National Outcome Forecast Assessment

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The NOFA: Why do it?

Presently, South Africa is experiencing the worst drought since 1992

- Concurrently, the Rand is weak and the country needs to import food
- Prices of food are rising fast

Clearly, this is enough justification!

The NOFA: What is it?

It is the next step after the baselines are completed

- But this is a *National* Outcome & Forecast Assessment
- It is a ***synthesis indicative*** analysis, we do not have all the primary information we need, we will rely instead on secondary sources

The NOFA: What is it?

- An attempt to *peer into a possible future* ...
- ... but not too far! The coming "Consumption Year": April '16 to March '17)
- To understand *how* poorer people's livelihoods could change given prevailing conditions

The NOFA: What is it?

Building scenarios:

- Using what we know and making stated assumptions about what we don't know ...
- ... we determine the outcome

The NOFA: What is it?

This is not the final say!

- Our model only gives a possible outcome for a given set of conditions
- Our assumptions will need to be tested and monitored
- If reality is different, the model must be re-calibrated

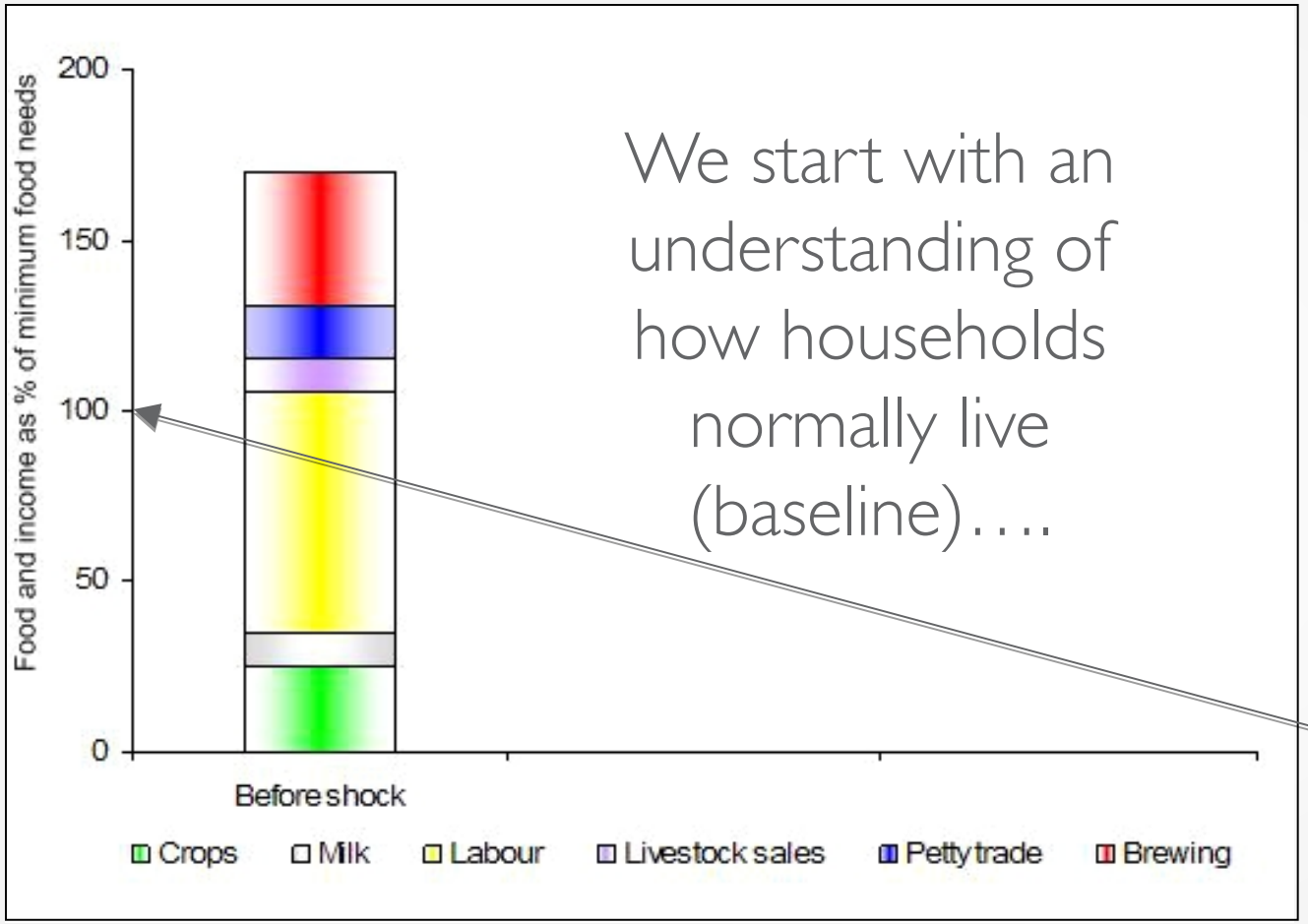
The NOFA: What is it?

