAFW had quadrupled its number of CHI beneficiaries^{ccxx}. No

¹³⁶ GRET's rationale behind the linkage of a micro-credit with a health insurance scheme was the finding that a significant proportion of non-reimbursement of loans in GRET's micro-credit scheme was due to healthcare expenses^{214,215}.

¹³⁷ See http://www.gret.org/activites_uk/result_long.asp?pays=37&domaine=&type=&mot=&Submit=Search&cle=1288

scheme-specific data on financial coverage are available yet; for SKY the results of an impact evaluation are expected soon^{ccxxi}.

The Cambodian experience with CHI is most interesting **in terms of organisational practice and institutional design**.

Each in their own way, both CAAFW and GRET link CHI with a social assistance fund for free access to healthcare for the extreme poor, known as Health Equity Fund (HEF)¹³⁸(^{ccxxii,ccxxiii,ccxxiv,ccxxv,ccxxvi}).

When CAAFW started its first CHI scheme in 2003, it did so grafting the scheme on a HEF it had been operating since 2000^{ccxix}. GRET started linking its CHI scheme (SKY, since 1998) with existing health equity funds in 2005. By 2010, out of SKY's 61,000 beneficiaries, more than 18,000 (around 30%) were covered through a HEF¹³⁷. While health equity funds – just like community health insurance – are no magic bullet, the articulation of CHI and HEF can help to overcome the exclusion that the extreme poor despite CHI still face, and appears to be a plausible step on the road to universal coverage^{ccxxvii}.

Both the CAAFW scheme and SKY work exclusively with public healthcare providers, which not per se offer good quality care in Cambodia. Both developed and successfully negotiated a range of mechanisms to upgrade quality of care. Particularly the experience of SKY in adapting its organisational practice is richly documented: in its actual form SKY uses a capitation system at health centres and first referral hospitals, and a third-payer system at provincial and national hospitals. It has established contractual relationships with fifty-five

¹³⁸ Health Equity Funds originated in Cambodia in the year 2000, to overcome the exclusion of the extreme poor from healthcare. The HEF principle of third-party financing for the extreme poor has been adopted – mostly on a small scale – in a number of other countries (see for example the section on Mauritania in this paper). In Cambodia HEF has become part of government policy. For a selection of literature on the Cambodian Health Equity Funds, see Hardeman and colleagues (2004)²²², Jacobs and Price (2006)²²³, Noirhomme and colleagues (2007)²²⁴, Annear and colleagues (2008)²³², Meessen and colleagues (2008)²²⁵, and Bigdeli and Annear (2009)²²⁹.

health centres, ten first-referral hospitals and five provincial or national hospitals. The terms of the contracts encompass compliance with intervention protocols, essential drugs stocks, opening hours and staff presence, and an established referral system. In addition, SKY monitors patient satisfaction and follows up complaints at village and provider level. As a consequence, SKY contributed in both raising the quality of care at offer and the utilisation of public healthcare^{ccxxviii}.

These achievements were not easily accomplished nor were they due to organisational practice alone. For instance, providers used to informal payments were reluctant to give up this practice. To overcome this and other obstacles, a partnership with and strong involvement of government at all levels was decisive^{ccxxviii}.

This would not have been possible without the development of an institutional framework by the central government either. A social health insurance Master Plan was developed in 2003 and adopted in 2005. The plan adheres to a fragmented approach towards universal coverage¹³⁹, aiming at coverage by a distinct financing mechanism for different population groups: compulsory insurance (SHI) for formal-sector workers and their dependents; voluntary insurance (CHI) for the informal sector workers and their dependents that can afford it; and social assistance (HEF) for those that cannot afford insurance – first through external, later through government funding and channelled towards insurance. The plan includes intermediate and final goals for the government and non-government sectors, and the establishment of a SHI Committee for intersectoral collaboration^{ccxxv, ccxxix}.

Following the plan, a new HEF implementation and monitoring framework was established in 2005 and expanded in 2007, guidelines for implementing CHI saw the light in 2006^{ccxxix},

¹³⁹ Comparable to fragmented approaches elsewhere, like in Senegal or Mali in Africa⁴⁸, or in China.

and a National Social Security Fund (NSSF) started functioning in 2008¹⁴⁰. Also in 2008, the Cambodian government released its 2nd Health Strategic Plan (2008-2015). This plan stresses social health protection – especially for the poor and vulnerable – as a first of five working principles, describes health financing as a strategic area and announces that by 2015 “the different elements and institutions of the current health financing system will be combined under a single strategy”^{ccxxx}. A subsequent Strategic Framework for Health Financing 2008-2015 outlines a phased approach to bring HEF, CHI and SHI “under a common Social Health Insurance umbrella” by 2015, to create the path towards universal coverage beyond 2015^{ccxxxi}.

While the 2008-2015 Health Strategic Plan mentions patient empowerment as a way forward for quality and accountability in service delivery^{ccxxx}, and the 2008-2015 Strategic Framework for Health Financing explicitly wants to “empower communities to participate in local policies and decisions that affect their financial access to health services”^{ccxxxi}, actual Cambodian **evidence on dynamics of empowerment and transformation** is still scarce. A 2007 study on a selection of CHI schemes and health equity funds found little evidence that CHI or HEF per se contributed to empower people in their health seeking and treatment behaviour. The study however perceived an impetus for empowerment through activities of the implementing NGOs, such as mechanisms for feedback and complaints and the employment of community liaison officers^{ccxxxii}.

Lao Peoples Democratic Republic

¹⁴⁰ See <http://www.nssf.gov.kh/>. Integration of a health component in NSSF’s social protection activities is still pending.

The design features of social health protection – including community health insurance and health equity funds – in Lao People’s Democratic Republic (also known as Laos, hereafter called Lao PDR) resemble that of Cambodia. Progress is slower, but achievements in terms of access to services and financial protection are noteworthy.

Gains in terms of financial and population coverage are fair at country level: the share of prepayment plans (including CHI, not mandatory health insurance) in private health expenditure rose from 0 to 0.4% between 2000 and 2007, while out-of-pocket expenditure as a proportion of private health expenditure dropped from 91.8 to 76.1% over the same period^{xlii}.

At country level, population coverage is not impressive. After nine years of piloting, less than a dozen of schemes now cover 1.7% of all Laotians; or 3.3% of their intended national target population¹⁴¹. When balanced against their actual local target populations, coverage reaches 13%. Membership of a CHI scheme significantly increases access to both inpatient and outpatient services, which is an important step forward considering Lao PDR’s very low utilisation rates. Despite the fact that CHI members are twice as likely to use health services, they also enjoy a substantial financial protection. Out-of-pocket payment over 12 months – including the monthly premiums in the group of the members – is 66% lower for CHI members than for the non-insured^{ccxxxiii,142}.

Sound **organisational practice** seems to play a material part in the achievements of CHI in Lao PDR. The schemes’ comprehensive benefit packages (including primary and referral care plus drugs obtainable from public structures), effective use of referral care, and a

¹⁴¹ According to Lao policy, CHI targets households in the informal sector not covered by other social protection schemes. This group represents 52% of the total population²³³.

¹⁴² The authors of this study²³³ contrast this positive outcome with the observed higher OOP payments among the insured in China’s RCMS¹⁵⁸.

capitation payment system all contribute to the gains in financial protection. At the same time, revenue generation is considered insufficient and dropout rates are still high^{ccxxxiii}.

Progress in **institutional design** goes hand in hand with organisational practice. Lao PDR has an active Health Insurance Unit in its Ministry of Health since 2000. A 'Health Strategy to the Year 2020' part of the Sixth National Socio-Economic Development Plan provides the framework for the development of both community health insurance and health equity funds, alongside two social health insurance schemes^{ccxxxiv,143}. In contrast with the situation in Cambodia, Lao PDR's health equity funds are less developed¹⁴⁴ than its CHI schemes. Government plans to link HEF with CHI in the near future, whereby the CHI premium of an extreme poor would be paid by HEF^{ccxxxiii}.

Understandably in this still incipient stage of development, **evidence on empowerment and transformation** through CHI is still lacking.

The Philippines

Community health insurance in the Philippines is mainly of historical interest. The first CHI initiatives in the Philippines were offshoots of community- or cooperative-driven health programmes in the 1980s, most of them plagued by low enrolment. In addition, several local government-prompted schemes were set up in the 1990s. At the same time, CHI schemes (alongside Health Maintenance Organisations) were activated by NGOs with external assistance^{ccxxxv}. Today, CHI occupies a marginal place in Philippine health financing.

¹⁴³ Lao PDR's roadmap is another example of a fragmented approach. The framework projects universal coverage through CHI for the informal workforce, HEFs for the extreme poor, a SHI scheme called Social Security Organisation (SSO) for the private formal sector, and a SHI scheme called Civil Servants' Scheme (CSS) for the public workforce^{233,234}. By 2009, the four schemes together had reached 11.7% national coverage²³³.

¹⁴⁴ In three aspects: fewer schemes, lower population coverage, and not yet coordinated with other SHP mechanisms^{233,234}.

Financial and population coverage at national level leave much to be desired. The Philippines are actually losing ground: the share of prepayment plans (including CHI, not mandatory health insurance) in private health expenditure dropped from 11.1 to 9.8% between 2000 and 2007, while out-of-pocket expenditure as a proportion of private health expenditure increased from 77.2 to 83.7% over the same period^{xlii}. Individual coverage of CHI schemes is rarely documented.

While CHI schemes in the Philippines typically suffered **operational difficulties** and financial problems, the 1995 National Health Insurance Act paved the way for SHI and created the Philippine Health Insurance Corporation (PhilHealth)¹⁴⁵ with the task to ensure universal coverage by 2010^{ccxxxvi}. In support of the **institutional choice** for SHI, GTZ subsequently set up the Social Health Insurance Networking and Empowerment (SHINE) project to link and frame the disparate CHI efforts within PhilHealth. The project was discontinued in 2001. PhilHealth today performs well in population coverage (around 80%, of which 20% poor in a subsidised regime), but less so in depth and height of coverage. Alongside the national PhilHealth a number of CHI schemes still subsist, most of them at local or provincial level and/or filling the gaps in outpatient service coverage left by PhilHealth.

Indonesia

As in the Philippines, CHI in Indonesia is mainly of historical interest. A CHI approach was adopted as one option among others within the national policy in the late 20th century, but practically abandoned in the early 21st century.

¹⁴⁵ See <http://www.philhealth.gov.ph/>

Gains in terms of financial and population coverage are weak at country level: the share of prepayment plans (including CHI, not mandatory health insurance) in private health expenditure dropped from 6.4 to 4.7% between 2000 and 2007, while out-of-pocket expenditure as a proportion of private health expenditure dropped from 72.9 to 66.2% over the same period^{xlii}.

In 1963, a sickness fund (*Dana sakit*) arrangement was tried out in one location in Central Java, within a broader community development effort of a local NGO. The project failed but was successfully relaunched in 1969, now under the name *Dana sehat* (Health Funds)^{ccxxxvii, ccxxxviii}. From 1970 up into the 1990s, the government promoted *Dana sehat* community schemes as an alternative form of healthcare financing all over the country^{ccxxxix}. By the year 2000, *Dana sehat* had a population coverage of nearly 11%, reaching 23 million people. This big number should not be misleading. Behind it was a scattered picture of **organisational practice**: small schemes (many of them covering less than 500 households) with insufficient risk pooling, unattractively limited benefit packages and dropout rates as high as 90%^{cli, ccxxxix, ccxli}. In parallel with the *Dana sehat*, health maintenance organisations (*Jaminan Pemeliharaan Kesehatan Masyarakat*, JPKM) had been launched from 1992 onwards. A more influential **institutional design** proved to be the introduction of health benefits cards for the poor (*Kartu sehat*) in 1998¹⁴⁶. Half a decade later, the *Kartu sehat* had replaced the *Dana Sehat* approach. The *Kartu sehat* by the time covered just under 20% of the Indonesian population. Yet only 12% of the cardholders effectively used their card when accessing health services, and of them 25% reported that they still had to pay^{ccxli}. In 2004-2005, the *Kartu sehat* approach became an integral part of Indonesia's social security design under the

¹⁴⁶ The *Kartu sehat* – part of a larger social safety net programme – were preceded by another initiative using benefits card (called 'Letter of Non-affordability'), which applied to health, education and transportation but had a limited health services coverage²⁴⁰ and was less successful²³⁹.

Asuransi Kesehatan Masyarakat Miskin (Health Insurance for Poor Population) or *Askeskin*. A recent impact evaluation of *Askeskin* found increased utilisation of outpatient services by the poor, but also increased out-of-pocket spending^{ccxlii}.

