



THE UNIVERSITY OF
SYDNEY



Strengthening Food and Nutrition Security in Developing Countries

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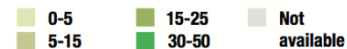
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Ntope Village, Tanzania (de Bruyn, 2017).

Nutritional challenges

Arable land (%)



Number of people undernourished (million)



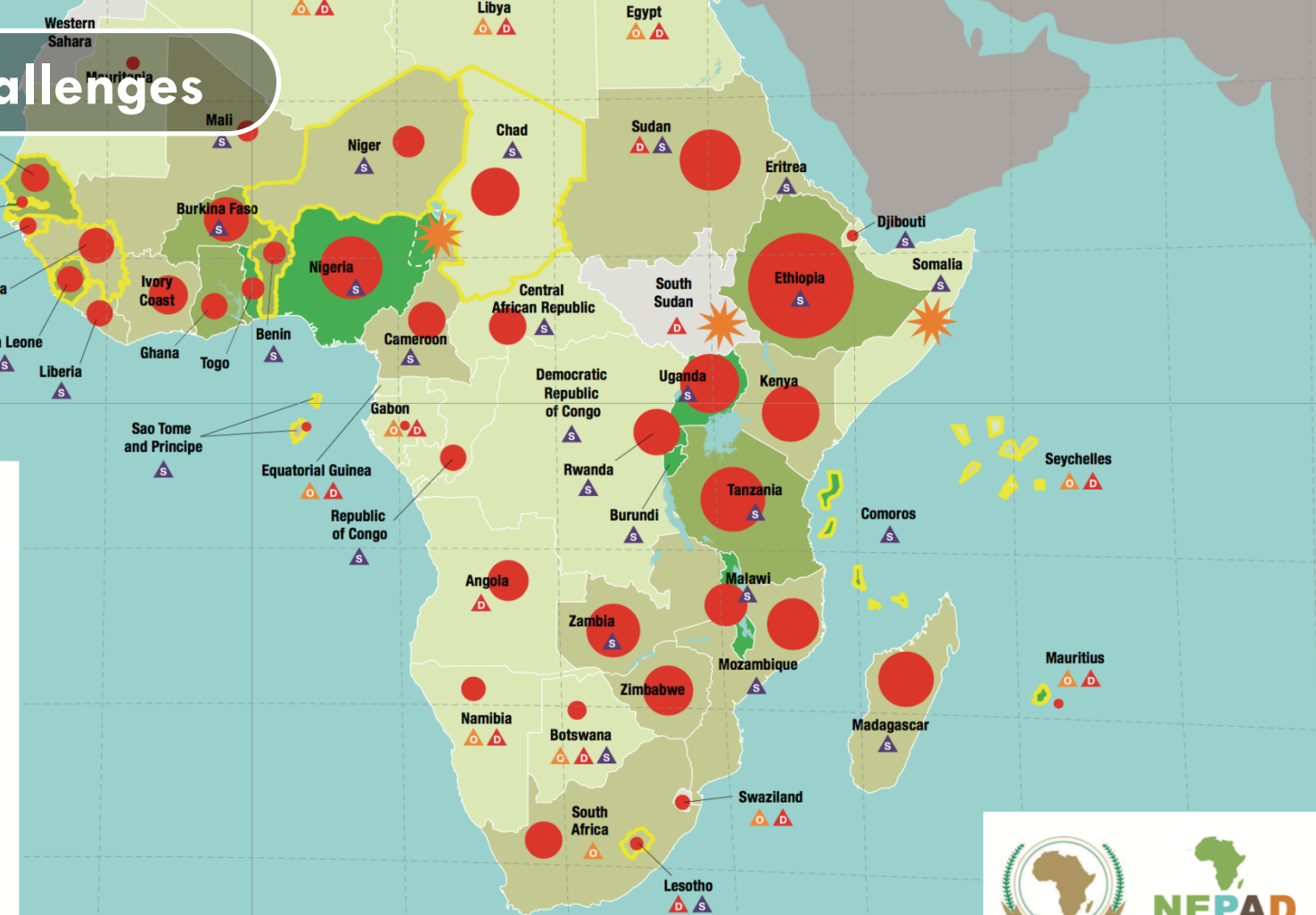
Risk of famine

>20% of food imports

>30% of stunting prevalence

>15% of adult obesity prevalence

>10% of adult diabetes prevalence



Achieving nutritious diets in resource-poor settings

White

++ protein
+ potassium
++ selenium

Yolk

+ energy
++ protein
++ choline
++ riboflavin
+ pantothenic acid
+ vitamin B6
++ vitamin B12
+ folate
+ phosphorus
++ selenium
+ zinc

Contribution to nutrient requirements
for a 7-12 mo child (+ 20-50%, ++ >50%)
Developed from *Iannotti et al, 2014*



Cooked bovine liver
300 g



Cooked beef
625 g



Cooked lentils/chickpeas
700 g



Cooked kidney/butter beans
810 g



Cooked peas
1.2 kg



Spinach
2.4 kg

Portion sizes required for a woman to reach her recommended daily intake of iron (*Gupta, 2016*)

Current research in Tanzania and Zambia



Australian Government

Australian Centre for
International Agricultural Research



<http://sydney.edu.au/vetscience/research/Nkuku4U/>

War, Tanzania (de Bruyn, 2014-16).

An interdisciplinary approach

Zambia

Ministry of Agriculture and Livestock
Ministry of Health (Public Health)
National Commission for Food and Nutrition
University of Zambia

University of Sydney

Sydney Institute of Agriculture
School of Life and Environmental Sciences
Sydney School of Public Health
Sydney School of Veterinary Science
Charles Perkins Centre
Marie Bashir Institute

Tanzania

Tanzania Veterinary Laboratory Agency
Tanzania Food and Nutrition Centre
Sokoine University of Agriculture
Muhimbili University of Health and Allied Sciences
University of Dar es Salaam

International

Royal Veterinary College, London
International Rural Poultry Centre,
Kyeema Foundation





Beyond Africa, our team is
actively working to improve
food and nutrition security in
Asia and **Australia**

Thank you.