Why it is useful:

- We can still plan ahead – devise solutions before adverse outcomes occur
- We will also know the critical variables – the ones with the most impact – and these need to be watch more closely

How Outcome Forecasts Work

How Outcome Forecasts Work

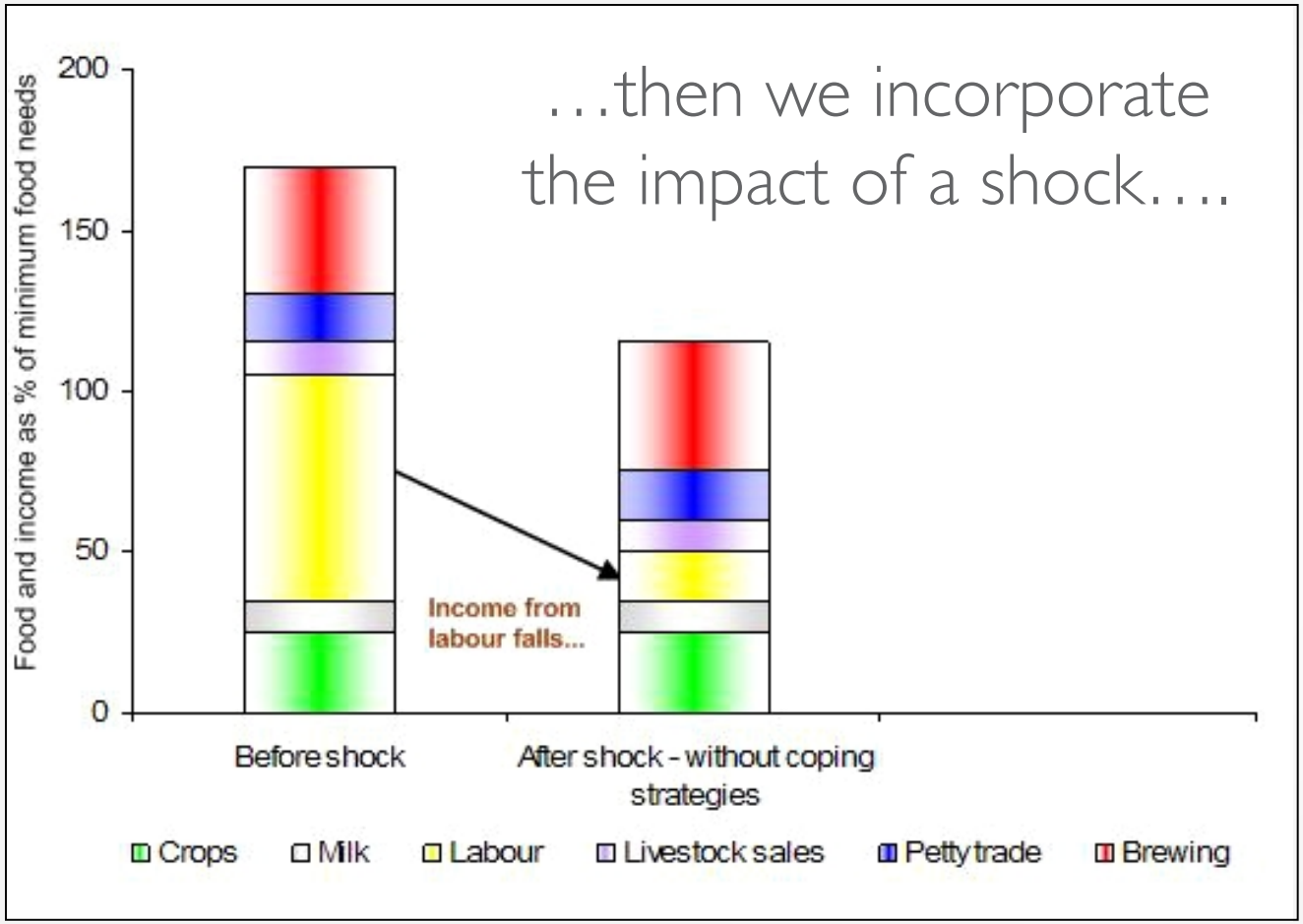


We start with an understanding of how households normally live (baseline)….

