



# DISH Indonesia

Bundled Solutions for Dietary Shifts



# DISH Background



Local and global diets urgently need to be transformed due to persistent hunger, malnourishment and the transgression of safe and just planetary boundaries.

Encouraging dietary shifts requires overcoming vested interests, as well as political, cultural, and regional differences. Solutions for dietary shifts therefore need to be actionable, agreeable and adapted to local circumstances and preferences.

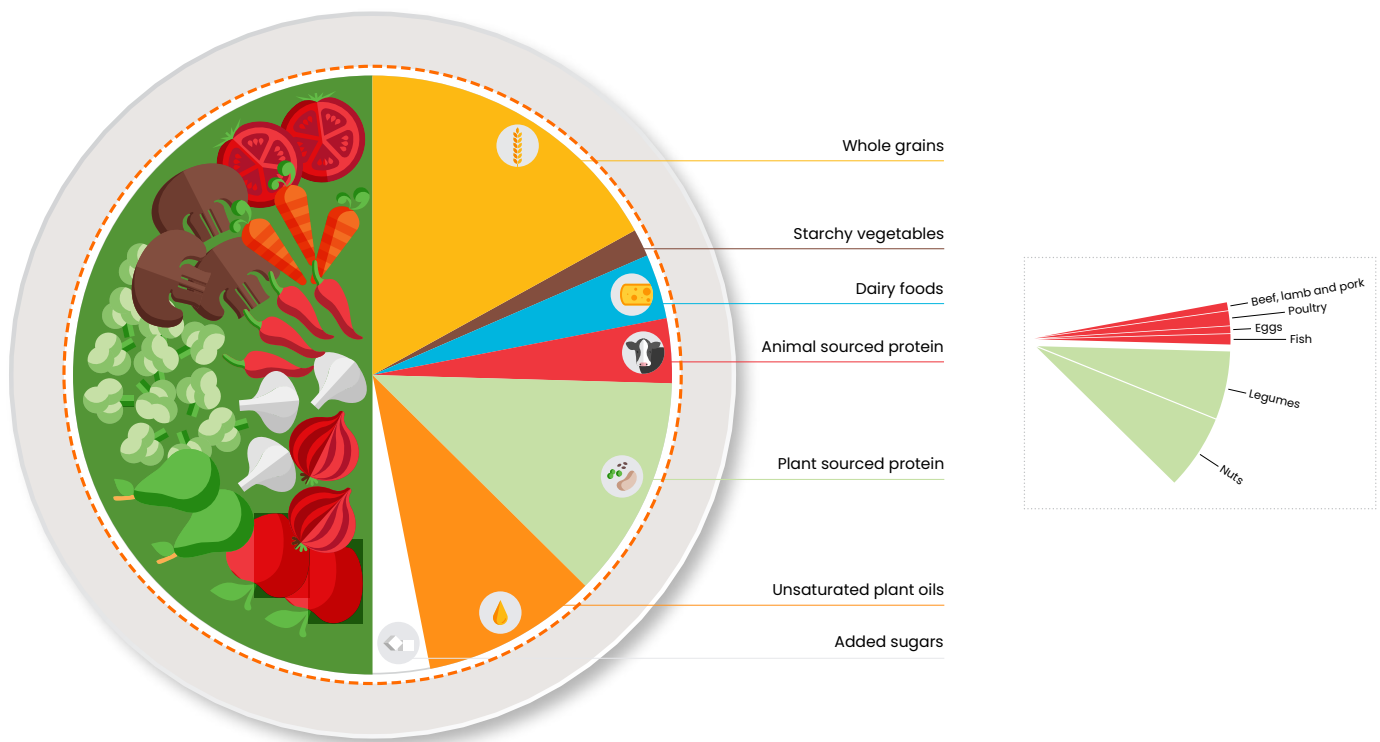


**The groundbreaking 2019 report ‘Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems’ developed global scientific targets for such dietary shifts.**

The commission found that it is possible to provide healthy diets for 10 billion people within planetary boundaries, but only by transforming what and how we produce and eat, while drastically reducing waste.

