

## **5.19: ENRICHING CHILD'S FOOD & NUTRITIONAL EDUCATION AND SITUATION THROUGH WEB-BASED TOOLS, INCLUDING FOOD INTO THE CURRICULA, AND PROVIDING SCHOOL MEALS.**

### **What problem is the solution trying to address?**

Food illiteracy is at the basis of unhealthy and unsustainable individual and collective choices that compromise the resilience of human and planetary health. These include both dietary choices, handling of food waste and choices on farming practices and the management of food production landscapes.

Research shows that only the combined effects of positive changes in all these fronts will be able to put current food systems within environmental limits that don't compromise social-ecological resilience (Springmann et al 2018). But many of these unsustainable and unhealthy habits are difficult to transform as they are embedded in social norms and regional food cultures (REF). Thus, to achieve positive change we need to shift mindsets and value systems. These are long-term transformational goals and education and knowledge from an early age on what constitutes a healthy diet, and on different sustainable management practices of food production landscapes, are key features in this process.

### **What, in brief, is the solution?**

To mainstream healthy food habits, from diets to production practices, we need to embed that knowledge on child education from an early age. Although adult education is important for accelerating short term action, the mind shift required for such systemic transformations demands a longer-term investment in those who will be the adult consumers and leaders of the future (Willet et al. 2019).

School programs in all regions of the world should be adapted to include knowledge on:

- The practices that sustain food landscapes that are environmentally sustainable and able to support local livelihoods while celebrating the value of local food cultures.
- Nutrition and what consist a healthy diet adapted to the local culture;
- The value and the importance of preserving diversity of foods at all scales of the food system, from the local scale to the thousands of crop varieties and wild foods at the planetary scale.
- How individual food choices can affect large scale transformation, and how each person can be part of a positive change

Additionally, schools should:

- Ensure that school menus have a high nutritional and sustainability standard (healthy food, as locally produced as possible with low amount of inputs)
- Use school gardens to produce food for educational purposes through sustainable practices. (if this is not possible, collaborations with, for ex. Pedagogical farms can be fostered to expose children to the kraft of farming)

### **What was/ were the source(s) from which this solution emerged?**

Google form (further supported and enriched through literature sources and practical examples).

### **How can this solution address that problem?**

Children educated in sustainable and healthy food systems from an early age are better equipped to make better food choices. Educated children can foster innovative ideas for transforming farming practices, become responsible consumers and stewards of sustainable and healthy local food environments and cultures.

This solution includes not only the transmission of theoretical knowledge but also learning through practice and exposure. School meals are a leverage point to both ensure the appropriate nutrition to school children from all social groups while at the same time promoting healthy food habits from an early age. Raising the sustainability and health standards of school meals can also be used to achieve other synergistic goals such as locally produced food, promoting organic farming, etc. Examples from places like Brazil and Denmark show how public policies targeting school meals have driven transformational change in the local and regional food production system, (Colombo et al. 2020; BMJ 2019; Hansen et al. 2010). School gardens or pedagogic farms provide also an opportunity for children to “learn by doing”, understand where does food come from and the basic principles of sustainable farming and local food cultures, as well as and experience the mental and physical benefits of producing local and sustainable food (Dyg and Wistoft 2018; Wolsey and Lapp 2017).

Experiences with school programs with focus on food health and sustainability show that public procurement can be an effective tool to implement such initiatives in schools. State (National education Boards for ex), municipality actors and school principals are therefore the main key change-agents in this solution.

Teachers and staff from school kitchens need specific training on how to integrate knowledge on food systems sustainability and health in their daily work. Teachers need pedagogical tools that allow this integration and kitchen staff will need support to compose more sustainable menus that are also nutritionally diverse.

One of the challenges/risks with this initiative is that in the shift towards healthier and sustainable food, the supply systems in place (ex. local organic farms) cannot deliver the volume of food needed to support the initiative. This was a problem identified in previous cases.

Another aspect is that educational systems in different regions/countries differ in their investment capacity. The risk being that less favored areas aren't able to put the necessary resources in place (training staff, changing school programs, etc) to out this solution in practice, which in the long term can increase the knowledge gap among different countries/society groups even more. Therefore, educational efforts shouldn't be limited to formal education. Civil societies and informal actors might have a key role in spreading this knowledge through different channels.

