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Sustainable Food Systems: Innovations from France and around the world

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Youth Month Celebration



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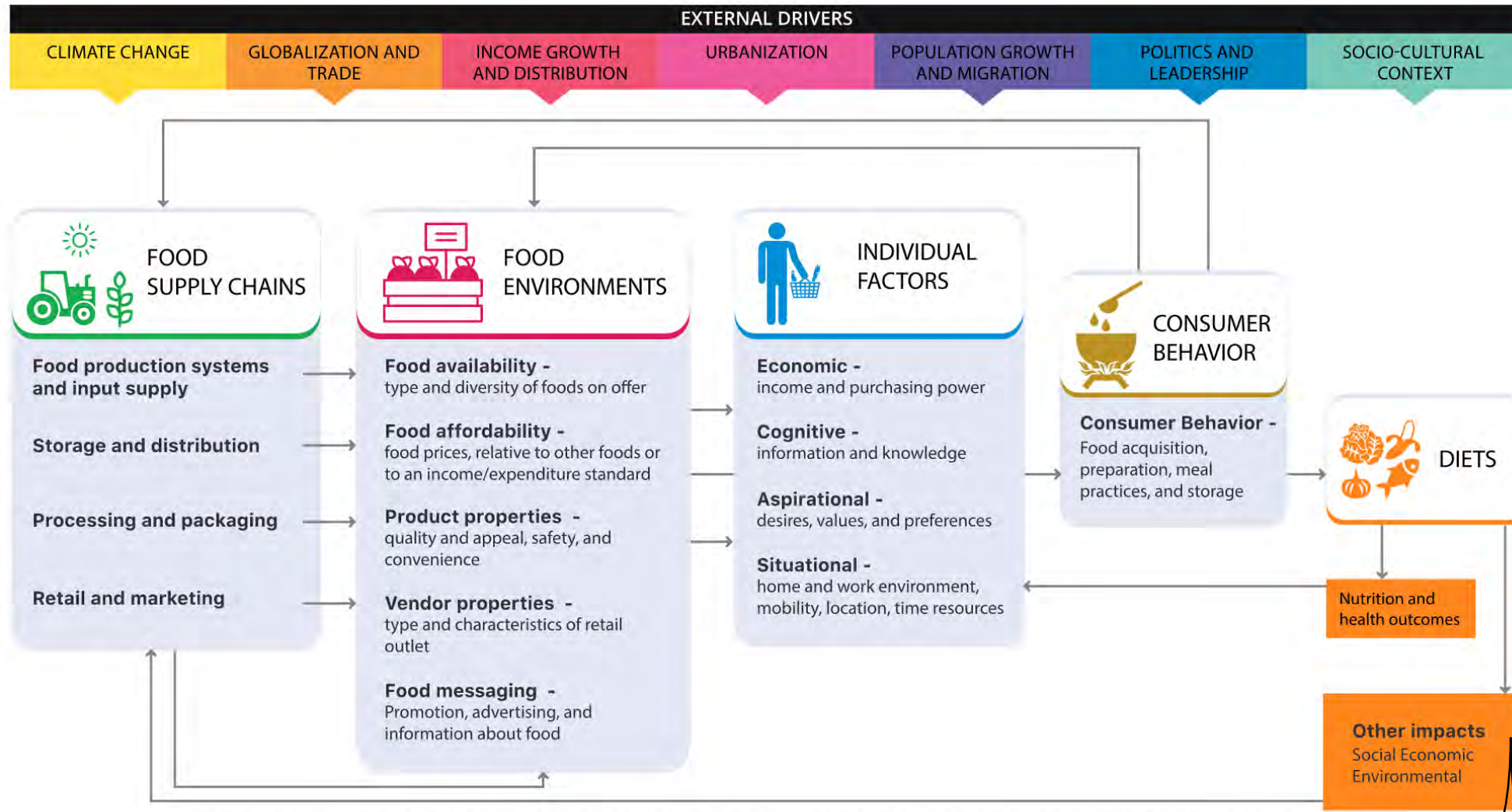
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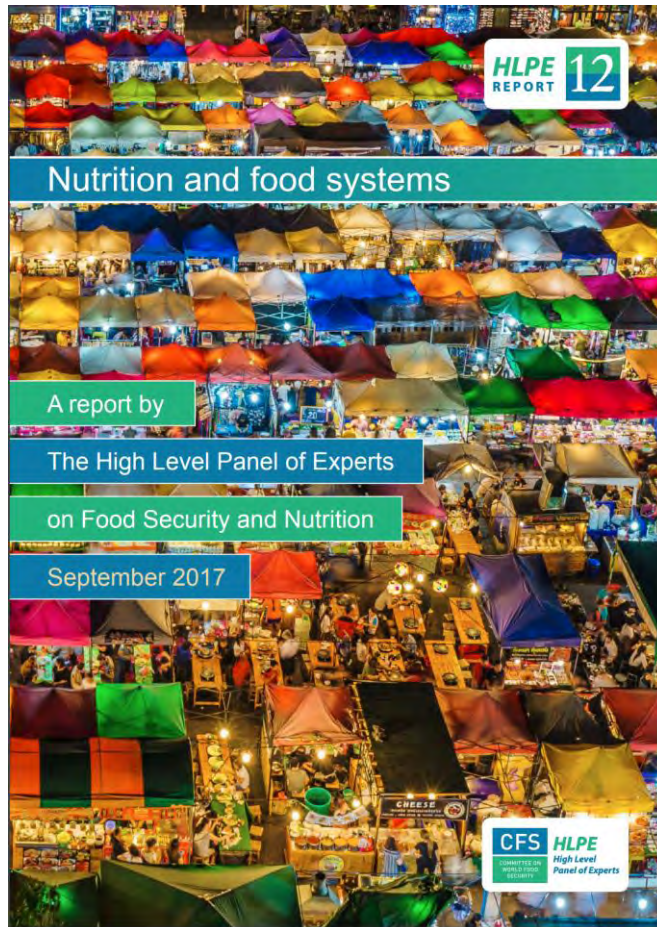
➤ What is a food system?