=8,800 kJ /p/d

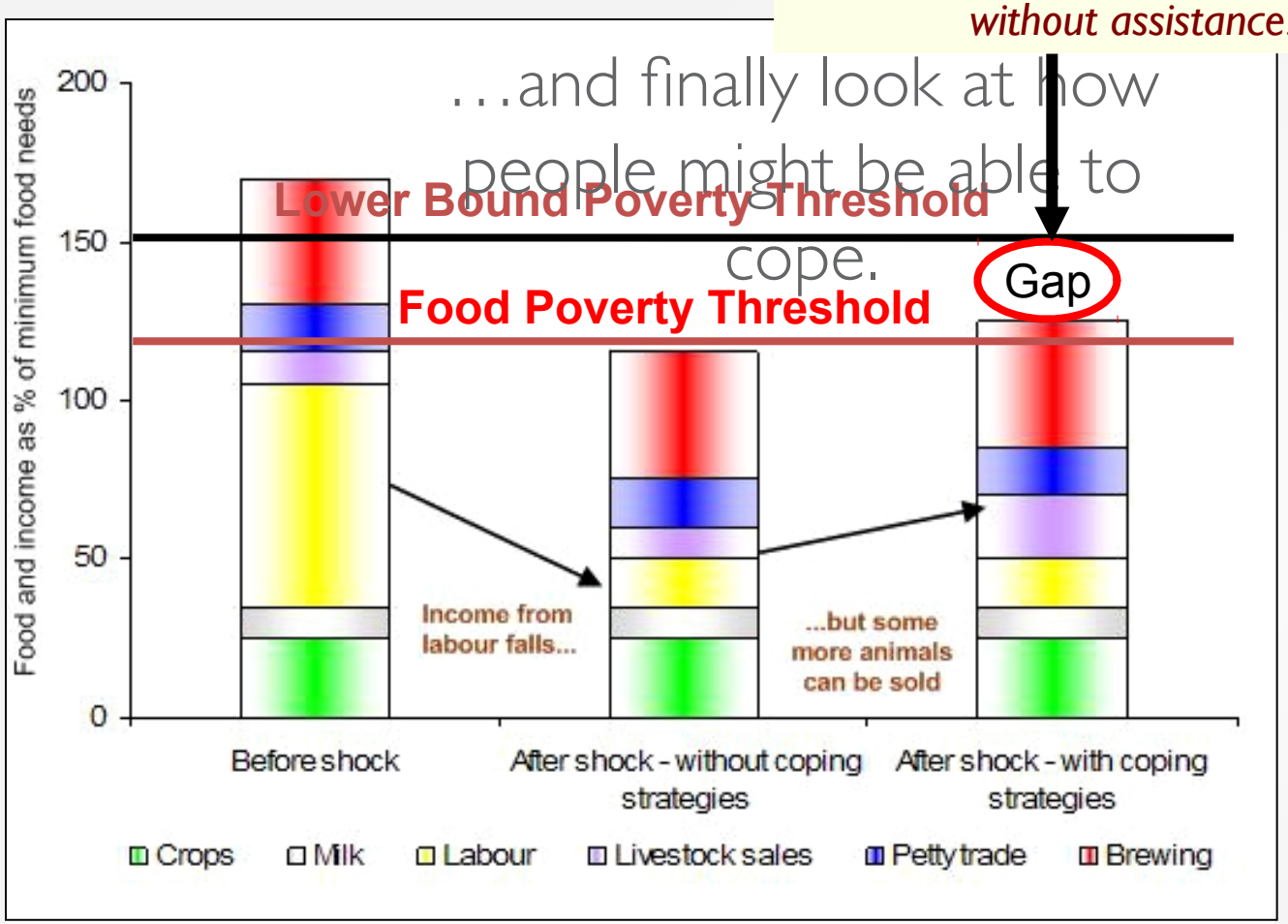
=12,848,000 kJ for a hh of 4 for a year

How Outcome Forecasts Work



How Outcome Forecasts Work

e.g. this analysis suggests that post-shock, households will not be able to maintain themselves above the LBPL without assistance.



Methods and Approach

Two issues to deal with

1) Lack of Baselines (no disrespect to the hard work of my colleagues!)

2) Compiling credible problem specifications to define the hazard component entirely from secondary sources

Methods and Approach

First Big Issue:

Baselines not yet completed.

Divide into three categories:

1) Rural LZs with open access (traditional) tenure systems

2) Rural LZs with commercial farm land

3) Urban areas

It's about POOR People!

Methods and Approach

Rural Open Access Zones with Open Access or Traditional Tenure:

1) We have baselines in 14 livelihood zones:

2) Some livestock-oriented, some mixed cropping and livestock, some more cropping.

Methods and Approach

Rural Open Access Zones with Open Access or Traditional Tenure:

In all LZs we see the poor depend:

1) Largely on social grants (pensions & child grants)
2) Some casual labour (for cash usually, occasionally for food)
3) A tiny bit of cropping
4) Sometimes, a few livestock
5) Kinship links

Methods and Approach

Rural Open Access Zones with Open Access or Traditional Tenure:

1) We are constructing some “typical” livestock, mixed crop and livestock and crop-based baselines to cover the remaining Livelihood zones.

