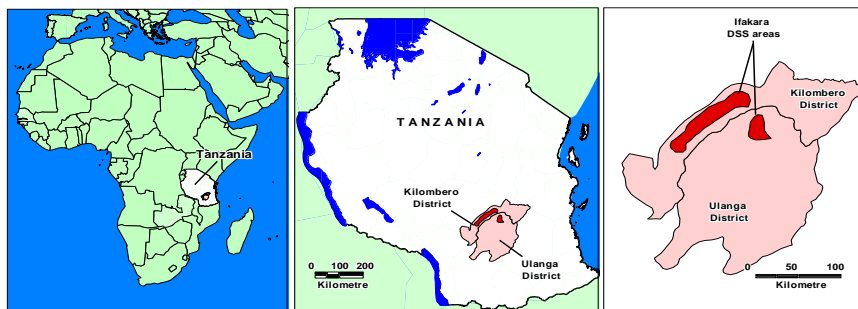


## Ifakara HDSS, Tanzania

### Site Map –



### Brief Description

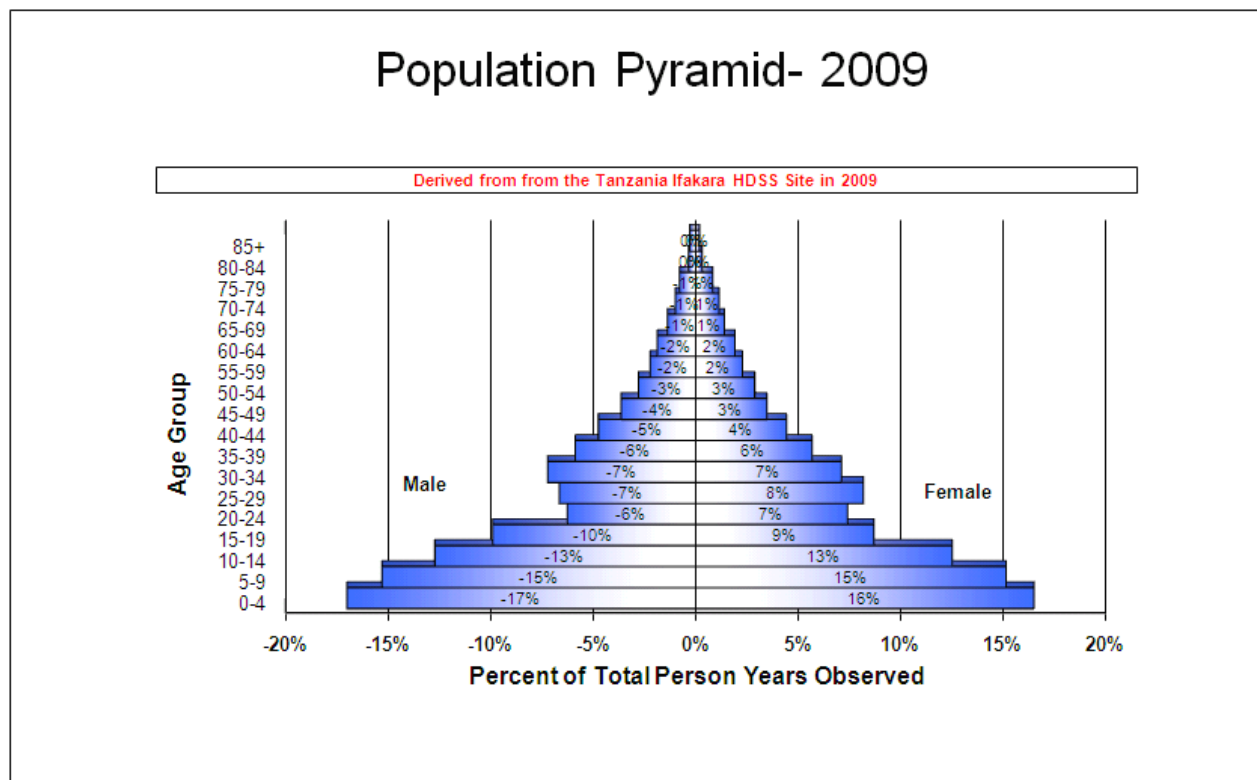
The Ifakara Health and Demographic Surveillance System (HDSS) area is located in southern Tanzania in parts of two districts, Kilombero and Ulanga both in Morogoro region (latitude 8° 00.'to 8° 35'S, altitude 35° 58 to 36° 48'E). Cover a total of 25 villages in rural area of Ulanga nd Kilombero districts, with a population of about 124,000 people in 28,000 households.

In June 2007 the surveillance area was extended to include five villages of Ifakara Town. This makes a total 30 villages with a population of 168000 in 38,000 households under health surveillance. All are in the flood plain of the Kilombero River.

