The Urban Food Print

A tool to calculate the land needed to feed a (Dutch) city

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AESOP 5, Montpellier 2013

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How many land do we need to feed ourself?

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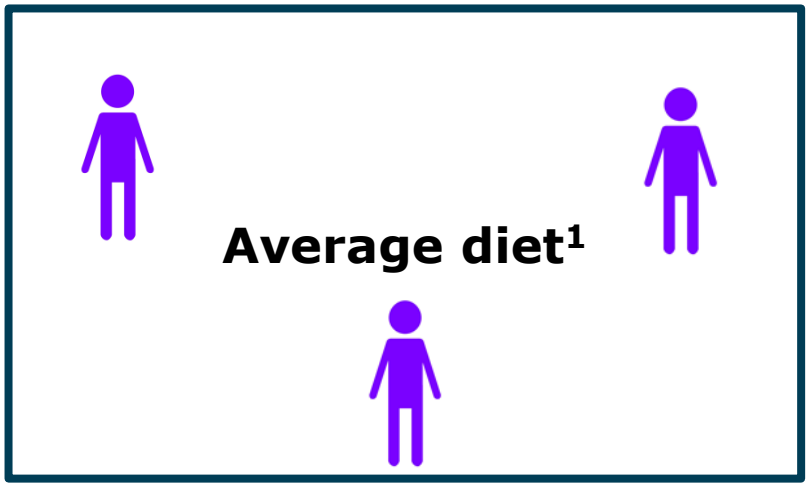
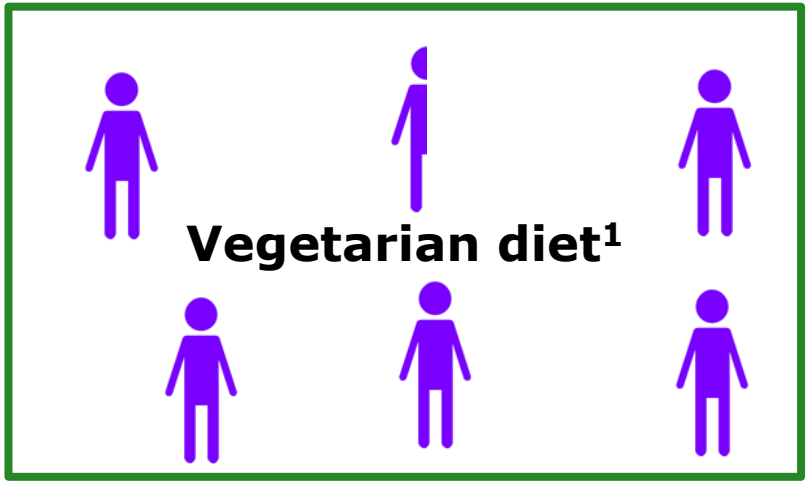
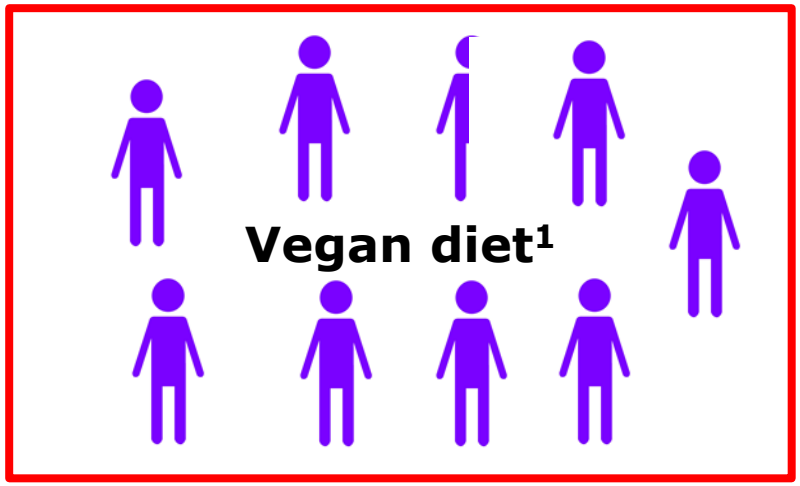
People per ha or 2,5 acres







1 Rood *et al*, 2004

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Dutch Diet in World Perspective

City Network Urban Agriculture

- Started in 2010
- 12 members
- Wageningen UR + NGO

- Different back ground
- Different approach

➢ Joint questions

➢ Joint validation

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How many hinterland do we need to feed our city?