2) The sources of livelihood are being adjusted to these types of LZs.

3) We are going to analyse the ‘poor’ and the ‘very poor’ ONLY

Methods and Approach

Rural Zones with Commercial Farming:

1) Focusing on farm workers (full time) Seasonal Workers and Casual workers

2) Their welfare is linked to the performance of the sectors

Methods and Approach

Rural Zones with Commercial Farming:

One approach:

1) Based on BFAP data, labour pay and labour requirements per Ha for ten most significant industries

2) Estimates of hectarage of each of those industries and, therefore,

3) Estimates of work opportunities

Methods and Approach

Rural Zones with Commercial Farming:

One approach:

4) Labour rates are available (BFAP)

5) Required: estimates of dependents per workers (for household composition)

6) Required: with seasonal work, comparison of seasonal employment vs full-time

Methods and Approach

Rural Zones with Commercial Farming:

One approach:

7) Two ‘typical’ households: A full time worker and a casual worker

8) Other components of livelihood can be included:

Social grants, loans, kinship, expenses

Methods and Approach

Urban Areas:

One approach:

1) ‘Typical’ households: unemployed, employed (casual work)

2) Data from Stats SA, NIDS surveys

3) Livelihood components:

social grants, labour, petty business, kinship, loans, expenses

Methods and Approach

Second Big Issue:

Drafting credible problem specs

Main variables being studied:

