



**BeanMeals**  
Thinking beyond the can

# BeanMeals: Fork to Farm

*Transforming UK Food Systems. January 2022 - November 2024*

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Presenter: Lisa Didier, Engagement Officer



# 'Capulet' and 'Godiva'



To research systemic innovation using novel common bean varieties 'Capulet' and 'Godiva'

- ✓ Developed for UK conditions
- ✓ Quick-cooking (no overnight soaking needed)
- ✓ Gluten-free and low glycaemic index
- ✓ N-fixing so reduces N inputs in subsequent crop

## University of Warwick harvests beans fit for British summer

By Rosie Eaton  
BBC CWR

8 September 2023



Prof Eric Holub, pictured with Warwick Crop Centre research fellow Rosanne Maguire, said seed was being harvested to produce food on a farm next year

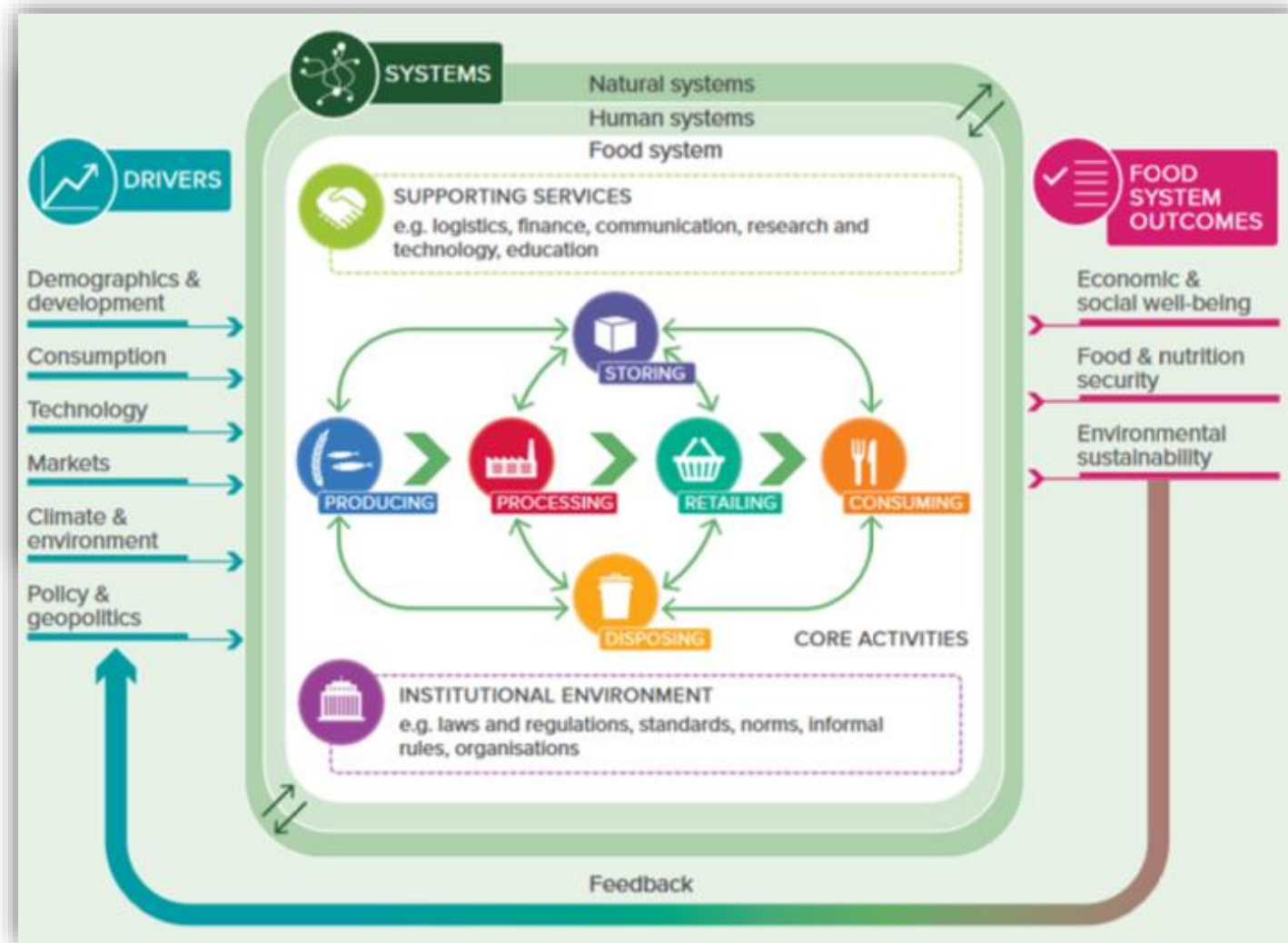
**University researchers have celebrated the first commercial harvest of a homegrown bean.**

The UK has traditionally had to import most of its beans used in products due to growing conditions.

