## 9.2.2- Voluntary Health Insurance

A number of community-based health insurance schemes have been introduced in various parts of the country by a range of international and local NGOs. CBHI is based on the principle of risk pooling and pre-payment for health care. CBHI is non-profit, voluntary insurance mechanism based on the sale of low-cost insurance premiums that provide the purchaser and their family with coverage for health charges for a stated list of medical benefits delivered at contracted public health facilities (generally health centers and referral hospitals). The CBHI scheme pays the contracted facility for the cost of services delivered to its members.

The MOH has adopted Guidelines for Implementing CBHI, prepared by the DPHI in 2006. The Guidelines provide directions for a common approach to the administrative and technical requirements, common benefits, and aims at future portability between different CBHI schemes.

Formal regulations for CBHI implementation are to be introduced through the Sub-Decree on Micro Insurance Business prepared by the MOEF and MoH. All companies and NGOs who want to provide CBHI must register with MOEF by submitting business plan together with Certificate of Recognition for the CBHI scheme received from the MOH.

Scheme	Start date	Province	OD	# HC	Payment	Primary RH	Payment	Secondary RH	Payment
SKY	Dec, 2006	Phnom Penh	Phnom Penh	1	Capitation	PPMRH	Capitation	Kosamak	Case
SKY	2001	Takeo	Ang Roka	9	Capitation	Ang Roka RH	Capitation	Takeo	Case
SKY	2001	Takeo	Kirivong	1	Capitation	Kirivong RH	Capitation	Takeo	Case
SKY	2007	Kompong Thom	Kompong Thom	3	Capitation	Kompong Thom RH	Capitation		
SKY	1997	Kandal	Ta Khmoa	1	Capitation	Chey Chum Neah Capitation			
SKY	2008	Kampot	Kampot	6	Capitation	Kampot RH Capitat			
SKY	2008	Kandal	Koh Thom	7	Capitation	Koh Thom RH	Capitation	Chey Chum Neah	Case
SKY	2008	Takeo	Daun Keo	15	Case	Takeo RH	Case		
CAAFW	Feb, 2005	Banteay Mean Chey	Thmar Pouk	19	Case	Thmor Pouk RH	Case	Monkol Borey	Case
BFH	January, 2006	Takeo	Kirivong	8	Capitation	Kirivong RH	Capitation	Takeo	Case
RACHA	August, 2006	Pursat	Sompov Meas	8	Capitation	Pursat RH	Capitation		
CHHRA	August, 2005	Odor Mean Chey	Odor Mean Chey	3	Case	Odor Mean Chey RH	Case		
12 Schemes		7 Provinces 1 Municipality	11 ODs	81		11			

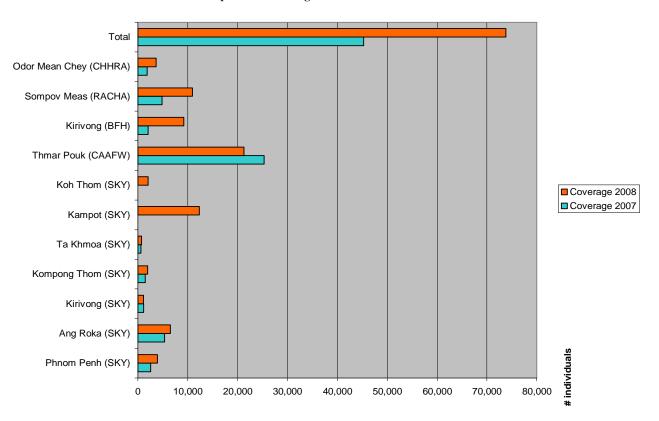
# Table 13 – CBHI general information

# 9.2.2.1- CBHI coverage

Table 14 - CBHI coverage

No	Scheme	OD	Total Beneficiaries (Individuals)	%OD Population Covered	New beneficiaries in 2008	Drop out in 2008	% beneficiaries covered by social assistance scheme (HEF)
1	SKY	Phnom Penh	4,022	NA	3,101	1,361	
2	SKY	Ang Roka	7,489	7.42	5,139	2,382	
3	SKY	Kirivong	1,095	0.49	131	108	
4	SKY	Kompong Thom	2,152	6.21	1,203	438	41%
5	SKY	Ta Khmoa	775	13.73	424	217	
6	SKY	Kamport	12,906	8.96	14,378	1,472	83%
7	SKY	Koh Thom	2,435	2.08	3,427	993	
8	SKY	Daun Keo	3,887		3,897	39	
9	CAAFW	Thmar Pouk	21,283	19%	8,138	12,287	0.00%
10	BFH	Kirivong	9,217	1%	7,086	71	0%
11	RACHA	Sompov Meas	10,931	4%	4,723	2,707	
12	CHHRA	Odor Mean Chey	3,681	2.19	2,902	408	
	Total		79,873		54,549	22,483	

