

UNIVERSITY OF MINNESOTA



## The Whole Village Project

### Summary of Mnenia, Filimo, and Kelema Kuu in Kondoa District

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## INTRODUCTION

The purpose of this report is to present district officials and local leaders with multi-sectoral data across several villages in this district. We hope these data may be useful in seeing the strengths and weaknesses of different sectors and the variation across villages. These data may be useful in prioritizing future development projects. The villages represented here were selected by our donors for their project purposes and therefore they cannot be seen as representatives of the district. The data however, illustrate the diversity of economic and social development activities occurring across villages in the district.

The Whole Village Project (WVP) is collecting and analyzing comprehensive data at village level over an extended period of time. A collaborative project between Savannas Forever Tanzania (SFTZ), a Tanzanian NGO, and the University of Minnesota, USA, the Whole Village Project has a **vision** to work with people in rural Tanzanian villages to acquire and use knowledge for improving long-term health and well-being while sustaining natural resources. To achieve this goal, quantitative and qualitative data are systematically collected in villages across northern Tanzania by the Savannas Forever team in partnership with staff from the National Institutes of Medical Research (NIMR) and the Tanzanian Wildlife Research Institute (TAWIRI). The data are sent to the University of Minnesota for analysis and then returned to Tanzania. The SFTZ team returns to each village to present the data to villagers for their own use and decision-making. WVP intends to return to each village every two to three years in order to assess the sustainability of development projects over time and identify best practices.

In this report, we present a summary of data collected within a single district. Village-level surveys were conducted in Kondoa District in Mnencia, Filimo and Kelema Kuu from October to December, 2009.

## METHODOLOGY

The Whole Village Project's survey tools and methodology has been reviewed and approved by multiple Tanzanian research authorities (COSTECH, NIMR and TAWIRI) and the University of Minnesota institutional review board for the ethical conduct of human subjects research. Further, permissions are sought by the respective regional, district and village leadership before beginning data collection.

Village selection is based on the funding agency priorities and permission of government leaders. After permissions are received the Savannas Forever Tanzania (SFTZ) staff arrange dates for data collection with district officials and village leaders. A Tanzanian survey team of 6-7 personnel work in each village for 5-6 days. The team begins with a sensitization session with leaders and community members to introduce the project and staff. Village leaders provide a roster list of heads of households and the research team uses a computer generated randomization program to select 60-75 households from this list. A standardized quantitative survey is conducted in each selected household.

Data collection tools include both quantitative and qualitative instruments. All interviews and focus groups are conducted in Kiswahili whenever possible. If respondents are not fluent in Kiswahili, a bi-lingual villager is identified by the leadership to translate from the local language to Kiswahili. The core household survey asks questions about livelihood, earnings, educational status of all household members, assets, health and natural resource use. From the household members, two brief individual level surveys are conducted: (1) a HIV/AIDS knowledge, attitude and practice (KAP) survey and (2) an anthropometric assessment of children under-five and nutrition questions. For the KAP survey, up to 4 adults (15 years or older) within the household are asked to complete the survey. All interviews are conducted in a private space where no one else may listen. All children in the household under five are weighed and measured and the primary caretaker is asked to answer the accompanying survey.

In order to obtain more contextual data about each village, a number of focus group and key informant interview tools are used. Focus groups are conducted with men and women, village leaders, and a special group of agriculturalists and livestock holders. Village leaders invite villagers to participate and try to obtain diversity of representation by sub-village, age and gender. The research team also conducts an institutional assessment of village organizations with a mixed group of 10-15 villagers to identify the different NGOs, religious organizations, and government services working in the village and their respective strengths, weaknesses and contributions to the community. In addition, key informant interviews are conducted with school headmasters and clinic officers. A detailed list of survey instruments and focus group guides can be found in Appendix A.

## **KEY FINDINGS**

The research captured a broad range of information about myriad aspects of three villages in Kondo District. Overarching district strengths, gaps, and opportunities were pulled from the abundance of data collected and analyzed and are presented below. Detailed results and discussion are presented in the full report.

### **District Strengths**

There are a number of NGOs and institutions that provide useful services to the residents of Kondo. Five organizations provide education and training on HIV/AIDS and other organizations support agricultural development and access to new crops such as jatropha. While not all NGOs are receiving high ratings from residents, most organizations have been able to provide helpful services, technologies and supplies to at least a portion of the villages.

Most children under five years old are found to be adequately nourished throughout the district. Although sustenance for young children primarily centers on ugali and milk, there appears to be sufficient food, indicated by the average height-for-weight z scores. Moreover, vaccination rates for children under five are high in all three villages for BCG, polio, and DPT. Mnesia, consistently ranked the lowest in vaccination rates, had still been able to vaccinate almost 90% of all young children for the diseases.