However scientists at the University of Warwick have been working to create a variety that could be planted by British farmers.

The first commercial crops of the Godiva and Olivia beans have been grown by a private firm in Lincolnshire.

# 'Fork to Farm'- full food system approach



## Four research areas

- Determine how to promote healthy diets with bean-based meals low in fat, salt and sugar
- Assess how to produce and supply bean-based foods and ingredients
- Estimate health, environmental and enterprise benefits/trade-offs of scaling UK beans
- Understand how to design and implement 'fork to farm' systemic innovation

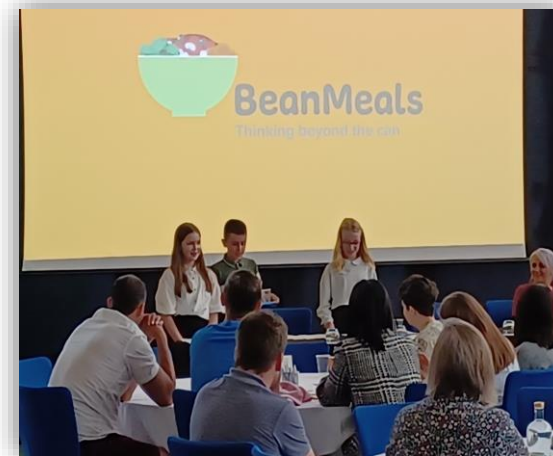
# Stakeholder engagement

- 2 school caterers, City Catering and Leicestershire Traded Services.
- 6 schools, 3 in city and 3 in county.
- 10 families
- Capulet and Godiva beans on the school menu for 4 months.
- Acceptability of bean meals by children and families measured over time.
- Creating demand and acceptability in the school food procurement system.



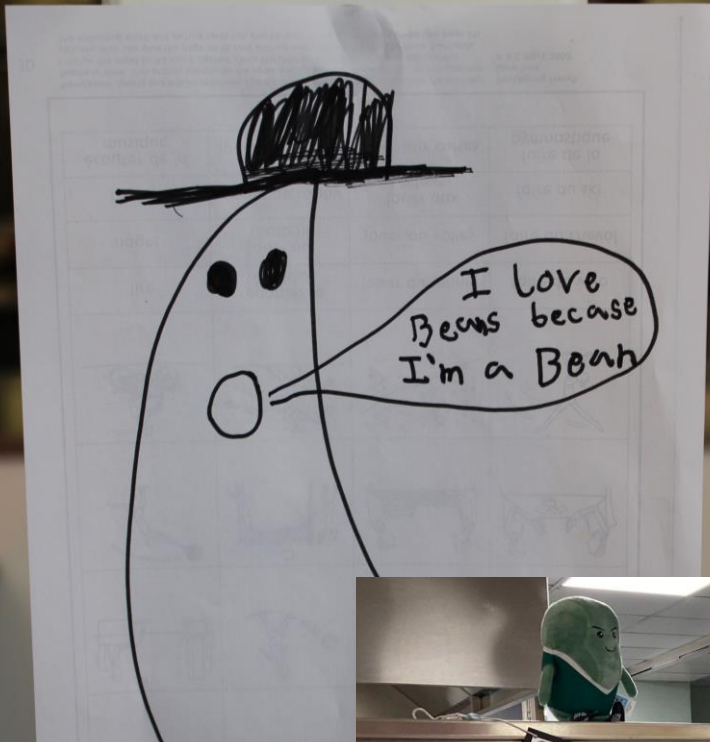
# Stakeholder engagement

- ✓ Training for teachers, cooks and family cook and eat sessions for household work.
- ✓ Stakeholder workshops. 3 larger, 2 smaller events.
- ✓ Local city-county-region policy processes linked to national level to facilitate scaling