The healthy reference diet recommended by the EAT–Lancet Commission, commonly known as the Planetary Health Diet (PHD), outlined what sustainable and healthy food consumption looks like and allows for diversity based on cultural, regional and personal preferences. An updated version of the Planetary Health Diet is expected in the second half of 2025, when the EAT–Lancet Commission 2.0 publishes its report.

To help ground these recommendations into actionable, acceptable and context-based local solutions, EAT and the Global Alliance for Improved Nutrition (GAIN), supported by Food and Land Use Coalition (FOLU), partnered and launched the DISH project. The project focuses on the FOLU/ GAIN member countries Kenya and Indonesia, with the aim of sourcing the top 15 solutions in the two countries that addresses dietary shifts towards more healthy and sustainable diets.



## The call for solutions competition in the fall of 2024 received more than 400 submissions in each country.

From there, a process of narrowing down to the top 15 took place via a set of criteria for eligibility. The selection of the 15 solutions happened through a competition process in the fall of 2024. With a set of competition criteria, and a jury of five local topic experts, the pool of more than 400 submissions in each country was narrowed down. The final 15 solutions were those who had the strongest pitch for shifting diets in line with the recommendations outlined in the PHD.

While solutions can have strong impacts on an individual level, shifting diets on a larger scale is a complex process, entailing many different stakeholders for a solution to reach a larger audience.

A key part of the DISH project was therefore to bring the top 15 solutions together in person to discuss how they could work together to strengthen their solutions. This process was called the “Deal Room”. Over two days, facilitated workshops and discussions brought together bundled groups with two to four solutions in each group.

In each bundled solution group, participants explored their individual and group challenges, the enabling factors for their bundled solutions, and developed a bundled solution proposal and presentation, addressing key dietary shift challenges in the country.

The DISH Competition expert judges and project team supported with their experience in the country context, knowledge on trends and conditions.



## In Indonesia, the outcome of the Deal Room were five bundled solutions:

### 01 Affordable and Nutrient-Rich

#### Alternative Ingredients:

Finding alternative ingredients for popular and widely consumed Indonesian foods, such as replacing imported soybeans with local jack beans, wheat flour with rice bran, and meat with mushrooms.

### 02 Baby Café:

Promoting the consumption of nutritious complementary feeding for baby, made from local ingredients while encouraging healthy eating habits from an early age.

### 03 Love Food, Hate Waste:

Increasing the consumption of fruits and vegetables by ensuring access to quality products.

### 04 Mindful Lunch Time:

10 minutes of creative storytelling during lunchtime in primary education about food production processes and healthy eating habits.

### 05 "PAPEDA": Indigenous Papuan Food, Education, and Action:

Encouraging families to leverage the abundance of nature and consume wild, edible local Papuan plants to promote healthy eating habits, support food security & reduce malnutrition for Eastern Indonesia, using creative interactive media that increases accessibility for all levels of literacy skills.



# 01

## Affordable and Nutrient-Rich Alternative Ingredients

Finding alternative ingredients for popular and widely consumed Indonesian foods, such as replacing imported soybeans with local jack beans, wheat flour with rice bran, and meat with mushrooms.



### What is/are the dietary shift(s) that the bundled solution is addressing?

Consumption of local foods rich in protein, vitamins, and minerals, while replacing imported ingredients and reducing waste.

### What environmental issue does this idea or dietary shift solve?

Reducing dependence on imported food ingredients such as soybeans & wheat flour, promoting the use of more environmentally friendly local foods, and decreasing deforestation and excessive water usage.

