

# Health related baseline millennium development goals indicators for local authorities in Malawi

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## Abstract

The Malawi Social Action Fund (MASAF) is implementing a 12 year programme to close service gaps in rural communities. These service gaps are primarily those in health, education, household food security, water and sanitation, transport and communications. The impact indicators of the Project are selected Millennium Development Goal indicators. MASAF conducted a baseline study of the MDG indicators for all districts in Malawi. This paper presents available health related MDG baseline indicators for all districts in Malawi. Other stakeholders implementing health interventions could use these baseline indicators for planning purposes.

## The Malawi Social Action Fund - MASAF

The Malawi Social Action Fund is one of the instruments employed by the Malawi government to fight poverty within existing policy frameworks. The first MASAF programme run from 1995-1998 and was funded to the tune of US\$56 million. The second programme, worth US\$66 million run from 1998-2003. MASAF is now running its third programme. The third programme of MASAF (MASAF 3) which became effective in November 2003 is a three-phased Adaptable Program Loan (APL) project that will run from 2003-2015. The MASAF 3 is funded to the tune of US\$240 million that will be released subject to the Project meeting certain performance benchmarks at the end of each phase. The three phases are of 3, 5 and 4 years respectively and are deliberately chosen to be in line with the current decentralisation programme in Malawi (Government of Malawi, 2003).

The MASAF 3 Project Development Objective is to empower individuals, households, communities and their development partners to implement measures that can assist them better manage risks associated with health, education, sanitation, water, transportation, energy and food security. The Project further aims to provide support to the critically vulnerable through funding a variety of sustainable interventions, all towards contributing to the attainment of the Millennium Development Goal (MDG) Indicator targets for Malawi. The Project specific objectives are (1) to improve access to and utilization of social and economic services by the communities in the rural and urban areas; (2) to transfer cash income to the poor households and individuals through creation of community assets; (3) to improve the quality of life for the most vulnerable persons; (4) to increase poor communities' access to savings and investment opportunities, and (5) to develop and strengthen capacities of communities, Local Authorities and civil society organizations for improved development management.

## Impact Indicators

Impact indicators of the MASAF 3 Project are 12 of the 48 MDG indicators. These indicators were selected on the basis of service packages in health, education, sanitation and

water, transportation and communication and household food security designed by the respective sector ministries. The health service package was developed through a partnership of the Ministry of Health, MASAF and other stakeholders working in the health sector (Essential Community Health Package, 2005). The selected 12 MDG impact indicators for the MASAF 3 Project are as in the second column in Table 1.

## Methods

MASAF conducted a baseline study for the indicators in Table 1 in November 2005. Some of the indicators were obtained from Official Statistics documents. The Malawi/national indicators reflect estimates during the study and not as in the recently presented Malawi Demographic and Health Survey (MDHS). MDGs 1, 2 and 3 have no health related indicators and are therefore not presented in this report. The district indicators are based on the 1998 population and housing census.

For MDG 4, infant mortality data was obtained from district social economic profiles and were compared with data obtained from the website of the Malawi National Statistical Office (NSO). Child mortality and under five malnutrition data was obtained from the Malawi Health Management Information Bulletin. For MDG 5 statistics on maternal mortality were from the district socio-economic profiles while the percentage of deliveries by a trained attendant (health personnel and TBA) is from the Malawi Health Management Information Bulletin. For MDG 6 data on HIV infected persons is from National AIDS Commission, with district populations derived from the 1998 population and housing census. Data on orphans in primary schools was obtained from the Education Management Information System of the Ministry of Education. Data on MDG 7, populations with access to sanitation was obtained from the State of the Environment Report housed in the Ministry of Natural Resources and Environmental Affairs. For MDG 8, out-patient total attendance and out-patient visits per population ratio were obtained from the Malawi Health Management and Information Bulletin.

## Results

Tables 2 to 7 shows health related baseline MDG indicators for each local authority. Tables 2, 3, and 4, addresses health related indicators for MDGs 4, 5 and 6 respectively. Tables 5 and 6 addresses health related indicators for MDG 7 and Table 7 address health related indicators for MDG 8.

