

Doris Wiesmann / Johannes Jütting

## The Emerging Movement of Community Based Health Insurance in Sub-Saharan Africa: Experiences and Lessons Learned

A country's economic development is closely interrelated with the health status of its population. An efficient and equitable health care system is an important instrument to break up the vicious circle of poverty and ill health. Sub-Saharan African countries have tried different modes of health care financing since independence. Due to low and unstable tax revenues and cutbacks in public budgets, the initial goal to provide „free health care for all“ was never achieved. In the eighties, government resources dried up in many countries and a deterioration in the quality of existing services was the result, with poorly paid and less motivated staff and shortage of drugs and medical equipment. Under the pressure to mobilise additional resources for health care provision, public facilities and NGO-run hospitals resorted to formal or informal cost recovery strategies by collecting fees at the point of use (Criel 1998a). User fees have been heavily criticised for several reasons:

- negative impact on equity and access: user fees can lead to access problems or even exclusion of the poor from health care utilisation, in case they cannot afford to pay the charges (Gilson 1998). The effect of poverty on access to health care may be aggravated by seasonal income variation in rural areas, as the striking of illness does not necessarily coincide with the availability of cash income (Creese and Bennett 1997), and by the fact that poor people mainly rely on their labour productivity for income generation, which is likely to be affected in the event of illness. Inequity related to user fees also exists within households with respect to children whose access to health care may be decreased because they cannot dispose of own income (Sauerborn et al. 1994).
- negative impact on health care utilisation and public health: access problems cause a drop in utilisation rates and eventually delays in seeking care – people do not show up at a health facility unless they are severely ill (Waddington 1989, Asenso-Okyere et al. 1998). When admitted to a hospital, people often turn up only after several days – they need time to organise the money from relatives or out of other sources. Diminished health care utilisation, especially by vulnerable, disease-prone groups like children and the poor, and delays in

seeking care result in adverse effects on public health<sup>1</sup> (Booth et al. 1995, Sauerborn et al. 1994).

- negative impact on cost-effectiveness of the health care system: delays in seeking care can result in prolonged and more expensive curative treatment in order to restore health status. Moreover, underutilisation of health facilities will reduce the running costs of these facilities less than proportionately due to the high share of fixed costs for salaries (Criel 1998a) – in consequence, cost-effectiveness declines.

Furthermore, the contribution of user fees to health care financing turned out to be far smaller than expected, and hospitals were increasingly facing the problem of rising “bad debts”, because a considerable proportion of patients left the hospital after recovery without ever paying the bills (Musau 1999). On the average, national user fee systems have generated only about 5% of recurrent health system expenditures (Gilson 1998).

In contrast to user fees, health insurance encompasses risk-sharing and is supposed to reduce unforeseeable or even unaffordable health care costs (in the case of illness) to calculable, regularly paid premiums. But in Africa, public and private health insurance cover almost exclusively the formal sector, and therefore achieve a coverage rate of no more than 10 percent of the population. The majority of African citizens – informal sector workers and the rural population – have never had access to this kind of social protection (World Bank 1994). Partly as a response to this lack of social security, to the negative side-effects of user fees and to persistent problems with health care financing, non-profit, voluntary insurance schemes for urban and rural self-employed and informal sector workers have recently emerged (Jütting 2000a, Atim 1998). This paper shortly describes the hopes set into this community based health insurance (CBHI)<sup>2</sup> schemes, shows their geographical distribution in Sub-Saharan Africa together with their size and period of foundation, and summarises experiences and lessons learned from their implementation.

## 1 Economic Aspects of Community Based Health Insurance

The principle of insurance – sharing risks by pooling resources and transforming a low-probability, but immense expected loss into a certain, but very small loss (Griffin 1992) – is well-known in developed countries and frequently used for financing and allocating health care. Though there are strong arguments in favour of universal coverage of health insurance that can be brought about by mandatory membership, this type of health insurance is not feasible in an environment where most people are either self-employed or informal sector workers (Creese and Bennett 1997). In contrast to social insurance implemented in Germany, recently

---

<sup>1</sup> In this context the external effects of contagious diseases should also be considered.

<sup>2</sup> The term CBHI is used here to refer to any non-profit health financing scheme that includes risk pooling.

