

### Objectives of the project

SafeVeg aims to pilot and scale innovative approaches to improve the functioning of vegetable value chains through strengthening the relationships among value chain actors, and increase the production and consumption of safe vegetables, leading to better nutrition and more jobs, especially for women and youth in West Africa.

More specifically SafeVeg contributes to these outcomes:

- ✓ Increased vegetable consumption in West Africa,
- ✓ Increased use of agroecological farming and post-harvest practices to reduce the use of chemical inputs in vegetable production,
- ✓ Strengthened vegetable businesses by building trust between actors in the vegetable value chain,
- ✓ Evidence-basis strengthened for informed policies and interventions increasing vegetable production and consumption,
- ✓ Capacity built of national agricultural research systems in vegetable research and development.



*Vegetable business women in tomato market at Seme-Kpodji, Benin*

### Background

The three project target countries in West Africa, i.e., Benin, Burkina Faso and Mali are not on track to meet their development targets of ending all forms of hunger and malnutrition by 2030 (SDG2). There is a clear need to promote the role of micronutrient-rich foods like vegetables in local food systems in all three countries. Meanwhile, there is a growing urban demand for safe and high-quality vegetable. Boosting the vegetable sector near cities will multiply farm incomes, thereby contributing to poverty reduction (SDG 1) and contribute to more diversified and more resilient farming systems (SDG13). Exploiting the nutritional and economic potential of vegetables requires that food systems better connect smallholder vegetable farmers with urban consumers. However, there is a lack of trust between actors in the vegetable value chain, in particular because of food safety concerns. Productivity of vegetables is low due to poor quality seed and suboptimal management practices and under pressure from climate change. Postharvest losses occur because of lack of investments in storage, food processing and market infrastructure. SafeVeg aims to pilot and scale innovative approaches to improve the functioning of vegetable value chains through strengthening the relationships among value chain actors, and increase the production and consumption of safe vegetables, leading to better nutrition and more jobs, especially for women and youth. SafeVeg takes a pro-active approach towards scaling of project results beyond the three target countries to other Economic Community of West African States (ECOWAS) countries.

### The theory of change to achieve the objectives

SafeVeg builds on the understanding that the development of a strong and competitive vegetable sector requires a combination of supply- and demand-side interventions as illustrated in the project's Theory of Change in Figure 1. A diagnostic was conducted to identify main barriers and opportunities to enhance safely produced vegetable and consumption and reduce post-harvest losses. Based on these assessments, potential innovative approaches to enhance consumption are being tested with local stakeholders across all the operational components of the project (Work Package – WP).



The project uses a demand-driven, action-oriented approach in which new tools and technologies are developed, piloted and scaled through vegetable business networks boosting the functioning of food systems, as well as through more direct scaling pathways including public and private sector partners. Young men and women are targeted to provide effective and efficient business support services that create income and jobs for them and transform their livelihoods. Seed production of climate-resilient vegetable varieties is one of such business opportunities. Improved varieties will be scaled through the nascent seed sector and reach thousands of other farmers as a result.

SafeVeg aims to improve food intake of 75,000 West African consumers. An estimated 200,000 small-scale farmer are expected to adopt improved vegetable seed across West African countries and at least 10,000 to adopt sustainable, climate smart practices. A further 5,500 vegetable producers connected to 220 vegetable business networks are expected to increase productivity and income.

The project is being implemented jointly by international partners, local National Agricultural Research Systems (NARS) and students. The project aims at supporting 24 MSc students and 7 PhD students from the partner countries.