## Figure 20 – CBHI coverage in 2007 and 2008



Comparison of coverage between 2007 and 2008

Overall coverage of CHI schemes has increased in 2008, due to

- Substantial increase in coverage of BFH (Kirivong) and RACHA (Sampov Meas) schemes
- Opening of new schemes in Kampot

CAAFW scheme in Thmar Pouk, which is still the scheme with the largest coverage in the country, has experienced large number of drop outs in 2008.

All other schemes have expanded their coverage although this has been more limited for SKY schemes than for BFH and RACHA.

Although all schemes in general comply with national guidelines, they however use various methods of community mobilization and social marketing, which may in turn explain different achievements in terms of expansion and coverage. A thorough review of these methods would be needed in the course of 2009.

In addition, SKY schemes in Kampot establish a linkage with Health Equity Funds, and HEF beneficiaries are accounted as members of these CBHI schemes

## 9.2.2.2- CBHI utilization

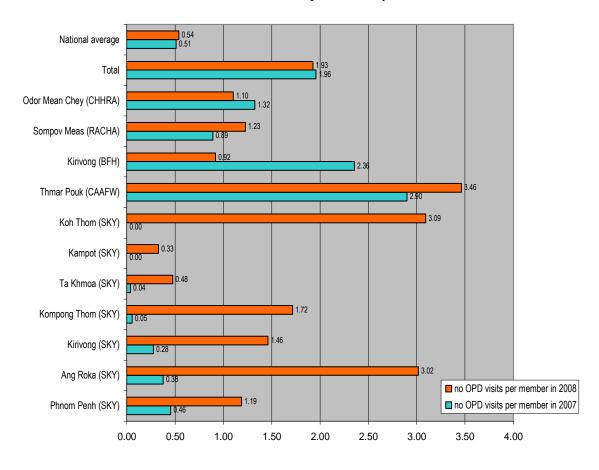
No	Scheme	OD	OPD visits				IPD admissions				Deliveries at facility	ALOSD	Number of referrals
			Total	Male	Female	Child	Total	Male	Female	Child			
1	SKY	Phnom Penh	4,785	1,450	2,615	711	378	99	172	78	29	7.46989	
2	SKY	Ang Roka	22,592	6,841	10,426	5,318	431	145	150	77	59	10.8916	
3	SKY	Kirivong	1,601	673	737	189	33	10	14	7	2	7.25	
4	SKY	Kompong Thom	3,694	1,097	1,785	812	196	51	81	35	29	5.10127	
5	SKY	Ta Khmoa	369	89	219	61	50	20	15	11	4	5.24138	
6	SKY	Kampot	4,229	1,091	2,225	907	785	181	304	210	90	4.6422	
7	SKY	Koh Thom	7,536	2,178	3,579	1,779	185	47	88	34	16	17.2473	
8	SKY	DounKeo	2,020	509	940	569	28	12	8	6	2	3.75	
9	CAAFW	Thmar Pouk	73,705	18,430	55275	29483	1,370	669	701	730	372		144
10	BFH	Kirivong	8,466				612				193	6.2	21
11	RACHA	Sompov Meas	13,411				331				168		149
12	CHHRA	Odor Mean Chey	4,054	766	2,149	1,139	160				3	4.92	
	Total		146,462	33,124	79,950	40,968	4,559	1,234	1,533	1,188	967	73	314

Table 15 - Utilization by CBHI members

Average number of OPD visits per member per year in 2008 was 1.93 and in very slight decrease compared to 2007, remaining however almost double the national average. Number of OPD visits per member has substantially increased for all schemes except for CHHRA (Odor Meanchey) and BFH (Kirivong), demonstrating a regained trust of the target population in the public health facilities in their areas as well as in the CBHI services. Even CHHRA and BFH utilization levels are far beyond national average indicators. However, although increased health care demand is desirable at current stage in the Cambodian health care system, all schemes have to carefully control over-utilization and provider-induced demand. This situation should be thoroughly assessed in 2009.