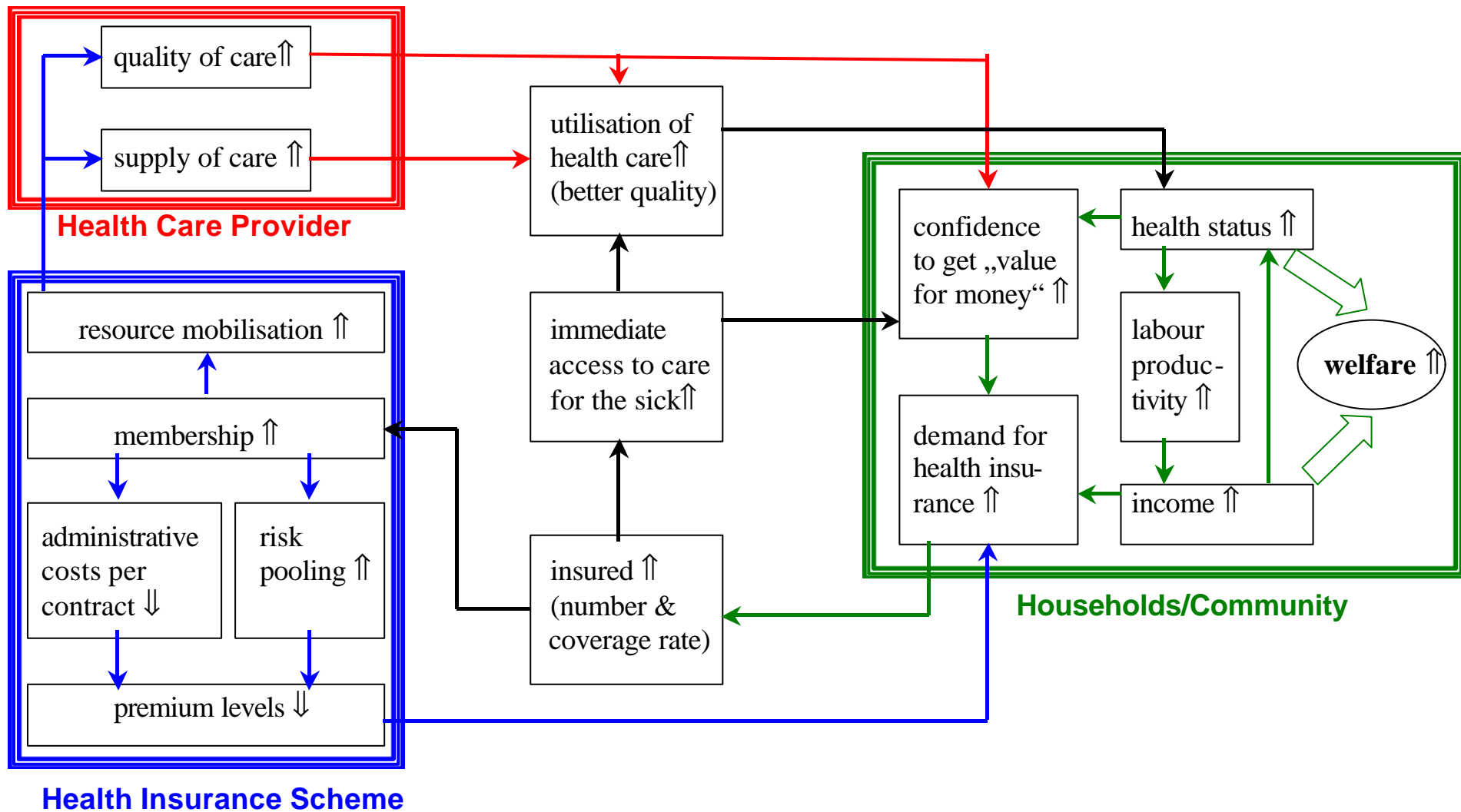
emerging health insurance schemes in Africa have taken the form of local initiatives of rather small size that are community-based with voluntary membership. They have either been initiated by health facilities, NGOs, local communities or cooperatives and can be owned and run by any of these organisations (Atim 1998, Criel 1998b). A recent study in Chad has shown that access to community based insurance schemes can help to mitigate risks. This is especially relevant in areas where risk markets are not existing and public programs are not available or inefficient (Weinberger and Jütting 2000).

Which benefits for public health, welfare and revenue generation can be expected to go hand in hand with the development of viable insurance schemes of this kind in rural areas? In Figure 1, possible dynamic interactions between demand and supply in the health care system are outlined, as they could take place after health insurance is offered to rural people in a low-income country. Explanations are given in the following with reference to the demand and supply aspects, respectively.

### *1.1 Demand Side*

Assume that a health insurance scheme has been set up and that some people are willing to test the new financing option and demand health insurance, that is, they decide to pay the premium and become members for one year. A certain proportion of the insured will fall ill during that time and need care at the hospital or health post. Financial barriers to access are removed for them by the insurance: in spite of possibly lacking cash income at the time of illness and of user fees being relatively high with respect to their income, they can readily get treatment at the health facility. As a consequence, they do not have to search for credit or sell assets, and they recover more quickly from their illness because there are no delays in seeking care. Considering the fact that people in rural areas rely mainly on their labour productivity and on assets like livestock for income generation, a serious decline of income can be prevented as productive assets are protected and people can return to work sooner. Income is stabilised or, taken the sum throughout the year, may be even increased. Consumption will be more stable and probably even higher, which consequently would have beneficial

Figure 1: Dynamic Interactions between Supply and Demand for Health Insurance and Health Care



Source: own presentation

effects for the health of all household members<sup>3</sup>. Both increased consumption and better health contribute to overall welfare. Furthermore, the positive experience of some households or community members with health insurance in terms of immediate access to care and benefits for their health may create trust in the new institution, and will convince people to prolong their membership and lead others to join the scheme<sup>4</sup>.

## 1.2 Supply Side

Given the fact that people may be willing to spend more money on secure access to health care than they can actually pay as user fees at the time of illness for the reasons stated above, and that the healthy carry the financial burden of illness together with the sick via the insurance scheme, additional resources may be mobilised for health care provision. Utilisation of health facilities will probably increase – a desirable effect if one considers currently prevailing under-utilisation in developing countries (Dor and van der Gaag 1993, Müller et al. 1996)<sup>5</sup> - therefore at least part of these resources could be used up for expanding access. Under the assumption that there is net revenue generation in spite of higher utilisation rates, the hospitals or health facilities will utilise the financial means to improve quality of care – for example, by increasing drug availability and purchasing more necessary medical equipment. Better quality of care will increase the expectations of people to get value for money in the case of illness and will again enhance demand for insurance.

More demand for insurance and accordingly increased membership could drive down the administrative cost of insurance provision per member, and risk pooling is enhanced as more people participate – consequently, risks become more calculable. Though the idea of rising demand usually suggests rising prices, in this case it could result in reduced premiums due to “economies of scale” (McGuire et al. 1989). Lower premiums will probably once again increase demand for insurance and coverage rates.