Currently, Indonesia projects universal health insurance coverage by 2014^{ccxlii}. It also debates the pros and cons of different health financing options to reach this goal¹⁴⁷. Community health insurance is no longer on the national agenda^{ccxliii}.

¹⁴⁷ Basically, three options are under discussion: a NHS-like approach; a unique SHI scheme (in this review called a comprehensive approach); and a combination of government coverage of the poor and mandatory insurance coverage of the others through multiple insurance funds (in this review called a fragmented approach)²⁴³.

Community health insurance in Latin America

Mutual aid societies have existed in Latin America since the 19th century. Yet Community Health Insurance is a marginal phenomenon in the continent, especially when compared to the venerable record of Social Health Insurance in some countries (like Costa Rica¹⁴⁸ and Uruguay¹⁴⁹) and of the development of National Health Systems in others (Cuba since 1959¹⁵⁰, Brazil since 1988¹⁵¹).

Most Latin American countries however have segmented social protection systems, rarely covering the whole population^{ccxlv,ccxlv}. Exclusion is common practice, also in health^{ccxlv,ccxlv}. It is the preoccupation with the excluded that gave rise to a few CHI initiatives, without however really taking off. Within a small number of case studies analysed a decade ago by the International Labour Organization, all led to improved access to healthcare amongst their target populations, but only a minority were judged to be financially sustainable in the absence of external funding^{ccxlvii}. Even so, most still exist and new schemes are being established. In the light of a growing regional commitment to social inclusion^{ccxlviii,ccxlix} and to universal coverage of health services^{ccl}, it is pertinent to question if and how the scattered Latin American CHI efforts can contribute to this broader development goals.

¹⁴⁸ See – among other sources – <http://www.ccss.sa.cr/> and <http://www.paho.org/hia/archivosvol2/paisesing/Costa%20Rica%20English.pdf>

¹⁴⁹ See – among other sources – <http://www.bps.gub.uy/> and <http://www.paho.org/hia/archivosvol2/paisesing/Uruguay%20English.pdf>

¹⁵⁰ See – among other sources – <http://www.paho.org/hia/archivosvol2/paisesing/Cuba%20English.pdf>

¹⁵¹ See – among other sources – <http://www.paho.org/hia/archivosvol2/paisesing/Brazil%20English.pdf> and <http://www.who.int/bulletin/volumes/86/4/08-030408.pdf>

Promises and challenges of Community Health Insurance at the crossroads of universal coverage

What is there to be learned from this global overview of CHI?

Our review indicates that the CHI picture today is very patchy, be it in Africa or Asia. In Latin America, CHI is nowadays hardly relevant and does not deserve much further discussion.

We observe a great heterogeneity in institutional designs and organisational models for implementing CHI in both the African and Asian continent. Similarly, we take notice of huge variation in coverage achieved, in terms of breadth, depth and height.

Except for the cases of Rwanda and Ghana, CHI in sub-Saharan Africa remains a relatively marginal, although growing phenomenon that currently occupies only a minor role in the wider endeavour of achieving universal coverage. Coverage at country level indeed rarely exceeds a few percent. This picture of small coverage at national level deserves nuance: CHI schemes in Africa are rarely launched on a programmatic nationwide basis. Most schemes today still are – with the notable exceptions of Rwanda and Ghana in mind – the result of scattered local project initiatives heavily dependent on support from external organisations. Marginal national coverage contrasts with the sometimes quite substantial scale achieved at individual scheme level, illustrating that under certain conditions growth and expansion are possible. The Bwamanda scheme in the Democratic Republic of Congo is exemplary in that respect. It shows that things are possible if the context is conducive. One of the important conditions for CHI to develop and grow is the need for a minimal level of (perceived) quality of care at the supply side of healthcare. Another one is the requirement of adequate organisational practice and design within the schemes: responsive to people's felt needs, but also financially sound and rational. To take but one example: the a priori quasi systematic

introduction of copayments at the time and point of health services utilisation, without any solid evidence of excessive overconsumption of healthcare by the insured, does not make much sense. Decades of (mis)application of copayments in low-income settings reveal how counter-productive this measure has been: it created yet another barrier to the many pre-existing cultural, social and administrative obstacles that excluded people experience in their difficult search for quality healthcare.

Ghana and especially Rwanda are powerful examples in Africa showing that political will, clear action plans, national scope of implementation beyond pilot project settings, existence of regulatory frameworks, and – last but not least – the unequivocal acceptance of the need of subsidies to finance partly or totally the premium for the poorest in society are a must. Under these conditions, CHI in Ghana, or the *Mutuelles de Santé* in Rwanda, today contribute significantly to progress towards universal coverage.

The CHI ‘movement’ in Africa has, for far too long, been hostile to a policy of subsidising insurance premiums for the poorest. The evidence today, however, is straightforward: CHI is not an (affordable) option for the poorest and the destitute. Unless somebody else pays for them, they will never be able to join a CHI scheme and remain unprotected. A series of cases in Cambodia, China and India illustrates the relevance of subsidising schemes, be it with public or with donor money.

All in all, the Asian picture of CHI is also a variable one. The case of China of course catches the eye. The New Cooperative Medical Schemes (NCMS) are the expression of a spectacular revival of CHI in China, with impressive expansion in population coverage in a relatively short time span. Yet accumulating evidence points to worrisome findings too. There appears to be only a minor impact of NCMS on financial protection: CHI is paired with steep increases in out-of-pocket spending, even of higher risk of catastrophic health expenditure.

China's multipronged NCMS experience points to the need for a more rational scheme design, as well as for stronger provider regulation hand in hand with patient empowerment.

The international evidence today that CHI may be a lever to empower its members in their relationship with healthcare providers is extremely scanty. Nonetheless, these socio-political dimensions of CHI have hardly been investigated. Indeed the study of CHI has been – and still is – largely led by a research community that finds its inspiration in economic and financial frameworks. The hypothesis that CHI could constitute a lever to weigh on the responsiveness of the health system and on the quality of healthcare provided remains a plausible one – given the past experience with sickness funds in early 20th century Europe – but would need more systematic study in Africa and Asia than is the case today. For CHI or any other social health protection arrangement to guarantee equitable access, there is need for empowerment of the most vulnerable groups and individuals. Evidence today – from women in Nongon and Ahmedabad to poor city dwellers in Nouackchott and Pune – suggests that CHI can have a positive transformative impact.

There are today no blueprints on how best CHI can be integrated in a national policy towards universal coverage. The options at hand are path-dependant and subject to the specificities of the national context. The most frequent picture however seems to be that of a fragmented approach, with CHI as one of the strategies in a pluralistic environment where the CHI model coexists with and hopefully complements other financing modalities targeting specific population groups.

The challenge to streamline and coordinate these various financing options in the broader perspective of universal coverage remains a huge one. There is need for more thorough scrutiny and documentation of the set of strategies that have been followed in cases of successful scaling-up of local CHI initiatives: we know that political will is paramount (it is

essential if, eventually, the voluntary character of CHI is to be overcome), but what is the precise configuration of the institutional and managerial environment that enabled multiplication and expansion of local initiatives and a solid embedding of CHI in national policies?

For CHI to maximise its risk pooling potential, schemes can join forces, as has been shown in Mali and is in progress in several African countries. Or they can make affiliation mandatory, as did Ghana and Rwanda. Both decisions rely on attitudes towards solidarity. Failing to join forces – as experienced in Senegal – raises a question mark over the feasibility of voluntary solidarity. Yet legal enforcement of affiliation is not sufficient to enrol the informal sector, or to guarantee effective access.

Whatever the role and place of CHI in national health financing systems, it is clear that its development cannot do without a *systemic* approach. CHI is about financing healthcare, but not only about that. It is also about organising and empowering the demand side in the healthcare system. In addition, development of CHI must go hand in hand with gradually improving quality at the supply side, with the necessary institutional and regulatory environment to steer and control provider behaviour. The implementation of CHI therefore requires a system-wide approach. Similarly, monitoring and evaluation of CHI development can only benefit from a multi-disciplinary perspective. Evaluation and confirmation of CHI's empowering potential would enable decision makers to consider CHI not only as a financing device, but also as a social investment.

REFERENCES

- ⁱ World Health Assembly (2005) *Sustainable health financing, universal coverage and social health insurance*. Resolution WHA58.33, Ninth plenary meeting, 25 May 2005 – Committee A, eight report. Geneva: World Health Organization. http://www.who.int/gb/ebwha/pdf_files/WHA58/WHA58_33-en.pdf
- ⁱⁱ World Health Assembly (2005) *Social health insurance: sustainable health financing, universal coverage and social health insurance*. Report by the Secretariat A58/20, 7 April 2005. Geneva: World Health Organization. http://www.who.int/gb/ebwha/pdf_files/WHA58/A58_20-en.pdf
- ⁱⁱⁱ World Health Organization (2008) *The world health report 2008: primary health care now more than ever*. Geneva: World Health Organization. http://www.who.int/whr/2008/whr08_en.pdf
- ^{iv} Nitayarumphong S (1998) *Universal coverage of health care: challenges for the developing countries*. In: Nitayarumphong S and Mills A [Editors] *Achieving universal coverage of health care*. Bangkok, Thailand: Ministry of Public Health; Office of Health Care Reform; pp. 3-24.
- ^v Commission on Social Determinants of Health (2008) *Closing the gap in a generation: equity through action on the social determinants of health*. Final report of the Commission on Social Determinants of Health (p100). Geneva: World Health Organization. http://whqlibdoc.who.int/publications/2008/9789241563703_eng.pdf
- ^{vi} Kutzin J (2000) *Towards universal health care coverage: a goal-oriented framework for analysis*. Health, Nutrition and Population discussion paper. Washington, DC: the World Bank; Human Development Network; Health, Nutrition and Population Family. <http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/281627-1095698140167/Kutzin-TowardUniversal-whole.pdf>
- ^{vii} Mills A (2007) *Strategies to achieve universal coverage: are there lessons from middle income countries?* A literature review commissioned by the Health Systems Knowledge Network. London: London School of Hygiene and Tropical Medicine; Health Economics and Financing Programme. <http://web.wits.ac.za/NR/rdonlyres/21C5E48E-702D-4772-979B-779130DC9772/0/Mills2007Universalcoverage.pdf>
- ^{viii} Narbondo P (2006) Reflexiones críticas sobre el universalismo básico. *Revista Uruguaya de Ciencia Política* **15**, 151-172. <http://www.fcs.edu.uy/icp/downloads/revista/RUCP15/RevistaICP15-07.pdf>
- ^{ix} Carrin G, Mathauer I, Xu K and Evans D (2008) Universal coverage of health services: tailoring its implementation. *Bulletin of the World Health Organization* **86**(11), 857-863. <http://www.who.int/bulletin/volumes/86/11/07-049387.pdf>
- ^x Mathauer I and Carrin G (2010) *The role of institutional design and organizational practice for health financing performance and universal coverage*. Discussion Paper No 5. Geneva: World Health Organization; Department Health Systems Financing; Cluster Health Systems and Services. http://www.who.int/health_financing/documents/dp_e_10_05-instit_uc.pdf
- ^{xi} Mathauer I and Carrin G (2010) The role of institutional design and organizational practice for health financing performance and universal coverage. *Health Policy* [in press].
- ^{xii} North D (1994) *Institutional change: a framework of analysis*. Economic History, EconWPA. Örebro, Sweden. <http://129.3.20.41/eps/eh/papers/9412/9412001.pdf>