ADAPTED FROM: HLPE (2017). NUTRITION AND FOOD SYSTEMS. A REPORT BY THE HIGH LEVEL PANEL OF EXPERTS ON FOOD SECURITY AND NUTRITION OF THE COMMITTEE ON WORLD FOOD SECURITY, ROME, ITALY.



➤ What is a sustainable food system?



The Expert definition:

- A sustainable food system (SFS) is a food system that ensures food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition of future generations are not compromised.

In a nutshell:

- In a sustainable food system all people would eat **sufficient safe, healthy and nutritious diets at all times**, that are produced and consumed within **planetary boundaries**, while all producers are able to make **decent livelihoods**.

THREE INCREASING LEVELS OF DIET QUALITY

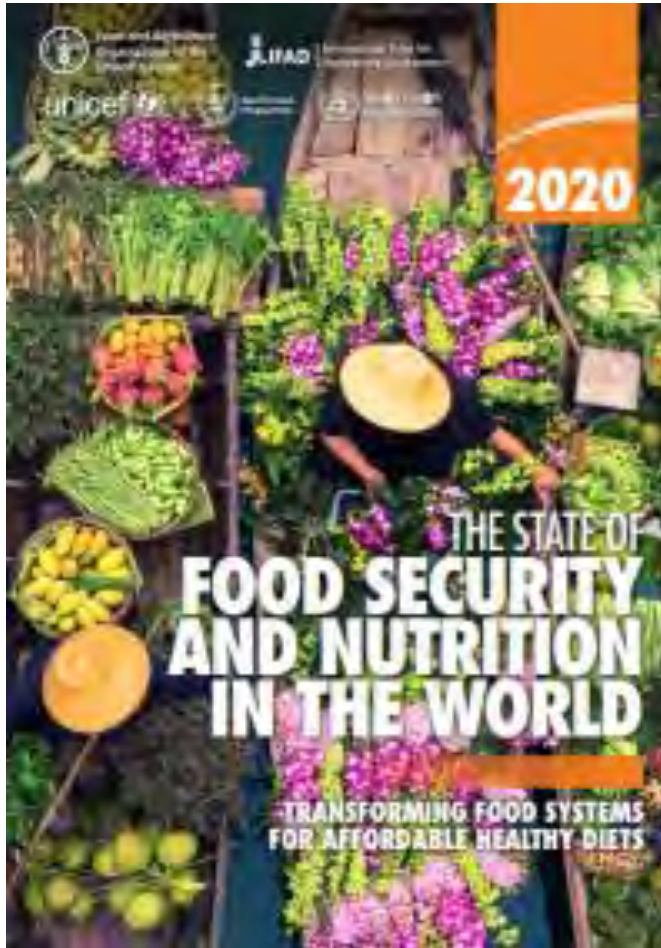


ENERGY SUFFICIENT DIET
meets needs for short-term subsistence

NUTRIENT ADEQUATE DIET
meets required levels of all essential nutrients

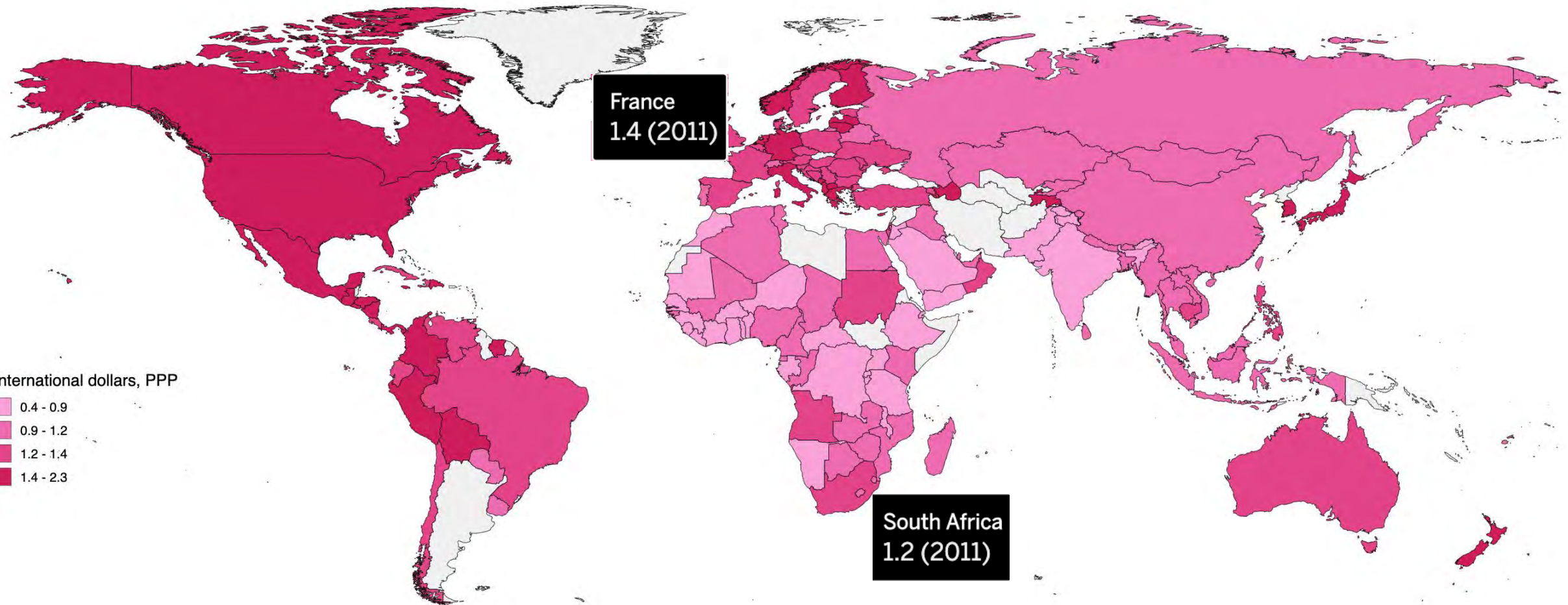
HEALTHY DIET