Besides acting as an agency that expresses the interests and needs of its members, the CBHI can try to promote the use of preventive care and healthy

---

<sup>3</sup> *The household is defined here as a decision-making unit, though some decisions - for example, to seek care in the case of illness or not – may be taken by individuals (e.g., the breadwinner). Moreover, many schemes do not offer membership to individuals, but only to households or families. Of course, a deeper analysis of the equity effects of CBHI (which is beyond the scope of this paper) should take into account the impact of schemes on the intra-household allocation of resources.*

<sup>4</sup> *In some settings membership rates nearly doubled in the second and third year after foundation of a CBHI, when people became aware that the scheme was working and gained confidence in its benefits (Garba and Cyr 1998).*

<sup>5</sup> *Of course the financial costs of treatment and the frequently poor performance of underfunded health facilities are not the only reasons for low utilisation rates of modern health care: the belief in traditional medicine is still very strong in Africa, especially in rural areas, though the effectiveness of medicines from wild animals or plants may be questionable in many cases. Some people believe that traditional medicine, which has been passed on from one generation to another, is more potent for certain types of ailments than modern medicine (Ntiama-Baidu 1997).*

behaviour (Garba and Cyr 1998). Health education and sensitisation for health problems would improve public health outcomes and counteract cost escalation.

The scenario presented here seems very promising, but it may be far too optimistic about what can be achieved by introducing health insurance *alone* as a new institution in rural areas. The benefits described here – improved quality of care, increased access to health care, better health outcomes, higher and more stable incomes - cannot be realised if some serious pitfalls are not taken into account in the scheme design, if the CBHI is badly managed or if impeding factors at the health facility or household level cannot be overcome. Keeping the balance between mobilisation of resources by means of insurance on the one hand and increasing costs for health care provision due to higher utilisation rates on the other hand may turn out to be a considerable problem. The relevant design features for adequately addressing this problem are discussed together with other critical issues in the following chapters, after a short review over the emergence of CBHI in Sub-Saharan Africa has been given.

## 2 Community Based Health Insurance: an Emerging Movement

The map in Figure 2 gives a view of health insurance schemes outside the formal employment sector in Sub-Saharan Africa (schemes limited to formally employed people, like teachers' funds, were not included)<sup>6</sup>. This summary is inevitably incomplete, because not all existing schemes have been included in the literature. But not many schemes will have escaped attention, as extensive research has been done in the past few years in order to build up an inventory of CBHI (Bennett et al. 1998, Atim 1998, Musau et al. 1999). The majority of the schemes has come into existence in the nineties, therefore it is justified to call CBHI an „emerging movement“ - especially as numerous new schemes, which are not indicated on the map, have been planned or already reached the take-off phase since 1998 (Debaig 1999).

The map clearly shows that so far, CBHI is more common in West Africa than in Central or East Africa. In some countries, these new schemes are mainly an urban phenomenon – such as in Côte d'Ivoire and in Tanzania – whereas in other states, they are predominantly covering people in rural areas; examples are Uganda, Ghana and Benin.

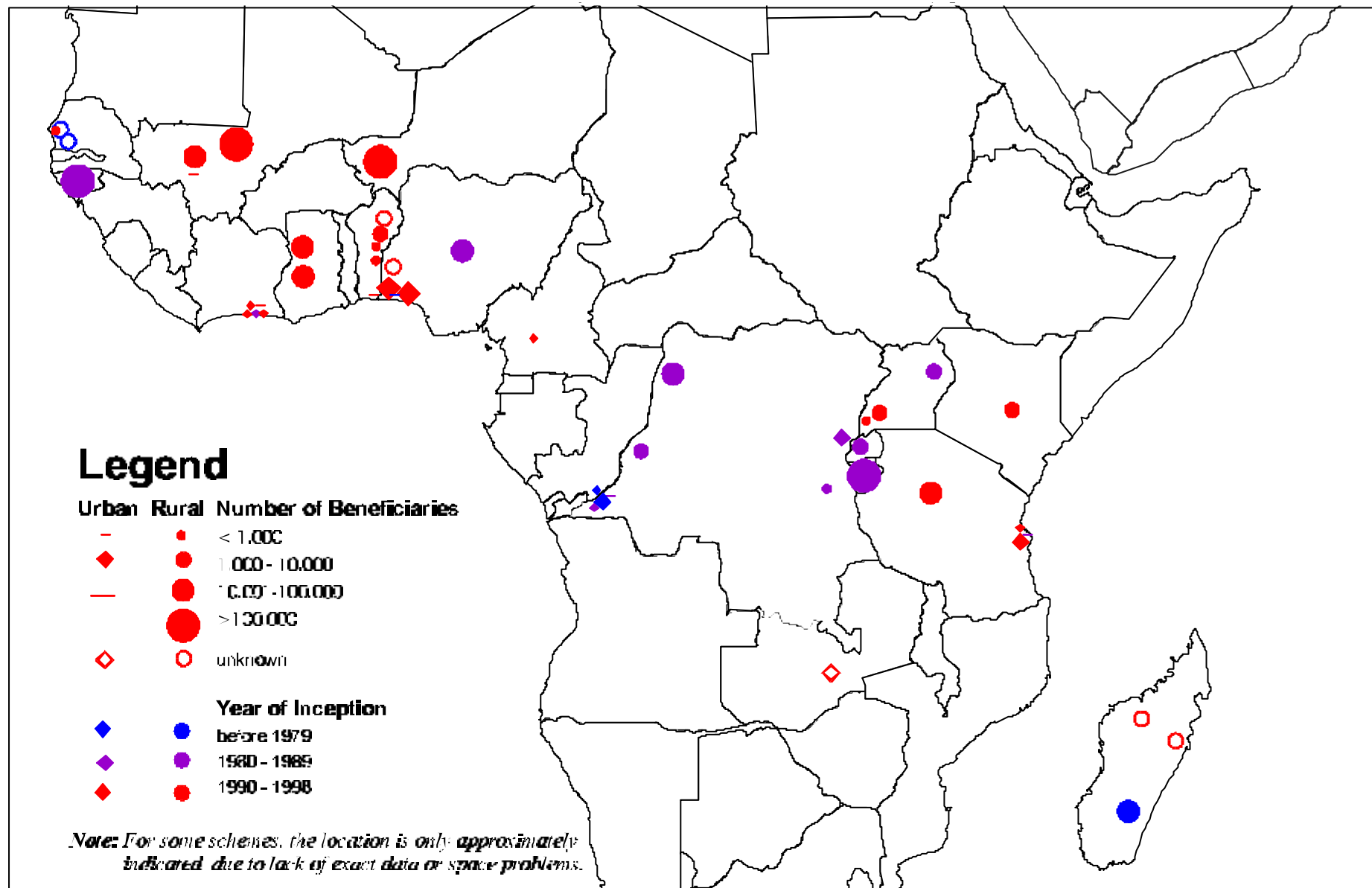
In Senegal, community-based health insurance has a long tradition especially in the Thiès region and currently over 15 schemes in urban and rural areas are operating (Tine 2000). In the Democratic Republic of Congo – the former Zaire – health insurance schemes mainly came up in the second half of the eighties. The reason for this relatively early departure was the virtual stop of government funding for health care in the mid-eighties and the resulting need to rely on other sources of finance (Criel 1998b). Similarly, the Abota scheme in Guinea-Bissau was initiated already in 1980 in the face of the breakdown of government funding for health care. In contrast to this, all CBHI schemes that currently exist in Ghana, Benin, Mali and Kenya were founded in the nineties. In Ghana and