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Urban foodprint

What does this tool do?

This tool helps you estimate the total amount of hectares needed to feed a certain amount of people. The tool also works the other way around: it calculates how many individuals you will be able to feed from a specific area size.

The tool is grossly simplified, which means that the outcomes are only an approximation of reality. It takes the following produce into account: vegetables, fruit, potatoes, wheat, sugar, meat, milk and eggs (plus the necessary fodder required to feed the animals.)

Briefly summarized, this tool:

1. Is based on the yearly average diet of a Dutch person;
2. Does not calculate the complete diet (only the consumption of vegetables, fruit, meat, milk, eggs, potatoes, bread and sugar);
3. Calculates, using model crops.
4. Works with average production data from conventional production methods;
5. Takes the needed cattle feed (partly) into account.

For more information: please download the manual for the assumptions and background used.

This tool is a product of the Stedennetwerk Stadslandbouw. For more information about the Stedennetwerk, please visit www.stedennetwerkstadslandbouw.nl.

manual | start

Preferred unit:

Hectares

Explanation

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- Average diet of a Dutch person between 19-30 years (2003)
- Not the complete diet
  - One ingredient processed food
  - No plant based oils
  - No exotic products

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- It works with average Dutch production levels
- It works with so called model crops
- It takes the loss (in the food chain) into account
- It takes the necessary concentrate to feed the livestock partly (approximately 60%) into account

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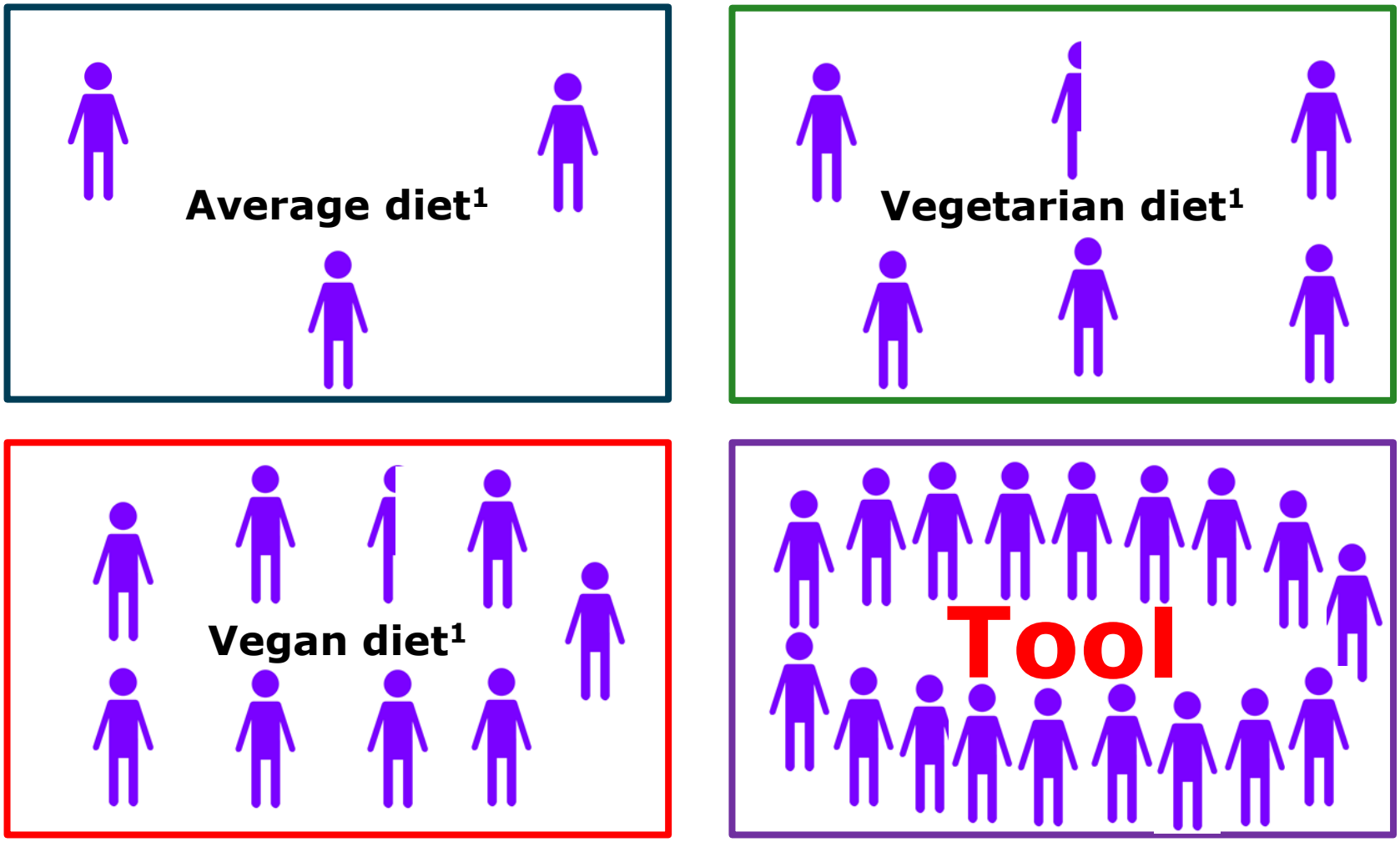
(Dutch) People per ha or 2,5 acres