includes foods from several food groups and has greater diversity within food groups

➤ Are our current food systems meeting our needs for sustainable and healthy food?



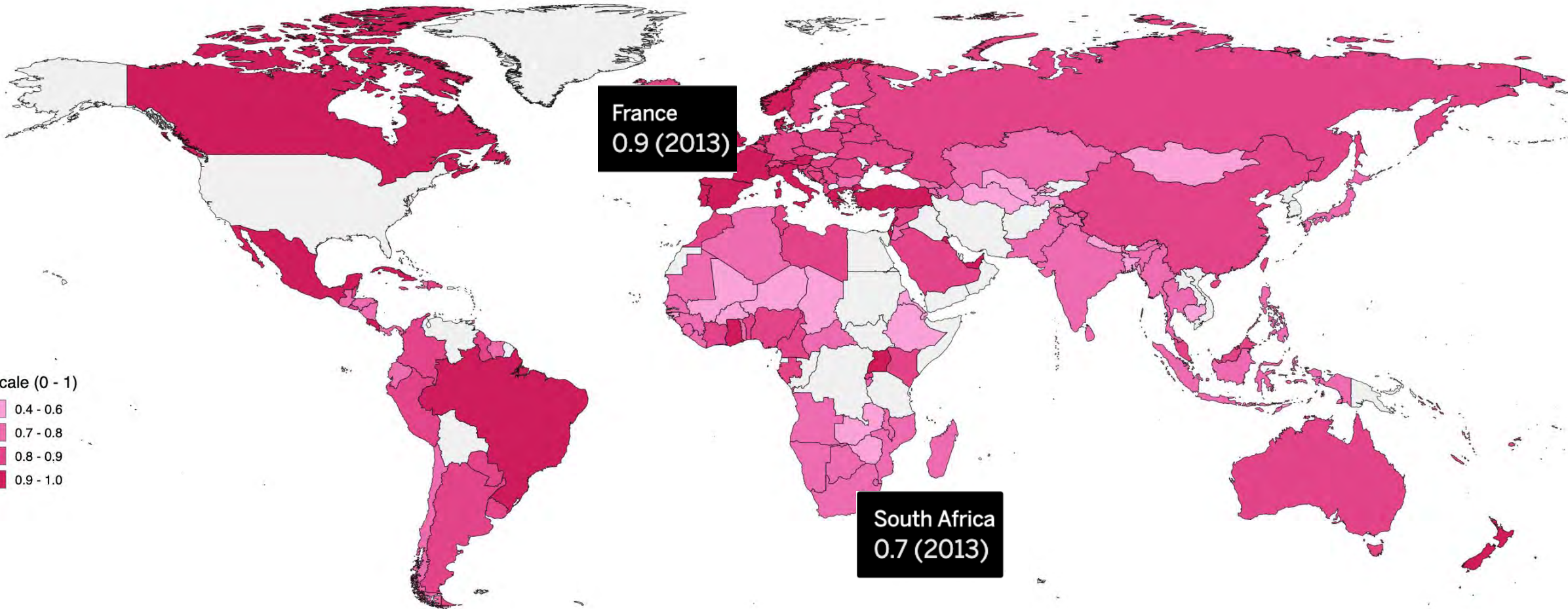
- The 2020 State of Food Security and Nutrition in the World (SOFI) Report shows that **healthy diets cost 60 percent more** than diets that only meet the requirements for essential nutrients and almost 5 times as much as diets that meet only the dietary energy needs through a starchy staple.
- **Healthy diets** – that reflect global guidelines and include foods from several groups and have greater diversity within food groups – **are unaffordable for more than 3 billion people**, and more than 1.5 billion people cannot even afford a diet that only meets required levels of essential nutrients.
- The unaffordability of healthy diets is due to their high costs relative to people's incomes, a problem likely to be **exacerbated by COVID-19**.