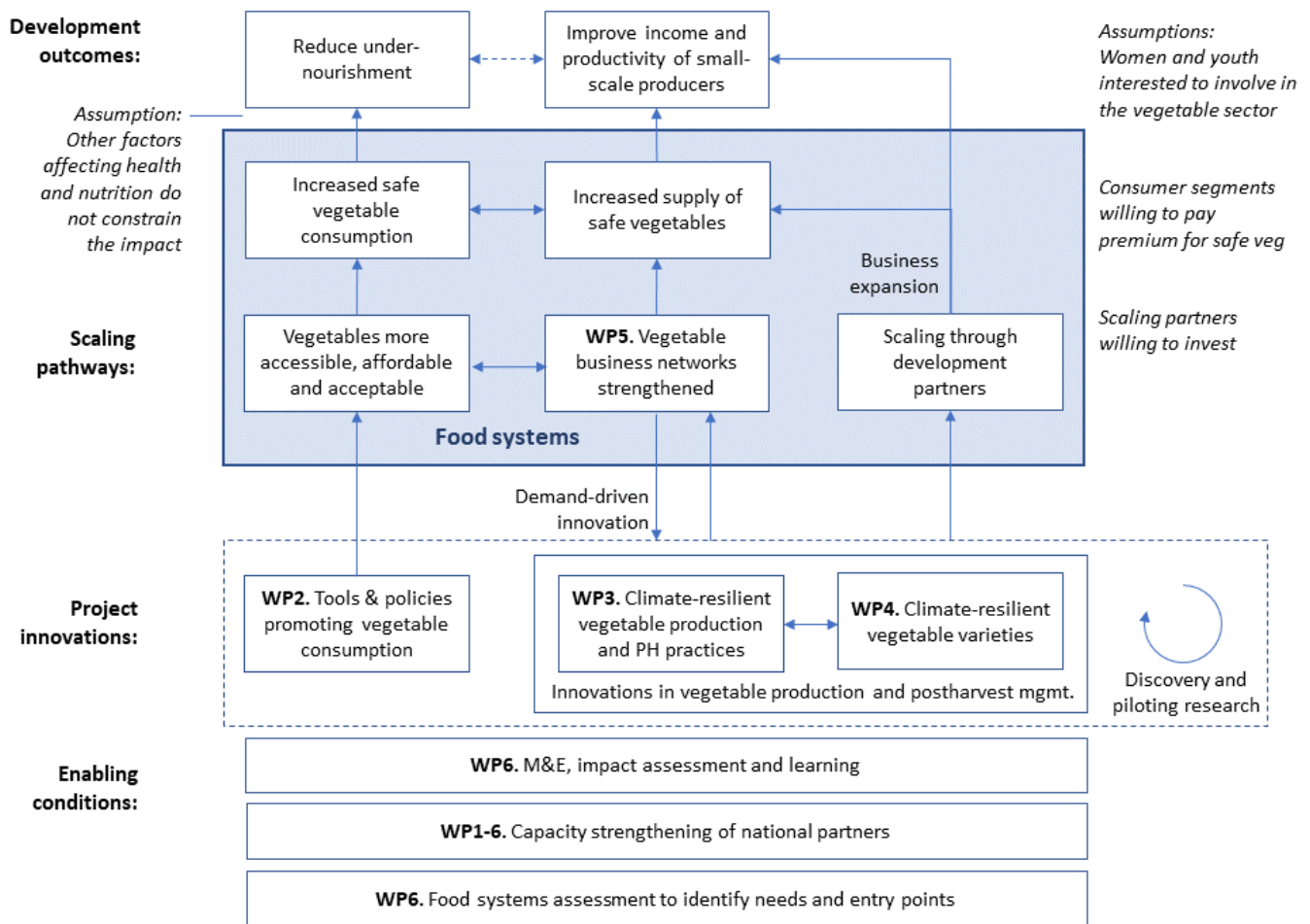


Figure 1. Theory of Change for SafeVeg, showing the synergy between increasing vegetable demand and supply

### Main activities

The main activities of SafeVeg are:

- ✓ Comprehensive food systems assessments in each country;
- ✓ Surveys to identify, design, test and scale innovative solutions and distribution models to make vegetables more accessible and acceptable and to gain consumer trust in food safety;
- ✓ Surveys to identify supply constraints and food safety concerns;
- ✓ Multi-location on-farm trials to test new varieties, and promising agricultural and post-harvest practices;
- ✓ Training in seed production and good agricultural and post-harvest practices for vegetable producers;
- ✓ Selection and training of business champions to strengthen vegetable business networks;
- ✓ Establishment of real-time monitoring and knowledge management system;
- ✓ Surveys to conduct impact evaluation to generate evidence.

### Results achieved to date (October 2023)

#### Stimulating vegetable consumption: Target 75,000 consumers

- ✓ Experimental phase: 8,000 consumers reached in Benin, Burkina Faso and Mali.
- ✓ And potentially 333,000 consumers after the scaling phase with 500 popular restaurants.

#### Promoting sustainable agricultural practices: Reach 2500 hectares of farmland using more eco-friendly practices

- ✓ Eight (08) agroecological farming and postharvest practices are being tested in Benin, Burkina Faso and Mali.
- ✓ 300 vegetable farmers trained on Integrated Pest Management and Integrated Soil Fertility Management.
- ✓ 250 ha of farmland covered with eco-friendly practices during the pilot phase.