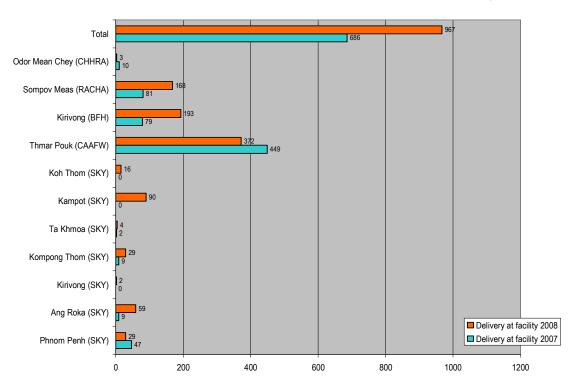
#### Figure 21 – OPD visits per member and by scheme in 2007 and 2008

#### OPD visits per member, by scheme



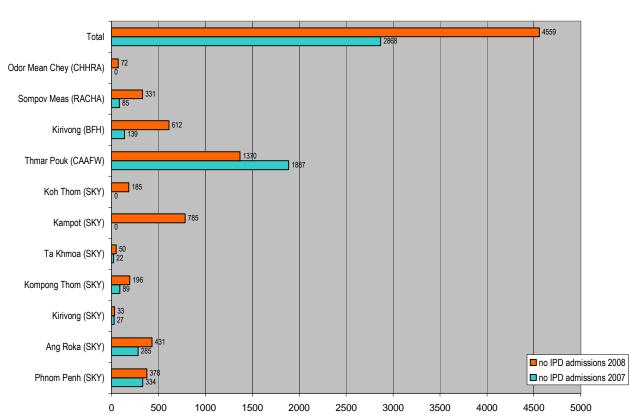
Total number of deliveries at public health facilities in 2008 was 967 for all schemes, increasing by 41% over 2007. Thmar Pouk/CAAFW account for 38% if all deliveries at facilities supported by CBHI schemes, followed by Kirivong / BFH (20%) and Sampov Meas / RACHA (17%). In Thmar Pouk, the total number of deliveries at facilities has however decreased in 2008 compared to 2007, probably as a result of decrease in coverage rate. All SKY schemes present a low number of deliveries at public health facilities in 2008, and this has decreased in Phnom Penh compared to 2007.

### Figure 22 – Deliveries in facilities for CBHI members in 2007 and 2008



#### Comparison in the numer of deliveries in facilities between 2007 and 2008, by scheme

Trend in IPD admissions is similar to deliveries at health facilities. CAAF in Thmar Pouk is again the most active scheme, although activity has decreased in 2008. BFH in Kiriving and RACHA in Sampov Meas experience a substantial increase in IPD admissions while all SKY schemes, except the new scheme in Kampot, experience a smaller size increase in IPD admissions. Once again, over-utilization and provider-induced demand need to be carefully monitored in all cases.



### Figure 23 – IPD admissions by scheme in 2007 and 2008

Comparison in IPD admissions between 2007 and 2008, by scheme

Average length of stay is variable between schemes and can be as high as 17 days in Ko Thom (SKY) scheme. ALOS is usually very high in CBHI schemes

compared to national overage of 6 days per hospitalization. Therefore, CBHI schemes should pay attention to over-utilization of health care services among their beneficiaries. Note that CAAFW and RACHA have not reported an ALOS.