➤ What do the current systems deliver in terms of affordability?



➤ What about dietary diversity?

FOOD AVAILABILITY ⓘ Nutrition functional diversity index (food supply) | Scale (0 - 1) | Total



How about wild biodiversity?



COUNTRY
WORLD

YEAR
MOST RECENT



FOOD SUPPLY CHAINS

FOOD ENVIRONMENTS

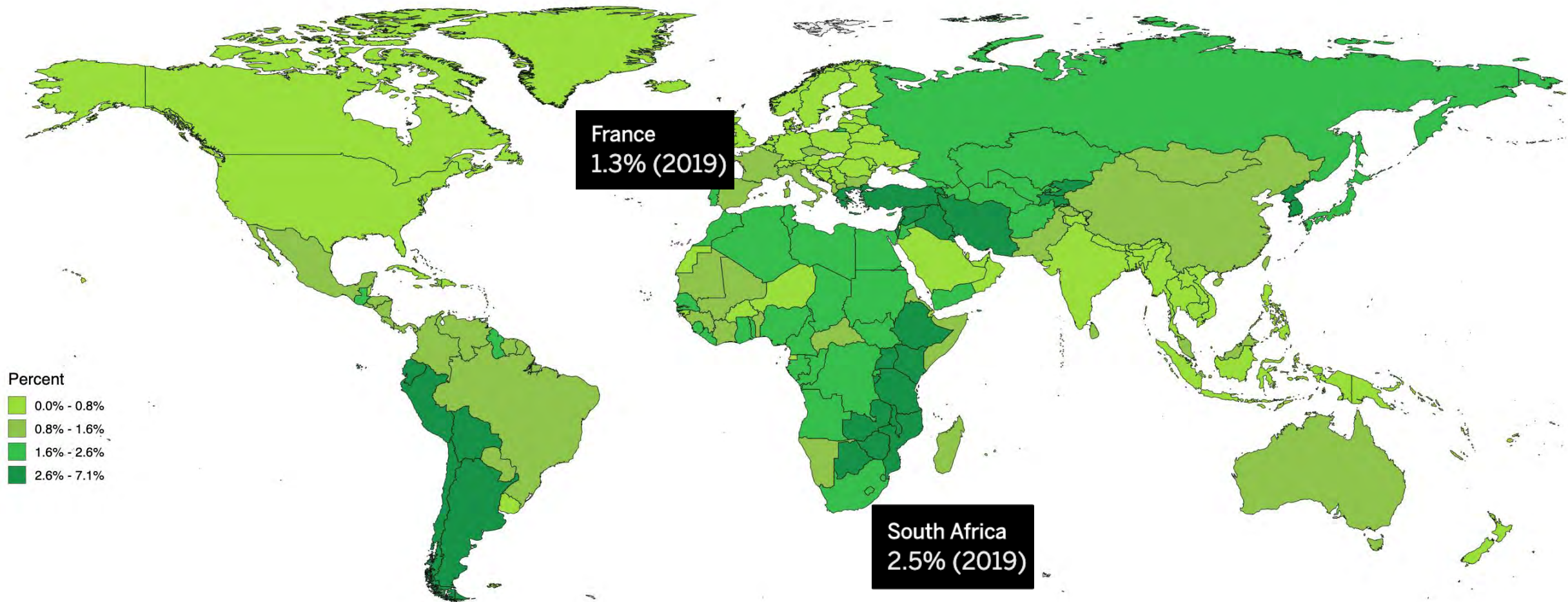
INDIVIDUAL FACTORS

CONSUMER BEHAVIOR

DIETS AND NUTRITION

DRIVERS

PRODUCTION SYSTEMS AND INPUT SUPPLY *i* Comprehensiveness of conservation of useful wild plants (Mean value) | Percent | Total