-
- xiii Wallerstein N (2006) *Empowerment and related concepts: definitions and dimensions* [Annex 1]. In: Wallerstein N [Author] *What is the evidence on effectiveness of empowerment to improve health?* Copenhagen: WHO Regional Office for Europe; Health Evidence Network; pp 17-19. http://www.euro.who.int/__data/assets/pdf_file/0010/74656/E88086.pdf
- xiv De Vos P, De Ceukelaire W, Malaise G, Pérez D, Lefèvre P and Van der Stuyft P (2009) Health through people's empowerment: a rights-based approach to participation. *Health and Human Rights* 11(1), 23-35. <http://www.hhrjournal.org/index.php/hhr/article/view/126/202>
- xv Kabeer N, Cook S, Chopra D and Ainsworth (2010) *Social protection in Asia: research findings and policy lessons*. Programme synthesis report 2010. Sussex, UK; Institute for Development Studies and New Delhi, India; Institute for Human Development: Social Protection in Asia policy-research and network building program. http://www.socialprotectionasia.org/Conf-prgram-pdf/SPA_SynthReport_web.pdf
- xvi United Nations Development Programme (2010) *Empowerment*. In: Klugman J [Lead author] *Human Development Report 2010 – The real wealth of nations: pathways to human development*. New York: United Nations Development Programme; pp 66-71. http://www.undp.org/publications/hdr2010/en/HDR_2010_EN_Complete.pdf
- xvii Sabates-Wheeler R and Devereux S (2007) Social protection for transformation. *IDS Bulletin* 38(3), 23-28.
- xviii Michielsen J, Meulemans H, Soors W, Ndiaye P, Devadasan N, De Herdt T, Verbist G and Criel B (2010) Social protection in health: the need for a transformative dimension [Editorial]. *Tropical Medicine and International Health* 15(6), 645-658. <http://dspace.itg.be/bitstream/10390/6142/1/2010tmih0654.pdf>
- xix Diop F and Ba A (2010) *Mutual health insurance, scaling-up and the expansion of health insurance in Africa*. Bethesda, MD: Abt Associates; Health Systems 20/20. <http://www.healthsystems2020.org/content/resource/detail/2523/>
- xx Bennett S, Creese A and Monasch R (1998) *Health insurance schemes for people outside formal sector employment*. Geneva: World Health Organization; Division of Analysis, Research and Assessment. http://whqlibdoc.who.int/hq/1998/WHO_ARA_CC_98.1.pdf
- xxi Criel B, Waelkens M-P, Soors W, Devadasan N and Atim C (2008) *Community health insurance in developing countries*. In: Heggenhougen K and Quah S [Editors] *International Encyclopedia of Public Health*. San Diego, CA: Academic Press; pp 782-791.
- xxii Yip W and Hsiao (2008) The Chinese health system at a crossroads. *Health Affairs* 27(2), 460-468. <http://content.healthaffairs.org/cgi/reprint/27/2/460>
- xxiii Witter S and Garshong B (2009) Something old or something new? Social health insurance in Ghana. *BMC International Health and Human Rights* 9, 20. <http://www.biomedcentral.com/content/pdf/1472-698X-9-20.pdf>
- xxiv Twahirwa A (2008) Sharing the burden of sickness: mutual health insurance in Rwanda. *Bulletin of the World Health Organization* 86(11), 823-824. <http://www.who.int/bulletin/volumes/86/11/08-021108.pdf>

^{xxv} Waelkens M-P and Criel B (2004) *Les mutuelles de santé en Afrique sub-Saharienne: état des lieux et réflexions sur un agenda de recherche*. Health, Nutrition and Population discussion paper. Washington, DC: the World Bank; Human Development Network; Health, Nutrition and Population Family. <http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/281627-1095698140167/Waelkens-LesMutuelles-whole.pdf>

^{xxvi} Dror D and Jacquier C (1999) Micro-insurance: extending health insurance to the excluded. *International Social Security Review* 52(1), 71-97. <http://www3.interscience.wiley.com/cgi-bin/fulltext/119067113/PDFSTART>

^{xxvii} International Labour Organization (2000) *Health Micro-Insurance: a compendium*. Geneva: International Labour Office; Social Security Department; Strategies and Tools against social Exclusion and Poverty programme. <http://www.gdrc.org/icm/step.pdf>

^{xxviii} Churchill C [Editor] (2006) *Protecting the poor: a microinsurance compendium*. Geneva: International Labour Office. <http://www.munichre-foundation.org/NR/rdonlyres/52FA02DB-B6A4-4DEB-8149-5A64B64D6A68/0/ProtectingthepoorAmicroinsurancecompendiumFullBook.pdf>

^{xxix} Institute on Health, Politics and Society in Africa (2005) *Access and equity in African health systems*. Dakar, Senegal: Council for the Development of Social Science Research in Africa. http://www.codesria.org/IMG/article_PDF/article_a290.pdf

^{xxx} Russell S (1996) Ability to pay for health care: concepts and evidence. *Health Policy and Planning* 11(3), 219-237. <http://heapol.oxfordjournals.org/cgi/reprint/11/3/219>

^{xxxi} Gilson L, Kalyalya D, Kuchler F, Lake S, Oranga H and Ouendo M (2000) The equity impacts of community financing activities in three African countries. *International Journal of Health Planning and Management* 15, 291-317. <http://www3.interscience.wiley.com/cgi-bin/fulltext/77002025/PDFSTART>

^{xxxii} Ndiaye P (2006) *Développement des mutuelles de santé en Afrique: une analyse comparative des approches et de leurs impacts*. Research Matters working paper. Ottawa, ON: International Development Research Centre; Governance, Equity and Health program initiative. http://www.idrc.ca/uploads/user-S/11539235471Pascal_Ndiaye_-_Mutuelles_-_juin_2006.pdf

^{xxxiii} Moens F (1990) Design, implementation, and evaluation of a community financing scheme for hospital care in developing countries: a pre-paid health plan in the Bwamanda health zone, Zaire. *Social Science & Medicine* 30(12), 1319-1327.

^{xxxiv} Oxfam International (2008) *Health insurance in low-income countries: where is the evidence that it works?* Oxford, UK: Oxfam International. http://publications.oxfam.org.uk/download.asp?dl=http://www.oxfam.org.uk/resources/policy/health/downloads/bp112_health_insurance.pdf

^{xxxv} La Concertation (2008) *10 years serving the African Mutual Health Organization, 1998-2008*. Dakar, Senegal: la Concertation. <http://www.concertation.org/gimi/concertation/RessFileDownload.do?ressourceId=10211>

^{xxxvi} La Concertation (2004) *Inventaire des mutuelles de santé en Afrique: Synthèse des travaux de recherche dans 11 pays*. Dakar, Senegal: la Concertation. www.ilo.org/gimi/RessFileDownload.do?ressourceId=82

-
- xxxvii Ndiaye P, Soors W and Criel B (2007) A view from beneath: Community Health Insurance in Africa [Editorial]. *Tropical Medicine and International Health* **12**(2), 157-161.
<http://dspace.itg.be/bitstream/10390/1378/1/2007tmih0157.pdf>
- xxxviii Waelkens M-P and Criel B [Editors] (2007) *La mise en réseau de mutuelles de santé en Afrique de l'Ouest : l'union fait-elle la force ?* Les enseignements d'un colloque international organisé à Nouakchott, Mauritanie, 19 et 20 décembre 2004. Antwerp: ITGPress.
<http://dspace.itg.be/bitstream/10390/1620/1/9789076070308.pdf>
- xxxix Union Economique et Monétaire Ouest Africaine (2009) *Règlement N°07/2009/CM/UEMOA portant réglementation de la mutualité sociale au sein de l'UEMOA*. Dakar, Senegal: Union Economique et Monétaire Ouest Africaine; le Conseil des Ministres.
http://www.uemoa.int/actualite/2009/CM26062009/reglement_07_2009_CM_UEMOA.pdf
- xl Union Economique et Monétaire Ouest Africaine (2009) *Communiqué de presse de la reunion ordinaire du conseil des ministres de l'union, Dakar, le 26 juin 2009*. Dakar, Senegal: Union Economique et Monétaire Ouest Africaine; le Conseil des Ministres.
http://www.uemoa.int/actualite/2009/CM26062009/com_presse_26062009.pdf
- xli Projet d'Appui aux Systèmes de Santé des Régions Médicales de Kaolack et Fatick (2008) *Une couverture assurance-maladie pour les élèves*. Kaolack, Senegal: ASSRMKF.
<http://assrmkf.sn/spip.php?article40>
- xliv World Health Organization (2010) *World Health Statistics 2010*. Geneva: World Health Organization; Department of Health Statistics and Informatics.
http://www.who.int/whosis/whostat/EN_WHS10_Full.pdf
- xlvi Belgische Technische Coöperatie/Coopération technique belge (2008) *Programme d'Appui au développement de la MicroAssurance Santé au Sénégal (PAMAS 2008-2011) : dossier technique et financier*. Brussels: BTC/CTB.
<http://www.btcctb.org/files/web/tenders/Dossier%20technique%20et%20financier%20Appui%20a%20développement%20de%20la%20micro%20assurance%20santé%20au%20Sénégal.pdf>
- xlv Jütting J (2003) Do community-based health insurance schemes improve poor people's access to health care? Evidence from rural Senegal. *World Development* **32**(2), 273-288.
<http://www.oecd.org/dataoecd/48/46/24670935.pdf>
- xlv Chankova S, Sulzbach S and Diop F (2008) Impact of mutual health organizations: evidence from West Africa. *Health Policy and Planning* **23**(4), 264-276.
<http://heapol.oxfordjournals.org/cgi/reprint/23/4/264>
- xlvi République du Sénégal (2004) *Plan stratégique de développement des mutuelles de santé au Sénégal*. Dakar, Senegal: Ministère de la Santé. <http://www.sante.gouv.sn/IMG/pdf/planstrategique.pdf>
- xlvii Wade A (2007) *La mise en réseau des mutuelles de santé au Sénégal*. In: Waelkens M-P and Criel B [Editors] *La mise en réseau de mutuelles de santé en Afrique de l'Ouest : l'union fait-elle la force ?* Les enseignements d'un colloque international organisé à Nouakchott, Mauritanie, 19 et 20 décembre 2004. Antwerp: ITGPress; pp 65-84.
<http://dspace.itg.be/bitstream/10390/1620/1/9789076070308.pdf>
- xlviii Letourmy A (2010) *How to implement health insurance in sub-Saharan Africa?* Background paper for the European Report on Development (ERD 2010) conference *Promoting resilience through social*

protection in sub-Saharan Africa, 28-30 June 2010. Dakar, Senegal: ERD 2010 regional conference.
<http://erd.eui.eu/media/2010/Letourmy%20ERD.pdf>

^{xlix} Faye O and Paul E (2009) *The opportunities of the global crisis for social policy enhancement in Senegal*. Geneva: United Nations Research Institute for Social Development.
[http://www.unrisd.org/80256B3C005BD6AB/httpNetITFramePDF?ReadForm&parentunid=116BFCFB01D47A66C12576A200567079&parentdoctype=eventauxiliarypage&netitpath=80256B3C005BD6AB/\(httpAuxPages\)/116BFCFB01D47A66C12576A200567079/\\$file/FayePaul.pdf](http://www.unrisd.org/80256B3C005BD6AB/httpNetITFramePDF?ReadForm&parentunid=116BFCFB01D47A66C12576A200567079&parentdoctype=eventauxiliarypage&netitpath=80256B3C005BD6AB/(httpAuxPages)/116BFCFB01D47A66C12576A200567079/$file/FayePaul.pdf)

^l Witter S, Armar-Klemesu M and Dieng T (2008) *National fee exemption schemes for deliveries: comparing the recent experiences of Ghana and Senegal*. In: Richard F, Witter S and De Brouwere V [Editors] *Reducing financial barriers to obstetric care in low-income countries*. Studies in Health Services Organisation & Policy, 24. Antwerp: ITGPress; pp 167-198.
<http://dspace.itg.be/bitstream/10390/2576/2/2008shso0167.pdf>

^{li} Witter S, Dieng T, Mbengue D, Moreira I and De Brouwere V (2010) The national free delivery and caesarean policy in Senegal: evaluating processes and outcomes. *Health Policy and Planning* 25(5), 384-392. <http://heapol.oxfordjournals.org/cgi/reprint/25/5/384>

^{lii} Perezniето P (2009) *Social protection to tackle child policy in Senegal*. ODI Project Briefing No 26. London: Overseas Development Institute. <http://www.odi.org.uk/resources/download/3793-odi-project-briefing-english.pdf>

^{liii} Smith K and Sulzbach S (2008) Community-based insurance and access to maternal health services: evidence from three West African countries. *Social Science & Medicine* 66(12), 2460-2473.