### Which individual solutions were bundled?

#### **Jack Bean Tempeh (Koro Pedang):**

A source of carbohydrates, protein, and minerals that are water-efficient and easy to cultivate. Currently being used for alternative bean tempeh and flour. (Agus Somamihardja, Koperasi BUMR Paramasera)

#### **Rice Bran Bread (Bekatul):**

A vitamin-rich ingredient by product of rice milling. This is often discarded or sold as animal feed. (Ismiyati, Global Net)

#### **Mushroom Meat (Jamur):**

A low-calorie, low-fat, high-fibre meat alternative with a taste and texture similar to meat (Widya Putra, Meatless Kingdom)

### What, specifically, will the solution bundle do?

Explores the three food ingredients mentioned above to create healthy, highly nutritious, accessible, and delicious food products, such as soy-free tempeh, wheat-free bread and cookie creations, as well as meat analogues, designed as a package to address malnutrition and support sustainable healthy eating habits.

### Why is the bundled solution more powerful than individual solutions?

Indonesia imports soybean and wheat flour to make our popular food (tahu/tempe). This consortium of companies will focus on finding alternative ingredients, researching the new process and collaborating on new products. These ingredients are low-cost, locally available, yet nutrient-rich alternatives. We believe the solution is scalable.

The flexibility in product offering and ingredient selection allows businesses to more cost-effectively reach multiple market segments.

### To reach 1 million people, which channels does the solution use?

Food processing industries, restaurants, catering services, government programs such as POSYANDU (health clinics, where one of the services provided includes supplementary feedings for children under 5 and pregnant women), digital campaigns and product distribution in national markets.

### Why would this solution appeal to 1 million people?

More healthy option.

### What are the major cost drivers for this solution?

Product research and development, local ingredient processing, distribution, and promotion to raise public awareness.

### In the medium to long term, is the solution meant to be profitable, cost-neutral, or requiring outside funding?

Profitable.

# 02

## Baby Café

Promoting the consumption of nutritious complementary feeding for baby, made from local ingredients while encouraging healthy eating habits from an early age.



### What is/are the dietary shift(s) that the bundled solution is addressing?

Promoting the consumption of nutritious complementary feeding for baby, made from local ingredients while encouraging healthy eating habits from an early age.

### What environmental issue does this idea or dietary shift solve?

Reducing single-use plastic packaging in baby food and promoting the sustainable utilisation of 'blue foods' (seaweed salt) and fish (fish bone flour).

### Which individual solutions were bundled?

#### **Fish Bone Flour:**

The use of fish bone flour as an affordable and nutrient-rich calcium source. (Novriani Tarigan)

#### **Seaweed Salt:**

The use of low-sodium seaweed salt to enhance the nutritional content of complementary feeding. (PT Aquanutrindo Sukses Makmur)

#### **Baby Café:**

A café (located in a villager's home) managed by Community Health Workers who promote complementary feeding and encourage nutritious foods. (Forum Kesehatan Kelurahan Mojosongo)

### What, specifically, will the solution bundle do?

Provide nutritious local complementary foods, engage community health workers (and their home kitchens) as small business operators in preparing complementary foods for sale, and offer training to parents and communities to promote sustainable eating habits.

### Why is the bundled solution more powerful than individual solutions?

Because this solution not only provides locally sourced complementary foods but also incorporates food innovations, such as calcium-rich fish bone flour and low-sodium seaweed salt, while reducing plastic waste by purchasing packaged baby food.

### To reach 1 million people, which channels does the solution use?

Community health workers (over 1 million health workers working in over 300,000 health clinics across Indonesia), media.

### Why would this solution appeal to 1 million people?

Because it offers healthier, more affordable, and environmentally friendly complementary feeding while encouraging active participation from local communities.

### What are the major cost drivers for this solution?

Fish bones and seaweed are widely available in Indonesia. It is believed that the cost of producing these ingredients can be low if produced at scale. Overhead costs are low as this cafe is run inside the CHW home. Revenue is expected from the sale of food, but it is mostly cost-recovery. Additional costs training community health workers, and creating & distributing recipes.

### In the medium to long term, is the solution meant to be profitable, cost-neutral, or requiring outside funding?

Cost neutral, supported by NGO and government.