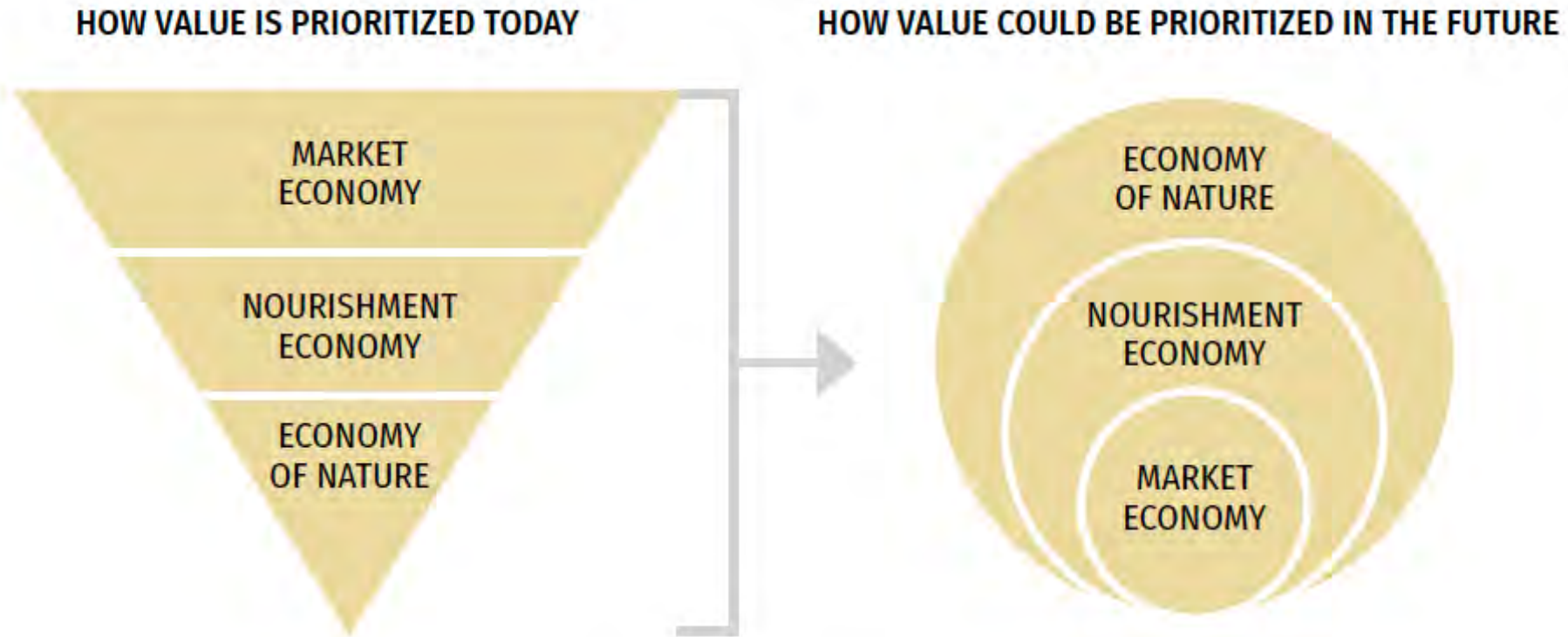
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- So how can we make changes to food systems so that they are more diverse and sustainable?



➤ Rethink how agriculture is being valued in the food system

Figure 2 (Re)Valuing agriculture



Source: adapted from authors' brainstorming Chiang Mai, 2016 and O.Nieto, Familia de la Tierra, Colombia

➤ Reorganize how different parts of the food system are connected.



➤ Small-scale agricultural service companies

Un drone pour protéger ses parcelles agricoles

Morbihan - Publié le 07/07/2016 à 02:43

🔊 écouter



<http://www.ouest-france.fr/bretagne/morbihan/un-drone-pour-proteger-ses-parcelles-agricoles-4357375>

- Creation of small-scale local service companies by youth who are competent in ITC and Drone technology
- Example of Agri Load
 - 2 800 eggs of natural predators are deposited throughout the fields. They live for 3 days and will eat the larvae of the corn borer.
 - Cost of the operation: 55€/ha
 - “Same price as a powdered agrochemical product, but without the waste of time.”

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MANAGING AND
ACCESSING
SUSTAINABLE
INPUTS



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Incubator farms (France)

In France, there is a growing trend among smallholders to set up incubator farms. The recently established national network of incubators (Réseau national d'espace test agricoles, Reneta) is a clear indication of this development.

Among the most successful examples are the "Champs des possibles" incubators. They were created by the local CSA network in the region of Paris to satisfy the need for increasing the number of new entrants in short-chain farming systems. As stated in Peter Volz et al. (2017, p.34):

The incubator farms provide access to land and equipment, mentoring and legal status to new growers during a trial period. The aim is to help them gain new skills and confidence, test farming practices, build a consumer base and develop their professional network before getting started on their own farm. This is a key dimension to bridging the gap between training and entry into farming for prospective farmers who's training often lacks practical experience.

Since its establishment in 2009, "Champs des possibles" has incubated 40 future farmers and helped install 14 new farmers.

It has also expanded into new trial sites and launched a larger cooperation with a local organic agriculture association, with a national community-based land trust called Terre de Liens, and with the CSA network. The goal was to set up an informal platform to promote new farmers in the area. They all felt there was a need for cooperation between different expert organizations: one providing training and mentoring on agronomic skills; another on distribution systems and community connections; a third one on trial farming; and a last one on finding and securing land. Thus, cooperation between all these different structures was necessary to provide a broad and coherent set of activities. The purpose is to help future farmers move "from initial plans to actual farming, securing every step of their entry path into farming" (Peter Volz et al., 2017, p. 36).

