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 will contribute to these outcomes:

- ✓ Increased vegetable consumption in urban and peri-urban areas.
- ✓ Increased use of sustainable agricultural and post-harvest practices that are climate-smart.
- ✓ Strengthened vegetable businesses.
- ✓ Evidence-basis strengthened for effective policies and interventions increasing vegetable production and consumption.
- ✓ Capacity built of national agricultural research systems in vegetable research and development.

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 produce. 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 will take a pro-active approach towards scaling of project results beyond the three target countries to other ECOWAS countries.

The theory of change

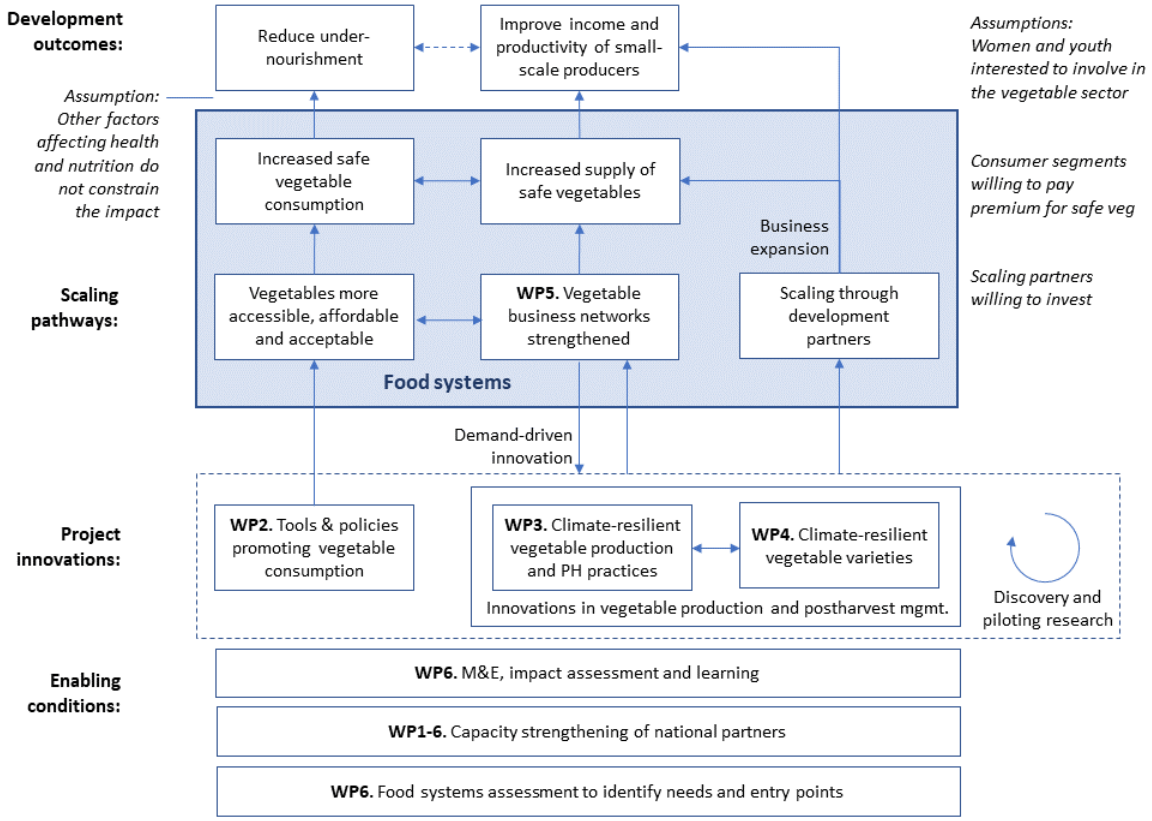
SAFEVEG builds on the understanding that the development of a strong and competitive vegetable sector requires a combination of supply- and demand-side interventions as illustrated in the project's Theory of Change in Figure 1. Surveys will be conducted to identify main constraints and opportunities to enhance vegetable consumption and production and reduce post-harvest losses, with a particular focus on food safety. Based on these assessments, potential innovative approaches to enhance consumption will be tested with local stakeholders. New climate-smart varieties and production and post-harvest practices will be trailed on-station and on-farm. Different communication procedures and innovative retail solutions and vegetable distribution models will be tested to enhance consumer

trust and stimulate vegetable consumption. Impact evaluations will be conducted to generative evidence regarding job creation, income enhancement and vegetable production and consumption levels to inform policy and decision-makers.

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 will enter the business of providing effective and efficient business support services that will create income and jobs for the group and transform their livelihoods. Seed production of climate-resilient vegetable varieties may be identified as one of such business opportunities. Improved varieties may also be scaled through the nascent seed sector and reach thousands of other farmers as a result. Scaling requires stakeholders to invest in components of the vegetable value chain. As this is a relatively risky assumption, the project will also strengthen the capacity of existing vegetable business networks and mentor them through the innovation process. Twenty young men and women per country will be trained yearly during the first two years of the project as vegetable business coaches. The training will focus on technical training, finance and business training and functional capacity development. These coaches will support the vegetable business networks in the implementation of their action plans focusing on (*i*) capacity to produce, store and process safe vegetables, (*ii*) capacity to manage a business and (*iii*) capacity to partner and build business relationships. Successful networks could be a model for other value chain actors to emulate.

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

Most of the research will be conducted jointly by international project partners and local NARS and students. The project will support 24 MSc students and 7 PhD students from the partner countries who will conduct their research within the project. Increasing knowledge and evidence for the effectiveness of tools and technologies tested is an integral aspect of the project.



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
- ✓ Workshops to select and training to strengthen vegetable business networks
- ✓ Establishment of real-time monitoring and knowledge management system
- ✓ Surveys to conduct impact evaluation to generate evidence

Organization:

SAFVEG is composed of several work packages (WP):

- ✓ WP1: Management and Coordination of the Action
- ✓ 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 will be chaired by the Netherlands' Embassy in Benin. The steering committee will include senior representatives of the international and national partners. The EC and the Netherlands Ministry's Inclusive Green Growth Department (IGG) will be invited to join these meetings (virtually). The committee will provide strategic guidance to the consortium partners. In its yearly meeting, progress on the action will be discussed and policy and strategic issues will be set out.

Implementing organizations:
World Vegetable Center (WorldVeg) is the world's leading vegetable research centre and has been based in Mali since 2003 and in Benin since 2017. WorldVeg, through its regional centres in Benin and Mali, will coordinate SAFEVEG on the ground and lead WP4, WP5 and WP6.

Partners of the project:
- ✓ Wageningen University & Research (WUR), the Netherlands will lead WP2. WUR has long-term experience in West Africa and provides complementary expertise in terms of food systems 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 will lead 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 will participate in all WPs and will 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 will participate in all WPs.
- ✓ Institut National des Recherches Agricoles du Bénin (INRAB) is the national agricultural research institute for Benin. INRAB will participate in all WPs.
- ✓ Local NGOs (to be identified)

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

Localisation: Countries/regions
Benin, Burkina Faso, Mali with potential scaling to other ECOWAS countries.

Funding and co-funding:

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

Duration:
Start: November 1, 2020
End: October 31, 2025


Ministry of Foreign Affairs of the Netherlands


World Vegetable Center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