@Leicestershire Food Summit

@Leicester Food Plan

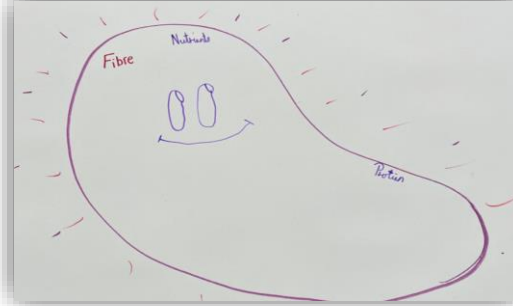


Whole school food approach.

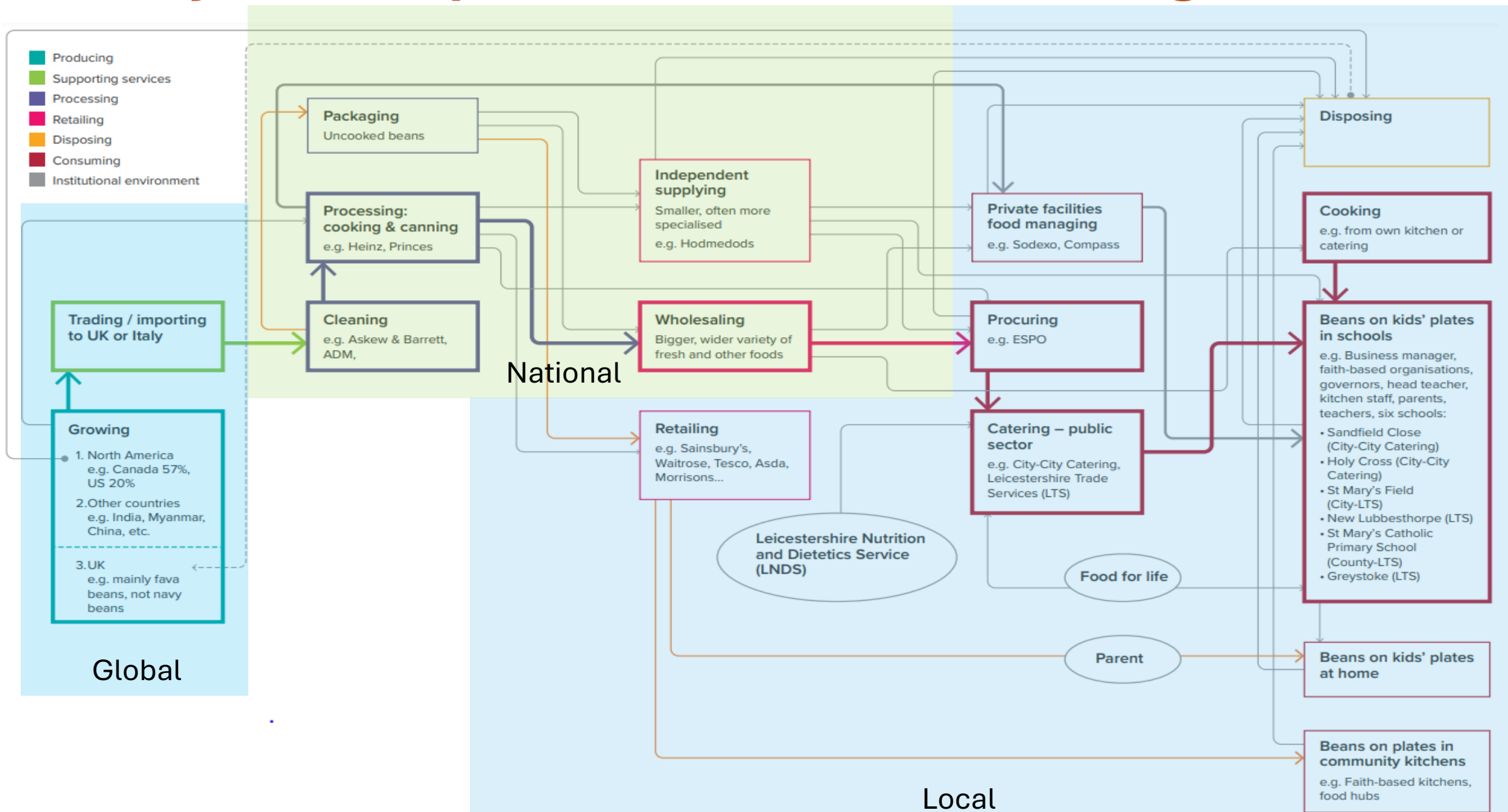
Curriculum links and inclusion of school catering service and staff in school.