Source: Jocelyn Parot, URGENCI

To know more, visit:
www.accesstoland.eu/IMG/pdf/reneta_overview_farmincubators_france_en.pdf
www.terredeliens-iledefrance.org/le-pole-abiosol
www.leschampsdespossibles.fr

The Fields of Possibilities Agriculture and Food Incubator and Cooperative



Couveuse et coopérative d'activités agricoles et alimentaires

TROIS SECTEURS D'ACTIVITES COMPLEMENTAIRES



Organic and smallholder production



Processing and artisanal food



Mentoring, advice and training



5. EDUCATE FUTURE CONSUMERS

A food system is not sustainable if it does not provide for future generations. Educating children to eat and enjoy diversified, healthy food is of crucial importance to ensure they have a healthy life, and to guarantee the survival and growth of your sustainable initiative.

CASE BOX

7

School gardens (France)

School gardens are perhaps the best way to get children and their families to understand and commit to sustainable food. In Jean Guehenno primary school, in Caen, Normandy, as in thousands of schools around the world, school gardens have been used as a multi-faceted educational tool. Even if space is limited in an urban environment, it is always possible to grow something edible. Besides, growing food is an exciting pedagogical activity; it is a way to learn about nature, plants, sun, water, wind, and seeds from an early age.

There are many possible approaches. Children can cook the edible products harvested from the garden and sing songs about vegetables or gardening. They can also learn about the differences between plants and vegetation in different parts of the world. The economics of production and consumption can be calculated, and the basics of sustainability can be taught.

A school garden is more than a single class project. It is a school project:

different teachers may choose different ways to relate to the same garden. It is also a community project: parents and local food activists can be associated with the activities. In the Jean Guehenno school, parents partake in visits to the nearby pedagogical farm, whose growers helped to set up the school garden. These volunteer parents are trained on the spot as workshop facilitators for the day: some parents are responsible for organizing a game on the classification of plant "families"; while others facilitate blind tests about vegetables. The key is to make full use of the farm visit by preparing it in advance and by remembering the material learned there during the following classroom lessons. A school garden is a very efficient way to keep these memories alive, as it requires regular commitment.

Source: Jocelyn Parot, URGENCI

To know more on this topic, visit:
<https://eathink2015.org/en/download/School-Garden-Guide-WEB.PDF>



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ATTRACTING
CONSUMERS
AND KEEPING THEM
ENGAGED



➤ New labeling schemes in Farmers' markets

- 42% of French consumers purchased a product in a 'circuit court' (short food supply chain) during the preceeding month, with a food basket worth 25€/week

<http://www.gret.org/2014/06/circuits-courts-que-pensent-les-francais/>

- Research-Municipality-Producer-Consumer led initiative
- Labels for distance
- Reduced competition between producers



locally

"Let's unite to buy the best products from the farmers and artisans of our regions."



KEY FACTS

Created in 2011.

Corporation (with "social enterprise" status).

800+ Ruches in Europe, mostly France (729). 126 Ruches in PMR.

Ruche-Mama platform: 50+ employees (mainly IT and development).