---

<sup>6</sup> *The initiators of each of these schemes and its history of origins are documented in Bennett et al. 1998.*

Kenya they originated from the search of mission hospitals for new sources of finance in a time of reduced government subsidies and declining external support, after the practice of levying user fees had proved dissatisfactory for well-known reasons (Creese and Bennett 1997).

Figure 2: Urban and Rural Health Insurance Schemes in Sub-Saharan Africa – Year of Inception and Size



Source: own presentation, *Data Sources:* Bennett et al. 1998, Atim 1998, Musau 1999, Debaig 1999



Some of the schemes are confined to a local cooperative of craftsmen or traders, therefore they are often very small and may cover less than 100 beneficiaries (Kiwara 1997). Other CBHIs are extended over the whole country and many communities and include up to 1 million or even more beneficiaries (Bennett et al. 1998). The number of beneficiaries can change rapidly and neither reveals the financial balance of the CBHI, nor does it say much about the scheme's sustainability. Indeed, a few schemes had to be terminated after some years (Criel 1998b, Bennett et al. 1998), whilst others have been in operation for decades. Reasons for success or failure, as they have been identified so far, are presented in the next section.

### 3 Experiences and Lessons Learned

The ultimate benefit to be expected from CBHI for the population is its potential positive impact on health and social security. The most important questions for the evaluation of schemes are therefore the following:

1. Has the scheme improved access to health care and thereby contributed to better health outcomes?
2. Has the scheme stabilised incomes and helped to preserve assets?

Unfortunately, no scientific evidence relating to these questions has been collected so far, partly due to methodological difficulties and data constraints<sup>7</sup>. At least it may be said that in order to achieve the above objectives, the scheme has to be viable and sustainable in its given setting, both from an institutional and financial point of view. Factors influencing long-term viability can be identified, e.g. high participation rates among the target population contribute to financial sustainability and are a rough indicator for the acceptance of the scheme<sup>8</sup>. A comprehensive assessment of the 48 CBHI schemes shown in the overview map (Figure 2) is far beyond the scope of this article, and the interested reader is referred to Bennett et al. 1998 (world-wide inventory of schemes outside formal sector employment, including their basic characteristics), Atim 1998 (Mutual Health Organisations in West- and Central Africa), Musau 1999 (CBHI in East Africa) and Criel 1998 b (district-based health insurance in the former Zaire and Rwanda) for further information. The findings presented here are restricted to general conclusions from the

---

<sup>7</sup> *The Center for Development Research in Bonn and the Institute of Health and Economic Development in Dakar are currently undertaking a study on the impact of CBHI in Senegal. An overview study on strengths and weaknesses of micro insurance schemes has been conducted by Ziemek and Jütting (2000). At the University of Heidelberg, Department for Tropical Hygiene and Public Health, an intervention study is being conducted in Burkina Faso (the outline of this project is accessible at <http://www.hyg.uni.heidelberg.de/tropmed/research/systems2.htm>).*

<sup>8</sup> *For 24 out of the 48 schemes depicted in Figure 2, participation rates are reported in the literature. For one third of them, they are ranging beneath 10%, and only five out of 24 cover more than half of the target population (figures are derived from data published in Bennett et al. 1998 and Musau 1999). Data on the schemes' financial balances are not sufficient for a general overview, a few well-documented examples are cited in the following sections.*

experiences described in these publications, and to some illustrative examples. The main factors determining viability and membership (as preconditions for success with respect to the above stated aims) are related to the following three fields

- scheme design and management
- behaviour of health care providers
- household and community characteristics,

which are discussed in more detail in the following sections.

### 3.1 Health Insurance Scheme

The viability of a CBHI partly depends on outside determinants that can hardly be influenced by the scheme such as a country's legal and policy framework<sup>9</sup>, but nevertheless, the design of the scheme and its running as well as community participation are important factors for sustainability. The optimal size of a scheme to ensure sustainability and adequate risk pooling and possible threshold levels of membership necessary to realise economies of scale (as mentioned in part 2 of the paper) are not yet known<sup>10</sup>. No general rules for the minimum size can be given either, because the appropriate size of the risk pool largely depends on the magnitude and nature of risks among the insured (which may be idiosyncratic or covariant) - factors that vary from setting to setting and for which reliable data are almost non-existent - and on the availability of reinsurance mechanisms. Therefore issues of size are not considered further.