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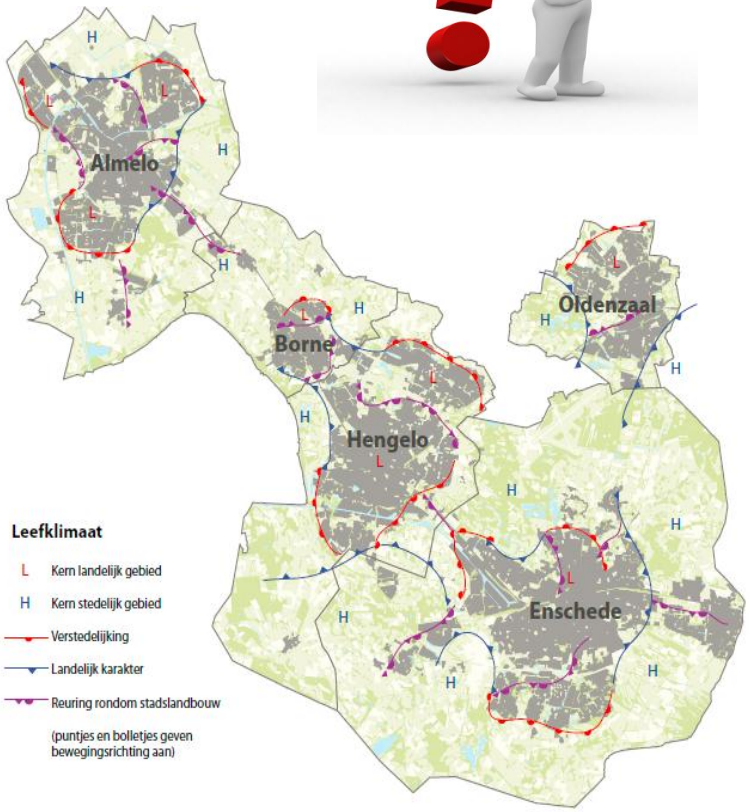
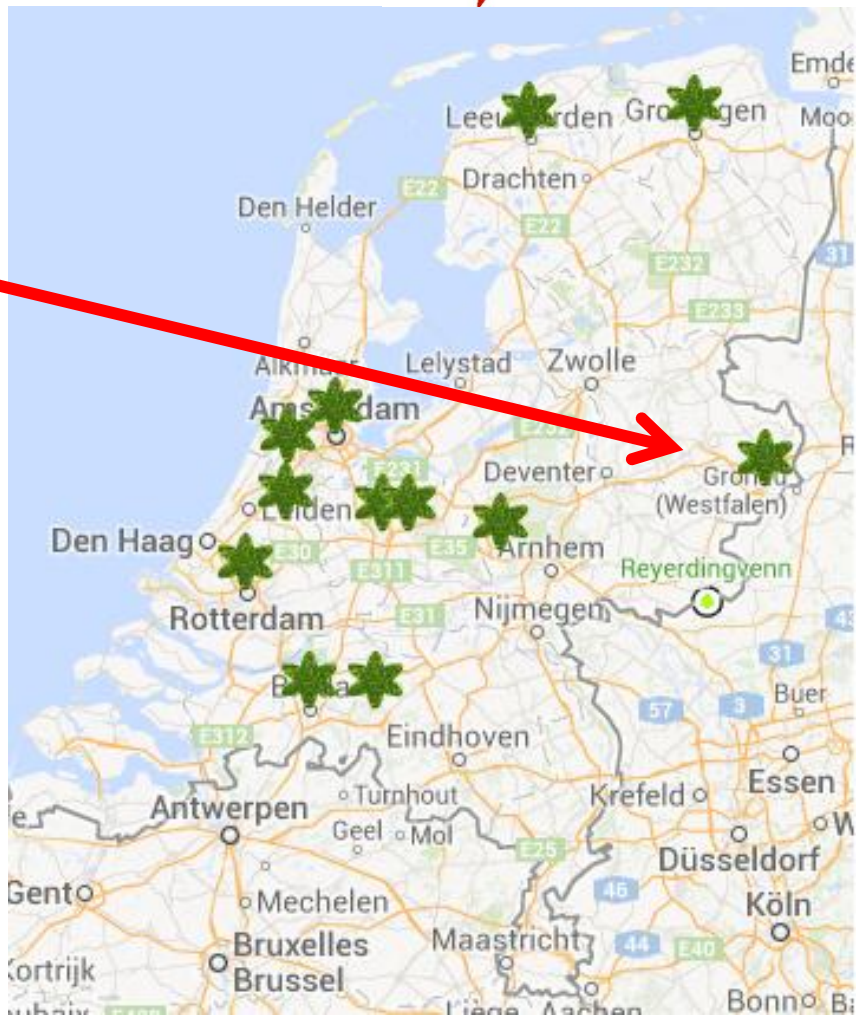
Netwerkstad Twente





