AFGHANISTAN

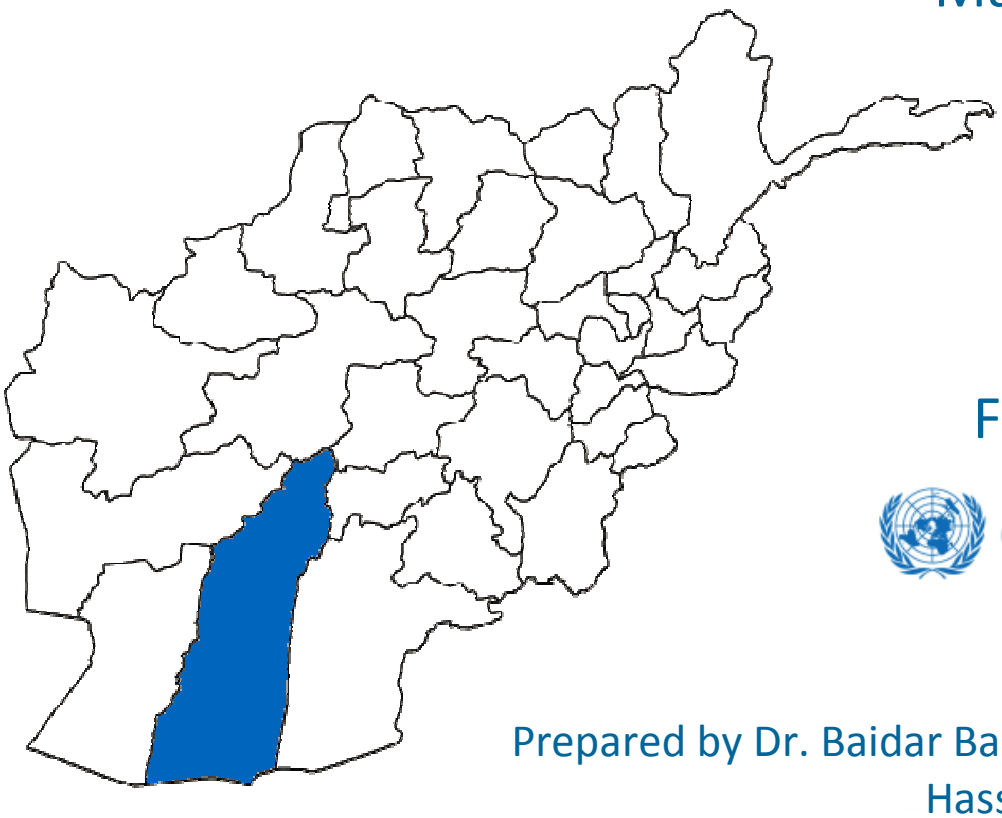
Afghanistan Center for Training and Development (ACTD)

ACF INTERNATIONAL Afghanistan

Nutrition and Mortality SMART Survey

Preliminary Report

Helmand Province, Afghanistan
March 2015



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Prepared by Dr. Baidar Bakht Habib and Hassan Ali Ahmed

Action Contre la Faim
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ABBREVIATIONS

ACF	Action contre la faim/Action Against Hunger
ACTD	Afghanistan Centre for Training and Development
BHC	Basic Health Centre
BPHS	Basic package of health services
CDR	Crude Death Rate
CHF	Common Humanitarian Fund
CSO	Central Statistics Organization
ENA	Essential Nutrition Action
GAM	Global Acute Malnutrition
HAZ	Height for Weight
HF	Health Facility
HH	Household
IYCF	Infant and Young Child Feeding
MOPH	Ministry of Public Health
MUAC	Mid-upper arm circumference
MW	Measured Weight
OW	Observed Weight
PPS	Probability Proportional to Size
RC	Reserve Cluster
RNA	Rapid Nutrition Assessment
SAM	Severe Acute Malnutrition
SD	Standard Deviation
SMART	Standardized Monitoring and Assessment of Relief and Transitions
U5DR	Under 5 Death Rate
WASH	Water, Sanitation and Hygiene
WFP	World Food Program
WH	Weight for Height
WHO	World Health Organization

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1. INTRODUCTION

Helmand is one of the 34 provinces of Afghanistan. Located in the southern part of the Afghanistan, the Helmand Basin region is encompassed entirely by mountains - the Hindu Kush to the North, the East Iranian ridges to the West, and the mountains of Baluchistan Province to the East and South. The lower portion of the Basin is located in the worldwide subtropical dry zone. As a result, the area is arid or hyper arid. The lower Helmand Basin receives less than 75 millimetres (3 inches) of precipitation annually. Because winters are colder than it is typical for the subtropical dry zone, the basin more closely resembles the large, continental deserts of Asia than the subtropical deserts found in Northern Africa and the Middle East.