^{liv} Ouimet M-J, Fournier P, Diop I and Haddad S (2007) Solidarity or financial sustainability: an analysis of the values of community-based health insurance subscribers and promoters in Senegal. *Canadian Journal of Public Health* 98(4), 341-346.
<http://journal.cpha.ca/index.php/cjph/article/viewFile/885/885>

^{lv} Togo L, Ponzio N, Bouaré M and Ouattara O (2004) *Rapport Mali sur la couverture sociale de la maladie*. Background document for the colloquium *L'amélioration de l'accès aux services de santé en Afrique francophone : le rôle de l'assurance*, 28-29 April 2004. Paris: Collège des Economistes de la Santé; Réseau Economie de la Santé dans les Pays en Développement. http://www.ces-asso.org/docs/WBI_IMA_Rapport_Mali.pdf

^{lvi} Letourmy A and Ouattara O (2006) *L'assurance maladie obligatoire au Mali : discussion d'un processus en cours*. In: Dussault G, Fournier P and Letourmy A [Editors] *L'assurance maladie en Afrique francophone : améliorer l'accès aux soins et lutter contre la pauvreté*. Health, Nutrition and Population discussion paper. Washington, DC: the World Bank, Human Development Network; Health, Nutrition and Population Family; pp 229-262. http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2006/08/30/000160016_20060830113122/Rendered/PDF/37149.pdf

^{lvii} Fischer K, Sissouma I and Hathie I (2006) *L'Union Technique de la Mutualité Malienne, Mali*. CCGAP Working Group on Microinsurance: Good and Bad Practices, Case Study No 23. Geneva: International Labour Office; Social Finance Programme. http://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_122479.pdf

-
- lviii Ministère du Développement Social, de la Solidarité et des Personnes Agées & Bureau Régional de l'UNICEF pour l'Afrique de l'Ouest et du Centre (2009) *La protection sociale et les enfants en Afrique de l'Ouest et du Centre : le cas du Mali*. Bamako, Mali: Ministère du Développement Social, de la Solidarité et des Personnes Agées; Direction Nationale de la Protection Sociale et de l'Economie Solidaire.
http://www.unicef.org/wcaro/wcaro_mali_Protection_sociale_Mali_FR_s.pdf
- lix Miller Franco L, Pathé Diop F, Burgert C, Gamble Kelly A, Makinen M and Tidiane Simpapa C (2008) Effects of mutual health organizations on use of priority health services in urban and rural Mali: a case-control study. *Bulletin of the World Health Organization* **86**(11), 830-838.
<http://www.who.int/bulletin/volumes/86/11/08-051045.pdf>
- lx Miller Franco L, Pathé Diop F, Burgert C, Gamble Kelly A, Makinen M and Tidiane Simpapa C (2008) Effects of mutual health organizations on use of priority health services in urban and rural Mali: a case-control study: Appendices listed in the *Bulletin of the World Health Organization* **86**(11), November 2008. http://www.urchs.com/news/WHO_Appendices.pdf
- lxi Soors W (2006) *Evaluation de la Mutuelle de Santé de Cinzana*. Background document for Akory A, Soors W and Douabélé C (2006) *Evaluation du Projet Intégré de Santé et d'Activités Mutualistes (PISAM) dans la commune de Cinzana (cercle de Ségou)*. External evaluation report. Bamako, Mali: Novartis Foundation for Sustainable Development [Unpublished; available from the author upon request wsoors@itg.be].
- lxii Criel B, Atim C, Basaza R, Blaise P and Waelkens M-P (2004) Community health insurance (CHI) in sub-Saharan Africa: researching the context [Editorial]. *Tropical Medicine and International Health* **9**(10), 1041-1043. <http://dSPACE.itg.be/bitstream/10390/1212/1/2004tmih1041.pdf>
- lxiii Togola A and Gerber D (2007) *An evaluation of Malian civil society's role in governance*. New York: Open Society Institute; Africa Governance Monitoring and Advocacy Project (AfriMAP).
[http://www.afriMAP.org/english/images/paper/Mali_Civil_Society\(fin\).pdf](http://www.afriMAP.org/english/images/paper/Mali_Civil_Society(fin).pdf)
- lxiv Audibert M and de Roodenbeke E (2005) *Utilisation des services de santé de premier niveau au Mali : analyse de la situation et perspectives*. Washington, DC: the World Bank; Région Afrique; Département du développement humain. http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2005/09/28/000160016_20050928112649/Rendered/PDF/33643a10MLI0sante0AFR0Human0dev0no087.pdf
- lxv Koné Y, Ouattara O and Balique H (1998) *Un projet de création d'une mutuelle en zone rurale au Mali : la mutuelle des cotonniers de Nongon*. Background paper for the conference *Les mutuelles de santé en Afrique : concept importé ou réalité émergente ? Expérience et perspectives*, 27-29 May 1998. Paris: Centre International de l'Enfance et de la Famille.
- lxvi Coulibaly S, Desplat D, Koné Y, Nimaga K, Dugas S, Farnarier G, Sy M, Balique H, Doumbo O and Van Dormael M (2007) Une médecine rurale de proximité : l'expérience des médecins de campagne au Mali. *Education for Health* **20**(2), 47.
http://www.educationforhealth.net/publishedarticles/article_print_47.pdf
- lxvii Letourmy A and Pavy-Letourmy A (2005) *La micro-assurance de santé dans les pays à faible revenu*. Notes et documents, No 26. Paris: Agence Française de Développement; Département de la Recherche.
<http://www.afd.fr/jahia/webdav/site/afd/users/administrateur/public/publications/notesetdocuments/ND-26.pdf>
- lxviii Ouattara O and Sissouma I (2007) *La mise en réseau des mutuelles de santé : l'expérience de l'Union Technique de la Mutualité malienne*. In: Waelkens M-P and Criel B [Editors] *La mise en réseau de mutuelles*

de santé en Afrique de l'Ouest : l'union fait-elle la force ? Les enseignements d'un colloque international organisé à Nouakchott, Mauritanie, 19 et 20 décembre 2004. Antwerp: ITGPress ; pp 49-64.
<http://dspace.itg.be/bitstream/10390/1620/1/9789076070308.pdf>

lxxix Union Technique de la Mutualité Malienne (2009) *Le rôle de la Mutualité Malienne dans l'extension de la couverture maladie au plus grand nombre : synthèse générale des travaux*. Séminaire organisé par l'UTM en partenariat avec la Mutualité Française, Bamako, 24-26 février 2009. Bamako, Mali: Union Technique de la Mutualité Malienne.

lxx Ministère de la Santé du Mali (2009) *La mutualité malienne s'engage dans l'amélioration des services de santé*. http://www.sante.gov.ml/index.php?option=com_content&view=article&id=776:la-mutualite-malienne-sengage-dans-lamelioration-des-services-de-sante&catid=78&Itemid=120

lxxi McIntyre D, Garshong B, Mtei G, Meheus F, Thiede M, Akazili J, Ally M, Aikins M, Mulligan J-A and Goudge J (2008) Beyond fragmentation and towards universal coverage: insights from Ghana, South Africa and the United Republic of Tanzania. *Bulletin of the World Health Organization* 86(11), 871-876. <http://www.who.int/bulletin/volumes/86/11/08-053413.pdf>

lxxii Soors W and Criel B (2009) *L'interface entre mutuelles, qualité de l'offre et demande : résultats de deux études de cas au Mali rural*. Presentation at the Forum 2009 de la Concertation. Yaoundé, Cameroon: Palais des Congrès. <http://www.concertation.org/gimi/concertation/ShowNews.do?nid=5843>
[embedded as Plénière 2 Thème 2]

lxxiii Samaké S, Keita B and Mariko S (2007) *Santé de la mère*. In: Samaké S, Traoré S, Ba S, Dembélé E, Diop M, Mariko S and Libité P [Editors] *Enquête Démographique et de Santé du Mali 2006*. Bamako, Mali: Ministère de la Santé; Direction Nationale de la Statistique de l'Informatique; Cellule de Planification et de Statistique – Calverton, MD: Macro International.
<http://www.measuredhs.com/pubs/pdf/FR199/FR199.pdf>

lxxiv Sylla M, Barry A, Diallo Y, Yobouno M, Bongono M, Keita A and Condé S (2002) *Test du modèle de Mutuelle Communautaire d'Aire de Santé (MUCAS) en Guinée Forestière 1996-2000 (Rapport avril 2000)*. In: Criel B, Barry A and von Roenne F [Editors] *Le projet PRIMA en Guinée Conakry : une expérience d'organisation de mutuelles de santé en Afrique rurale*. Brussels: Medicus Mundi Belgium; pp 17-120.

lxxv Ndiaye P, Kaba S, Kourouma M, Barry A, Barry A and Criel B (2008) *MURIGA in Guinea: an experience of community health insurance focused on obstetric risks*. In: Richard F, Witter S and De Brouwere V [Editors] *Reducing financial barriers to obstetric care in low-income countries*. Studies in Health Services Organisation & Policy, 24. Antwerp: ITGPress; pp 117-148.
<http://dspace.itg.be/bitstream/10390/2480/1/2008redu0117.pdf>

lxxvi Barry A (2007) *La plateforme des opérateurs d'appui aux mutuelles de santé en Guinée*. In: Waelkens M-P and Criel B [Editors] *La mise en réseau de mutuelles de santé en Afrique de l'Ouest : l'union fait-elle la force ? Les enseignements d'un colloque international organisé à Nouakchott, Mauritanie, 19 et 20 décembre 2004*. Antwerp: ITGPress; pp 99-105.
<http://dspace.itg.be/bitstream/10390/1620/1/9789076070308.pdf>

lxxvii Gbamou C (2007) *La mise en réseau des mutuelles de santé en Guinée : l'expérience du CIDR et de l'Union des mutuelles de la Guinée forestière*. In: Waelkens M-P and Criel B [Editors] *La mise en réseau de mutuelles de santé en Afrique de l'Ouest : l'union fait-elle la force ? Les enseignements d'un colloque international organisé à Nouakchott, Mauritanie, 19 et 20 décembre 2004*. Antwerp: ITGPress; pp 85-97. <http://dspace.itg.be/bitstream/10390/1620/1/9789076070308.pdf>

lxxxviii Criel B and Waelkens M-P (2003) Declining subscriptions to the Maliando Mutual Health Organisation in Guinea-Conakry (West Africa): what is going wrong? *Social Science & Medicine* **57**(7), 1205-1219.

lxxxix Wiegandt A, Van der Venet J, Diallo A and Criel B (2002) *La perception des professionnels de santé de la MUCAS Maliando : la difficulté de l'approche partenariale*. In: Criel B, Barry A and von Roenne F [Editors] *Le projet PRIMA en Guinée Conakry : une expérience d'organisation de mutuelles de santé en Afrique rurale*. Brussels: Medicus Mundi Belgium; pp 207-238.

lxxx Criel B, Diallo A, Van der Venet J, Waelkens M-P and Wiegandt A (2005) La difficulté du partenariat entre professionnels de santé et mutualistes : le cas de la mutuelle de santé Maliando en Guinée-Conakry. *Tropical Medicine and International Health* **10**(5), 450-463.
<http://dspace.itg.be/bitstream/10390/1213/1/2005tmih0450.pdf>

lxxxi Criel B, Blaise P and Ferette D (2006) *Mutuelles de santé en Afrique et qualité de soins dans les services : une interaction dynamique*. In: Dussault G, Fournier P and Letourmy A [Editors] *L'assurance maladie en Afrique francophone : améliorer l'accès aux soins et lutter contre la pauvreté*. Health, Nutrition and Population discussion paper. Washington, DC: the World Bank, Human Development Network; Health, Nutrition and Population Family; pp 229-262. http://www-wds.worldbank.org/external/default/WDSPContentServer/WDSP/IB/2006/08/30/000160016_20060830113122/Rendered/PDF/37149.pdf

lxxxii Djan B, Tafsir C and von Roenne F (2002) *L'économie du centre de santé de Yendé* [Annexe 8]. In: Criel B, Barry A and von Roenne F [Editors] *Le projet PRIMA en Guinée Conakry : une expérience d'organisation de mutuelles de santé en Afrique rurale*. Brussels: Medicus Mundi Belgium; pp 112-118.

lxxxiii Dong H, De Allegri M, Gnawali D, Souares A and Sauerborn R (2009) Drop-out analysis of community-based health insurance membership at Nouna, Burkina Faso. *Health Policy* **92**(2), 174-179.

lxxxiv Gnawali D, Pokhtrel S, Sié A, Sanon M, De Allegri M, Souares A, Dong H and Sauerborn R (2009) The effect of community-based health insurance membership on the utilization of modern health care services: evidence from Burkina Faso. *Health Policy* **90**(2), 214-222.

lxxxv Wereldsolidariteit. *Landenfiche Burkina Faso*. <http://www.wereldsolidariteit.be/wereldwijd/53-landenfiches/87-burkina-faso>

lxxxvi Ridde V, Haddad S, Yacoubou M and Yacoubou I (2010) Exploratory study of the impacts of mutual health organizations on social dynamics in Benin. *Social Science & Medicine* **71**(3), 467-474.

lxxxvii Gerkens M and Jadin K (2009) *Bezoek aan zeven projecten van het Belgisch Overlevingsfonds in Benin (15 tot 22 maart 2009): verslag namens de parlementaire delegatie / Visite de sept projets du Fonds belge de survie au Bénin (15 au 22 mars 2009) : rapport fait au nom de la délégation parlementaire* [Doc 52 2074/001]. Brussels: Belgische Kamer van volksvertegenwoordigers/Chambre des représentants de Belgique.
<http://www.jadin.be/medias/pdf/propositions-de-loi/260609%20-%20Benin.pdf>

lxxxviii Sery J-P and Letourmy A (2006) *Couverture du risqué maladie en Afrique francophone : état des lieux, défis et perspectives*. In: Dussault G, Fournier P and Letourmy A [Editors] *L'assurance maladie en Afrique francophone : améliorer l'accès aux soins et lutter contre la pauvreté*. Health, Nutrition and Population discussion paper. Washington, DC: the World Bank, Human Development Network; Health, Nutrition and Population Family; pp 197-225. <http://www->

wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2006/08/30/000160016_20060830113122/Rendered/PDF/37149.pdf

