



THE UNIVERSITY
of ADELAIDE



Nutrition in transition in Vanuatu: *policies to improve household diet in Vanuatu*

Tim Martyn

Laupua Fiti

Dale Yi

Presentation Guide

- Evidence of stunting, micronutrient deficiency and NCDs
- Very little empirical analysis of household factors affecting nutrition outcomes or impact of policy/programme options to improve diet
- Present comparison of household dietary intake by household type (location, type of income, number of dependents, gender of household head, etc)
- Present optimum foods get minimum nutrition requirements,
- Identify policies and programs which could help improve access to nutritious foods and reduce health problems associated with current diet
- Need partnership in building evidence-based case for new approach

Vanuatu Nutrition Profile

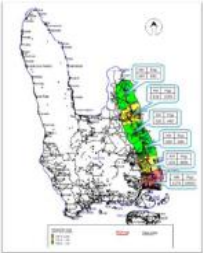
	Under-nourishment	Stunting (under 5 years)	anaemia	vitamin a deficiency	Obesity (% adults 25-64)	Diabetes (% adults 25-64)
Vanuatu	6.4	28.5	59	16.1	19.0	21.2
PIC Average	6.7	25.7	34.7	21.3	46.2	24.8

- Significant undernourishment and micronutrient deficiencies co-exist with rising rate of obesity/diabetes.



Low rate of food poverty in Vanuatu

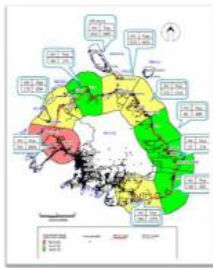
- FPL US\$2.30 p.p. per day – income required to purchase 2200 calories
- At this rate only 2.2% Vanuatu are considered ‘Food Poor’
- Little consideration given to quality of diet and nutrition and impact on both stunting and micronutrient deficiency



HIES 2010 Poverty Analysis

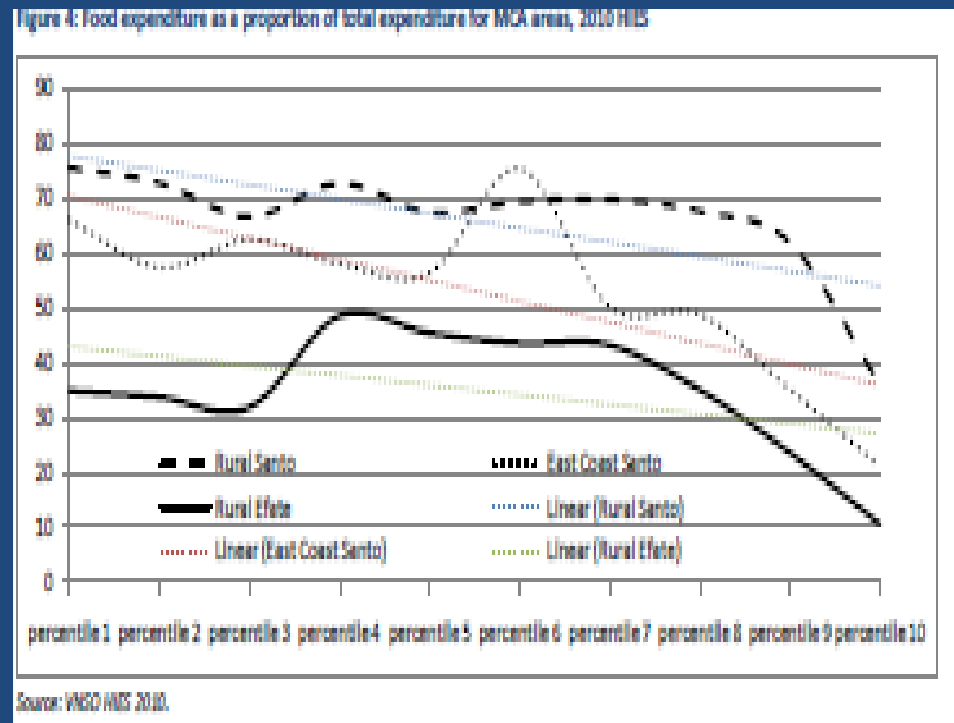
21 June 2011

Prepared for MCA (Vanuatu)