*Clay application to manage soil texture and fertility*

#### Enabling access to quality vegetable seed: Target 200,000 small-scale farmers



*A women vegetable farmer weeding her onion plot at Grand-Popo, Benin*

- ✓ Vegetable Seed Road Map developed and officially handed over to the Government of Benin.
- ✓ 2 rounds of training for 152 seed company staff (27% women), including 57 in Benin, 42 in Burkina Faso and 53 in Mali.
- ✓ Eight (08) seed companies recruited for the production of 20,000 seed kits across the 3 SafeVeg countries.
- ✓ Vegetable varieties multilocation trials underway in the 3 SafeVeg countries involving 12,000 farmers.





*A field visit with a VBN champion and coach at Goulosodji, Benin*

**Establishing and strengthening Vegetable Business Networks (VBNs): Target 220 VBNs with 5,500 farmers**

- ✓ 125 VBNs established, including 75 in Benin, 25 in Burkina Faso and 25 in Mali.
- ✓ 5000 farmers trained and connected to VBNs, with 3572 in Benin, 700 in Burkina Faso and 728 in Mali.

**Food environment assessment and compiled evidence for science-informed policies: Target 1 food systems assessment, 2 impact evaluation studies, and support for 24 MSc and 7PhD students**

- ✓ Three (03) food systems assessments conducted across the three countries.

- ✓ Two impact evaluation ongoing studies
- ✓ 20 MSc students and nine (09) PhD students supported by SafeVeg Project in the three countries.

**Organization**

SafeVeg is composed of several Work Packages (WP):

- ✓ WP1: Management and Coordination
- ✓ WP2: Tools and policies promoting vegetable consumption
- ✓ WP3: Climate-resilient, safe vegetable production, and postharvest practices
- ✓ WP4: Climate-resilient vegetable varieties
- ✓ WP5: Strengthening of Vegetable Business Networks (VBNs)
- ✓ WP6: Knowledge and evidence for policy development

A SafeVeg steering committee is chaired by the NARS partners for more leadership and buy in with the project interventions. The steering committee includes senior representatives of the project consortium and national partners. The committee provides strategic guidance to the consortium partners. The steering committee meets twice a year to discuss progress on the actions.

**Implementing organization**

SafeVeg is implemented by the World Vegetable Center in Benin, Burkina Faso and Mali, with WUR, CIRAD and national research and development partners INRAB, INERA and IER. SafeVeg is financed by the EU and the Government of the Netherlands.



**World Vegetable Center**

**Partners of the project**

- ✓ Wageningen University & Research (WUR), the Netherlands is leading WP2. WUR has long-term experience in West Africa and provides complementary expertise in terms of food systems research.



**WAGENINGEN**  
UNIVERSITY & RESEARCH

- ✓ Centre de coopération internationale en recherche agronomique pour le développement (CIRAD) is the French agricultural research and international cooperation organization working for the sustainable development of tropical and Mediterranean regions. CIRAD through their research unit HortSys leads WP3. CIRAD has long-term experience in West Africa and provide complementary expertise in terms of agronomy research.
- ✓ Institut de l'Environnement et Recherches Agricoles (INERA) is the national agricultural research institute of Burkina Faso. INERA participates in all WPs and take a lead in reporting results to the Economic Community of West African States (ECOWAS) as INERA is the National Centre of Specialization in Fruits and Vegetables for ECOWAS.
- ✓ Institut d'Economie Rurale (IER) is the national agricultural research institute for Mali. IER participate in all WPs.
- ✓ Institut National des Recherches Agricoles du Bénin (INRAB) is the national agricultural research institute for Benin. INRAB participate in all WPs.
- ✓ Local NGOs (Association Malienne d'Eveil au Développement Durable (AMEDD), Groupe de Recherche et d'Action pour le Développement (GRAD), Africa Green Corporation SA, etc.)



**Institut National des Recherches Agricoles du Bénin**

La recherche agricole au service du développement

### Other main stakeholders

- ✓ Urban vegetable consumers
- ✓ Peri-urban vegetable growers
- ✓ Vegetable input dealers, in particular the seed sector
- ✓ Vegetable processors and traders
- ✓ Young women and men entering vegetable business networks as producers, processors or traders
- ✓ Local, national, and regional policy and decision-makers

### Location

Benin, Burkina Faso, Mali with potential scaling to other ECOWAS countries.

### Funding and co-funding

EU contribution	€ 8,000,000
Netherlands contribution	€ 3,970,000
Total budget	€ 11,970,000



### Duration

5 years

Start: November 1, 2020

End: October 31, 2025

### Website

<https://avrdc.org/safeveg-local-production-of-safe-vegetables-for-west-african-consumers/>

Updated on 12/10/2023