^{lxxxix} Soors W, Waelkens M-P and Criel B (2008) *Community health insurance in sub-Saharan Africa: opportunities for improving access to emergency obstetric care?* In: Richard F, Witter S and De Brouwere V [Editors] *Reducing financial barriers to obstetric care in low-income countries*. Studies in Health Services Organisation & Policy, 24. Antwerp: ITGPress; pp 149-164.
<http://dspace.itg.be/bitstream/10390/2482/1/2008redu0149.pdf>

^{xc} Plate-forme des Promoteurs de Mutuelles de Santé au Cameroun/Platform of Promoters of Mutual Health Organisations in Cameroon (2006) *Plan stratégique pour la promotion et le développement des mutuelles de santé au Cameroun/Strategic plan for the promotion and development of mutual health organizations in Cameroon*. Yaoundé, Cameroon: Promuscam.
<http://www.platformeecm.org/plateforme/index2.php?cat=planstrategique>
<http://www.platformeecm.org/plateforme/en/index2.php?cat=strategicplan>

^{xc}i Ahawo A and Kopnang P (2007) How mutual health organizations (MHOs) and microinsurance schemes contribute to the fight against HIV/AIDS in Cameroon. *G-NEWS [Social Security Extension and Microinsurance Newsletter]* 2, 5.
<http://www.ilo.org/gimi/RessFileDownload.do?resourceId=3112>

^{xcii} Bâ A (2007) *Les mutuelles de santé et l'accès à l'hôpital : perspective de la mutuelle de santé de Dar-Naïm*. In: Waelkens M-P and Criel B [Editors] *La mise en réseau de mutuelles de santé en Afrique de l'Ouest : l'union fait-elle la force ? Les enseignements d'un colloque international organisé à Nouakchott, Mauritanie, 19 et 20 décembre 2004*. Antwerp: ITGPress; pp 99-105.
<http://dspace.itg.be/bitstream/10390/1620/1/9789076070308.pdf>

^{xciii} Criel B, Bâ A, Kane F, Noirhomme M and Waelkens M-P (2010) *Une expérience de protection sociale pour les plus démunis : le fonds d'indigence de Dar-Naïm en Mauritanie*. Studies in Health Services Organisation & Policy, 26. Antwerp: ITGPress.
<http://dspace.itg.be/bitstream/10390/2895/2/2010maur0026.pdf>

^{xciv} Criel B, Van Damme W, Meessen B and Ir P (2008) *A comparative analysis of public social assistance systems in Belgium and health equity funds in Cambodia: an overview of lessons learned*. In: Meessen B, Pei X, Criel B and Bloom G [Editors] *Health and social protection: experiences from Cambodia, China and Lao PDR*. Studies in Health Services Organisation & Policy, 23. Antwerp: ITGPress; pp 347-381.
<http://www.povill.com/download/A%20comparative%20analysis%20of%20public%20social%20assistance%20systems.pdf>

^{xcv} Atim C, Grey S, Apoya P, Anie S and Aikins M (2001) *A survey of health financing schemes in Ghana*. Bethesda, MD: Abt Associates; Partners for Health Reformplus.
http://www.healthsystems2020.org/files/1517_file_Tech013_fin.pdf

^{xcvi} Sulzbach S, Garshong B and Owusu-Banahene G (2005) *Evaluating the effects of the national health insurance act in Ghana: baseline report*. Bethesda, MD: Abt Associates; Partners for Health Reformplus.
http://www.abtassociates.com/reports/national_health_insurance_ghana_1205.pdf

^{xcvii} Gyapong J, Garshong B, Akazili J, Aikins M, Agyepong I and Nyonator F (2007) *Critical analysis of Ghana's health system with a focus on equity challenges and the national health insurance*. SHIELD

workpackage 1 report. Accra, Ghana: Ghana Health Service; Health Research Unit; Strategies for Health Insurance for Equity in Less Developed countries project.

<http://web.uct.ac.za/depts/heu//SHIELD/reports/Ghana1.pdf>

^{xcviii} Agyepong I and Adjei S (2008) Public social policy development and implementation: a case study of the Ghana national health insurance scheme. *Health Policy and Planning* **23**(2), 150-160.

<http://heapol.oxfordjournals.org/content/23/2/150.full.pdf>

^{xcix} Jehu-Appiah C, Aryeetey G, Spaan E, Agyepong I and Baltussen (2010) Efficiency, equity and feasibility of strategies to identify the poor: an application to premium exemptions und national health insurance in Ghana. *Health Policy* **95**(2), 166-173.

^c Alfes L (2009) *The Ghana national health insurance scheme. WIEGO social protection case study*. Manchester, UK: Women in Informal Employment Globalizing and Organizing.

http://www.wiego.org/program_areas/social_protect/ghana_nhis_case_study_draft.pdf

^{ci} Marriott A (2009) Your money or your life: will leaders act now to save lives and make health care free in poor countries? Oxford, UK: Oxfam International.

<http://www.oxfam.org/sites/www.oxfam.org/files/bp-your-money-or-your-life.pdf>

^{cii} Agyepong I, Nabyonga Orem J and Hercot D (2010) When the 'non-workable ideological best' becomes the enemy of the 'imperfect but workable good' [Viewpoint]. *Tropical Medicine and International Health* [in press].

^{ciii} Sarpong N, Loag W, Fobil J, Meyer C, Adu-Sarkodie Y, May J and Schwarz N (2010) National health insurance coverage and socio-economic status in a rural district in Ghana. *Tropical Medicine and International Health* **15**(2), 191-197. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-3156.2009.02439.x/pdf>

^{civ} Basaza R, Pariyo G and Criel B (2009) What are the emerging features of community health insurance schemes in East Africa? *Risk Management and Healthcare Policy* **2**, 47-53.

<http://www.dovepress.com/getfile.php?fileID=4955>

^{cv} Kamuzora P and Gilson L (2007) Factors influencing implementation of the community health fund in Tanzania. *Health Policy and Planning* **22**(2), 95-102.

<http://heapol.oxfordjournals.org/content/22/2/95.full.pdf>

^{cvi} Msuya J, Jütting J and Asfaw A (2004) *Impact of community health insurance schemes on health care provision in rural Tanzania*. ZEF discussion papers on development policy no. 82. Bonn: Universität Bonn; Zentrum für Entwicklungsforschung – Center for Development Research.

http://www.zef.de/fileadmin/webfiles/downloads/zef_dp/zef_dp82.pdf

^{cvi} Msuya J, Jütting J and Asfaw A (2007) Impact of community health funds on the access to health care: empirical evidence from rural Tanzania. *International Journal of Public Administration* **30**(8), 813-833.

^{cvi} Mtei G and Mulligan J-A (2007) *Community health funds in Tanzania: a literature review*. Ifakara, Tanzania: Ifakara Health Research and Development Centre; Consortium for Research on Equitable Health Systems programme.

<http://www.crehs.lshtm.ac.uk/downloads/publications/Community%20health%20funds%20in%20Tanzania.pdf>

-
- cix Tanzanian German Programme to Support Health (2007) *Impact of new ways of public private partnerships in expanding social health insurance to workers in the informal sector*. Dar es Salaam, Tanzania: Tanzanian German Programme to Support Health; Health financing component.
http://www.tgpsh.or.tz/uploads/media/Impact_of_PPP_in_expanding_social_health_insurance_to_workers_of_the_infomral_sector.doc.pdf
- cx Mtei G, Mulligan J, Ally M, Palmer N and Mills A (2007) *An assessment of the health financing system in Tanzania*. Report on SHIELD work package 1. Ifakara, Tanzania: Ifakara Health Research and Development Centre; Strategies for Health Insurance for Equity in Less Developed countries project.
<http://web.uct.ac.za/depts/heu//SHIELD/reports/Tanzania1.pdf>
- cxii Carrin G, Doetinchem O, Kirigia J, Mathauer I and Musango L (2008) Social health insurance: how feasible is its expansion in the African region? *DevISSues* 10(2), 7-9.
http://www.iss.nl/content/download/14393/137519/file/DevISSues10_2_nov_08.pdf
- cxiii Kenya Community Based Health Financing Association (2008) *The role of KCBHFA in the transformation of National Hospital Insurance Fund (NHIF) to National Social Health Insurance Fund (NSHIF)*. Nairobi, Kenya: Kenya Community Based Health Financing Association.
<http://www.kcbhfa.org/training%20materials/role%20of%20kcbhfa%20in%20transformation%20of%20nhif.pdf>
- cxiv Basaza R, Criel B and Van der Stuyft P (2007) Low enrolment in Uganda community health insurance schemes: underlying causes and policy implications. *BMC Health Services Research* 7, 105.
<http://dspace.itg.be/bitstream/10390/1161/1/2007bhsr0105.pdf>
- cxv Basaza R, Criel B and Van der Stuyft P (2008) Community health insurance in Uganda: why does enrolment remain low? A view from beneath. *Health Policy* 87(2), 172-184.
- cxvi Waelkens M-P (2010) *Design health insurance in Uganda: evaluation of a Cordaid funded CHI programme in Kabale and Masaka diocese*. Nkozi, Uganda: Uganda Martyrs University.
- cxvii Basaza R, Criel B and Van der Stuyft P (2010) Community health insurance amidst abolition of user fees in Uganda: the view from policy makers and health service managers. *BMC Health Services Research* 10, 33. <http://dspace.itg.be/bitstream/10390/2978/1/2010bhsr0033.pdf>
- cxviii Nabyonga Orem J and Mukeiki Zikusooka C (2010) Health financing reform in Uganda: how equitable is the proposed national health insurance scheme? *International Journal for Equity in Health* 9, 23. <http://www.equityhealthj.com/content/pdf/1475-2876-9-23.pdf>
- cxix Musango L, Doetinchem O and Carrin G (2009) *De la mutualisation du risque maladie à l'assurance universelle : expérience du Rwanda*. Discussion paper 1/2009. Geneva: World Health Organization; Department Health Systems Financing; Cluster Health Systems and Services.
http://www.who.int/health_financing/documents/dp_f_09_01-mutualisation_rwa.pdf
- cxix Roenen C and Criel B (1997) La mutuelle du Kanage : leçons à tirer d'un échec. Une expérience d'un système d'assurance maladie pour soins de santé à l'hôpital de Murunda au Rwanda. *L'Enfant en Milieu Tropical* 228, 29-39.

-
- cxx Schneider P, Diop F and Leighton C (2001) *Pilot testing prepayment for health services in Rwanda: results and recommendations for policy directions and implementation*. Technical report no. 66; executive summary. Cambridge, MA: Abt Associates Inc. http://www.abtassociates.com/reports/ES-2001230338148_27336.pdf
- cxxi Schneider P and Diop F (2001) *Synopsis of results on the impact of community-based health insurance on financial accessibility to health care in Rwanda*. Health, Nutrition and Population discussion paper. Washington, DC: the World Bank; Human Development Network; Health, Nutrition and Population Family. <http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/281627-1095698140167/Schneider-SynopsisofResults-whole.pdf>
- cxxii Inyarubuga H (2007) *Les mutuelles de santé au Rwanda : une force pragmatique de mutualisation de risque lié à la maladie*. Kigali, Rwanda: République du Rwanda; Ministère de la Santé; Cellule technique d'appui aux mutuelles de santé. http://www.cbhirwanda.org.rw/index.php?option=com_docman&task=doc_download&gid=6&Itemid=38
- cxxiii Ministère de la Santé (2004) *Politique de développement des mutuelles de santé au Rwanda*. Kigali, Rwanda: République du Rwanda; Ministère de la Santé. <http://www.grandslacs.net/doc/4061.pdf>
- cxxiv Basinga P, Sekabaraga C and Soucat A (2008) *Scaling up innovations in services delivery of primary health care: case of Rwanda*. In: *Three decades of primary health care: reviewing the past and defining the future* [Panel session: primary health care: past achievement, future challenges and responses: five country case studies]. Bangkok, Thailand: Prince Mahidol Award Conference 2008; pp 91-108. http://www.pmaconference.mahidol.ac.th/index.php?option=com_docman&task=doc_download&gid=14&Itemid
- cxxv National Institute of Statistics of Rwanda (2009) *Statistical Yearbook: 2009 Edition*. Kigali, Rwanda: Republic of Rwanda; Ministry of Finance and Economic Planning; National Institute of Statistics. <http://statistics.gov.rw/images/PDF/Statistical%20Yearbook.pdf>
- cxxvi National Institute of Statistics of Rwanda (2008) *Rwanda service provision assessment survey 2007*. Kigali, Rwanda: Republic of Rwanda; Ministry of Finance and Economic Planning; National Institute of Statistics – Calverton, MD: Macro International. <http://statistics.gov.rw/images/PDF/RSPA%202007%20FINAL%20REPORT-ENGLISH.pdf>
- cxxvii Logie D, Rowson M and Ndagije (2008) Innovations in Rwanda's health system: looking to the future. *The Lancet* **372**(9634), 256-261.
- cxxviii National Institute of Statistics of Rwanda (2007) *EICV poverty analysis for Rwanda's economic development and poverty reduction strategy* [Final report]. Kigali, Rwanda: Republic of Rwanda: Ministry of Finance and Economic Planning; National Institute of Statistics. http://statistics.gov.rw/images/PDF/2-EICV%20Living%20Standards%20Analysis_English.pdf
- cxxix Saksena P, Fernandes Antunes A, Xu K, Musango L and Carrin G (2010) *Impact of mutual health insurance on access to health care and financial risk protection in Rwanda*. Discussion paper 3/2010. Geneva: World Health Organization; Department Health Systems Financing; Cluster Health Systems and Services. http://www.who.int/health_financing/documents/dp_e_10_03-mut_frp_rwa.pdf