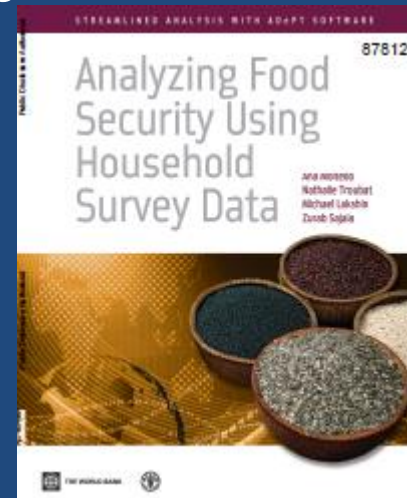
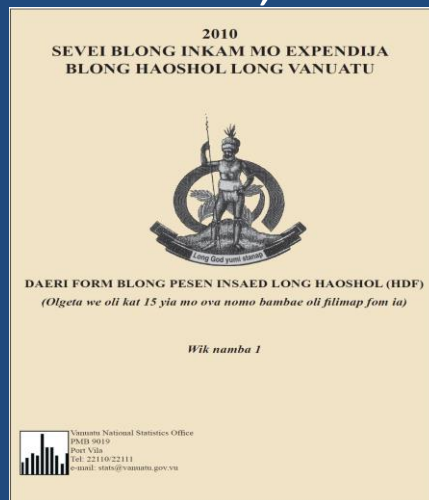
Monitoring progress towards achieving income and poverty targets in the transport sector for Rural Efate and East Coast Santo.

Prepared by: Kim Robertson, Poverty Consultant (MCA-V)



Using Household Income and Expenditure Surveys to estimation nutrition

- Establish access to food by nutrient and household type
- Good: Income (both subsistence and waged) expenditure (all types), physical activity and household risk factors (location, housing quality, ...). Core survey - every 5 years
- Bad: food expenditure not intake; intra-household distribution; consumer waste; stocks



Average intake across household types

VARIABLES	Overall	Rural	Urban	Female HH	No food production	5+ dependents
	n=3957	n=3037	n=920	n=501	n=1072	n=238
Caloric Intake (AME)	3056	3160	2710	3490	2492	1942
Calories <50%	0.21	0.21	0.28	0.18	0.21	0.42
Fat >150%	0.10	0.09	0.12	0.12	0.09	0.03
Sodium >150%	0.14	0.12	0.22	0.17	0.17	0.03
Protein < 50%	0.09	0.10	0.09	0.09	0.11	0.21
Iron <50%	0.13	0.09	0.25	0.14	0.25	0.27
Vit. A <50%	0.12	0.10	0.18	0.10	0.22	0.22

Marginal effects of factors affecting diet

VARIABLES	Meets all	< Calories	< Protein	< Iron	< Vit. A
Household head is female	0.06	-0.18**	-0.11	0.10	-0.21**
Ratio of dependents to adults	-0.21**	0.40**	0.31**	0.42**	0.28**
Household in urban location	-0.38**	0.59**	0.44**	0.71**	0.46**
High food production activity	0.65*	-0.86**	-0.79**	-1.01**	-0.81**
Observations	3,833	3,833	3,833	3,833	3,833

Optimum food: Cheapest satisfaction of daily nutrient requirements

Name	Vt/kg	Consumption (g)	Expenditure (Vt)	Required decrease (Vt/kg)	Allowable Increase (Vt/kg)
Bananas (Cooking)	150	587.97	88.20		5.3
Island Cabbage	132	315.99	41.71		9.9
Cabin Biscuits	353	191.47	67.59		71.5
Peanuts	382	166.33	63.54		18.5
Water Taro	146	0		6.7	
Cassava	133	0		9.5	
Bread fruit	109	0		10.5	
Sweet potato	145	0		32.9	
Other fresh fruits n.e.c	75	0		33.6	
Ripe Bananas	127	0		36.8	
Pumpkin	88	0		43.4	
Taro	146	0		52.2	
Bread	300	0		62.4	
Beef fresh	201	0		64.9	
Sugarcane	128	0		67.6	
TOTAL		1261.76	261.4 (USD2.73)		

Policy recommendations for improving access to nutritious foods in order to reduce stunting, micronutrient deficiency and NCDs

1. Urban gardening programme (focus optimum foods)
2. Investment in improving access to optimum foods e.g. cooking bananas, island cabbage, taro, breadfruit, cassava, sweet potato among at risk groups (School feeding programs)
3. Vouchers for target households (urban low income, high # dependents, no food production) to improve access to optimum foods
4. Fortify bread and rice with iron, vitamin A
5. Apply and excise to target foods high in sodium, fat and sugar with low nutritional value

Next steps

- Model impact on nutrition and cost of implementing complimentary package of policies and programmes (School lunch for urban primary students; food voucher for 'at risk' households; fortification of rice and bread; 20% excise on target foods)
- Supply opportunities and health benefits
- Focus on partnership and advocacy: food-nutrition nexus (SIDS action plan)
- Vanuatu FIRST FAO



Tankyu tumas

