

Factsheet midterm findings Global Challenges Programme Call 3



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

Summary

The project creates an integrated framework for development of allotment gardens in urban and peri-urban areas of Benin following a four-pronged approach. It developed two pilot allotment gardens in Cotonou and Porto Novo, including, tillage, reliable water sources, landscaping for logistics and first planting. Forty participants, randomly selected from the poorest segment of urban vicinities, received training in gardening techniques and management. The enthusiastic participants were empowered to diversify their diets and earned an extra income from selling produce surplus. Panel data of participants will be compared with a control group to quantify diet changes and income. Second, a survey among experienced gardeners elucidated information on prevailing cooperative structures. Third, a special survey among decision makers, local and national authorities is organized to determine principal constraints for expansion of the allotment gardens after the first difficult experience of allocating the pilots. Fourth, and finally, the project output of a decision support tool that formalizes expert knowledge to allocate optimal sites for urban gardening fully aligns with the policies of the Ministry of Agriculture to upscale urban garden activities. A three-day workshop on the development of a site allocation tool was given in Cotonou and attended by 13 participants.

Interim research findings

The baseline survey showed that urban poor have low education levels, lack financial resources, live in overcrowded and unsanitary housing conditions and encounter limited access to social services and health facilities; a large share (76 %) is food insecure. Research revealed that food security of urban poor is correlated with city, gender, ownership of a motorbike and access to formal health system. A survey among 261 experienced gardeners showed that urban gardening is profitable and can generate approximately €240 on a plot of 400 m² per year. However, 26% reported none (4%) or only a single meal (22%) per day over the last month and 40% cannot afford a balanced or culturally acceptable meal every month. Hence, urban gardening is profitable but does not fully guarantee food and nutrition security for its participants. The project found that gardeners' groups meet most of the principles for an efficient cooperation, yet, capitalizing on economic benefits of joint transactions could be further exploited. Despite enthusiastic reactions of local and national authorities the project experienced a delay of 6 months to allocate pilot sites. A survey among stakeholders shows that perception on scarce available land does not always coincide with reality. Key variables for the site selection tool were selected. Field visits of experts will compile a training set for estimation of site suitability for development of urban gardens.

Intermediate outcomes achieved

The project field experiments show that participation in allotment gardens can improve diets and provide additional incomes. For instance, analysis of financial diaries shows that participants can earn approximately 6000/ha per year. Additionally, women argued that they can now easily contribute to households' expenses which, increases their social status. By profiling the urban poor the project found that within the targeted group the segment with higher income was correlated with improved food security. Yet, 76% of the respondents was victim of a moderately or severe food insecurity situation. Experienced gardeners are organized in cooperatives and

avail of good management structure. Yet, the benefits of economies of scale by joint purchases is not or insufficiently exploited. Additional capacity building program could show the benefits of collective acquisition or procurement. The Ministry of Agriculture in Benin identified the two pilots as successful for implementing urban agriculture.

Messages to

A) Actors from private sector:

Urban gardening is profitable. The demand of the produce is very high (in Cotonou and Porto Novo). Farmers usually sell the majority of the produce on farms. For instance, hotels and retailers informally subscribe to secure part of the harvest. The promotion of contract farming could support allotment garden and value chains development. Convince gardeners on economic benefits of making joint transactions can improved the marketing of the produce.

B) Civil society and practitioners organizations:

An appropriate training and support to urban poor in garden development can provide their households with access to fresh foods, and can increase their food security situation.

C) Policy makers:

The two initiated project pilots in Cotonou and Porto Novo changed the lives of participants; they became empowered and independent producers of organically growing fresh foods that not only enrich their diet but also generated income by selling surplus produce. The promotion of allotment gardens upscaling in cities can increase the food security in urban areas. Rural and urban planning should account for possibilities of allotment garden development. Policymakers may encourage youth to enter the industry and reduce unemployment. Urban gardens provide green islands in cities that contribute to a pleasant environment. Development of urban agriculture is constrained by lack of land and absence of political will to assign sites for urban gardens. Therefore, the project aims to develop, first, a shared perspective among government and donor communities to position urban agriculture in development policies; second, a supporting component that builds capacity to fully exploit cooperative organization in urban gardens; third, formalize a site selection tool that support decision makers in allocation of sites for urban gardens, fourth, and finally, a technical component that explores possibilities of soil less vertical farming.

Knowledge products

Presentations

- [Overview of urban agriculture in West Africa: Highlights of lessons learned](#) (July 2016)
- [Allotment gardens: Definitions, forms and Examples of urban agriculture](#) (July 2016)
- [Feuille de route pour le projet d'amélioration de la sécurité alimentaire grâce au développement des jardins communautaires dans les villes du Benin](#) (July 2016)
- [Allotment gardens in Benin: Preliminary findings](#) (January 2019)

Research reports

- [Theme 6 – Urban food systems Conference “Research & Policy: two peas in a pod? A dialogue for food security impact”](#) (December 2017)
- [Report on allotment gardens](#) (July 2018)
- [Urban agriculture in Benin: How can policy support gardeners?](#) (January 2019)

Stories of Change

- [How a stakeholders' committee can make a difference in the way of doing research?](#) (January 2018)
- [How support to urban poor especially, women in developing allotment gardens can provide their households with access to fresh foods?](#) (September 2018)

Video

- [Inception workshop video](#) (July 2016)

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 on the reporting of results creates a good platform for a fruitful process of co-creation of knowledge and strategies within the project group.

Consortium Partners

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

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Project websites

- [F&BKP Research Project page](#)