



### Factsheet final findings Global Challenges Programme Call 3



# Enhancing urban food security through development of allotment gardens in and around the cities of Benin

#### Summarv

The project empowered urban poor in Benin to take matters of food security in their own hands. Two pilots in Abomey-Calavi and Porto Novo were developed where, randomly selected, twenty participants for each pilot received training in crop husbandry. Panel data of participants were used to monitor changes in diet and income that were compared with control groups from the same area. Findings showed that garden participants improved their income, food diversity and food security. A survey among experienced gardeners corroborated the findings and confirmed the potential of allotment gardens for entrepreneurship especially if gardeners transit from informal groups to genuine cooperatives. For upscaling of project findings, a decision support tool was developed, using biophysical (soil, water) and socio-economic (distance to markets, safety for women) criteria as explanatory and expert knowledge on site suitability as response variable. The tool's capacity to support policymakers comes to the fore by reporting on site suitability changes under scenarios of improved soil fertility and enhanced safety for women.

## Research findings

The project was an inspiring journey where the achieved objectives exceeded all expectations. The development of allotment gardens in the urban and peri-urban areas in Benin was a life changer for participants. And these changes were welcomed because the baseline survey elucidated that the life of garden participants was not easy; low education levels, lack of financial resources, overcrowded and unsanitary housing conditions and limited access to health facilities; a large share was food insecure. Yet, their participation increased the food security while surplus production assured some income, of around 50 euros per month. In comparison with the control group, food diversity of participants improved and the number of meals per day increased. A main finding of the project was that most allotment gardens had a formal organizational structure, but hardly benefited from collective actions nor did they levy negotiation positions. Finally, the project developed a unique site allocation tool that serves as a decision support tool to inform policymakers on optimal allocation. The rich data set underlying the tool was derived from secondary spatial data at a high operational resolution of 30x30m. Cadastral maps of three major cities indicated sites with highest probabilities for a successful implementation of allotment gardens.

### Final outcomes achieved

Analysis of financial diaries shows that participants can earn approximately EUR 6000/ha per year. Additionally, women argued that they can now easily contribute to households' expenses which increases their social status. The two following stories elucidate the most significant changes from the project:

"I usually stayed home and got sick regularly. But, since I started gardening, I have been going out of the house and making efforts to cultivate. I have noticed since then that I am getting better and no longer get sick. I am really enjoying the work in addition to the profits I make on my plot. Now, not only do I find money, I no longer spend it on health care. My husband is also happy for me", says Reine Toboekan, a woman gardener from the pilot gardens.

"I can't remember when I bought leafy vegetables to cook at home. Indeed, since I have been growing and harvesting my plot, I have been supplying my household with leafy vegetables on a regular basis. This has considerably reduced my food expenses and given me more autonomy at home. My husband looks at me even more positively and has allowed me to invest more in the activity", says Adélaïde Kounoukpevi, a woman gardener from the pilot gardens.

#### Messages to

#### A) Actors from private sector:

Urban gardening is profitable. The demand of the fresh and healthy produce is high in urban areas and most surplus produce is sold to customers, mostly hotels and retailers. An informal contact farming system secures part of the harvest.

#### B) Civil society and practitioners organizations:

- An appropriate training and support for the urban poor in garden development can provide their households with access to fresh foods and increase their food security. In addition, allotment gardens provide women to improve their social status and independency.
- Allotment gardens can empower producers to independently grow fresh food that enrich their diets and generate income.

#### C) Policy makers:

- Development of allotment gardens fully aligns with poverty alleviation policies and are in sync with many of the Sustainable Development Goals.
- Policy makers should have the political will to assign sites for urban gardens and remove the barriers that block their development.

#### Knowledge products

#### Policy paper

Midterm findings factsheet: Allotment gardens in urban Africa (May 2019)

#### Research reports

- Theme 6 Urban food systems Conference "Research & Policy: two peas in a pod? A dialogue for food security impact" (December 2017)
- Urban agriculture in Benin: How can policy support gardeners? (January 2019)
- How to Transition from Cooperations to Cooperatives: A Case Study of the Factors Impacting the Organization of Urban Gardeners in Benin. By D.M. Houessou, B.G.J.S. Sonneveld, A.K.N. Aoudji, F.S. Thoto, S.A.R. Dossou, D.R.M. Snelder, A. Adegbidi and T. De Cock Buning in Sustainability Journal (August 2019)

#### Stories of Change

How support to urban poor especially, women in developing allotment gardens can provide their households with access to fresh foods? (September 2018)

Summary of project's impact (October 2019)

#### **Knowledge networks**

- **INCLUDE** platform
- Food for Cities network
- African Think Tank Network
- African Community of Practice on Managing for Development Results

#### Co-creation

The regular contacts, feedback and joint collaboration created a well-functioning platform that fostered a fruitful process of co-creation of knowledge between consortium members. Concretely, in the inception the consortium defined a clear pathway to engage relevant stakeholders during the research process. Regular meetings enabled the team to adapt activities and to encounter challenges. Joint analysis of data and information collected throughout the project enabled the production of relevant knowledge that became instrumental for the policymaking strategies. Regarding stakeholders, the project adopted an active process of engagement through regular consultations. Exchanges and focus-group discussions with experienced gardeners enabled to co-produce knowledge on the transition from informal groups to genuine cooperatives. This nice example of active collaboration with stakeholders provided a solid argument of the necessity to engage relevant actors in knowledge co-creation.

#### **Consortium partners**

- Athena Institute / Vrije Universiteit Amsterdam (NL)
- Amsterdam Centre for World Food Studies / Centre d'Actions pour l'Environnement et le Développement Durable (Benin)
  - Faculty of Agricultural Sciences/University of Abomey-Calavi (Benin)

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#### **Project website**

F&BKP Research Project page