#### 3.1.1 Design Features

A rapid escalation of health care costs that is not matched by an increase in the scheme's fund is a serious danger to its financial viability. The initiators of the scheme can prevent this problem to a large extent by taking into account common insurance-related problems when the CBHI is designed. First, the **benefit package** should be affordable and include basic services tailored to the health care needs and preferences of the population. Though health insurance funds can replace public subsidies and external support only to a limited extent in low-income countries, the actual costs of the benefit package should be taken into account when the **premium** is calculated<sup>11</sup> (Musau 1999).

---

<sup>9</sup> *Aspects of the legal framework, such as amendments of existing laws necessary to promote CBHI, are not considered in this brief summary.*

<sup>10</sup> *Some researchers consider the inhabitants of a district (50.000 - 100.000 people) as sufficiently large target population for CBHI covering hospital admission, which is a rather expensive, low frequency event requiring a larger risk pool than insurance for more frequent, lower cost primary care treatment (Criel 1998a). Within the UMASIDA umbrella organisation in Tanzania, which comprises five health insurance schemes based on urban informal sector co-operatives, the three smallest groups with a size between 16 and 35 members were reported to perform very poorly, whereas the larger ones with 400-600 members achieved better results (Kiwara 1997).*

<sup>11</sup> *Moreover, premium collection should be performed during the season when cash income is highest.*

Second, the problem known as “**moral hazard**” should be considered: as insurance lowers the price of care at the point of use and removes barriers to access, utilisation of health facilities will increase (Manning et al. 1987) – surely a desirable effect given the current under-utilisation of facilities in developing countries. But health care costs may grow far more rapidly than resources mobilised through premiums – an effect which can quickly jeopardise the scheme’s financial viability. Furthermore, some provider-payment mechanisms like fee-for-service reimbursement give incentives for the provision of unnecessary and expensive treatment to insured patients (McGuire et al. 1989). These problems can be tackled by appropriate provider-payment mechanisms and by levying small co-payments at the point of use (Criel 1998b).

Indeed, overprescription of services or drugs to CBHI members by doctors has been reported in several cases, e.g. for the Kisiizi Hospital Health Society in Uganda, the Chogoria Hospital Scheme in Kenya, the Atiman Health Insurance Scheme in Tanzania (Musau 1999), and has at least been suspected of the Masisi Scheme in the Democratic Republic of Congo, where part of the revenue was used as incentive payment for doctors (Creese and Bennett 1997). In the first two settings, the problem was mainly addressed by educating health care providers. Firm conclusions on the extent of unjustified use of services by the insured (“moral hazard”) are difficult to draw, but in some cases extremely high hospital admission rates suggest the prevalence of overutilisation by CBHI members. After the introduction of the Masisi scheme, the hospital admission rate among the insured increased dramatically, reaching 157% and being five times higher than among the non-insured. In Murunda, Rwanda, the hospital admission rate among members of the “Mutualité du Kanage” was about 141% and only 6% among non-members, which means that the insured used inpatient hospital care 23 times more than the non-insured did. Though these figures may be partly explained by the self-selection of high-risk individuals or households (see the discussion on adverse selection below) and by better financial access to medically justified care, unnecessary use of services seems likely. Both of the schemes failed to reach their financial objectives and ended up with deficits. In Bwamanda district, the hospital admission rate among the non-insured was 17% and nearly three times higher among the insured (49%). Unmet need for care among the non-insured population was found to be at least partly responsible for this pattern. In contrast to the people insured by the CBHI scheme in Bwamanda, who had to pay 20% of the usual charges in the event of hospitalisation, members of an employer-based scheme living near the hospital had no cost to bear in case of admission. Their admission rate was 184%, more than eleven times higher than among the non-insured (Criel 1998b) – a figure that can hardly be explained by an increased utilisation of justified care alone.

Third, voluntary insurance is prone to the so-called **adverse selection** problem: the people most likely to join a voluntary scheme are high-risk individuals such as the chronically ill, who anticipate a high need for care. Due to this self-selection, the claims made to the scheme will exceed its revenues by far if premiums are based on the average risks in the community. As a consequence, premiums would have to be raised and insured persons with a relatively lower risk than other members would drop out of the scheme, and would therefore again increase the health care cost per insurance member

(Chollet and Lewis 1997). To prevent insurance market failure induced by adverse selection, it should be required that people join as groups, e.g., that all household members are enrolled, to make sure that membership is composed of both healthy and sick people. Furthermore, waiting periods should be established to prevent people from joining just after they have fallen ill (Musau 1999).

An evaluation of the Community Health Fund in rural Tanzania (cited in Musau 1999) found that 52 % of the sampled member households reported at least one person suffering from a chronic ailment. But as only about 6% of the target population were insured and premiums were pooled with revenues from user fees paid by the non-insured (Musau 1999), the impact of adverse selection on the financial performance of the fund was probably small. Adverse selection was also an issue during the first phase of implementation of the Masisi Health District scheme in the Democratic Republic of Congo. At the initial stage, subscription took place on an individual basis, and the insurance option was preferentially chosen by pregnant women. After the household had been fixed as unit of membership in the second year, the proportion of pregnancy-related health problems among hospital admissions dropped (Criel 1998b).

Fourth, CBHI schemes are usually of small size and cover only a limited area making them especially prone to **covariant risks**. A person's risk of needing care is not independent from his or her neighbour's health: the risks of falling ill are correlated especially in cases where natural disasters or epidemics hit a certain region or village. The fact that such disastrous events can rapidly deplete the financial reserves of the scheme calls for public-private partnership, either in the form of reinsurance contracts with private insurance companies or as an agreement with public institutions that can provide subsidies to minimise deficits (Jütting 1999).