Helmand borders Kandahar, Nimroz, Farah, Ghor and Daykundi provinces. Administratively Helmand has a population of about 894,200[1] and is divided into 14 districts with Lashkargah City being the provincial capital. Demographically the predominant tribe is the Pashtu although there are other minority tribes like the Baluchi, Tajik and Hazaras. The most commonly spoken language in the province is Pashtun.

There are a total of 14 districts in Helmand Province. Only 5 districts out of these 14 districts were surveyed in Helmand province due to security and inaccessibility challenges. The population of these 5 districts represents 38.82% of the entire population of the Province. According to SMART methodology, the results cannot be extrapolated to the whole province but only representative of the surveyed areas. This is a limitation with regards to having a complete picture of the nutritional status of children under five year's old and pregnant/lactating women in Helmand province.

2. OBJECTIVE OF THE SURVEY

2.1 Broad objective

This survey was justified by the need to obtain a more up to date nutrition and key health data specific to the area of intervention for BPHS implementers at province level in order to design better intervention strategies that are evidence based.

Afghanistan Center for training and Development (ACTD) was selected to participate in this survey because they are the BPHS implementer of nutrition activities within the BPHS program. Therefore, this has been viewed as a great opportunity of building their capacity on nutrition assessments and surveillance.

[1] CSO Population statistics 2012/13.

2.2 Specific objective

- To estimate the prevalence of under nutrition of 0-59 months children in Helmand province;
- To estimate crude death rate and under five death rate in 5 districts of Helmand province;
- To determine IYCF practice for children 0-23 months in 5 districts of Helmand province;
- To determine the nutritional status of Pregnant and Lactating Women in 5 districts of Helmand Province;
- To estimate measles vaccination coverage among children aged from 9 – 59 months in 5 districts of Helmand Province;
- To estimate Vitamin A supplementation coverage among children aged from 6-59 month in 5 districts of Helmand Province;
- Two weeks recall morbidity & Zinc supplementation;
- To collect key WASH data and indicators.

3. METHODOLOGY

Survey area:

This survey covered 5 out of 14 districts of Helmand Province (Lashkar Gah, Greeshk (Nahri Seraj), Nawa, Nadali and Marjah).

Survey period:

The survey was conducted from 21st February 2015 to 3rd March 2015.

Survey design:

The survey was a cross sectional study with two-stage cluster sampling using Standardized Monitoring of Relief and Transition (SMART) methodology. Villages were considered as the smallest geographical unit (clusters).

Survey population:

Out of (879500[2]) total population of Helmand this survey covered (341,482[3]) population. This represents 38.8% of the entire population of Helmand province.

Sample size:

Emergency Nutrition Assessment (ENA) for SMART software delta version 2011 updated November 2014, was used for sample size calculation (parameters used for sample size calculation are in Annex 1).

4. PRIMARY RESULTS

[2] Settled Population of Helmand province by Civil Division , Urban, Rural and Sex-2012-13 (CSO report)
[3] Sampling frame for SMART survey March 2015

For the sake of timely presentation of survey results, here below is a preliminary summary of finding with regards to key nutrition and health indicators. The final report will contain the full analysis and will be completed within one month once completion of field data collection.

A total of 1128 children aged 0-59 months were assessed for their nutritional status through anthropometric measurements from 662 sampled households. The data quality analysis is presented in Annex 2 (plausibility check on anthropometric results).