Other health factors such as mosquito net ownership, though slightly varied, were found to be relatively good in the district. The majority of households (approximately 80% for the district) owned mosquito nets and over half of all households owned nets treated with insecticide. Such high proportion of mosquito net ownership further prevents the spread of illness and disease.

### **District Gaps**

Access to water was problem more particular to Kelema Kuu and Filimo. Mnesia stood as the exception as there were two sources of clean water, including a public tap that were available to all residents all year. In the case of Kelema and Filimo, the shortage of water was a commonly cited problem. Filimo relies on an “unreliable” water machine, often forcing residents to obtain water from ponds or other villages. People from Kelema also noted that they must often use pond water as well. Due to drought and a seeming lack of water services and infrastructure, primary sources of water are found to be available only 6 months of the year.

Livestock losses, particularly chickens, were high throughout the district. Nearly 50% of chickens in Kondoa district were lost to disease. Cows and goats, although to a much lesser degree were also lost to disease. Kelema was the only village that administered a significant amount of vaccines to cows and goats, both at 90% of the herd. Yet, it also lost the highest proportion of both animals.

Education services tended to be lacking in Kondoa district. Only 52% of adults in Kelema and 56% in Filimo completed primary school. Mnenia stood out with higher primary school completion rates for adults at 73%. For the entire district, there are 3 primary schools and 1 secondary school with widespread shortage of teachers and facilities. These shortages are indicated through qualitative survey responses and high teacher to student and classroom to student ratios, as high as 1:60 and 1:77 respectively.

There were a large number of households that noted significant and unexpected losses in terms of income and assets. Almost three-quarters to four-fifths of respondents declared a loss of one or both income and assets, particularly crops due to weather. It was also found that less than half of children under five years old are taken care of by both parents in Filimo (49%) and Mnenia (43%). Losses in income and assets appear to have been steep in the last year.

## **Opportunities**

Within the strengths and weaknesses, there are a number of opportunities that district and village leaders can undertake. The already high percentage of mosquito net coverage has established conditions that can make 100% coverage possible. Moreover, the villages can move toward significantly increasing the number of nets treated with insecticide.

High HIV/AIDS knowledge scores throughout the district indicate that the large number of organizations that provide education and training on HIV awareness and prevention can have a positive influence. The current figures for HIV testing and awareness could be enhanced in the future to lead to more complete awareness and training.

Despite inadequacies in educational facilities, improving education is generally a high priority in Kondoa district. In Filimo, they have worked to address part of the problem by commencing construction on a new educational building though it has not yet been completed. The high

prevalence of NGOs in Kondoa district does not include many organizations that focus on education. More organizations that focus on educational development may be able to enhance the educational environment in the district.

		Mnenia	Filimo	Kelema Kuu
<b>THE HOUSEHOLD AND HOUSING</b>				
	Number of households surveyed	60	60	60
	Average household size	4.97	5.37	5.39
	% households in polygamous marriage (more than 1 wife)	8.3	16.7	16.7
	% of households headed by women	22%	28%	22%
	% of households with modern roof	88%	83%	50%
	% of households using a toilet	2%	0%	0%
	% households connected to electricity grid	3	0	0
	Avg time (minutes) required to collect water	24.68	44.69	37.96
	% households use firewood as primary energy source for cooking	95%	98%	98%
<b>EDUCATION</b>				
	% of all adults without education	30%	28%	15%
	% of household heads completed primary school	45%	36%	66%
	% of adult men completed primary school	63%	51%	79%
	% of adult women completed primary school	47%	53%	67%
	Average primary school teacher to student ratio	1:55	n/a	1:60
	Average primary school textbook to student ratio	1:3	1:3	1:4
	Average secondary school teacher to student ratio	n/a	n/a	1:38
	Average # of years teachers stay at primary school	14	3	8
	Average # of years teachers stay at secondary school	n/a	n/a	4
<b>HEALTH</b>				
	% of households with at least one mosquito net	78%	82%	87%
	% of households that use traditional medicine often or very often	n/a	n/a	n/a
	% of households with access to protected drinking water	67%	12%	0%
	% of households that take measures to make the water safe	78%	48%	37%
	# of hospital/dispensary/clinic in the village			
<b>CHILDREN UNDER 5</b>				
	% of infants exclusively breast fed through 6 months of age	20%	19%	22%
	Average age (months) at introduction of complementary feeding	6 mo	3.7 mo	4.4 mo
	% of children whose birth mother is still alive and inside the hh	80%	87%	85%
	% of children moderately to severely underweight	17%	14%	10%