-
- xxxx Saksena P, Fernandes Antunes A, Xu K, Musango L and Carrin G (2010) Mutual health insurance in Rwanda: evidence on access to care and financial risk protection. *Health Policy* [in press].
- xxxxi Kalk A, Groos N, Karasi J-C and Girrbaach E (2010) Health systems strengthening through insurance subsidies: the GFATM experience in Rwanda [Viewpoint]. *Tropical Medicine and International Health* **15**(1), 94-97. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-3156.2009.02424.x/pdf>
- xxxii Schmidt J-O, Mayindo J and Kalk A (2006) Thresholds for health insurance in Rwanda: who should pay how much? *Tropical Medicine and International Health* **11**(8), 1327-1333. <http://onlinelibrary.wiley.com/doi/10.1111/j.1365-3156.2006.01661.x/pdf>
- xxxiii Kalk A (2008) Rwanda's health system: some concerns [Correspondence]. *The Lancet* **372**(9651), 1729.
- xxxiv Baza A, Hakizimana A, Hanson K, Kwizera F and van der Geest (1993) Health insurance and the Bamako initiative in Burundi: value for money? *The International Journal of Health Planning and Management* **8**(2), 129-135.
- xxxv Arhin D (1994) The health card insurance scheme in Burundi: a social asset or a non-viable venture. *Social Science & Medicine* **39**(6), 861-870.
- xxxvi Arhin-Tenkorang D (2004) *Experience of community health financing in the African region*. In: Preker A and Carrin G [Editors] *Health financing for poor people: resource mobilization and risk sharing*. Washington, DC: the World Bank; pp 157-197.
- xxxvii Kippenberg J, Sahokwasama J and Amon J (2007) Detention of insolvent patients in Burundian hospitals. *Health Policy and Planning* **23**(1), 14-23. <http://heapol.oxfordjournals.org/content/23/1/14.full.pdf>
- xxxviii Cliffe S and Ndikumana D (1999) *Burundi poverty note: prospects for social protection in a crisis economy*. Report n° 1709-BU. Washington, DC: the World Bank; Africa Region; Country Department 9. <http://www.grandslacs.net/doc/2301.pdf>
- xxxix Ministère de la Santé Publique (2006) *Plan National de Développement Sanitaire 2006-2010*. Bujumbura, Burundi: République du Burundi; Ministère de la Santé Publique. http://www.minisante.bi/index.php?option=com_rokdownloads&view=file&Itemid=86&id=53
- cxl Kamwenubusa T, Nicobaharaye O, Niyonkuru D and Munyandekwe O (2010) *Etude comparative des systèmes de protection sociale au Rwanda et au Burundi*. Brussels: Wereldsolidariteit – Solidarité Mondiale.
- cxli Atim C and Criel B (2004) *Faisabilité de la mise en oeuvre de mutuelles de santé en République Démocratique du Congo*. Mission report. Kinshasa, Democratic Republic of Congo: Ministry of Public Health and Belgian Technical Cooperation – Antwerp: Institute of Tropical Medicine.
- cxlii Criel B and Kegels G (1997) A health insurance scheme for hospital care in Bwamanda district, Zaire: lessons and questions after 10 years of functioning. *Tropical Medicine and International Health* **2**(7), 654-672. <http://onlinelibrary.wiley.com/doi/10.1046/j.1365-3156.1997.d01-349.x/pdf>
- cxliii C.D.I.-Bwamanda Integrale Streekontwikkeling (2010) *Nieuwsbrief juni 2010*. Heverlee, Belgium: C.D.I.-Bwamanda-België.

<http://www.cdibwamanda.com/website/Documents/newsLetters/nieuwsbrief16/NBjuni2010RESU LTATEN2009.pdf>

cxliv Criel B, Van der Stuyft and Van Lerberghe (1999) The Bwamanda hospital insurance scheme: effective for whom? A study of its impact on hospital utilization patterns. *Social Science & Medicine* 48(7), 897-911.

cxlv Chenge F and Bottieau E (2010) Evaluation du projet DGCD OS2 Santé 2008-2010 pour le CDI-Bwamanda. Heverlee, Belgium: CDI Bwamanda België.
<http://www.cdibwamanda.com/website/paginas/Publicaties/Evaluaties/2010Gezondheidszorg.pdf>

cxlvi Programme National de Promotion des Mutuelles de Santé (2009) *Plan 2009-2011 : les grandes lignes. Synthèse des travaux de l'atelier du 13 au 16/02/2009*. Kinshasa, Democratic Republic of Congo: Ministry of Public Health, PNPMs.
http://www.coopami.org/fr/countries/countries_partners/drc/projects/2009/pdf/20090202report.pdf

cxlvii Devadasan N (2006) *The Student's Health Home – Kolkata*. In: Devadasan N [Editor] *Community Health Insurance in India: a compilation of case studies*. Ahmedabad, India: Friends of Women's World Banking; pp 34-37. <http://www.iphindia.org/wp/wp-content/uploads/2010/10/CHI-India-compilation-Deva-2006-FWWB.pdf>

cxlviii Hsiao W (1999) The Chinese health care system: lessons for other nations. *Social Science & Medicine* 41(8), 1047-1055.

cxlix Liu Y, Rao K and Hu S (2002) *People's Republic of China: toward establishing a rural health protection system*. Manila, the Philippines: Asian Development Bank.
http://www.adb.org/Documents/Reports/PRC_Rural_Health_Protection_System/prc_rural_health.pdf

cl Bogg L, Hengjin D, Keli W, Wenwei C and Diwan V (1996) The cost of coverage: rural health insurance in China. *Health Policy and Planning* 11(3), 238-252.
<http://heapol.oxfordjournals.org/cgi/reprint/11/3/238>

cli Hsiao W (2001) *Unmet health needs of two billion: is community financing a solution?* Health, Nutrition and Population discussion paper. Washington, DC: the World Bank; Human Development Network; Health, Nutrition and Population Family.
http://whoindia.org/LinkFiles/Commision_on_Macroeconomic_and_Health_03_07.pdf

clii Carrin G, Ron A, Hui Y, Hong W, Tuohong Z, Licheng Z, Shuo Z, Yide Y, Jiaying C, Qicheng J, Zhaoyang Z, Jun Y and Xuesheng (1999) The reform of the rural cooperative medical system in the People's Republic of China: interim experience in 14 pilot counties. *Social Science & Medicine* 48(7), 961-972. http://www.who.int/health_financing/documents/reform_rural_china_1999.pdf

cliii Lei X and Lin W (2009) The new cooperative medical scheme in rural China: does more coverage mean more service and better health? *Health Economics* 18(S2), S25-46.
<http://onlinelibrary.wiley.com/doi/10.1002/hec.1501/pdf>

-
- cliv Yip W and Hanson K (2009) *Purchasing health care in China: experiences, opportunities and challenges*. In: Chernichovsky D and Hanson K [Editors] *Innovations in health system finance in developing and transitional economies*. Bingley, UK: Emerald; pp 197-220.
- clv Yi H, Zhang L, Singer K, Rozelle S and Atlas S (2009) Health insurance and catastrophic illness: a report on the new cooperative medical system in rural China. *Health Economics* **18**(S2), S119-S127.
<http://onlinelibrary.wiley.com/doi/10.1002/hec.1510/pdf>
- clvi Wang H, Yip W, Zhang L and Hsiao W (2009) The impact of rural mutual health care on health status: evaluation of a social experiment in rural China. *Health Economics* **18**(S2), S65-S82.
<http://onlinelibrary.wiley.com/doi/10.1002/hec.1465/pdf>
- clvii Gong S, Walker A and Shi G (2007) From Chinese model to U.S. symptoms: the paradox of China's health system. *International Journal of Health Services* **37**(4), 651-672.
- clviii Wagstaff A and Lindelow M (2008) Can insurance increase financial risk? The curious case of health insurance in China. *Journal of Health Economics* **27**(4), 990-1005.
http://repository.upenn.edu/cgi/viewcontent.cgi?article=1019&context=gansu_papers
- clix Wagstaff A, Yip W, Lindelow M and Hsiao W (2009) China's health system and its reform: a review of recent studies. *Health Economics* **18**(S2), S7-S23.
<http://onlinelibrary.wiley.com/doi/10.1002/hec.1518/pdf>
- clx Wagstaff A, Lindelow M, Wang S and Zhang S (2009) *Reforming China's rural health system*. Washington, DC: the World Bank; Human Development Network; Directions in Development series.
<http://depositfiles.com/en/files/kr2uz9rm6>
- clxi Xu Y, Zhang X and Zhu X (2008) *Medical financial assistance in rural China: policy design and implementation*. In: Meessen B, Pei X, Criel B and Bloom G [Editors] *Health and social protection: experiences from Cambodia, China and Lao PDR*. Studies in Health Services Organisation & Policy, 23. Antwerp: ITGPress; pp 295-317.
<http://www.povill.com/download/Medical%20financial%20assistance%20in%20rural%20China%20-%20policy%20design%20and%20implementation.pdf>
- clxii Zhang J, Ma X, Decoster K, Tang X, Gao X and Meessen B (2008) *Helping the poor against major illness: a comparative analysis of medical financial assistance in four countries of China*. In: Meessen B, Pei X, Criel B and Bloom G [Editors] *Health and social protection: experiences from Cambodia, China and Lao PDR*. Studies in Health Services Organisation & Policy, 23. Antwerp: ITGPress; pp 319-345.
<http://dspace.itg.be/bitstream/10390/2391/2/2008heal0319.pdf>
- clxiii Shi W, Chongsuvivatwong V, Geater A, Zhang J, Zhang H and Brombal D (2010) The influence of the rural health security schemes on health utilization and household impoverishment in rural China: data from a household survey of western and central China. *International Journal for Equity in Health* **9**, 7. <http://www.equityhealthj.com/content/pdf/1475-9276-9-7.pdf>
- clxiv Hao Y, Wu Q, Zhang Z, Gao L, Ning N, Jiao M and Zakus D (2010) The impact of different benefit packages of medical financial assistance scheme on health service utilization of poor population in rural China. *BMC Health Services Research* **10**, 170.
<http://www.biomedcentral.com/content/pdf/1472-6963-10-170.pdf>

