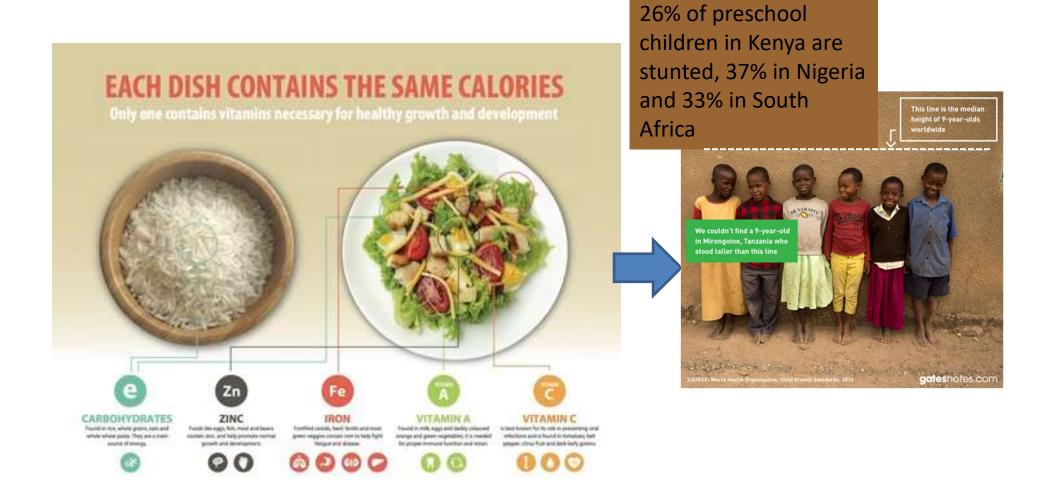




Smart Computing Framework to Mitigate Hidden Hunger in Africa

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June 2018

Hidden Hunger



http://www.huffingtonpost.ca/howard-schiffer/end-hidden-hunger_b_8215624.html

Project Team

16 Researchers from 4 countries from Australia and Africa









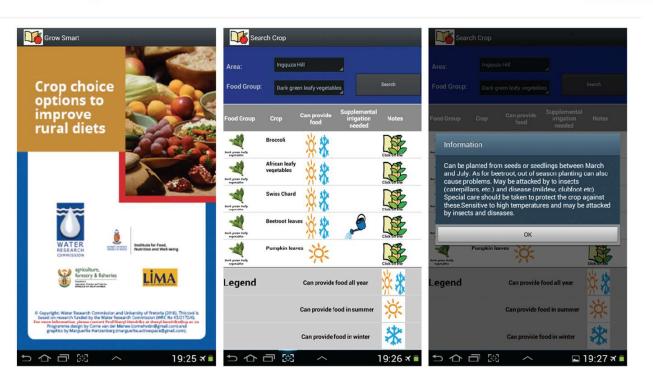




Findings from University of Pretoria study

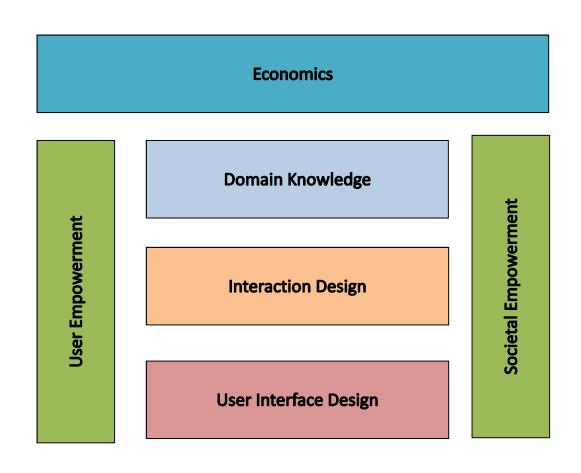


Food Security in Rural South Africa - Homegrown solutions for South Africa's hungry