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Netwerkstad

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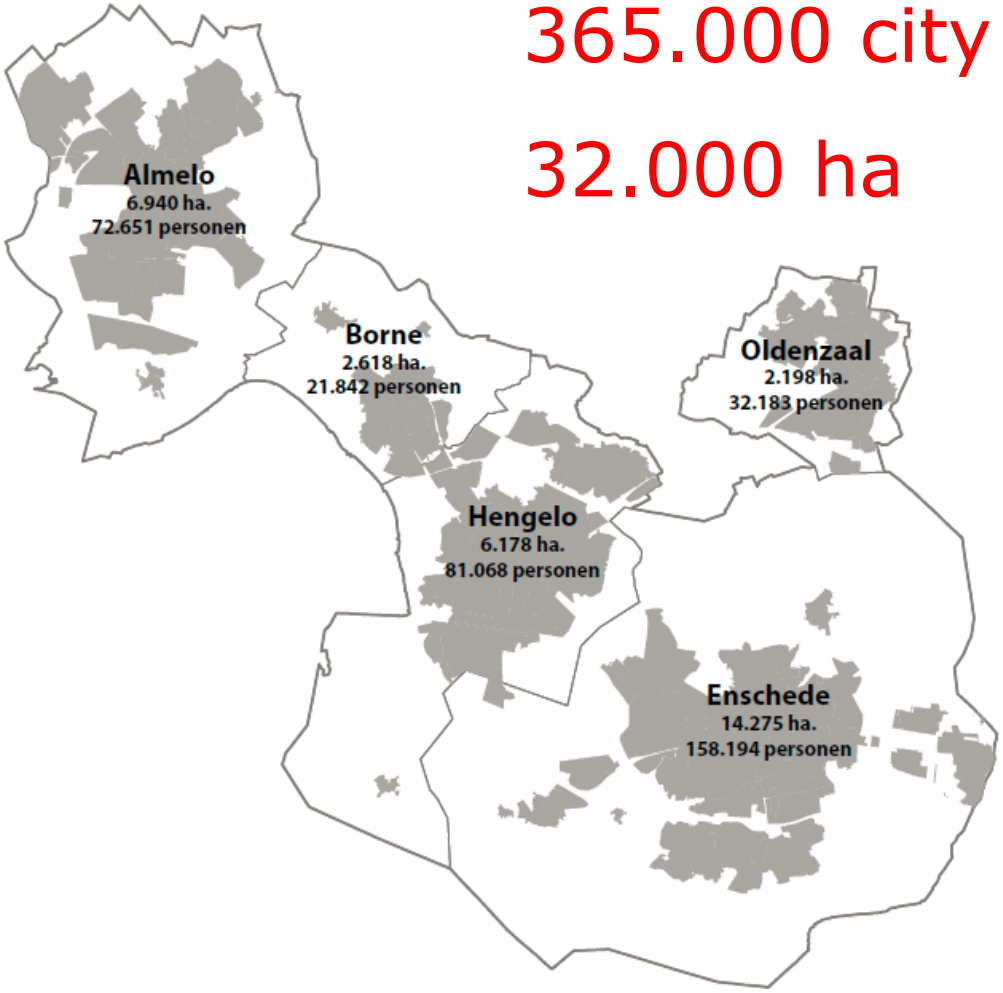
365.000 city dwellers