### **Why does this solution align to the definition and criteria for a 'game changing solution' developed by the Summit?**

1) A mindshift on the way we consume and produce food towards more sustainable and healthy habits has the potential to contribute to systemic food systems transformation from the local to the global scale. Educating the children of today, will contribute to a next generation of consumers and producers whose values and behavior are aligned with the health and sustainability targets for food systems.

2) Investments in education can be costly as rigidity is often a trait of most educational systems. However, examples such as the city of Copenhagen that within a few years time succeeded in making 90% of the food served in public in school kitchens coming from organic production, show how public procurement can be effective in changing the rules of the game within a short time period.

National governments and municipalities have the mandate, and in many cases the capacity for a direct implementation of such changes in their respective school systems. Thus, this is an actionable solution with well identified policies and key actors.

Still, the replication of examples such as the one described for the city of Copenhagen might be challenging in regions where resources to the educational system are scarce in countries where institutions are weak. In those cases intergovernmental organizations and the civil society sector can play a crucial role in filling providing the support mechanisms to the implementation of this solution in less favored regions (qualified training of school staff, ensure the availability and better access to healthy sustainable food, etc)

(3) Investments in education and changes in values and behavior are actions with a long-time horizon that would likely deliver outcomes beyond 2030.

### **What is the current and/or likely political support for this idea?**

The World Food Program is a strong supporter of using school meals as a way of improving nutrition and educating children on the benefits of sustainable and healthy food choices

Stakeholders implementing this type of solutions:

- The EAT-C40 Food Systems Network is a collaboration between the EAT foundation and the C-40 network Cities Climate Leadership Group that supports cities to accelerate action in order to reduce greenhouse gas emissions while enhancing urban food system resilience. One their main action tracks is the Sustainable Diets and Procurement – which includes using food procurement for public schools' canteens to foster more sustainable and healthy diets.
- The city of Copenhagen Food strategy, which includes the use of public procurement to embed food health and sustainability in public schools [https://www.kk.dk/sites/default/files/uploaded-files/the\\_city\\_of\\_copenhagen\\_food\\_strategy\\_2019.pdf](https://www.kk.dk/sites/default/files/uploaded-files/the_city_of_copenhagen_food_strategy_2019.pdf)
- The Brazilian School Feeding Programme uses school meals as a leverage point for increased nutrition and food security, knowledge and learning on food systems sustainability and health, while at the same time supporting family farms [https://www.researchgate.net/publication/233876347\\_The\\_Brazilian\\_School\\_Feeding\\_Programme\\_an\\_Example\\_of\\_an\\_Integrated\\_Programme\\_in\\_Support\\_of\\_Food\\_and\\_Nutrition\\_Security](https://www.researchgate.net/publication/233876347_The_Brazilian_School_Feeding_Programme_an_Example_of_an_Integrated_Programme_in_Support_of_Food_and_Nutrition_Security)
- <https://thesolutionsjournal.com/2016/02/22/the-local-food-revolution-in-brazils-schools/>

Similar initiatives have been successfully implemented in other countries such as Japan

<https://www.barillacfn.com/en/magazine/food-and-society/japan-shows-food-education-works/>

<https://www.devex.com/news/what-lessons-can-countries-learn-from-japan-on-school-meals-96198> and

Italy: [http://www.citego.org/bdf\\_fiche-document-1329\\_en.html](http://www.citego.org/bdf_fiche-document-1329_en.html)

### **Are there certain contexts for which this solution is particularly well suited, or, conversely, contexts for which it is not well-suited at all?**

This solution is suited to be implemented worldwide, but should be particularly prioritized in countries with high levels of obesity and countries with high levels of food insecurity, and where the gains of nutritious and healthy school food would really make a difference for child food security.

### **What do you think are the key actions required to address this solution?**

1. Use public procurement to embed food systems literacy in school pedagogic programs, raise the nutrition and sustainability standards of school meals and increase the exposure of children to the ways of producing and processing healthy and sustainable food (through school gardens; cooking lessons, etc)
2. Intergovernmental organizations and civil society organizations are instrumental to the implementation of this solution in countries/regions where resources for investment in education are scarce or/and institutions are weak.