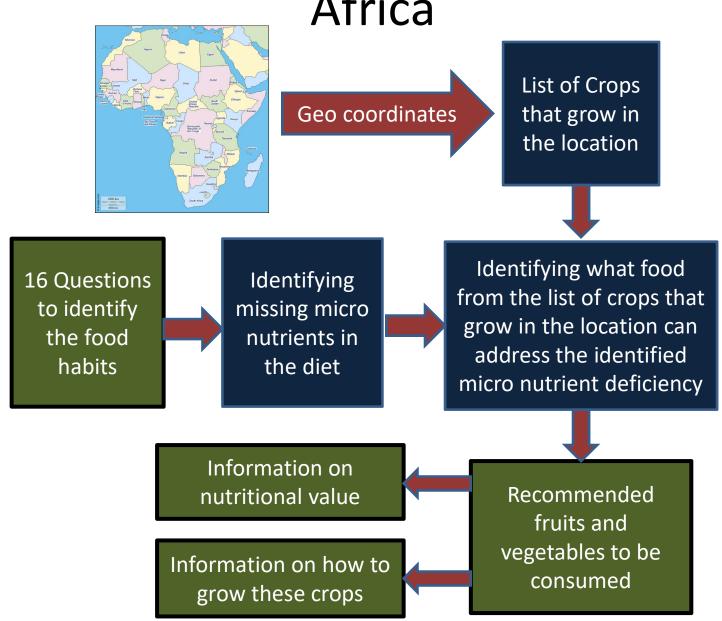




Smart Computing Framework



Mobile based Information System for Africa



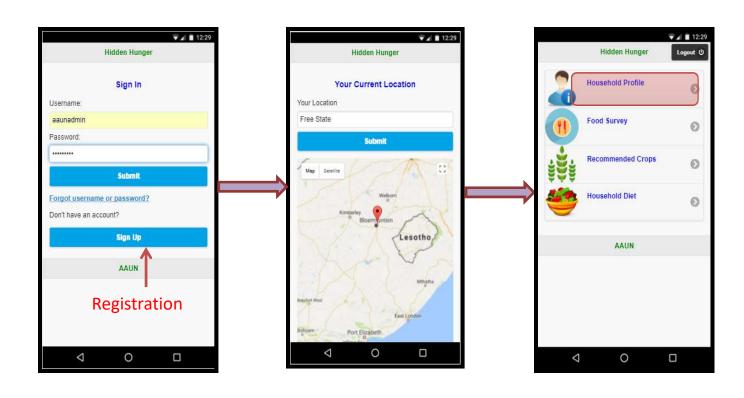
Application Assumptions



Item	Detail	
Survey Target	Information is collected based on household (not per person) in a specific region (in SA)	
Meals	Any food consumption or meal in a day	
Time period	24-hours, Last Survey	
Food groups	16 food categories	
Crops	Local crops only mapping for vegetables in food categories	

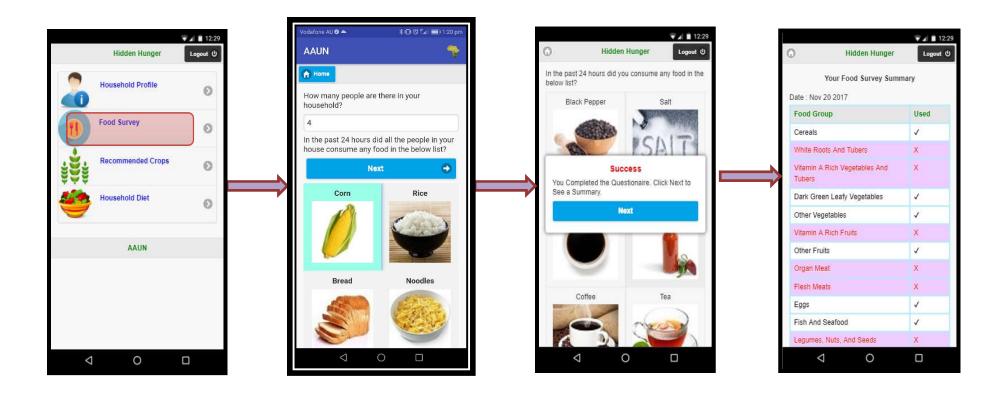
Registration and Login





Food Survey (24-hour recall)





Recommended Crops (Local Crops)





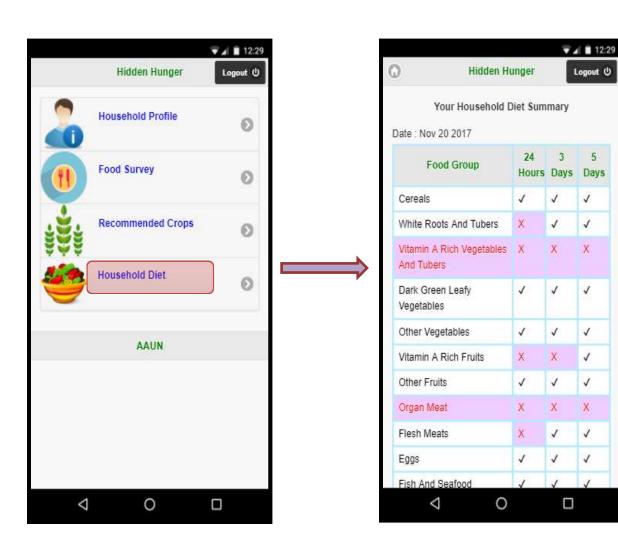






Household Diet





Data Analysis (back end)



AAUN							
•	Filter		Date: Jan 28 2018 > All Food Groups > All Regions Total No. of Users: 2				
Date From			Food Group	Households Consumed	Households Did Not Consumed		
			Cereals	50%	50%		
Date To			White Roots And Tubers	50%	50%		
			Vitamin A Rich Vegetables	100%	0%		
OR			Dark Green Leafy Vegetables	50%	50%		
Select No. Of Days			Other Vegetables	100%	0%		
	Last 24 Hours	0	Vitamin A Rich Fruits	50%	50%		
			Other Fruits	50%	50%		
Food Groups			Organ Meat	100%	0%		
	All	0	Flesh Meats	0%	100%		
			Eggs	50%	50%		
Region			Fish And Seafood	0%	100%		
	All	0	Legumes, Nuts, And Seeds	100%	0%		
			Milk And Milk Products	0%	100%		
Dieplay			Oils And Fats	0%	100%		
	Display		Sweets	100%	0%		
			Spices, Condiments, Beverages	50%	50%		
AAUN User Management Logout							

Evaluation



Two questions to answer:

1. Does the app address the hidden hunger problem?

Feedback from experts: food, nutrition, and crop scientists

Their feedback provided evidence that the we are in the right track

However, adjustments in the original design were needed

Evaluation



Two questions to answer:

2. Does the app promote change behavior in users?

Usability study with 6 users (25 to 50 years old), 50%

male, 50% female

Undertaking guided actions

in the app

Positive feedback, with

suggestions (some already implemented)

Evaluation



"One [participant was] very excited as he has been planting potatoes and doing it wrongly."