32.000 ha



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To start....

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365,000

5,749 ha. of plants

- 349 ha. of fruit
- 459 ha. of vegetables
- 3,487 ha. of wheat
- 373 ha. of potatoes
- 1,081 ha. of sugar

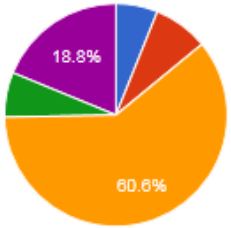
814,349 animals

- 8,103 dairy cows
- 19,170 beef cows
- 58,298 pigs
- 87,407 laying hens
- 641,371 chickens

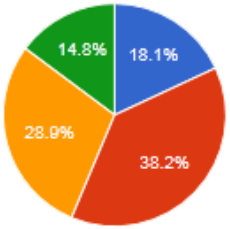
14,854 ha. of fodder

- 2,684 ha. of wheat and barle
- 5,681 ha. of corn produ ts
- 4,288 ha. of grass and clover
- 2,201 ha. of additional produce
- another 35%-50% from abroad

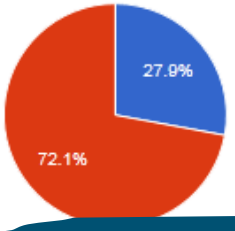
Vegetable products
total of: 5,750 ha.



Fodder
total of: 14,853 ha.



Vegetable produce versus fodder
total of: 20,603 ha.



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Some results...

Vegetable products
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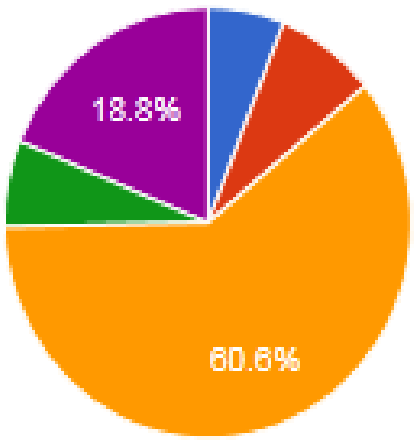

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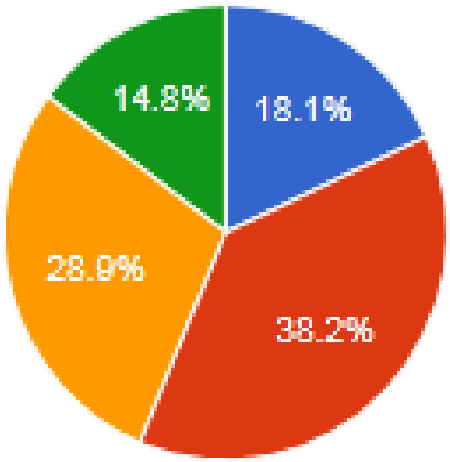