Since January 1997, every registered household has been visited every four months by an interviewer who records demographic events such as pregnancies, births, deaths, in and out migrations of the household members. All information is recorded in the “household record book”(HRB) and on event-specific forms. HRBs are bound into bundles of approximately 50 households that have visitation dates close to each other. Interviewers report their work on a weekly basis to a supervisor, who brings the completed work to a weekly field meeting in Ifakara. All household visits and events are recorded in a database system. Any inconsistencies that cannot be resolved, forms are

sent back to the field team for correction. All members of new households are registered as in migrants.

The four- month fieldwork cycle starts every January, May and September each involves a week of training, then 14 weeks of field work. This is followed by one week of holiday and lastly one week of resolving queries in the field which have arisen from the work of the previous four months. The households to be visited each week are allocated according to a strict schedule to try to ensure visits are exactly four months apart.



## Demographic Characteristics

### 1. Age Specific death rates

	2005	2006	2007	2008	2009	2010
Neonatal mortality rates	36.6	34.6	31.6	29.2	28.9	33.3
Probability of deaths by age 1 (1q0) per 1000 live births	88.4	73.9	65.1	65	59.8	55.6
Probability of deaths by age 5 (5q0) per 1000 live births	126.6	106.2	99.9	95.2	87.8	80.1

<b>Basic Vital statistics (2010)</b>	<b>Rates (per 1000 person years)</b>
Crude birth rate	33.5
Total fertility rate	4.5
Crude death rate	7.6
Post neonatal mortality rate	19.6
Crude rate of natural increase	25.9
In-migration rate	275.9
Outmigration rate	151.3
Life expectancy at birth (Females)	62.0
Life expectancy at birth (Males)	61.0
All	61.2

### Objectives

- To collect accurate information on health and survival;
- To monitor MDG 4 and MDG 5 in the study population
- To facilitate use of this information to improve health at district and national levels; and
- To provide a framework for population-based health research relevant to local health priorities and needs.
- To evaluate health tools and interventions

### Priority Research Areas

- Malaria
- Burden of disease
- Health and poverty
- Effectiveness of malaria control tools
- HIV/AIDS and TB
- Non communicable diseases
- Maternal and newborn health
- Health Systems

### Funders

<b>No.</b>	<b>Donor Institution Name</b>
1	Ministry of Health and Social Welfare, Tanzania
2	Swiss Agency for Development and Cooperation (SDC)
3	Medicines for Malaria Venture (MMV)
4	Malaria Vaccine Initiatives/Glaxo Smith Kline
5	Novartis Foundation for Sustainable Development (NFSD)
6	Bill and Melinda Gates Foundation (BMGF)
7	US – Centre for Disease Control and Prevention (CDC)
8	United States Agency for International Development (USAID)
9	World Bank (WB)
10	World Health Organization (WHO)
11	Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM)
12	Doris Duke Charitable Foundation (DDCF)

13	Comic Relief, UK
14	UK Department for International Development (DFID)

### Collaborators

No.	Collaborating Institution Name
1	INDEPTH Network
2	Nelson Mandela African Institute of Science and Technology, Arusha
3	Swiss Tropical and Public Health Institute
4	London School of Hygiene and Tropical Medicine
15	Columbia University in the City of New York, US
26	University of Witwatersrand, School of Public Health, SA
37	INDEPTH Network
58	Wageningen University and Research Centre, Netherlands
69	Liverpool School of Tropical Medicine, Uk
710	Herbert Kairuki Memorial Hospital (HKMH), Tanzania
118	University of Dodoma (UDOM), Tanzania
12	Navrongo Health Research Centre, Ghana
13	Harvard University
14	Manhica Health Research Centre, Mozambique
15	East African Network for Monitoring Malaria Treatment
16	Genome Institute of Singapore (GIS)

### Key Publications

- Abdulla S, Sagara I, Bormann S, D'Alessandro U, Gonzalez R, Hamel M, Ogutu B, Martensson A, Lyimo J, Maiga H, Sasi P, Nahum A, Bassat Q, Juma E, Otieno L, Bjorkman A, Beck HP, Andriano K, Cousin M, Lefevre G, Ubben D and Premji Z. **Efficacy and safety of artemether-lumefantrin dispersible tablets compared with crushed commercial tablets in African infants and children with uncomplicated malaria: a randomized, single-blind, multicentre trial.** *Lancet* 2008; 372: 1819-27.
- Kara Hanson, Rose Nathan, Tanya Marchant, Hadji Mponda, Caroline Jones, Jane Bruce, Godlove Stephen, Jo Mulligan, Hassan Mshinda, Joanna Armstrong Schellenberg . **Vouchers for scaling up insecticide-treated nets in Tanzania. Methods for monitoring and evaluation of a national health system intervention.** *BMC Public Health* 2008; 8, 205.
- Tanya Marchant; Rose Nathan; Caroline Jones; Hadji Mponda; Jane Bruce; Yovitha Sedekia; Joanna Schellenberg; Hassan Mshinda and Kara Hanson. **Individual, facility and policy level influences on national coverage estimates for intermittent preventive treatment of malaria in pregnancy in Tanzania.** *Malaria journal* 2008, 7:260