# 03

## Love Food, Hate Waste

Increasing the consumption of fruits and vegetables by ensuring access to quality products.



### What is/are the dietary shift(s) that the bundled solution is addressing?

Increasing the consumption of fruits and vegetables by ensuring access to quality products.

### What environmental issue does this idea or dietary shift solve?

Reducing food waste, and reducing plastic packaging.

### Which individual solutions were bundled?

#### **Edible Coating:**

Extends the shelf life of fruits and vegetables by up to two times, using Chitasil technology. The coating is based on shrimp shells (chitin) at a cost of 0.01 USD/food. The coating is tracked using a digital traceability system to enhance transparency and efficiency in the application of the coating and helps to estimate the 'expiry date'. (*Chitasil Edible Coating- BIKI*)

#### **Ugly Food Corner:**

Sells fresh but imperfect-looking produce at lower prices. (*Aulia Ariyanti Tanjung*)

### What, specifically, will the solution bundle do?

This program can save 3,000 tons of fruits and vegetables from potential waste by training and mentoring farmers to use Chitasil technology, and working with supermarkets to sell the edible coated fruits and vegetables as well as set up the 'ugly food corner' to sell imperfectly shaped fruits and vegetables at lower prices.

### Why is the bundled solution more powerful than individual solutions?

This solution addresses food waste from upstream to downstream, by integrating technology and behavioural change (via acceptance of ugly foods) for impact.

### To reach 1 million people, which channels does the solution use?

Retail channels for Ugly Food Corners and training for farmers and distributors on using Chitasil technology.

### Why would this solution appeal to 1 million people?

Indonesia is the second largest FLW producer. Consumers and the government are eager to find solutions to this problem. The technology is affordable and local farmers can extend shelf life to sell their harvests at 'off peak' times. By normalizing imperfect produce at retail, we can still sell other foods that would end up thrown out or as animal feed.

### What are the major cost drivers for this solution?

Scaling the Chitasil coating technology, implementing digitization, training farmers, and promoting Ugly Food Corners.

### In the medium to long term, is the solution meant to be profitable, cost-neutral, or requiring outside funding?

Profitable for farmers as it will increase the sales of vegetables and fruits over a longer period and create opportunities to sell imperfectly shaped produce.

# 04

## Mindful Lunchtime

10 minutes of creative storytelling during lunchtime in primary education about food production processes and healthy eating habits.



### What is/are the dietary shift(s) that the bundled solution is addressing?

Building a new generation with awareness of healthy eating habits (eat more vegetables, fruits, legumes, nuts and seeds. Eat less fried snacks, salty snacks, beverages with added sugar, processed food) from an early age.

### What environmental issue does this idea or dietary shift solve?

Reducing food waste, promoting the efficient use of local resources, and encouraging an environmentally friendly lifestyle.

### Which individual solutions were bundled?

#### **Healthy Eating Habits at Islamic Boarding Schools:**

Implementation of healthy eating habits and environmental education for students through school farms. This program instills good dietary practices and sustainability at a young age. (*Pondok Pesantren Ekologi Ath-Thaariq - Salwa Khanzaa*)

#### **Healthy Eating Habits at Prison for Women:**

In an environment with limited access to nutrition and education, a program aims to establish healthy eating habits in women's prisons by transforming daily dietary routines through growing vegetables and microgreens in limited spaces. (*Lapas Wanita Kelas II A Semarang - Rini Sulistiawati*)

#### **Permaculture at Primary School:**

A permaculture program for primary schools in Purwakarta that teaches local food cultivation skills and sustainable eating patterns. (*SLI-Mochamad Irvan Efrizal*)

#### **Aquaponic Catering Service:**

A healthy eating program using aquaponic and circular resources. (*John Gideon - PT DietPLUS*)

### What, specifically, will the solution bundle do?

This solution will promote the 10-minute storytelling campaign during lunchtime in various primary education institutions, train teachers, develop teaching modules and videos, and implement the program directly in the field.