For example, a malaria epidemic in southwestern Uganda cost the Kisiizi Hospital Health Society around 8.5 million Ugandan shilling (about 6500 US\$). As a consequence, from January to December 1998 no more than 64% of treatment expenditures were covered by the scheme's revenues – without the epidemic the cost recovery rate would have amounted to nearly 90% (McGaugh 1999). Though no formal public-private partnership contract had been signed with the Ministry of Health, the ministry has implicitly accepted responsibility for losses due to epidemics and has reimbursed the associated expenses to the scheme (Musau 1999), acting as public reinsurance agency.

### 3.1.2 Accounting and Management

Besides initial scheme design, management capacity is important to run the scheme on a day-to-day basis and make necessary adjustments (Musau 1999). Scheme managers are usually charged with financial control, i.e. investment of funds to prevent the erosion of resources by inflation, eventually with negotiations with providers (in case the scheme is not managed by a health facility), with keeping records of all members, received contributions and expenses. Proper book-keeping that provides essential information about the scheme's financial balance and accountability of scheme managers vis-a-vis the community have been found to be important (Creese and Bennett 1997).

Abuse of funds - a very detrimental type of mismanagement - can quickly erode confidence into the scheme.

### 3.1.3 Community Participation

The degree of community participation in the design and running of the CBHI can vary widely and is usually greater if funds are owned and managed by the members themselves than if schemes are run by health facilities<sup>12</sup>. If members can identify themselves with “their” schemes because they control the funds and have decision-making power, they will tend less to unnecessary use of health care services (“moral hazard”).

Furthermore, strong community participation can facilitate health education and sensitisation of members in order to promote healthy behaviour and the use of preventive services, as the members share a common interest in keeping the costs of health care low. For example, the members of a self-governed CBHI comprising several villages in Benin realised that many cases of sickness and a considerable amount of health care costs reimbursed by the scheme originated from one distinct village. In consequence, CBHI members of that village and the local nurse organised sensitisation sessions on water hygiene and vaccination (Garba and Cyr 1998). Members of the Kisiizi Hospital Health Society in Uganda cited health education on preventive medicine as one of the main benefits of the scheme (Musau 1999).

## 3.2 Health Care Providers

Some factors that contribute to success or failure of schemes are related to health care providers, e.g. to the hospital that offers services to the insured. Decisions taken by the health care provider have an impact on mobilising demand for CBHI as well as on the financial balance of the scheme.

### 3.2.1 Fee Levels

If no payment is charged for the use of health care, no incentive for joining an insurance scheme exists, except if consumers can take the chance to press for quality improvement or expansion of services if they bring up additional resources. If user fees are very low, probably not many people are willing to contribute to health insurance. CBHI schemes were frequently initiated because fees were so high that a large portion of the population could not afford them and utilisation rates declined (Creese and Bennett 1997).

---

<sup>12</sup> *Schemes managed by health facilities are often initiated with the main goal of resource mobilisation; they are probably less responsive to consumers' interests and do not provide enough incentives for quality improvement (Creese and Bennett 1997) - the latter may be crucial for enhancing the demand for insurance.*

### 3.2.2 Quality of Care

In some settings, it will not be possible to set up a viable insurance scheme and mobilise demand *before* quality of care is not improved, because if people feel that they will get no “value for money” at the hospitals or health posts, they would be unwilling to pay premiums. Frequently complaints are raised about shortage of drugs and other supplies, rude personal, dirty hospitals, or poor security (Batusa 1999). Therefore, such problems have to be addressed first, and quality improvement should not be expected as an outcome of resource mobilisation via insurance, but has to be considered as a necessary precondition for successful implementation of CBHI.

Another aspect of quality of care that is very relevant with respect to demand for insurance is the attitude of hospital staff towards the insured. Though it can generally be expected that insured patients get better, more or sometimes even unnecessary treatment because the health facilities can be sure that costs will be recovered, this is not always the case. In fact, the concept of insurance was at first misunderstood at Kisiizi Hospital in Uganda, where insured patients were seen as “nuisances” by staff because they “did not follow the normal routine” or were even regarded as people who “were not really paying their way” as they did not pay fees at the point of use. A lot of staff sensitisation had to be carried out to change these misperceptions about insurance members (McGaugh 1999).

### 3.2.3 Referral System

Health insurance is no “magic bullet” to improve health care systems, though it can contribute to their effectiveness in case it helps to remove barriers to access to health care, which means that utilisation of formerly under-utilised facilities increases and patients show up before it’s (almost) too late.

Nevertheless, a CBHI can also cause inefficiency if no referral is required at hospitals: people will go directly to the hospitals to seek treatment even when suffering from minor ailments that could be taken care of at local clinics or health posts. This especially takes place if the insurance scheme offers coverage only for the hospital level, but not for care at primary facilities. But even if care at both primary and secondary facilities is included in the benefit package, many people prefer to go directly to the hospitals in case no referral is required, because they expect the quality of care to be superior there. As the provision of care is more expensive at the secondary level, the introduction of health insurance can worsen existing inefficiencies in the absence of a proper referral system (Creese and Bennett 1997). Though mandatory referral can be required by the insurance scheme, the controls have to be performed at the hospital.

## 3.3 Households and Community

As Figure 1 shows, the demand for health insurance is a crucial factor if the benefits expected from CBHI are to be realised. The demand of households for health insurance depends not only on the quality of care offered by the health

care provider, on the premium and benefit package, but also on socio-economic and cultural characteristics of households and communities.

### 3.3.1 Poverty

Widespread absolute poverty among potential members can be a serious obstacle to the implementation of insurance. If people are struggling for survival every day, they are less willing to pay insurance premiums in advance in order to use services at a later point in time. A positive impact of health insurance on equity and access must be doubted if a large proportion of the population cannot even afford CBHI membership.