-
- clxv Lin W, Liu G and Chen G (2009) The urban resident basic medical insurance: a landmark reform towards universal coverage in China. *Health Economics* **18**(S2), S83-S96.
<http://onlinelibrary.wiley.com/doi/10.1002/hec.1500/pdf>
- clxvi Sun X, Jackson S, Carmichael G and Sleigh A (2009a) Prescribing behaviour of village doctors under China's new cooperative medical scheme. *Social Science & Medicine* **68**(10), 1775-1779.
- clxvii Sun X, Jackson S, Carmichael G and Sleigh A (2009b) Catastrophic medical payment and financial protection in rural China: evidence from the new cooperative medical scheme in Shandong province. *Health Economics* **18**(1), S103-S119. <http://onlinelibrary.wiley.com/doi/10.1002/hec.1346/pdf>
- clxviii Yip W and Hsiao W (2009) Non-evidence-based policy: how effective is China's new cooperative medical scheme in reducing medical impoverishment? *Social Science & Medicine* **68**(2), 201-209.
- clxix Wagstaff A, Lindelow M, Jun G, Ling X and Juncheng Q (2009) Extending health insurance to the rural population: an impact evaluation of China's new cooperative medical scheme. *Journal of Health Economics* **28**(1), 1-19.
- clxx You X and Kobayashi (2009) The new cooperative medical scheme in China. *Health Policy* **91**(1), 1-9.
<http://www.sciencedirect.com/science/article/B6V8X-4V936HH-1/2/b6c788a74c686d2e706cf54e4c5e98c7>
- clxxi Zhang L, Yi H and Rozelle S (2010) Good and bad news from China's new cooperative medical scheme. *IDS Bulletin* **41**(4), 95-106.
- clxxii Babiarz KS, Miller G, Yi H, Zhang L and Rozelle S (2010) New evidence on the impact of China's New Rural Cooperative Medical Scheme and its implications for rural primary healthcare: multivariate difference-in-difference analysis. *BMJ* **341**, c5617.
<http://www.bmj.com/content/341/bmj.c5617.full.pdf>
- clxxiii Feng Z (2010) Chinese healthcare in rural areas [Editorial]. *BMJ* **341**, c5254.
<http://www.bmj.com/content/341/7779/Editorials.full.pdf>
- clxxiv Bogg L, Wang K and Diwan V (2002) Chinese maternal health in adjustment: claim for life. *Reproductive Health Matters* **10**(20), 95-107.
- clxxv Long Q, Zhang T, Hemminki E, Tang X, Huang K, Xiao S and Tolhurst R (2010) Utilisation, contents and costs of prenatal care under a rural health insurance (New Co-operative Medical System) in rural China: lessons from implementation. *BMC Health Services Research* **10**, 301.
<http://www.biomedcentral.com/content/pdf/1472-6963-10-301.pdf>
- clxxvi Bogg L, Huang K, Long Q, Shen Y and Hemminki E (2010) Dramatic increase of Cesarean deliveries in the midst of health reforms in rural China. *Social Science & Medicine* **70**(10), 1544-1549.
http://groups.stakes.fi/NR/rdonlyres/727B7CB2-2CA0-422E-8099-BB2B105756A9/0/Boggetal_3_SSM_2010.pdf
- clxxvii Leung J (2006) The emergence of social assistance in China. *International Journal of Social Welfare* **15**(3), 188-198. <http://onlinelibrary.wiley.com/doi/10.1111/j.1468-2397.2006.00434.x/pdf>
- clxxviii Hope N, Yang D and Li D [Editors] (2003) *How far across the river? Chinese policy reform across the millennium*. Stanford, CA: Stanford University Press.

-
- clxxxix Pan X, Zhang Y, Xu L, Huang J and Zhao Q (2009) An analysis of farmers' perception of the new cooperative medical system in Liaoning Province, China. *BMC Health Services Research* **9**, 230. <http://www.biomedcentral.com/content/pdf/1472-6963-9-230.pdf>
- clxxx Bloom G, Kanjilal B and Peters D (2008) Regulating health care markets in China and India. *Health Affairs* **27**(2), 952-963. <http://content.healthaffairs.org/cgi/reprint/27/4/952>
- clxxxii International Labour Organization (2005) *India: an inventory of micro-insurance schemes*. Geneva: International Labour Office; Social Security Department; Strategies and Tools against social Exclusion and Poverty programme. <http://www.ilo.org/gimi/amin/RessShowRessource.do?ressourceId=84>
- clxxxiii International Labour Organisation (2003) *An inventory of micro-insurance schemes in Nepal*. Kathmandu, Nepal: International Labour Office. <http://www.ilo.org/public/english/protection/socsec/step/download/714p1.pdf>
- clxxxiiii International Labour Organization (2003) *Micro-insurers: inventory of micro-insurance schemes in Bangladesh*. Geneva: International Labour Office; Social Security Department; Strategies and Tools against social Exclusion and Poverty programme. <http://www.ilo.org/gimi/amin/RessShowRessource.do?ressourceId=83>
- clxxxiv National Commission for Enterprises in the Unorganised Sector (2006) *Social security for unorganized workers: report*. New Delhi, India: National Commission for Enterprises in the Unorganised Sector. <http://nceuis.nic.in/Social%20Security%20-%20Cover%20and%20index.htm>
- clxxxv Werner W (2009) Micro-insurance in Bangladesh: risk protection for the poor? *Journal of Health, Population and Nutrition* **27**(4), 563-573. <http://www.banglajol.info/index.php/JHPN/article/view/3402/2849>
- clxxxvi Devadasan N, Ranson K, Van Damme W, Acharya A and Criel B (2006) The landscape of community health insurance in India: an overview based on 10 case studies. *Health Policy* **78**(2), 224-234. <http://www.iphindia.org/wp/wp-content/uploads/2010/08/The-landscape-of-CHI-India.pdf>
- clxxxvii Devadasan N, Criel B, Van Damme W, Ranson K and Van der Stuyft P (2007) Indian community health insurance schemes provide partial protection against catastrophic health expenditure. *BMC Health Services Research* **7**, 43. <http://dspace.itg.be/bitstream/10390/1244/1/2007bhsr0043.pdf>
- clxxxviii Devadasan N, Criel B, Van Damme W, Manoharan S, Sankara Sarma P and Van der Stuyft P (2010) Community health insurance in Gudalur, India, increases access to hospital care. *Health Policy and Planning* **25**(2), 145-154. <http://heapol.oxfordjournals.org/content/25/2/145.full.pdf>
- clxxxix Aggarwal A (2010) Impact evaluation of India's 'Yeshasvini' community-based health insurance programme. *Health Economics* **19**(S1), 5-35. <http://onlinelibrary.wiley.com/doi/10.1002/hec.1605/pdf>
- cx Dror D, Radermacher R, Khadikar S, Schout P, Hay F-X, Singh A and Koren R (2009) Microinsurance: innovations in low-cost health insurance. *Health Affairs* **28**(6), 1788-1798. <http://content.healthaffairs.org/cgi/reprint/28/6/1788>
- cxci Hamid S, Roberts J and Mosley P (2010) *Can micro health insurance reduce poverty? Evidence from Bangladesh*. Sheffield Economic Research Paper Series 2010001. Sheffield: University of Sheffield;

Department of Economics. <http://www.microfinancegateway.org/gm/document-1.9.43777/Can%20Micro%20Health%20Insurance%20Reduce%20Poverty.pdf>

excii Radermacher R, van Putten-Radermacher O, Müller V, Wig N and Dror D (2005) *Karuna Trust, Karnataka, India*. CGAP Working Group on Microinsurance: Good and Bad Practices, case study No. 19. Geneva: International Labour Office; Social Finance Programme.

http://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_122475.pdf

exciii World Health Organization (2000) *The World Health Report 2000: health systems: improving performance*. Geneva: World Health Organization. http://www.who.int/whr/2000/en/whr00_en.pdf

exciv Sinha T, Ranson K, Chatterjee M, Acharya A and Mills A (2006) Barriers to accessing benefits in a community-based insurance scheme: lessons learnt from SEWA insurance, Gujarat. *Health Policy and Planning* 21(2), 132-142. <http://heapol.oxfordjournals.org/content/21/2/132.full.pdf>

exciv Ranson K, Sinha T, Ganghi F, Jayswal R and Mills A (2006) Helping members of a community-based health insurance scheme access quality inpatient care through development of a preferred provider system in rural Gujarat. *The National Medical Journal of India* 19(5), 274-282.

http://www.nmji.in/archives/Volume_19_5_Sep_Oct_2006/Medicine_and_Society/Me&So_5.pdf

excvi Kharva R (2008) Vimo SEWA's cashless hospitalization: a case study for micro health insurance. *IRDA Journal* 6(2), 31-34. http://www.irdaonline.org/irdacontent/journals/irda_jan08.pdf

excvii The World Bank (2003) *World Development Report 2004: making services work for poor people*. Washington, DC: the World Bank and Oxford University Press. http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2003/10/07/000090341_20031007150121/Rendered/PDF/268950PAPER0WDR02004.pdf

excviii Hirschman A (1970) *Exit, voice, and loyalty: responses to decline in firms, organizations and states*. Cambridge, MA: Harvard University Press.

excix Michielsen J, Criel B, Devadasan N, Soors W, Wouters E and Meulemans H (2010) Contextual factors for improving access to quality care in India: the issue of health insurance. *International Journal for Quality in Health Care* [submitted].

cc Devadasan N, Criel B, Van Damme W, Lefèvre P, Manoharan S and Van der Stuyft P (2010) The effect of community health insurance schemes on patient satisfaction: evidence from India. *Indian Journal of Medical Research* [in press].

cci Peters D and Muraleedharan (2008) Regulating India's health services: To what end? What future? *Social Science & Medicine* 66(2), 2131-2144.

ccii Government of India (1999) *Insurance Regulatory and Development Authority Act*. New Delhi, India: Government of India; Parliament of India. http://www.irda.gov.in/ADMINCMS/cms/frmGeneral_Layout.aspx?page=PageNo108&flag=1&mid=Insurance%20Laws%20etc.%3E%3EActs

cciii Government of India (2007) *Duties, powers and functions of IRDA* [IRDA/GEN/03/2007]. Hyderabad, India: Insurance Regulatory and Development Authority. http://www.irda.gov.in/ADMINCMS/cms/NormalData_Layout.aspx?page=PageNo101&mid=1.2

cciv National Rural Health Mission (2005) *National Rural Health Mission (2005-2012) mission document*. New Delhi, India: Government of India, Ministry of Health & Family Welfare.

http://mohfw.nic.in/NRHM/Documents/Mission_Document.pdf

ccv National Rural Health Mission (2005) *Framework for implementation 2005-2012*. New Delhi, India: Government of India, Ministry of Health & Family Welfare.

http://jknrhm.com/Guideline/Frame_Work.pdf

ccvi National Rural Health Mission (2007) *Framework for developing health insurance programmes: some suggestions for states*. New Delhi, India: Government of India, Ministry of Health & Family Welfare.

http://mohfw.nic.in/NRHM/Documents/framework_for_health_insurance.pdf

ccvii Ministry of Health & Family Welfare (2006) *Report of the working group on health care financing including health insurance for the 11th five year plan*. New Delhi, India: Government of India, Ministry of Health & Family Welfare.

http://planningcommission.nic.in/aboutus/committee/wrkgrp11/wg11_rphfw3.pdf

ccviii Planning Commission, Government of India (2008) *Eleventh five year plan, 2007-12; volume II: social sector*. New Delhi, India: Oxford University Press.

http://planningcommission.nic.in/plans/planrel/fiveyr/11th/11_v2/11th_vol2.pdf

ccix Kuruvilla S and Liu M (2007) Health security for the rural poor? A case study of a health insurance scheme for rural farmers and peasants in India. *International Social Security Review* 60(4), 3-21.

<http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1167&context=articles>

ccx Urban Health Division (2008) *National Urban Health Mission (2008-2012): meeting the health challenges of urban population especially the urban poor (with special focus on urban slums)*. Draft for circulation. New Delhi, India: Government of India, Ministry of Health & Family Welfare.

<http://www.uhrc.in/downloads/Reports/NUHM-Draft.pdf>

ccxi Nagpal S, Devadasan N and Jain N (2008) Government initiatives in health insurance: health security for all. *IRDA Journal* 6(2), 25-30.

http://www.irdaonline.org/irdacontent/journals/irda_jan08.pdf

ccxii Devadasan N and Swarup A (2008) Rashtriya Swasthya Bima Yojana: an overview. *IRDA Journal* 6(4), 33-36. http://www.irdaonline.org/irdacontent/journals/irda_mar08.pdf

ccxiii Michielsen J, John D and Chaudhuri L (2009) *Researching the transformative dimensions of social protection in health (SHP): transformations in the power relation between providers and female slum dwellers in Mumbai and Pune (India)*. Antwerp: Universiteit Antwerpen and VLIR/UOS.

<http://webh01.ua.ac.be/cello/index.php?pg=7&idrec=380&act=2&filter=8>

ccxiv Poursat C (2004) *Quelles articulations entre politique de santé et micro-assurance ? Réflexions à partir du projet de micro-assurance santé du Gret au Cambodge*. Les documents de travail de la Direction scientifique, Coopérer aujourd'hui n° 37. Paris: Groupe de recherche et d'échanges technologiques.

http://www.sky-cambodia.org/downloads/Case_Study_Cambodia_French.pdf and

<http://www.gret.org/ressource/pdf/07007.pdf>

ccxv International Labour Organization (2008) *Cambodia: SKY health insurance scheme*. Series Social Security Extension Initiatives in East Asia, paper 20. Bangkok, Thailand: International Labour

Organization Subregional Office for East Asia.