		Mnenia	Filimo	Kelema Kuu
	% of children who are vaccinated for BCG	88%	96%	95%
	% of children who are vaccinated for polio	88%	96%	95%
	% of children who are vaccinated for DPT	88%	94%	98%
	% of children who are vaccinated for measles	80%	85%	80%
	% of children received Vitamin A supplement	94%	80%	78%
	% children with fever reported in past 3 months	39%	43%	40%
<b>AIDS KNOWLEDGE</b>				
	% of men with high AIDS knowledge score (5-6 points)	77%	74%	88%
	% of women with high AIDS knowledge score (5-6 points)	81%	95%	91%
	% of women who know that a person can protect themselves from HIV	98%	98%	98%
	% of men who know that a person can protect themselves from HIV	100%	100%	96%
	Perception of risk of mother-to-child transmission of HIV	98%	92%	90%
	% of men who have talked with their wife/primary partner about ways to prevent AIDS	82%	82%	87%
	% of women who have talked with their husband/primary partner about ways to prevent HIV/ AIDS	89%	63%	72%
	% of men ever tested for HIV	60.6	55.3	67.9
	% of women ever tested for HIV	51.9	59.3	55.7
<b>FOOD SECURITY AND NUTRITION</b>				
	% of households worried about food in the past 4 weeks	71%	52%	70%
	% of households ate limited variety of food in the past 4 weeks	74%	97%	75%
	% of hhs went one day and night with no food in the past 4 weeks	0%	3%	17%
	% of households that are currently growing kitchen garden	22%	22%	7%
	Avg # of days/times hhs ate meat protein in past week	2.4	1.5	1.3
	Avg # of days/times hhs ate legumes in past week	3.1	3.0	1.6
	Avg # of days/times in last week hh ate foods with Vitamin A	2.7	2.2	1.4
	# of different types of food eaten in last week	7.1	6.5	5.9
	Food Security Index	3.9	3.5	4.1
<b>ECONOMIC ACTIVITY, AGRICULTURE AND INCOME</b>				
	% households own any agricultural land	88%	97%	92%
	Average acres cultivated per household	4.0	4.5	5.0

	Mnenia	Filimo	Kelema Kuu
Average # of cattle owned per household	1.2	2.0	3.1
Average # of goats/sheep owned per household	1.8	2.8	4.1
Average # of chickens owned per household	2.3	3.1	2.8
% of hhs whose chicken are vaccinated for newcastle disease	34%	26%	10%
% of cattle lost to disease in the past 12 months	18%	6%	24%
% of cattle lost to drought in the past 12 months	0%	2%	2%
% of cattle lost to wildlife in the past 12 months	0%	0%	0%
% of chickens lost to disease in the past 12 months	54%	45%	48%
% of chickens lost to drought in the past 12 months	0%	0%	0%
% of chickens lost to wildlife in the past 12 months	5%	10%	6%
% of goats/sheep lost to disease in the past 12 months	10%	13%	19%
% of goats/sheep lost to drought in the past 12 months	0%	0%	0%
% of goats/sheep lost to wildlife in the past 12 months	1%	3%	3%
% of household heads with the main occupation of farming	88%	92%	96%
% of hh heads with the main occupation of livestock keeping	0%	0%	0%
% HHs that report loss of crops due to wildlife destruction	n/a	n/a	n/a
% households with bicycle	33%	38%	43%
% households with radio	53%	35%	52%
% households with cell phone	38%	23%	30%
<b>LOCAL INSTITUTIONS</b>			
# of village committees/groups	14	8	9
# of NGOs	5	6	8
# of credit, banking services or VICOBA	0	0	1
<b>UNEXPECTED TRAUMA OR LOSS</b>			
% of HH which had at least one major <b>unexpected</b> shock or trauma in past 12 mo (ex. Death, loss of job, crop failure)	87%	77%	78%
% of HH with major trauma that lost income and assets	27%	23%	33%
% of most frequent trauma/loss and type within village	Loss of crops due to weather	Rise in food prices	Loss of crops due to weather; food prices
<b>DEMOGRAPHICS</b>			
Religion (% Christian; %Muslim; % Traditional)	98% Muslim	97% Muslim	98% Muslim

		<b>Mnenia</b>	<b>Filimo</b>	<b>Kelema Kuu</b>
	Dependency Ratio	128	129	121
	Child-Woman Ratio	0.48	0.46	0.47
	Sex Ratio	0.88	1.2	1