# BeanTopia—A co-designed game with kids



# Bean system map for kids' meals -> local to global





## School research Dr Natasha Bayes 1 – mealtime observations

### Findings:

- 36 observations completed, with 54 different bean-based meals provided, and 3,060 bean-based meals plated/served.

- BeanMeal availability (whole-school):

Beans served mostly in main dishes (82%) rather than side dishes (19%)

Vegetarian dishes (89%) rather than meat dishes (9%)

Beans presented in both hidden (46%) and identifiable/visible (54%)

# School research Dr Natasha Bayes 1 – mealtime observations

## Findings:

- BeanMeal uptake (whole-school):

Variety of bean-based meals chosen by children

Bean-based Pizza (main meal) and Baked Beans (side dish) the most popularly provided and taken up.

- Consumption (sub-sample Yr4&Y5):

Consumption rates varied across the different BeanMeals offered/selected

Average of 71% of the BeanMeal consumed across all of the meals.

## School research Dr Natasha Bayes 2 – focus groups

- The texture of beans for children is highly controversial
- Children outwardly highlighted that they prefer consuming beans in already liked and familiar meals
- Children learned loads about beans and the food system
- Children enjoyed bean-related educational activities and generally being involved in something new
- Children desired taster-based experiences before/instead of a 'new' school meal
- Children with packed lunches want more chances to try new foods

# School research Dr Natasha Bayes 2

- Children are more likely to like and consume novel health foods (beans) when they are added to already liked foods
- Baked Beans and bean-based pizza the most popular dish provided and taken up
- Consumption and liking of beans was high
- Beans can easily be added to a variety of existing school meals
- Caterers should be encouraged to experiment using beans in hidden and identifiable forms and in meat and vegetarian meal
- A fun and engaging educational experiences about food, aid children to become more curious about food and more willing to try new and unfamiliar foods

# Household Research Dr Lucy Michaels

- Cook and eat sessions provided recipes, built confidence which supported bean novices to incorporate beans into their cooking
- Participants found beans to be versatile – making them easy to add to familiar household meals.
- We can borrow strategies from bean experts in making dried beans a wider dietary habit
- Shifting bean novices to bean experts requires more than focusing on convenience/economic strategies
- Public health communication, including classroom education was an important tool to inspire use of beans (including dried beans)
- Awareness of structural pressures and access to cooking equipment (eg blenders and pressure cookers) for families in areas of deprivation to cook sustainable, nutritious food from scratch
- Shift English food culture to value homecooked and family meals



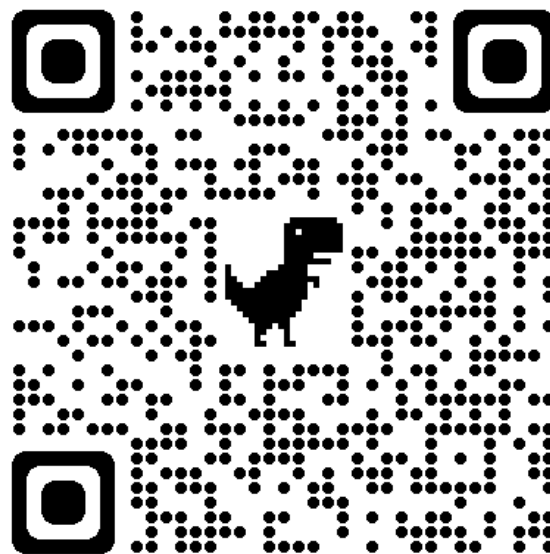
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UKRI, January 2022 - November 2024



<https://www.eci.ox.ac.uk/beanmeals>

 [@BeanMealsUK](https://twitter.com/BeanMealsUK)

 [BeanMeals](https://www.linkedin.com/company/BeanMeals)



## Putting beans on the plate

Analysis of UK demand and supply of beans and plant-based proteins

Research and report by  
Will Nicholson and Katie Jones, 3Keel  
June 2023