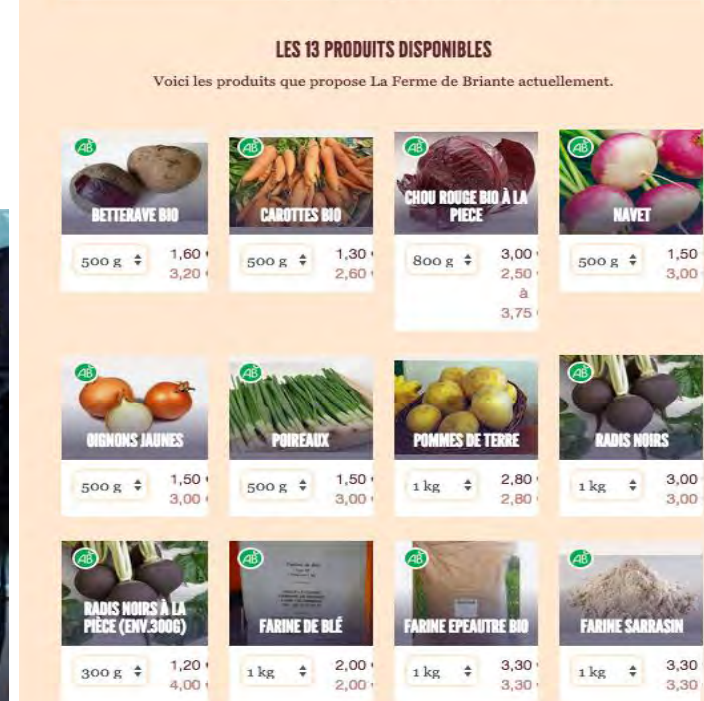
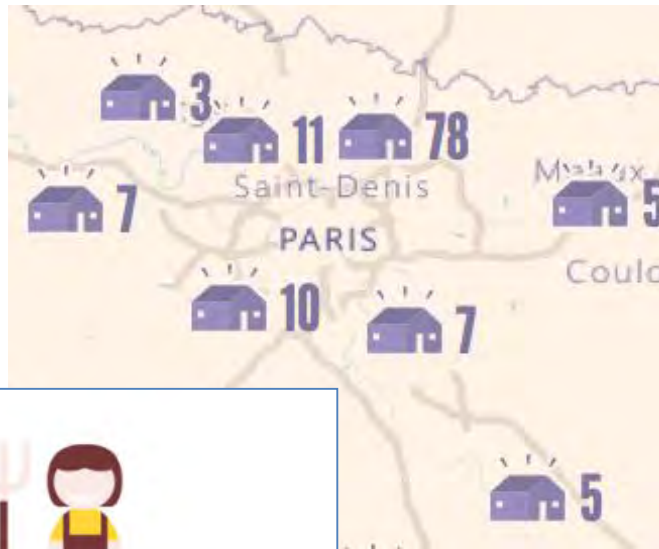
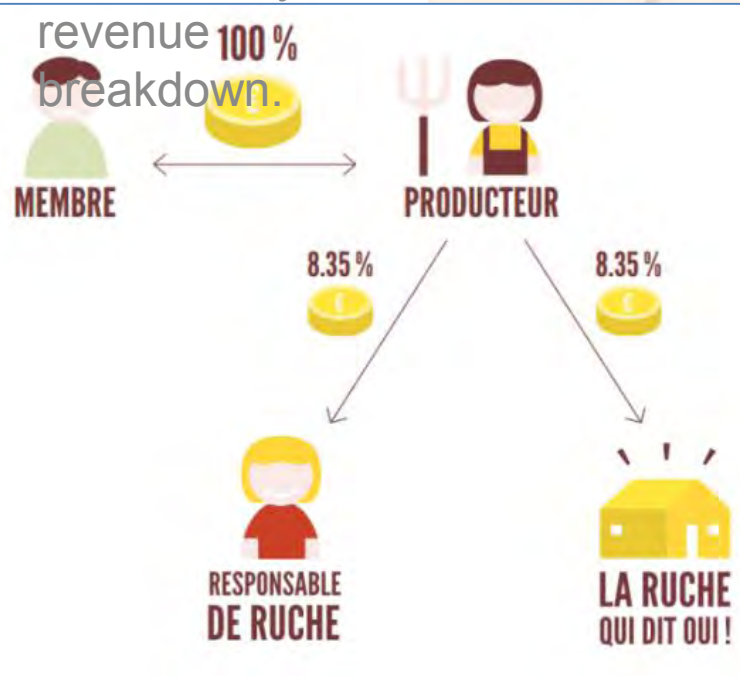
Franchise system: decentralized network of auto-entrepreneurs each manage one or several Ruches.

Each Ruche must follow platform specifications (e.g. Ruche opening conditioned on appropriate product diversity).

Maximum distance < 250 km.

Source: R. Stephens and M. Barbier (INRA)

Ruche intermediary revenue breakdown.



Réseau Mixte Technologique Alimentation Locale



RMT Alimentation Locale

Les circuits courts alimentaires ne sont pas nouveaux en France mais sont en plein renouvellement depuis la fin des années 90, sous l'impulsion de producteurs, de consommateurs, d'acteurs économiques, de collectivités : une façon de répondre aux peurs alimentaires, de diversifier les sources de revenus agricoles, de proposer une alternative à la grande distribution ou bien encore de dynamiser l'économie locale. Bien plus que des modes de commercialisation, ces circuits peuvent s'analyser comme des **chaînes alimentaires courtes de proximité**, rapprochant producteurs et consommateurs à l'échelle d'une même région, avec un nombre d'intermédiaires limité.