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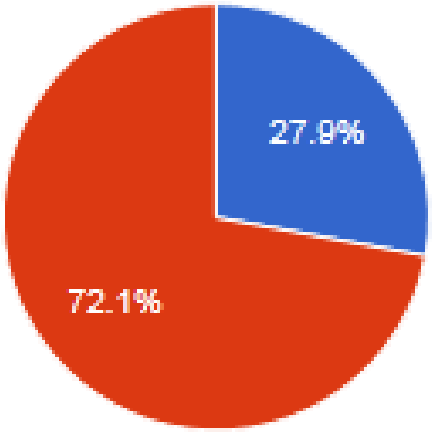

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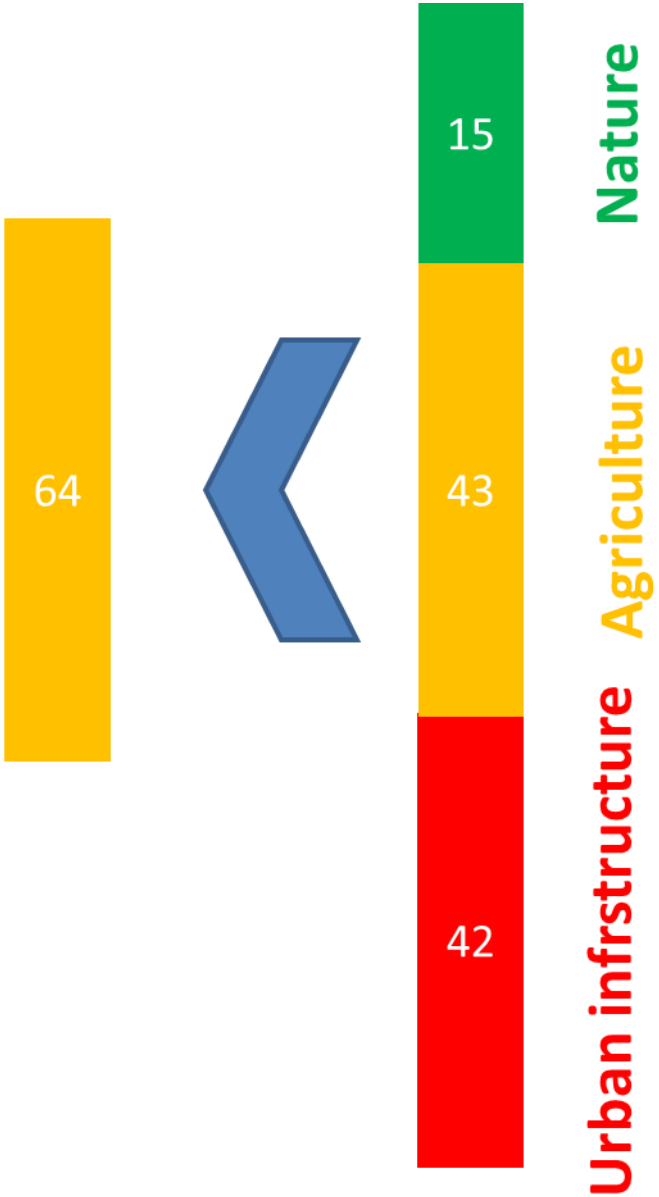