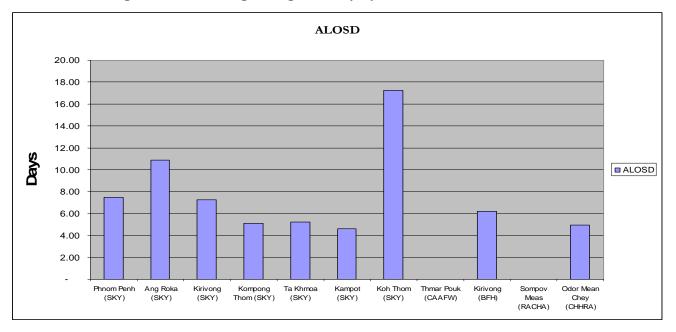


Figure 23.b – Average Length of stay by scheme in 2008

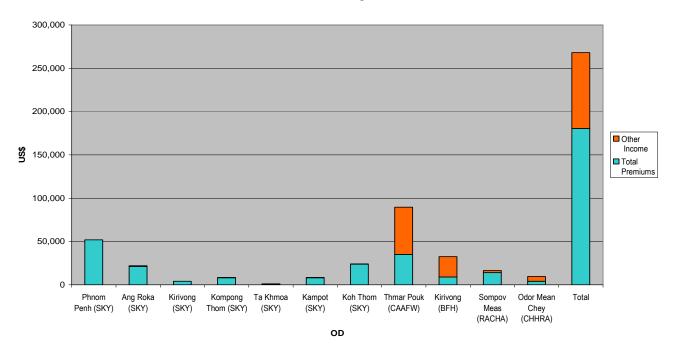
# 9.2.2.3- CBHI financial data

Table 16- CBHI financial data in 2008

	Scheme	OD	li	ncome		Expenditures							
No			Total Premiums	Other Income	Total Income	Total direct medical benefits paid	Total non-medical benefits paid	Administr ative costs	Outreach and social marketing costs	Other costs	Total		
1	SKY	Phnom Penh	51,830	189	52,020	33,838	17,725	2,135	4,242	2,987	60,927.31		
2	SKY	Ang Roka	21,191	704	21,895	20,025	23,620	2,786	12,823	6,388	65,641.66		
3	SKY	Kirivong	4,209	32	4,241	2,935	1,354	119	583	441	5,433.10		
4	SKY	Kompong Thom	8,138	104	8,242	6,505	14,440	606	4,352	2,003	27,906.02		
5	SKY	Ta Khmoa	1,033	25	1,058	1,125	2,256	371	558	130	4,439.24		
6	SKY	Koh Thom	8,118	263	8,381	7,389	15,897	2,255	9,387	3,217	38,145.49		
7	SKY	Kampot	23,682	281	23,964	22,817	29,512	1,977	7,897	3,870	66,072.32		
8	SKY	Daun keo	2,825	19	2,845	1,409	10,626	7,827	11,424	10,341	41,625.90		
9	CAAFW	Thmar Pouk	35,024	54,544	89,568	41,956	5,842	29,083	7,058	5,629	89,568		
10	BFH	Kirivong	8,954	23,526	32,480	13,722	10,210	3,158	1,672	481	29,233		
11	RACHA	Sompov Meas	14,177	2,165	16,342	16,067	230				16,296		
12	CHHRA	Odor Mean Chey	4,056	5,620	9,676	1,941	1,022	693	0	0	3,656		
	Total		183,238	87,473	270,710	169,729	132,733	51,010	59,996	35,486	448,944		

Figure 24 – Income of CBHI schemes per source in 2008

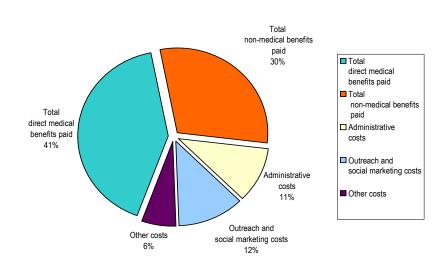
#### Income of CBHI schemes per source 2008



CAAFW scheme in Thmar Pouk heavily relies on other sources of income than premiums from members, with 61% of scheme income coming from other sources, mainly Malteser and its own micro credit scheme's income. BFH in Kirivong is also relying on other sources of funds for over 72% of scheme income, although in this case the source of funding is mainly a charity fund run by the local pagoda. SKY schemes however do not report high income from external funding sources (1.3% on average across all schemes). This may actually explain the lower achievements in coverage and utilization of services reported by SKY schemes. However, caution should be applied in the interpretation of these data: SKY schemes do rely on technical assistance from GRET back office, the cost of which is fully borne by GRET own budget. This assistance directly benefits SKY scheme but is not reported as income in their reports.

CBHI schemes expenditures are mainly on direct medical benefits (41%) and non-medical benefits (30%) such as food for caretaker during hospitalization, transport costs as well as funeral costs when a patient dies at the health facility. Administrative costs are on average 11% of all expenditures although this is underestimated as RACHA scheme in Sampov Meas does not report any administrative cost, which seems unlikely and is probably due to the quality of their financial reports. CAAFW scheme in Thmar Pouk reports the highest share administrative costs and the lowest share of non-medical benefits to their members. SKY rural schemes spend more on indirect benefits than SKY urban scheme in Phnom Penh, explained by higher transport costs in rural remoter areas.

### Figure 25 – CBHI expenditures by category in 2008



Expenditures of CBHI schemes

Figure 26 – CBHI expenditures by category and by scheme in 2008

Expenditures by categories in 2008