- Adiel K Mushi; Joanna Schellenberg; Mwifadhi Mrisho; Fatuma Manzi; Conrad Mbuya; Haji Mponda; Hassan Mshinda; Marcel Tanner; Pedro Alonso; Robert Pool and David Schellenberg. **Development of behaviour change communication strategy for a vaccination-linked malaria control tool in southern Tanzania.** *Malaria Journal* 2008, 7:191
- Honorati Masanja; Don de Savigny; Paul Smithson; Joanna Schellenberg; Theopista John; Conrad Mbuya; Gabriel Upunda; Ties Boerma; Cesar Victora; Tom Smith and Hassan Mshinda. **Child survival gains in Tanzania: analysis of data from demographic and health surveys.** *Lancet* 2008; 371: 1276-83
- Manuel W Hetzel; Brigit Obrist; Christian Lengeler; June J Msechu; Rose Nathan; Angel Dillip; Ahmed M Makemba; Christopher Mshana; Alexander Schelze and Hassan Mshinda. **Obstacles to prompt and effective malaria treatment lead to low community-coverage in two rural districts of Tanzania.** *BMC Public Health* 2008, 8:317 doi:10.1186/1471-2458-8-317
- Fatuma Manzi; Joanna Schellenberg; Yuna Hamis; Adiel K. Mushi; Kizito Shirima; Alex mwita; Azma Simba; Neema Rusimbamayila; Mary Kitambi; Marcel Tanner; Pedro Alonso; Hassan Mshinda; David Schellenberg. **Intermittent preventive treatment for malaria and anaemia control in Tanzanian Infant; the development and implementation of a public health strategy.** *Translations of the Royal Society of Tropical Medicine and Hygiene* (2008)103,79-86
- Elizeus Kahigwa, Montse Garcia, Max Petzold, Peter Olumese, Abdullah Ali, Anders Björkman, **Influence of Rapid Malaria Diagnostic Tests on Treatment and Health Outcome in Fever Patients, Zanzibar—A Crossover Validation Study,** *PLoS Med* 6(4): e1000070. doi:10.1371/journal.pmed.1000070
- Issa N. Lyimo and Heather M. Ferguson, **Ecological and evolutionary determinants of host species choice in mosquito vectors,** *TREPAR*-817; doi:10.1016/j.pt.2009.01.005
- Mwifadhi Mrisho, Brigit Obrist, Joanna Armstrong Schellenberg, Rachel A. Haws, Adiel K. Mushi, Hassan Mshinda, Marcel Tanner and David Schellenberg, **The use of antenatal and postnatal care: perspectives and experiences of women and health care providers in rural southern Tanzania,** *BMC Pregnancy and Childbirth* 2009, 9:10 doi:10.1186/1471-2393-9-10

Alba S, Dillip A, Hetzel MW, Mayumana I, Mshana C, Makemba A, Alexander M, Obrist B, Schulze A, Kessy F, Mshinda H, Lengeler C. Improving in access to Malaria treatment in Tanzania following, community retail sector and health interventions. *Malaria Journal* 2010, 9:163 (15 June 2010)

- Mwanyangala, M., Mayombana, C., Urassa, H., Charles, J., Mahutanga, C., Abdullah, S., Nathan, R.. Health status and quality of life among older adults in rural Tanzania. *Global Health Action, North America*, 3, sep. 2010. Available at: . *Date accessed: 27 Sep. 2010.*
- Lutambi, A., Alexander, M., Charles, J., Mahutanga, C., Nathan, R.. Under-five mortality: spatial-temporal clusters in Ifakara HDSS in South-eastern Tanzania. *Global Health Action, North America*, 3, aug. 2010. Available at: . *Date accessed: 30 Sep. 2010.*
- KOWAL, P., KAHN, K., NG, N., NAIDOO, N., ADBULLAH, S., BAWAH, A., BINKA, F., CHUC, N., DEBPUUR, C., EZEH, A., GÓMEZ-OLIVE, F., HAKIMI, M., HIRVE, S., HODGSON, A., JUVEKAR, S., KYOBUTUNGI, C., MENKEN, J., MINH, H., MWANYANGALA, M., RAZZAQUE, A., SANKOH, O., STREATFIELD, P., WALL, S., WILOPO, S., BYASS, P., CHATTERJI, S., TOLLMAN, S.. Ageing and adult health status in eight lower-income countries: the INDEPTH WHO-SAGE collaboration. *Global Health Action, North America*, 3, sep. 2010. Available at: . *Date accessed: 30 Sep. 2010.*
- Mathew A Mwanyangala, Honorathy M Urassa, Jensen C Rutashobya, C Mahutanga, Angelina M Lutambi, Deodatus V Maliti, Honorati M Masanja, Salim K Abdulla and Rose N Lema [Verbal autopsy completion rate and factors associated with undetermined cause of death in a rural resource-poor setting of Tanzania](#) *Population Health Metrics* 2011, 9:41 doi:10.1186/1478-7954-9-41