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Not Self Sufficient

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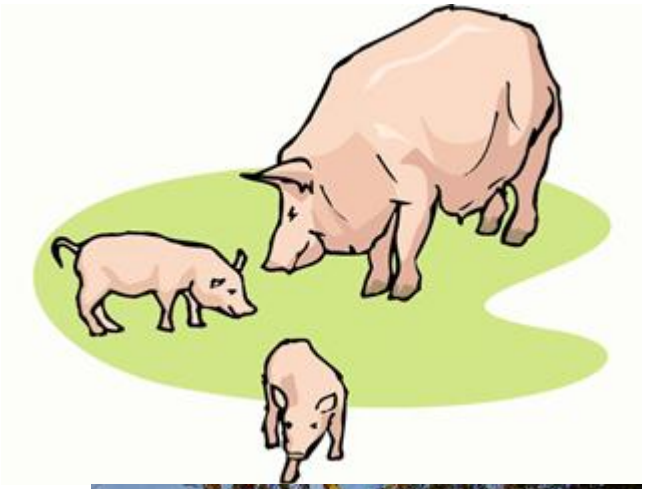
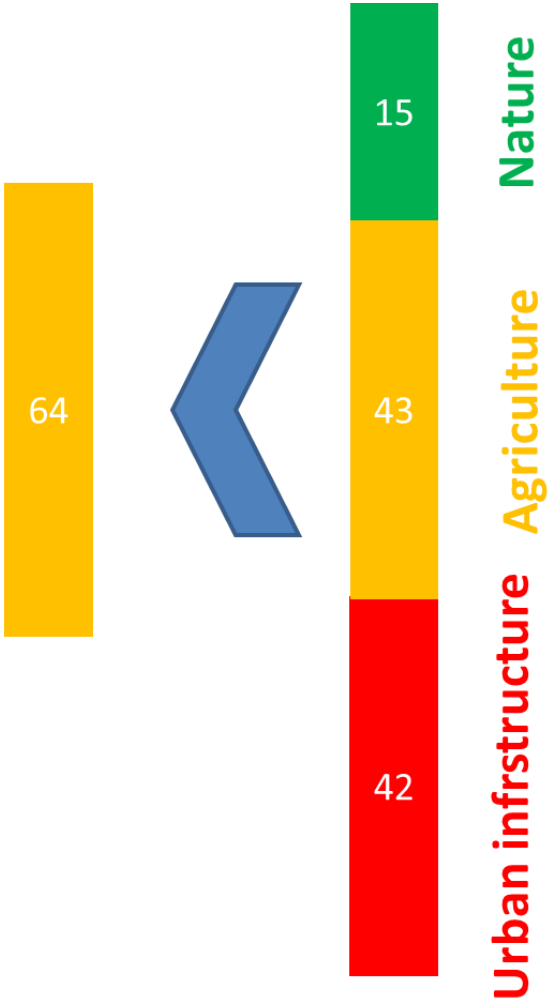
To much of ....





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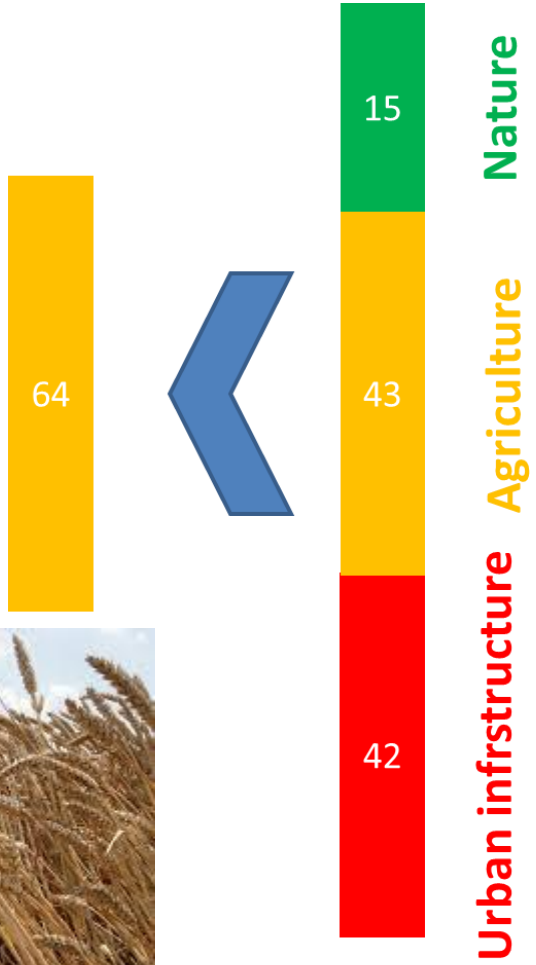
Shortage of....



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Impact of the Tool

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Local debate on...

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To conclude

Size & composition of local food shed

Local food strategy

Impact of our diet

To conclude

Tool is not finished yet

- More different types of diet
- More production conditions
- More partners involved..

Feeding your cities future?

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