Table 1: Summary of Nutrition and Health Indicator Results, Helmand, March 2015. Results presented in brackets are expressed with 95.0% confidence interval (CI)

Index	Indicators		Results (CI 95%)
Under nutrition Children 6-59 months (WHO 2006)	WHZ- scores (n=1128)	**Global Acute Malnutrition** *Weight for height< -2 z and/or edema**	**2.7%** (1.8-3.9)
		Severe Acute Malnutrition *Weight for height < -3 z and/or edema*	**0.0%** (0.0-0.0)
		Moderate acute malnutrition *Weight for height <-2 z-score and >=-3 z-score*	**2.7%** (1.8-3.9)
	HAZ- scores (n=1042)	**Stunting** *Height for age <-2 z-score*	***48.7%*** (44.9-52.5)
	WAZ-scores (n=1137)	**Underweight** *Weight for age <-2 z-score*	**21.1**% (17.7-24.9)
	MUAC (n=1154)	**Global Acute Malnutrition** *MUAC <125 mm or edema*	**9.6%** (7.2-12.7)
		Severe Acute Malnutrition *MUAC <115 mm or edema (<115mm)*	**2.1**% (1.3- 3.4)

The survey showed that the Crude Mortality Rate (CMR) and under five mortality rate (U5MR) were 0.11 (95% CI: 0.05 – 0.22) and 0.47 (95% CI; 0.24 – 0.94) respectively. Both CMR and U5MR rates were below the WHO's emergency thresholds of 2/10,000/day and 4/10,000/day respectively.

Retrospective morbidity data was collected among children 6-59 months (two-week recall) to assess the occurrence of main diseases. The survey established that 17.5% (210 cases) had been sick two weeks prior to survey period. Out of those, 54.8% (115 cases) reported to have had episodes of Cough/ARI, 39.0% (82 cases) fever, 27.1% (57 cases) watery diarrhea, 1.9% (4 cases) bloody diarrhea. Out of the 57 cases that were reported to have watery diarrhea only 5 cases (11.9%) reported to have received zinc supplementation as part of the treatment for diarrhea.

The survey also assessed the supplementation of vitamin A, deworming and vaccination among

children 0-59 months. According to the survey findings 38.3% (383 cases) of children 9-59 months were vaccinated against measles, out of these only 20.8% could be verified by card while the rest were recall and 50.7% (611) of children 0-59 months had received BCG vaccination. Vitamin A supplementation for children 6-59 months 6 months prior to the survey was found to be at 13.2% (145 cases).

5. SUMMARY OF KEY RECOMMENDATION

Some key recommendations have been drawn after the context analysis and the preliminary results from the survey. However, a complete set of detailed recommendations will be presented in the final report.

5.1 Nutrition status

- Prioritize activities addressing chronic malnutrition, high stunting rates, at the community level, through integrated food security, WASH, nutrition and IYCF programs;
- Continue implementing the integrated management of acute malnutrition (IMAM) program and where applicable start up new outreach sites to access as many of the malnourished children as possible;
- Scale up community detection and referral of children with acute malnutrition through community health workers and providing health education to the entire community on symptoms of malnutrition.

5.2 Health status

- Strengthening of outreach services and integrating supplementation in all immunization campaigns;
- Enhanced integration and expanded coverage for nutrition and other health programmes in all basic health centres and health posts;
- Comprehensive analysis on the barriers and boosters to improved health seeking behaviour and the further vigorous campaigns targeting the entire population are required in Helmand province, which should allow their children to better attend existing services;
- Intervention programs for improving water, sanitation and hygiene practices including health education to educate the community on domestic treatment of drinking water and proper disposal of human faecal waste to avoid contamination of water sources. Diarrhea especially contributes much in the morbidity and mortality burden. There is need for mass hygiene promotion, hand-washing practices and diarrhea management skills.

6. ANNEXES

Annex 1: Sample size calculation for nutrition status using ENA for SMART software (Version 2011 November 2014 update)

Estimated GAM[4]	Precision	DEFF	U5 Population [5]	Av. HH size[6]	Non response	Sample size Children	Sample size HHs	Clusters (15HHs/ cluster)
10%	3	1.5	15.6%	7	6%	627	679	**46**

Annex 2: Plausibility check summary

Criteria	Missing/ flagged data	Overall sex ratio	Overall age distribution	Digit pref. score Weight	Digit pref. score Height	Digit pref. score MUAC	Standard deviation WHZ	Skewness WHZ	Kurtosis WHZ	Poisson distribution WHZ	Overall score WHZ
Score	0	0	10	0	2	0	0	0	0	0	**12**
Interpretation	Excellent	Excellent	Problematic	Excellent	Good	Good	Excellent	Excellent	Excellent	Excellent	**Good**

[4] GAM estimate average calculated from Previous SMART surveys.(NNS 2013 Helmand & SMART SCI Kandahar 2014)
[5] Afghanistan Mortality survey, 2010
[6] National vulnerability assessment of Afghanistan -2014