<http://www.ilo.org/public/english/region/asro/bangkok/events/sis/download/paper29.pdf>

ccxvi International Labour Organization (2009) *Cambodia: GRET "SKY" health insurance programme. Micro-insurance brief*. New Delhi, India: International Labour Organization Subregional Office for South Asia. <http://www.ilo.org/gimi/RessShowRessource.do?ressourceId=6194>

ccxvii Levine D and Gardner R (2008) *Briefing paper: health care in Cambodia*. Berkeley, CA: University of California, Haas School of Business. <http://www.afd.fr/jahia/Jahia/site/afd/lang/en/pid/28601>

ccxviii Annear P, Bigdeli M, Eang R and Jacobs B (2008) *Providing access to health services for the poor: health equity in Cambodia*. In: Meessen B, Pei X, Criel B and Bloom G [Editors] *Health and social protection: experiences from Cambodia, China and Lao PDR*. Studies in Health Services Organisation & Policy, 23. Antwerp: ITGPress; pp 189-226.
<http://www.povill.com/download/Providing%20access%20to%20health%20services%20for%20the%20poor%20-%20health%20equity%20in%20Cambodia.pdf>

ccxix International Labour Organization (2009) *Cambodia: Cambodian Association for Assistance to Families & Widows (CAAFW) community health insurance*. Micro-insurance brief. New Delhi, India: International Labour Organization Subregional Office for South Asia.
<http://www.ilo.org/gimi/RessShowRessource.do?ressourceId=6190>

ccxx Minnik V (2009) *Community based health insurance (CBHI) in Cambodia*. Presentation at the Delegation of the European Commission workshop "Repercussions of the economic downturn in rural Cambodia", Siem Reap, Cambodia, 2-3 April 2009.
<http://www.delkhm.ec.europa.eu/en/events/april-2-3-2009/09-Community-Based-Health-Insurance.pdf>

ccxxi Levine D, Hema N and Ramage I (2007) *Insuring health: testing the effectiveness of micro-health insurance to promote economic wellbeing for the poor*. BASIS brief 2007-05. Madison, WI: University of Wisconsin-Madison; Department of Agricultural and Applied Economics; BASIS Research Program on Poverty, Inequality and Development.
http://www.basis.wisc.edu/publications_ama/pubs_project.html

ccxxii Hardeman W, Van Damme W, van Pelt M, Ir P, Kimvan H and Meessen B (2004) Access to health care for all? User fees plus a Health Equity Fund in Sotnikum, Cambodia. *Health Policy and Planning* 19(1), 22-32. <http://heapol.oxfordjournals.org/content/19/1/22.full.pdf>

ccxxiii Jacobs B and Price N (2006) Improving access for the poorest to public sector health services: insights from Kirivong operational health district in Cambodia. *Health Policy and Planning* 21(1), 27-39. <http://heapol.oxfordjournals.org/content/21/1/27.full.pdf>

ccxxiv Noirhomme M, Meessen B, Griffiths F, Ir P, Jacobs B, Thor R, Criel B and Van Damme W (2007) Improving access to hospital care for the poor: comparative analysis of four health equity funds in Cambodia. *Health Policy and Planning* 22(4), 246-262.
<http://heapol.oxfordjournals.org/content/22/4/246.full.pdf>

ccxxv Meessen B, Chheng K, Decoster K, Heng T and Chap S (2008) *Can public hospitals be pro-poor? The health equity fund experience in Cambodia*. In: Meessen B, Pei X, Criel B and Bloom G [Editors] *Health and social protection: experiences from Cambodia, China and Lao PDR*. Studies in Health Services Organisation & Policy, 23. Antwerp: ITGPress; pp 469-490.

<http://www.povill.com/download/Can%20public%20hospitals%20be%20pro-poor%20-%20The%20health%20equity%20fund%20experience%20in%20Cambodia.pdf>

ccxxvi Bigdeli M and Annear P (2009) Barriers to access and the purchasing function of health equity funds: lessons from Cambodia. *Bulletin of the World Health Organization* 87(7), 560-564.
<http://www.who.int/bulletin/volumes/87/7/08-053058.pdf>

ccxxvii Jacobs B, Bigdeli M, van Pelt M, Ir P, Salze C and Criel B (2008) Bridging community-based health insurance and social protection for health care – a step in the right direction of universal coverage? [Editorial]. *Tropical Medicine and International Health* 13(2), 140-143.
<http://dspace.itg.be/bitstream/123456789/2221/2/2008tmih0140.pdf>

ccxxviii Duffau A and Díaz Pedregal V (2009) To what extent does non profit private micro health insurance help improve public health care? *Field Actions Science Reports* 3
<http://factsreports.revues.org/index360.html?file=1>

ccxxix Annear P (2009) *Cambodia: developing a strategy for social health protection*. In: *Promoting sustainable strategies to improve access to health care in the Asian and Pacific region*. Bangkok, Thailand: United Nations Economic and Social Commission for Asia and the Pacific; pp 1-35.
<http://www.unescap.org/esid/hds/pubs/2529/pub2529.pdf>

ccxxx Kingdom of Cambodia (2008) *Health strategic plan 2008-2015: accountability, efficiency, quality, equity*. Phnom Penh, Cambodia: Ministry of Health.
<http://www.moh.gov.kh/files/dphi/HSP0815En.pdf>

ccxxxi Kingdom of Cambodia (2008) *Strategic framework for health financing 2008-2015*. Phnom Penh, Cambodia: Ministry of Health; Department of Planning and Health Information; Bureau of Health Economics and Financing. http://www.who.int/health_financing/documents/cam_frmwrk.pdf
http://www.who.int/health_financing/documents/cam_frmwrk-annex_1.pdf
http://www.who.int/health_financing/documents/cam_frmwrk-annex_2.pdf

ccxxxii Annear P, Bigdeli M, Eang R and James P (2007) *Study of financial access to health services for the poor in Cambodia – Phase 2: In-depth analysis of selected case studies*. Phnom Penh, Cambodia: Ministry of Health. http://www.who.int/health_financing/documents/cam-healthaccess-study-phase2.pdf

ccxxxiii Alkenbrack S, Lindelow M and Jacobs B (2010) *Community-based health insurance in Lao P.D.R.: understanding enrolment and impacts* [Policy note]. Vientiane, Lao People's Democratic Republic: Lao People's Democratic Republic World Bank country office.

ccxxxiv Thomé J-M and Pholsena S (2009) *Lao People's Democratic Republic: health financing reform and challenges in expanding the current social protection schemes*. In: *Promoting sustainable strategies to improve access to health care in the Asian and Pacific region*. Bangkok, Thailand: United Nations Economic and Social Commission for Asia and the Pacific; pp 71-102.
http://www.unescap.org/esid/hds/pubs/2529/2529_Chapter%203%20P71-102.pdf

ccxxxv Yap M (2003) *On overview of community health insurance initiatives in the Philippines*. Manila, the Philippines: World Health Organization; Western Pacific Region.
http://www.searo.who.int/LinkFiles/TAG_Meeting_INF5c.doc

ccxxxvi Obermann K, Jowett M, Alcantara M, Banzon E and Bodart C (2006) Social health insurance in a developing country: the case of the Philippines. *Social Science & Medicine* 62(12), 3177-3185.

ccxxxvii Nugroho G and Elliott K (1977) The Dana Sehat programme in Solo, Indonesia. *Proceedings of the Royal Society B* 199(1134), 145-150.

<http://rsph.royalsocietypublishing.org/content/199/1134/145.full.pdf>

ccxxxviii Saludung D (1997) Community mobilization and empowerment for health. *World Health Forum* 18(3-4), 274-277. [http://whqlibdoc.who.int/whf/1997/vol18-no3-4/WHF_1997_18\(3-4\)_p274-281.pdf](http://whqlibdoc.who.int/whf/1997/vol18-no3-4/WHF_1997_18(3-4)_p274-281.pdf)

ccxxxix Thabrany H, Gani A, Pujiyanto, Mayanda L, Mahlil and Budi B (2004) *Social health insurance in Indonesia: current status and the plan for national health insurance* [Annex 3]. In: Sein T [Editor] *Regional overview of social health insurance in South-East Asia*. New Delhi, India: World Health Organization; Regional Office for South-East Asia; pp 101-161.

http://www.searo.who.int/LinkFiles/Social_Health_Insurance_an3.pdf

ccxl Suwandono A and Suhardi Q (2002) *Case-study Indonesia*. In: Brodsky J, Habib J and Hirschfeld M [Editors] *Long-term care in developing countries: ten case-studies*. Geneva: World Health Organization; pp 119-170. http://www.who.int/chp/knowledge/publications/case_study_indonesia.pdf

ccxli Strauss J, Beegle K, Dwiyanto A, Herawati Y, Pattinasarany D, Satriawan E, Sikoki B, Sukamdi and Witoelar F (2004) *Social safety net programmes*. In: Strauss J, Beegle K, Dwiyanto A, Herawati Y, Pattinasarany D, Satriawan E, Sikoki B, Sukamdi and Witoelar F [Authors] *Indonesian living standards before and after the financial crisis*. Singapore: Institute of Southeast Asian Studies – Santa Monica, CA: RAND Corporation, Center for the Study of the Family in Economic Development; pp 316-365.

http://www.rand.org/pubs/monographs/2004/RAND_MG137.pdf

ccxlii Sparrow R, Suryahadi A and Widyanti W (2010) *Social health insurance for the poor: targeting and impact of Indonesia's Askeskin program* [Working paper]. Jakarta, Indonesia: the SMERU Research Institute. http://www.smeru.or.id/report/workpaper/askeskin/askeskin_eng.pdf

ccxliii Rokx C, Schieber G, Harimurti P, Tandon A and Somanathan A (2019) *Health financing in Indonesia: a reform road map*. Washington, DC: the World Bank; Human Development Network; Directions in Development.

<http://siteresources.worldbank.org/INTINDONESIA/Resources/Publication/280016-1235115695188/5847179-1243406029796/Full.Report.en.pdf>

ccxliv Barrientos A and Hinojosa-Valencia L (2009) *A review of social protection in Latin America*. Manchester, UK: University of Manchester; Brooks World Poverty Institute.

<http://www.ids.ac.uk/download.cfm?objectid=4A21EF26-E9D9-E7FA-9CC79EC2F2EDDC74>

ccxlv Mesa-Lago C (2008) *Social insurance (pensions and health), labour markets and coverage in Latin America*. Social Policy and Development Programme paper number 36. Geneva: United Nations Research Institute for Social Development.

<http://www.unrisd.org/80256B3C005BCCF9/search/6E08841FF30C8F83C125751200320B25?OpenDocument>

ccxlvii Acuña C, Levcovitz E, Vivas G, Rosenberg H, Feo O, Curcio P, Brito P and Urrutia S [Editors] (2004) *Exclusion in health in Latin America and the Caribbean*. Series Extension of Social Protection in Health No. 1. Washington, DC: Pan American Health Organization; Area of Strategic Health Development; Health Policies and Systems Unit – Swedish International Development cooperation Agency.

http://www.lachealthsys.org/index.php?option=com_docman&task=doc_download&gid=222&Itemid

ccxlvi International Labour Organization and Pan American Health Organization (1999) *Synthesis of case studies of micro insurance and other forms of extending social protection in health in Latin America and the Caribbean* [Regional Tripartite Meeting with the Collaboration of PAHO on the Extension of Social Protection in Health to Excluded Groups in Latin America and the Caribbean, Mexico DF, Mexico, November 29 – December 1, 1999 Working document n°5]. Geneva: International Labour Office.

ccxlviii Bárcena A and Prado A [Editors] (2010) *Time for equality: closing gaps, opening trails*. Santiago, Chile: Economic Commission for Latin America and the Caribbean.
http://www.eclac.cl/publicaciones/xml/1/39711/100604_2010-115-SES-33-3-Time_for_equality_doc_completo.pdf

ccxlix Hujo K and Gaia E (2010) *Towards universal social protection*. In: *Combating poverty and inequality: structural change, social policy and politics*. Geneva: United Nations Research Institute for Social Development.
[http://www.unrisd.org/80256B3C005BCCF9/httpNetITFramePDF?ReadForm&parentunid=36C592406B99BEBAC125778900325E5A&parentdoctype=documentauxiliarypage&netitpath=80256B3C005BCCF9/\(httpAuxPages\)/36C592406B99BEBAC125778900325E5A/\\$file/PovRepCh5.pdf](http://www.unrisd.org/80256B3C005BCCF9/httpNetITFramePDF?ReadForm&parentunid=36C592406B99BEBAC125778900325E5A&parentdoctype=documentauxiliarypage&netitpath=80256B3C005BCCF9/(httpAuxPages)/36C592406B99BEBAC125778900325E5A/$file/PovRepCh5.pdf)

ccl Machinea J, Titelman D and Uthoff A [Editors] (2006) *Shaping the future of social protection: access, financing and solidarity*. Santiago, Chile: Economic Commission for Latin America and the Caribbean.
<http://www.eclac.org/publicaciones/xml/0/24080/lcg2294i.pdf>