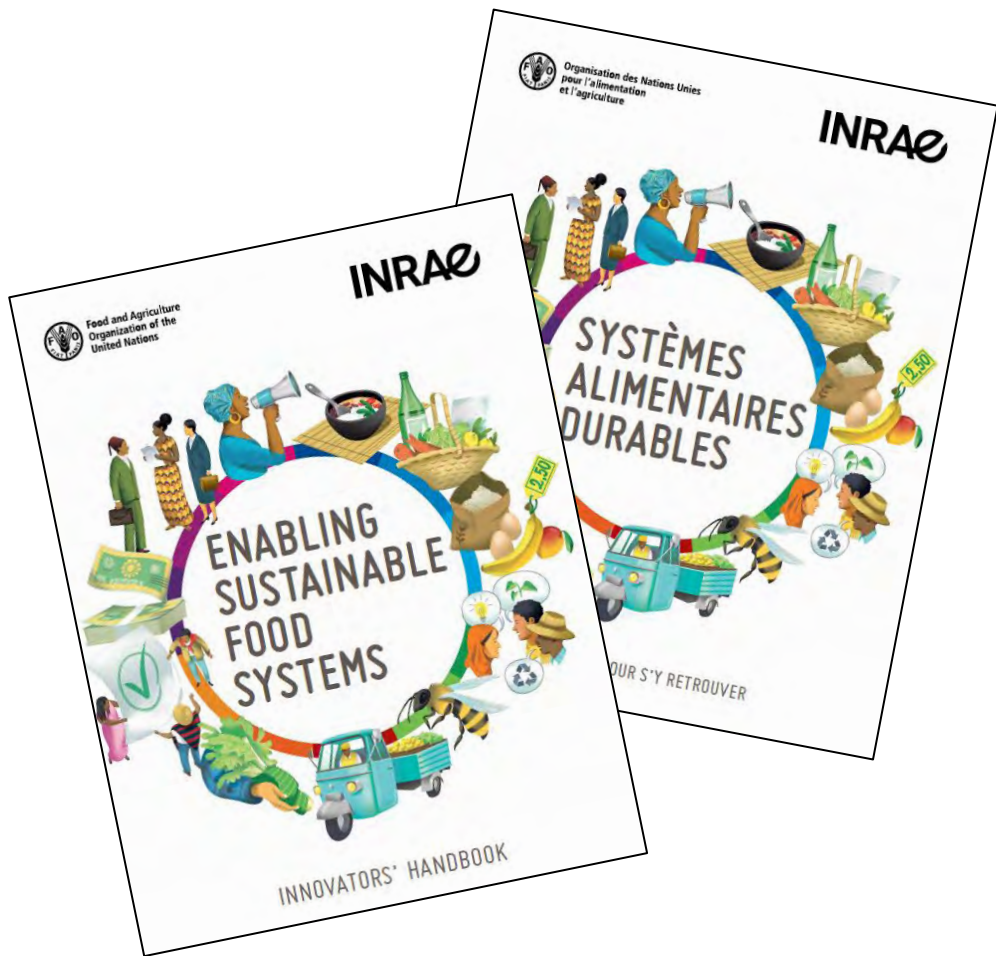
Membres fondateurs



Membres partenaires*



*Les membres partenaires ont rejoint le RMT en cours de période et/ou ne peuvent s'engager dans la durée en termes de temps passé sur la problématique du RMT. Leur participation est néanmoins importante pour les activités et les productions du réseau.



<http://www.fao.org/documents/card/en/c/ca9917en/>
<http://www.fao.org/publications/card/fr/c/CA9917FR>



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2 KNOWING YOUR MARKETS

CASE BOX 10

“Sa Patass” vs. “Boy Pombiter” (Senegal)

Within the SADMAD programme (Sustainable Food System to fight malnutrition in Dakar), a study on the eating habits of households and students in a number of neighbourhoods in Dakar was carried out by CICODEV (a consumer advocacy organization). The study revealed a high consumption of sweet potatoes with nearly 95 percent in the form of fries or unprocessed tubers. However, there was also a considerable prevalence of industrial processed snacks sold to children by vendors outside the schools. The team realized that designing a communication tool around the sweet potato could stimulate children’s awareness and increase their consumption of local, nutritious foods.

In Senegal, across all social classes, wrestling is men’s, women’s and children’s favorite national sport. The majority of wrestlers are considered role models

CASE BOX 17

Go it alone or join a network? (Benin)



PREMIUM HORTUS is a technological platform for agroecology in Benin specializing in organic production, e-commerce of agroecological products, and support for producers. Available as Web and mobile applications, and as an online payment solution, the PREMIUM HORTUS site allows you to subscribe, choose the contents of your shopping cart, order, pay online and have fruit, vegetables, cocktails and organic products delivered safely to your home. There are two programmes that

credit that helps members with payments when they are running low on cash; and CONSOM’Acteur is an app that helps consumers to track their eating habits and food needs. PREMIUM HORTUS will pick up surplus food and deliver it to those in need.

PREMIUM HORTUS guarantees agroecological producers’ permanent access to natural seeds, bio-fertilizers and specific biopesticides outside agroecological farm sites in Benin. It strengthens the professionalism and resilience of small producers and family farms through exchanges, capacity building, personalized technical support in green business management and adapted, clean technological solutions.

Source: Johannes Gourjanou, Premium Hortus

To know more, visit: <http://premiumhortus.com>

and live in the suburbs of Dakar, near the areas targeted by the SADMAD programme. This offered the perfect opportunity to develop a public service message about the nutritional qualities of the sweet potato compared to the white potato. With wrestlers delivering this message in a cartoon format in Wolof (a widely spoken local language), CICODEV was able to reach both local and national audiences. The video was designed in collaboration with the Laboratoire National d’Analyses et de Contrôle (LANAC) of the Direction du Commerce Intérieur, a graphic designer, Mr. Ousmane Diallo, Mr. Becaye Mbaye, a well-known reporter and emblematic figure in Senegalese wrestler, and Mrs. Khar Mbaye, a great national singer and icon who lent her voice.

Source: Khady Ndoye, CICODEV, Senegal

To watch the video in Wolof, visit <https://www.youtube.com/watch?v=8HhKz0AoPUB&t=3s>