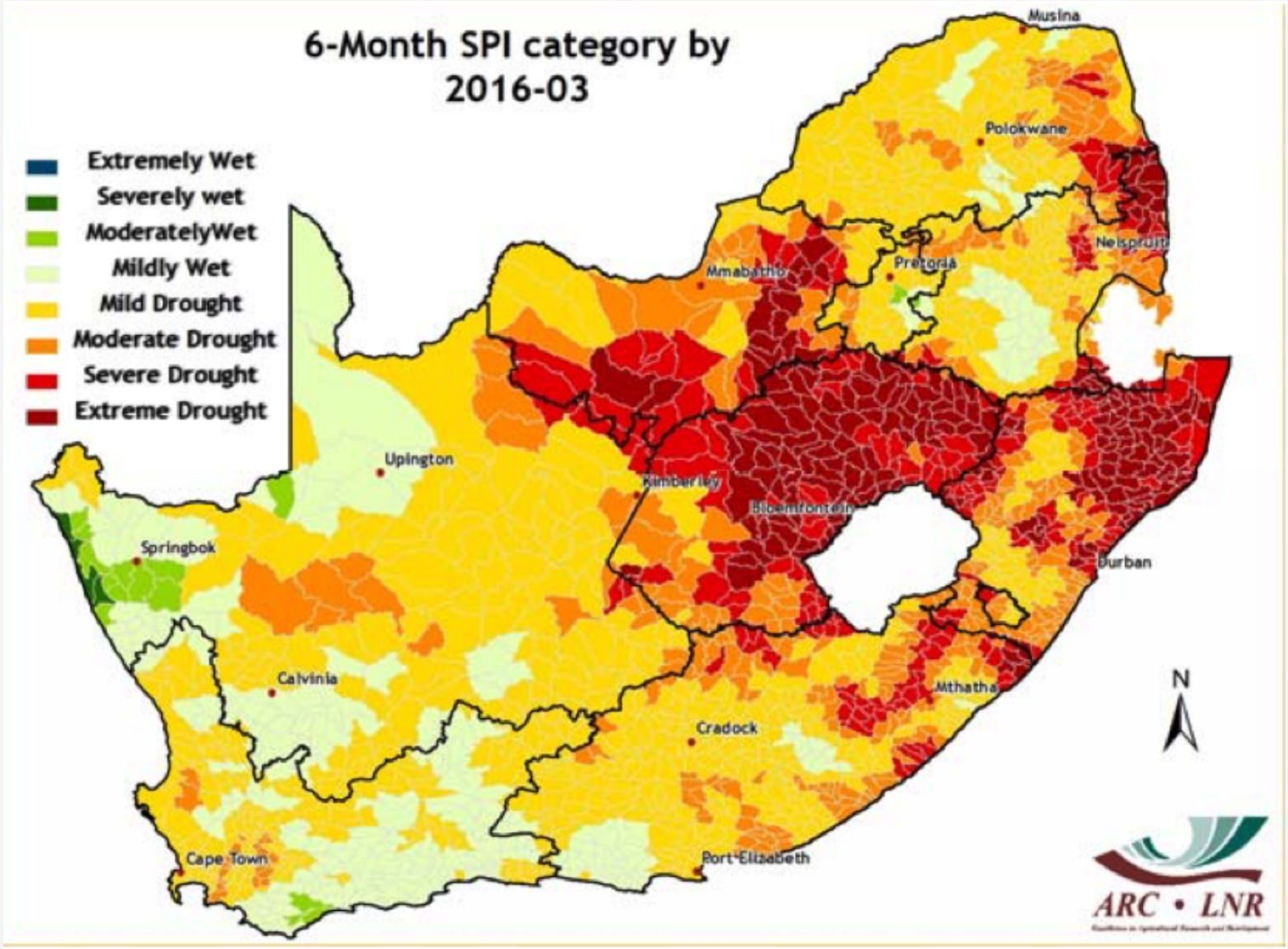
1) Drought vs non-drought affected areas & impact of drought on crops, livestock

2) Price projections

3) Work opportunities, social grants policy, kinship links

Methods and Approach

Drought areas, SPI – overlay onto LZs



Methods and Approach

Prices :

Data from NAMC, BFAP, Stats SA:

1) ‘Forward’ models for key commodities -> use for scenario assumptions (BFAP, NAMC)

2) Influence of the exchange rate on other commodities (esp. imported)

Methods and Approach

Social grants:

Future payments --> DSD policy

1) Rate does not change, tracks inflation, tracks food prices

Casual work:

Pay rate & work available

2) Scenario

Methods and Approach

Putting it all together

This is, fortunately, a number-crunching exercise – Thanks to Mr Postgres

1) Analysis spread sheets

2) Outcomes at Hh level to Postgres table

3) Query linking outcomes with populations.

Thank you / Siyabonga /

Ke a Leboga / Dankie

Acknowledgements

DAFF (Crop Estimates Committee)

NAMC

BFAP

Statistics SA

ARC (Inst. for Soil, Climate & Water)

SA Weather Service

Discussion Points

What should we do?

Comments?