Social exclusion may persist even if barriers to access are reduced for part of the population, and exemption mechanisms for the poorest or sliding scales for premiums that might be a remedy are not easy to implement (Musau 1999). After or before the introduction of health insurance, rising incomes, that may be brought about by development projects, can be necessary to attract members and realise the potential benefits of CBHI. For instance, a “buyout local economy” has been cited as one of the factors contributing to the success of the Bwamanda scheme in Zaire that reached a coverage rate of about 60% of the target population and achieved recovery of about 80% of the hospital's running costs (Criel 1998b; Creese and Bennett 1997).

### 3.3.2 Cultural Factors

The prevailing **concepts of illness and risk** are relevant to the decision of households whether to purchase health insurance or not. If people see illness as a somewhat random event that can hit anyone, they are surely more willing to purchase insurance than if they perceive it as punishment for misbehaviour by magic powers.

Cultural habits in dealing with the risk of illness can influence the demand for insurance: for example, in rural Benin, people were used to put money aside for unpredictable events like marriages and funerals, but they believed that saving money for eventual health care costs meant “wishing oneself the disease”. Fortunately, this attitude changed after an CBHI had come into existence (Garba and Cyr 1998).

If **solidarity** is strong, people will not worry so much if the benefits of the premiums they paid will accrue to themselves or other community members. For example, members of the Bwamanda scheme in Zaire expressed the opinion that if they would not need health care themselves, at least they had done something good for the community by contributing to the insurance fund (Criel 1998b). The degree of solidarity and mutual trust is probably higher in homogeneous, close-knit communities than in scattered and diverse populations comprising people of different ethnic origin, religion and culture (Creese and Bennett 1997).

Existing, “traditional” institutions of risk-sharing and mutual help can on the one hand facilitate CBHI implementation, because health insurance may be

built upon these groups, as has been done with the Engozi<sup>13</sup> societies in Uganda by the Kisiizi Hospital Health Society (Musau 1999). On the other hand, the different logic of traditional networks sometimes induces **misperceptions of insurance** and disappointment, because people have expectations based on their experience with traditional institutions that are not fulfilled by CBHI, e.g. that the money paid into the common fund accumulates over time and that the benefits will correspond to the contributions made (Batusa 1999). A lot of community sensitisation may be necessary in this respect.

In any case, initiators and managers of health insurance schemes should pay more attention to consumer satisfaction and to people's preferences and perceptions, because these are crucial factors for successful implementation of CBHI.

#### 4 Conclusions

In most industrial and many middle-income countries, insurance has turned out to be a useful financial tool in the health sector (Griffin 1992). In Africa, the wage-based social insurance and private health insurance have had very limited impact because they failed to cover informal sector workers and the rural self-employed, who constitute the majority of African populations. The debate about the potential of community-based health insurance to improve access to health care and social protection is still ongoing, while more and more schemes have been emerging during the nineties in rural and urban Sub-Saharan Africa. Though health insurance is an exogenous concept largely inspired by European history and occidental values, this does in no way preclude its appropriation by local populations. Given the unique ethnic, lingual and cultural diversity within African nations, the CBHI approach may be particularly promising for this continent because it allows adaptation to local conditions. On the other hand, the running of a CBHI scheme requires a – not yet clearly defined - minimum of management capacity at the local level as well as rational organisation of health care provisions. These prerequisites seem to be lacking in many instances in Sub-Saharan Africa (Criel 1998a). The actual implementation of CBHI schemes has had mixed results so far, with success and viability largely depending on design and management of the scheme, community participation, regulations at the level of the health care provider, quality of services and on the socio-economic and cultural context. As experience gained with CBHI has become the focus of several research initiatives and the lessons learned are offered to people running the schemes or intending to start new ones, the performance of CBHI will hopefully improve over time. The future will show if there are ways to overcome common failings of CBHI which have been recognised in many schemes: limited participation, low cost recovery rates and the problems of including the poorest members of society (Creese and Bennett 1997). Small-scale health insurance can supplement other sources of finance in low-income

---

<sup>13</sup> *The Engozi societies cover burials and transport of ill members (the „Engozi“ is a hand-carried stretcher). Additionally, many offer a loan scheme or income generating projects. 96% of the community belong to an Engozi society (Musau 1999).*



countries rather than being a substitute for them. This fact calls for partnerships between public institutions, the private sector and the new institution of non-profit health insurance. To build viable partnerships is, however, not an easy task and depends on several factors as a recent study by Jütting (2000b) reveals. He summarises a variety of experiences with a public-private mix in the health sector in developing countries, ranging from fairly no co-operation to a partnership in which the involved actors jointly agree on defining the objectives, the methods and implementation of an agreement. A viable and functioning partnership depends largely on a legal framework guaranteeing a transparent and credible relationship between the different actors, the negotiation capacity of the government vis-a-vis powerful interest groups as well as the incentives provided for the private sector to build such a co-operation.

### **References**

Asenso-Okyere, W.; Anum, A., Osei-Akoto, I.; Adukonu, A. (1998), Cost recovery in Ghana: Are there any changes in health care seeking behaviour? *Health Policy and Planning* 13.

Atim, C. (1998), Contribution of Mutual Health Organisations to Financing, Delivery and Access to Health Care: Synthesis of Research in Nine West and Central African Countries. Technical Report No.18. Partnerships for Health Reform Project, Abt Associates Inc., Bethesda, MD.

Batusa, R. (1999), Lessons Learned with Dairy Cooperative Based Health Insurance Programs in Uganda. Paper presented at the PHR Study Design Workshop in Mombasa, January 1999.

Bennett, S.; Creese, A.; Monash, R. (1998), Health Insurance Schemes for People outside Formal Sector Employment. ARA Paper No. 16, WHO, Geneva.

Booth, D.; Milimo, J.; Bond, G.; Chimuka, S. (1995), Coping with cost recovery. Report to the Swedish International Development Authority. Development Studies Unit, Department of Social Anthropology, Stockholm University, Stockholm.