## Limitations

This is the first time that any Project in Malawi has established local-authority by local authority baseline indicators. This brought in a limitation on the quality of the data due to unfamiliarity of carrying out a nation-wide local authority data related exercise. In addition to Research Assistants, MASAF relied on local authority staff to provide most of the data to construct these baseline indicators. This also

Table 1: Selected MDG Indicators for the MASAF Project

MDG	MDG Indicators	Malawi 2000 Baseline	Malawi 2015 target
1. Eradicating extreme poverty and hunger	(1) Poor households receiving daily transfer or assistance of USD0.30 or more	55%	28%
2. Achieve universal primary education	(2) Grade 1 children reaching grade 5	20%	90%
3. Promote gender and equality and empower women	(3) Girls in primary school as % of total	48%	50%
4. Reduce child mortality	(4) Under-five malnutrition (%) using weight for age method	30%	15%
5. Improve maternal mortality	(5) Births attended to by at least a trained traditional birth attendant	43%	90%
6. Combat HIV/AIDS, malaria and other diseases	(6) Orphans given training and tools for production (7) Chronically ill reached with home based care (8) Households in anti-malaria program		
7. Ensure environmental sustainability	(9) Forest cover for non-agricultural land (10) Households with sanplants for sanitation (11) Households with improved water sources	77% 37%	84% 68%
8. Develop global partnership for development	(12) Households participating in functioning Drug Revolving Funds (stocked with a specified minimum list of drugs)		

Source: MASAF/CEDP Operations Manual (GoM, 2003)

compromised quality since local authority personnel have not yet developed expertise in ensuring data quality. There was also a limitation in that there were data gaps in some local authorities. MASAF and the Local Authorities will fill in these gaps as a Project requirement.

The Malawi/national estimates are presented as in at the time of the study (November 2004) and not as presented in the recently completed MDHS or in the recently completed national HIV and AIDS sentinel survey.

## Conclusion

It takes a lot of commitment and resources to establish baseline indicators per local authority. These local authority indicators are therefore presented as reference standards. Various agencies implementing health interventions in the local authorities can use this baseline information to make implementation decisions.

While no single intervention can wholly influence an MDG indicator, each single intervention contributes to the attainment of the MDGs. It is in that light and importance that implementers should be aware of these MDG baselines. This baseline line data can be used to determine where to intervene and can also influence funding level to interventions in various local authorities so as to achieve MDG targets.

## References

1. Government of Malawi; Office of the President, and Cabinet (2003); MASAF III/CEDP Operational Manual
2. Government of Malawi (2002); Malawi Poverty Reduction Strategy Paper
3. Lenneiyee, M (2003); Intergrating MDGs into the Malawi Social Action Fund; Findings, (233)
4. Malawi Social Action Fund (2005). Monitoring and Evaluation Handbook
5. Malawi Social Action Fund (2005). How we are performing?. MASAF III Monitoring and Evaluation Plan.
6. Malawi Social Action Fund (200). Assessment of the effectiveness of the backstopping arrangements in enhancing the justification and disbursement performance in the MASAF Project.

Table 2: MDG 4 Reduce Child Mortality: Related Indicators

Name of District	Under five Malnutrition (%) Using (W/A) Method	Infant mortality rate per 1000	Child mortality rate
<b>Malawi</b>	<b>19 %</b> (new estimate as per MHDS 2004 is 22%)	<b>132</b> (new estimate as per MDHS 2004 is 76)	<b>232</b> (new estimate as per MHDS 2004 is 133)
Balaka DA	19%	139 (123)	110
Balaka TA	19%	130	229
Blantyre CA	10%	106	191
Blantyre DA	10%	106 (99)	191
Chikwawa	16%	157 (131)	205
Chiradzulu DA	15%	164 (131)	164
Chitipa DA	11%	106 (95)	
Dedza DA	68%	185 (130)	243
Dedza TA	68%	132	
Dowa DA	16%	180 (129)	236
Karonga DA	8%	130 (104)	174
Karonga TA	8%	130	174
Kasungu DA	15%	93 (134)	207
Kasungu TA	15%	93	207
Likoma DA	14%	59	100
Lilongwe CA	26%	162	193
Lilongwe DA	26%	(129)	
Liwonde TA	19%	115	93
Machinga DA	20%	300	
Mangochi DA	15%	173 (124)	229
Mangochi TA	15%	169 (123)	
Mchinji DA	25%	221	276
Mulanje DA	11%	211 (131)	276
Mwanza	24%	(148)	
Mzimba DA	15%	134 (123)	134
Mzuzu CA	15%	105 (105)	181
Neno	24%		
Nkhatabay DA	14%		
Nkhotakota DA	13%	119 (103)	338
Nsanje	15%	(136)	
Ntcheu DA	16%	134 (145)	385
Ntchisi DA	10%		
Phalombe DA	11%	138 (145)	230
Rumphi DA	11%	149 (136)	230
Salima DA	25%	114 (91)	148
Salima TA	25%	132 (126)	240
Thyolo	18%	132	240
Zomba DA	13%	144 (133)	350
Zomba MA	13%	171 (124)	225

\*District Social Economic Profiles data were used in the analysis for this report. Similar estimates obtained from the NSO website are indicated in brackets.