### Why is the bundled solution more powerful than individual solutions?

Because this solution creates individual behavioural change and builds a new generation with awareness of healthy eating habits. It offers innovative solutions to a range of social issues, i.e. food security, health disparities, and environmental sustainability while engaging different groups, students, female prisoners and the broader community.

### To reach 1 million people, which channels does the solution use?

Schools and a policy from the Ministry of Primary and Secondary Education (*Kemendikdasmen*) will be implemented in primary education institutions across Indonesia with practical technology support.

### Why would this solution appeal to 1 million people?

A simple and easy method for every teacher to implement, fostering a healthier and smarter new generation.

### What are the major cost drivers for this solution?

Research and prototyping, development of modules/videos, and human resource training.

### In the medium to long term, is the solution meant to be profitable, cost-neutral, or requiring outside funding?

Cost-Neutral.

# 05

## PAPEDA

Indigenous Papuan Food, Education, and Action. Encouraging families to leverage the abundance of nature and consume wild, edible local Papuan plants to promote healthy eating habits, support food security & reduce malnutrition for Eastern Indonesia, using creative interactive media that increases accessibility for all levels of literacy skills.



### What is/are the dietary shift(s) that the bundled solution is addressing?

Sago, tubers, fruits, and vegetables.

### What environmental issue does this idea or dietary shift solve?

Preserving local food biodiversity, reducing food waste, and promoting the sustainable utilization of natural resources.

### Which individual solutions were bundled?

#### **Lumbung Sagu Collective:**

A collaborative movement with Papuan women and schools to revive nearly extinct traditional ingredients and recipes ensuring the preservation and revitalization of local cultural heritage and food practices. (*Salsabila Andriana*)

#### **Green Living Support:**

Provides education on biodiversity, training for mothers and farmers on edible wild plants, and creative educational media such as culturally inspired games. This can complement the revitalization efforts by educating farmers, mothers, and communities about the importance of biodiversity, edible wild plants, and sustainable practices. (*Onish Akhsani*)

#### **Kombucha Ruma:**

Kombucha producers in Papua focus on using abundant exotic local ingredients. Utilizing locally grown ingredients and wisdom will provide new economic opportunities. (*Dian Lestari*)

### What, specifically, will the solution bundle do?

Research the biodiverse plant landscape to identify edible options (e.g., wild ferns instead of spinach), train Papuan women to transform local ingredients into value-added products, develop training modules for communities and primary schools using engaging games, and promote these products nationally through

events and digital platforms. It will preserve biocultural diversity in the long-term.

### Why is the bundled solution more powerful than individual solutions?

Together they have the potential to create a circular ecosystem where cultural preservation (local wisdom), environmental sustainability, and economic growth intersect. They want to empower local communities, particularly women and farmers by preserving indigenous food systems and creating new markets for local products that improve nutrition and health. The inclusion of primary school students is to ensure that traditional knowledge is not only revived but also modernized for future generations, while also contributing to biodiversity conservation and economic resilience.

### To reach 1 million people, which channels does the solution use?

The Papuan community, collaboration with local government, education in formal and traditional schools, product promotion at cultural events such as the Sago Festival and other cultural festivals, and digital marketing for both national and international markets.

### Why would this solution appeal to 1 million people?

Foods that return to their cultural roots with a modern twist.

### What are the major cost drivers for this solution?

Collaborative research, development of educational media, community training & activities and publication.

### In the medium to long term, is the solution meant to be profitable, cost-neutral, or requiring outside funding?

Cost-neutral.



## Conclusion and Next Steps

Dietary shifts on a large scale are complex, multi-level, long-term processes. Each of the five bundled solutions outlined above have the potential to influence dietary habits, health and sustainability in Indonesia.

The next steps of DISH will focus on implementation. Some of the bundled solutions will move forward to a process of multistakeholder dialogues involving key stakeholders and implementing partners in the country.

With these dialogues, the solutions will have the opportunity to connect with partners, networks and key stakeholders in order to strengthen and plan for the further implementation of their solutions.