Chollet, D.; Lewis, M. (1997) Private Insurance: Principles and Practice. In: Beattie, A. et al. (eds.), Sustainable Health Care Financing in Southern Africa: Papers from an EDI Health Policy Seminar Held in Johannesburg, South Africa, June 1996. EDI Learning Resources Series, Washington, D.C.

Creese, A.; Bennett, S. (1997), Rural Risk-Sharing Strategies. In: Schieber, G.(ed.), Innovations in Health Care Financing. Proceedings of a World Bank Conference, March 10-11, 1997, Washington, D.C.

Criel, B. (1998a), District-based Health Insurance in sub-Saharan Africa. Part I: From Theory to Practice. *Studies in Health Services Organisation and Policy* 9, Antwerp.

Criel, B. (1998a), District-based Health Insurance in sub-Saharan Africa. Part I: Case-studies. *Studies in Health Services Organisation and Policy* 10, Antwerp.

Debaig, G. /CIDR (1999), Report on the Community Based Health Insurance Regional Conference in Kampala, Uganda, 9-13 November 1998.

Dor, A.; van der Gaag, J. (1993), Quantity Rationing and the demand of adults for medical care in rural Côte d'Ivoire. In: Mills, A. and Lee, K., Health economics research in developing countries. Oxford University Press.

Garba, M.; Cyr, V. (1998), Présentation de mutuelles du Sud Borgou et Zou Nord au Bénin. Paper presented at the Seminaire-Atelier de CIDEF - Les Mutuelles de Santé en Afrique: Concept Importé ou Réalité Émergente? Experiences et Perspectives, Paris, May 1998.

Gilson, L. (1998), The Lessons of User Fee Experience in Africa. In: Beattie, A. et al. (eds.), Sustainable Health Care Financing in Southern Africa: Papers from an EDI Health Policy Seminar Held in Johannesburg, South Africa, June 1996. EDI Learning Resources Series, Washington, D.C.

Griffin, C. (1992), Health Care in Asia: a Comparative Study of Cost and Financing. World Bank Regional and Sectoral Studies, Washington, D.C.

Jütting, J. (1999), Strengthening Social Security Systems in Rural Areas of Developing Countries. ZEF Discussion Paper on Development Policy No. 9, Center for Development Research, Bonn.

Jütting, J. (2000a), Social security systems in low income countries: Concepts, constraints and the need for cooperation. *International Social Security Review*, 4/2000, pp. 3-25

Jütting, J. (2000b), Optimising Public Private Partnerships in Developing Countries: the case of the health sector. Paper presented at an ILO seminar on the Extension of Social Protection, Geneva, December 1999.

Kiwara, A. (1997), UMASIDA Backup Report – January to August 1997. Dar es Salaam.

Manning, W.; Newhouse, J.; Duan, N.; Keeler, E.; Leibowitz, A.; Marquis, M. (1987), Health insurance and the demand for medical care: evidence from a randomised experiment. *American Economic Review* 77, 251-277.

McGaugh, J. (1999), Community-Based Health Insurance: Experiences and Lessons Learned from East Africa. Workshop Proceedings No.6. Partnerships for Health Reform Project, Abt Associates Inc., Bethesda, MD.

McGuire, A.; Fenn, P.; Mayhew, K. (1989), The assessment: the economics of health care. *Oxford Review of Economic Policy* 5, 1-19.

Müller, O.; Cham, K.; Jaffar, S.; Greenwood, B. (1996), The Gambian national impregnated bednet programme: Evaluation of the 1994 cost recovery trial. *Social Science and Medicine* 43, 1-7.

Musau, S. (1999), Community-Based Health Insurance: Experience and Lessons Learned from East Africa. Technical Report No. 34. Partnerships for Health Reform Project, Abt Associates Inc., Bethesda, MD.

Ntiemoa-Baidu, Yaa (1997), Wildlife and food security in Africa. FAO, Rome.

Sauerborn, R.; Nougara, A.; Latimer, E. (1994), The elasticity of demand for health care in Burkina Faso. In: *Health Policy and Planning* 9, 185-192.

Tine, J. (2000): Les mutuelles de santé rurales de la région de Thiès au Sénégal: des initiatives communautaires pour améliorer l'accès aux soins de santé. Center for Development Research, Bonn, mimeo.

Waddington, C.; Enyimayew, K. (1989), A price to pay, part 2: The impact of user charges in the Volta region of Ghana. *International Journal of Health planning and Management* 5, 287-312.

Weinberger, K.; Jütting, J. (2000), The role of local organizations in risk management: Some evidence from rural Chad. *Quarterly Journal of International Agriculture*, 2000, forthcoming.

World Bank (1994), *Better Health in Africa: Experience and Lessons Learned*. Washington, D.C.

Ziemek, S. ; Jütting, J. (2000): *Mutual insurance schemes and social protection: an overview*. Center for Development Research, Bonn, mimeo.

### *Abstract*

*The majority of Sub-Saharan African citizens – informal sector workers and the rural population – have never had access to wage-based social health insurance or privately run health insurance. As a response to the lack of social security, to the negative side-effects of user fees introduced in the eighties and to persistent problems with health care financing, non-profit, voluntary community-based health insurance (CBHI) schemes for urban and rural self-employed and informal sector workers have recently emerged. CBHI seems to be a promising attempt to improve access to health care, health outcomes and social protection in the case of illness. Given the unique ethnic, lingual and cultural diversity within African nations, the CBHI approach may be particularly valuable because it allows adaptation to local conditions. The actual implementation of CBHI schemes in Sub-Saharan Africa has had mixed results so far, with viability and acceptance largely depending on design and management of the scheme, community participation, regulations at the level of the health care provider, quality of services and on the socio-economic and cultural context. As it has turned out that small-scale health insurance can supplement other sources of finance rather than being a substitute for them, public-private partnerships may provide scope for improvement of CBHI performance.*