Source: Malawi Health Management Information Bulletin, Annual

Report July 2002 – June 2003, Ministry of Health, Department of Planning, Health Management Information Unit

Table 3: MDG 5 Improve maternal mortality: Related Indicators

Name of District	% births attended to by a trained personnel in a health facility	% of births attended to by a trained TBA	Malawi/District baseline 2000 /2004**	Maternal Mortality rate per 100,000***
<b>Malawi</b>	<b>41</b> (new estimate as per MDHS 2004 is 56)	<b>21</b> (new estimate as per MDHS 2004 is 26)	<b>63</b>	<b>1,1204****</b> (new estimate as per MDHS 2004 is 984)
Balaka DA	68	22	90 %	300
Balaka TA			80%	
Blantyre CA			71%	
Blantyre DA	61	10	71%	
Chikwawa	44	18	62%	1020
Chiradzulu DA	22	16	38%	1074
Chitipa DA	42	26	68%	400
Dedza DA	28	17	45%	778
Dedza TA			45%	778
Dowa DA	29	16	45%	1640
Karonga DA	68	13	81%	
Karonga TA			81%	
Kasungu DA	24	31	55%	1000
Kasungu TA			55%	
Likoma DA				
Lilongwe CA	28	15	43%	662
Lilongwe DA	28	15	43%	W
Liwonde TA			90%	1800
Luchenza			76%	1000
Machinga DA	50	26	76%	1830
Mangochi DA	38	33	71%	
Mangochi TA	38	33	71%	
Mchinji DA	37	21	58%	467
Mulanje DA	39	31	70%	
Mwanza	52	21	73%	900
Mzimba DA	37	10	48%	
Mzuzu CA			48%	
Neno			73%	900
Nkhatabay DA	49	15	64%	3400
Nkhotakota DA	39	30	69%	
Nsanje	72	22	94%	630
Ntcheu DA	44	22	66%	
Ntchisi DA	26	22	48%	
Phalombe DA	41	26	67%	
Rumphi DA	84	9	93%	
Salima DA	42	41	83%	
Salima TA			83%	
Thyolo	36	46	82%	677
Zomba DA	51	14	65%	1120
Zomba MA			65%	620

\*\* Source: Malawi Health Management Information Bulletin, Annual Report June 2002 – July 2003, Ministry of Health and Population, Planning Department, Health Management Information Unit

\*\*\* Source: District Socio-Economic Profiles

Table 4: MDG 6 Combat HIV/AIDS Malaria And Other Indicators: Related Indicators

Name of District	Number of adults (%) infected with HIV in 2003 by districts*		Number of orphans (%) in Primary Schools in 2004 by districts**		
	Numbers of adults infected	Proportion of adults infected**	Boys	Girls	Total
<b>Malawi</b>	<b>766,000</b>	<b>6.63</b>	<b>12.30</b>	<b>12.12</b>	<b>12.21</b>
Likoma	1,000	1.05	19.75	17.92	18.81
Lilongwe City	63,000	1.05	10.06	10.63	10.35
Mzuzu City	13,000	1.08	12.18	11.76	11.97
Zomba Municipality	13,000	1.44	11.37	12.25	11.82
Lilongwe Rural	29,000	2.76	9.57	9.37	9.78
Ntcheu	12,000	2.81	14.67	13.45	14.05
Dedza	16,000	2.84	10.56	9.87	10.21
Mchinji	12,000	3.15	11.53	11.44	11.48
Kasungu	21,000	3.68	9.01	8.76	8.88
Nkhotakota	10,000	3.75	11.50	12.50	12.0%
Mzimba	22,000	3.91	12.76	12.86	12.81
Rumphi	6,000	4.21	12.81	13.62	11.13
Ntchisi	9,000	4.48	9.91	10.00	9.9
Dowa	21,000	4.59	9.76	9.76	9.76
Chitipa	7,000	4.74	12.53	12.78	12.65
Nkhatabay	10,000	5.44	16.07	15.82	15.95
Phalombe	17,000	6.28	11.96	12.04	11.99
Chiradzulu	18,000	6.76	14.18	14.20	14.00
Karonga	16,000	7.16	13.44	14.28	13.85
Zomba Rural	41,000	7.56	13.37	13.48	13.43
Mwanza	12,000	7.61	14.32	14.15	14.24
Balaka	22,000	7.67	15.00	15.21	15.14
Nsanje	17,000	7.79	14.94	14.12	14.57
Machinga	32,000	7.82	11.03	11.72	11.37
Mangochi	54,000	7.82	13.72	12.91	12.50
Chikwawa	33,000	7.99	13.25	12.12	12.73
Salima	24,000	8.05	11.44	10.74	11.11
Blantyre Rural	29,000	8.52	14.56	14.61	14.58
Mulanje	42,000	8.55	16.13	17.77	15.51
Thyolo	46,000	8.79	13.31	12.97	13.15
Blantyre City	99,000	15.32	11.61	12.46	12.04

\*Source: National AIDS Commission. The district populations are from the National Statistics Office, Projected Population based on 1998 Malawi Population and Housing Census.

\*\*Source: Ministry of Education, Education Management Information system, Education Statistics 2004.

\*\*\*Proportions based on the projected population of 2003 using 1998 Population and Housing Census

Table 5 MDG 7 Ensure environmental sustainability: Related Indicators

District	Access to adequate sanitation (%)
Malawi	5.5
Rumphi	3.8
Nsanje	6.1
Blantyre	13.5
Karonga	2.6
Zomba	5.5
Mulanje	1.0
Lilongwe	7.6
Ntcheu	7.9
Chitipa	0.7
Mchinji	1.6
Nkhotakota	6.9
Nkhatabay	2.9
Machinga	11.2
Chikwawa	2.2
Mzimba	5.6
Chiradzulu	0.9
Dedza	1.4
Mangochi	4.0
Dowa	1.0
Thyolo	4.2
Salima	4.5
Kasungu	4.2
Mwanza	0.9
Ntchisi	17.6

Source: State of the Environment Report -2001, Ministry of Natural Resources and Environmental Affairs.

Table 6: MDG 7 Households using unsafe water source and with sanpplants as % of LA population

District Assem- bly	Population us ing unsafe wa ter sources	Households with pit latrines (District base- line 2004)	Household with pit latrines (District 2015 target)
<b>Malawi*</b>	<b>35%</b>	<b>(10)</b>	<b>(10)</b>
Balaka	23.60	76	84
Balaka Town	5.00		84
Blantyre City	5.00	82	90
Blantyre Rural	16.70	82	90
Chikwawa	38.80	42	77
Chiradzulu	36.70	89	100
Chitipa	55.40	77.5	84
Dedza	40.80	74	84
Dedza Town	6.80		84
Dowa	53.00	75	84
Karonga	27.00	65	84
Karonga Town	6.60	65	84
Kasungu	62.30		90
Kasungu Town	6.80	85	95
Likoma	73.20	85	95
Lilongwe City	6.80		84
Lilongwe Rural	29.60	15	30
Liwonde Town	5.00		84
Luchenza Town	5.00		77
Machinga	44.70	72	40
Mangochi	47.90	52	50
Mangochi Town	5.00		77
Mchinji	29.30	67	84
M'mbelwa (Mzimba)	44.40		77
Mulanje	40.20	57	84
Mwanza	46.20	45	77
Mzuzu City	6.60		84
Nkhata Bay	52.00	56	77
Nkhotakota	49.30	69.1	84
Nsanje	25.30	22.5	50
Ntcheu	27.60	78	25
Ntchisi	60.30	59	84
Phalombe	42.40	54	84
Rumphi	41.00	65	84
Salima	39.80	70	84
Salima Town	6.70		84
Thyolo	55.10	54.6	77
Zomba Municipality	5.00		90
Zomba Rural	33.30		90

\* Source: National Population Policy (2002)

Source: National Local Government Finance Committee Resource Allocation Formula

Table 7: MDG 8 Develop global partnership for development: Related Indicators

Name of District	Total Population	OPD total attendance	OPD Visits/Population ratio
<b>Malawi</b>	<b>11,065,333</b>	<b>11,671,511</b>	<b>1.05</b>
Balaka DA	274004	390,590	1.43
Blantyre CA		247,485	
Blantyre DA	933767	907,109	0.97
Chikwawa	372165	511,525	1.37
Chiradzulu DA	248091	90,390	0.36
Chitipa DA	143461	147,825	1.03
Dedza DA	552786	214,924	0.39
Dowa DA	459603	399,314	0.87
Karonga DA	220032	360,475	1.64
Kasungu DA	573635	410,225	0.72
Lilongwe CA		230,603	
Lilongwe DA	1553238	1,230,553	0.79
Machinga DA	404,099	338,723	0.84
Mangochi DA	675155	1,414,168	2.09
Mchinji DA	365851	291,748	0.80
Mulanje DA	441733	393,768	0.89
Mwanza/Neno	138,832	183,806	1.32
Mzimba DA	635712	497,178	0.78
Mzuzu CA		75,750	
Nkhatabay DA	196269	208,534	1.06
Nkhotakota DA	271816	379,781	1.40
Nsanje	191057	284,795	1.49
Ntcheu DA	376352	353,737	0.94
Ntchisi DA	194619	299,723	1.54
Phalombe DA	236377	212,489	0.90
Rumphi DA	162158	205,817	1.27
Salima DA	332284	395,943	1.19
Thyolo	472,912	276,572	0.58
Zomba DA	639325	572,758	0.90
Zomba MA		145,203	

Source: Malawi Health Management Information Bulletin, Annual Report June 2002 – July 2003, Ministry of Health and Population, Planning Department, Health Management Information Unit