# Home-based food production in urban Jamaica

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ome gardening provides a low-cost, sustainable strategy for increasing household food security by providing direct access to food (Marsh, 1998). Home gardening, which does not depend on imported inputs, high technology tools or food aid, increases the self-reliance of households. When introducing home gardening in a community, traditional food production methods and popular, well-known and nutritious crops should be taken into account. A participatory approach that considers gender roles is also important. This strategy is not limited to rural areas, but can also benefit the poorest segments of the urban population as is illustrated by a home gardening and small-scale poultry production project being implemented in Jamaica in urban and peri-urban communities.

# **BACKGROUND**

The project was implemented as part of FAO's Improve Household Food Security activities, which was one of the themes of the 1992 International Conference on Nutrition (ICN). In 1997, a multisectoral and multidisciplinary informal working group was formed in Jamaica to pursue the implementation of the National Plan of Action for Nutrition. The working group was chaired by the ICN focal point in the Ministry of Health and coordinated by FAO. After documenting the progress made in the ICN follow-up, the working group discussed priority areas for action. Under theme 1, Improve Household Food Security, major progress has been made by the Rural Agricultural Development Authority (RADA) in implementing the planned activities.

RADA was already executing a successful rural programme on backyard gardens and it was decided to expand the concept of these gardens into the urban areas. In urban Jamaica, approximately 40 percent of the people live below the poverty line and pockets of malnutrition persist. When the project was first planned, 6 to 8 percent of urban children under five years of age had been assessed as suffering from wasting (PIOJ, 1998). The project proposal was developed jointly by RADA and FAO in the context of World Food Day 1998. The theme that year was Women Feed the World, and assisting women was one of the project's main goals. The

Netherlands Embassy provided funding of \$US8 820 for the project.

### THE COMMUNITIES

The project sought to work with two communities: one in the inner-city and another in a peri-urban area. This allowed for comparisons and the identification of constraints and progress; for example, there was particular interest in learning about the specific challenges of working in the Kingston inner city (see Map)

At first it proved very difficult to identify an inner-city community because of violent incidents and a lack of enthusiasm for backyard gardening. Finally, however, the Bureau of Women's Affairs facilitated a contact with Bowerbank, which is located in East Kingston and can be categorized among the most deprived communities in Jamaica. This community was resettled by the government in 1972, at what was meant to be a temporary location, but many families have resided there for three generations. The area has dirt roads and tiny yards, fenced off by corrugated zinc siding. Unemployment is a widespread problem.

The peri-urban Watson Grove community, on the other hand, has more spacious yards and houses ranging from small wooden cottages to the occasional two-storey concrete building. The inhabitants of this area have benefited greatly from the opportunity to purchase individually allocated lots, although a few years ago they were living in similar conditions to those of the Bowerbank community. Unemployment and underemployment are as common among the residents in Watson Grove as in Bowerbank. Sometimes residents find temporary work at building sites and some even commute as far as Portland (a three-hour drive) to pick coffee. The Young Women's Christian Association (YWCA) in Spanish Town established the initial contact between the project and this community in the parish of St Catherine.

# THE PROJECT

The project's main objective was to improve food security through increasing food production and income generation. The



Map of Jamaica showing the project area

strengthening of women's groups was an additional objective. The project planned to assist 30 women in each community to produce a portion of the food they consume thereby reducing their food expenditures. Women could sell the excess food they produced and use the extra income to purchase other goods or services. The advantage of home-based income generation is that women can work within their communities and can thus continue to take care of their children.

The St Andrew and St Catherine parish offices of RADA, under its Home Economics and Social Services programme, implemented the project in both communities. Initial contacts were made to assess interest in vegetable gardening and to provide participants with the opportunity of becoming involved in the development of the project. During the first meetings, the women in the communities asked about the possibility of poultry production, since they were more interested in raising chickens than in growing vegetables. Some of the women are street-food vendors and the idea of poultry production appealed to many as they knew that there was a market. It was decided that, in each community, the project would seek to involve 20 women in vegetable production and ten in poultry production. Although the initial interest in vegetable growing was less, it was still included in the project, since the inputs are low-cost. In addition, RADA's experience in the rural areas was that enthusiasm for vegetables grew once results were seen in the communities.

# **Poultry**

In each community, ten participants benefited from the poultry component of the project. Among all the interested women, a selection was made according to the space available for the chicken coop in each woman's yard and her willingness and ability to provide the coop. Feeders, waterers, vitamin/mineral

### COST OF INPUTS FOR THE PROJECT

### Total budget US\$8 820

Inputs needed for backyard poultry production:

- day-old chicks;
- feed bags;
- mineral mix;
- · feeders;
- waterers;
- poultry litter;
- lanterns.

Bowerbank (ten beneficiaries): Total cost US\$2 469 Watson Grove (ten beneficiaries): Total cost US\$2 619

# Inputs needed for vegetable gardening:

- seeds;
- small tools (four forks, three hoes, ten rakes, one knapsack sprayer, 20 hand forks, 20 hand spades, ten machetes, ten files, one watering can);
- fertilizer;
- insecticide spray;
- · fencing;
- · staplers.

Bowerbank (20 beneficiaries): Total cost US\$1 373 Watson Grove (20 beneficiaries): Total cost US\$1 373



Training session on poultry production from RADA's extension officer in Bowerbank

mix, lanterns, feed and day-old chicks were provided under the project. Women in Watson Grove each received 55 chicks, while in Bowerbank they received 30 because there was less space available; the total costs of the inputs provided for poultry production (except training) were US\$140 and \$125 per participant, respectively. This allowed the participants to rear the first batch of chickens in about six weeks without any extra costs. It was expected that at least five batches of chickens could be raised per year (see Box).

Each woman built a coop at her own convenience, which meant that the delivery of inputs had to be staggered. In addition, the chicks matured at different times and this reduced competition among the women when marketing them. RADA officers visited the project sites several times a week to provide training on poultry management and related bookkeeping.

In both communities chicken mortality rates were low and a satisfying average weight was achieved six weeks after the chicks were delivered. Chickens were sold live or slaughtered, either fresh (chilled) or frozen. With the earnings, participants restocked, and most of them expanded by doubling the number of day-old chicks.

# Vegetables

The vegetable component of the project began in February-March 1999. Fewer women were interested in participating in this part of the project. Tools for working in the garden were provided. In Bowerbank, six women were present at a demonstration on soil preparation. After clearing and ploughing, a fertilizer was mixed into the soil and the area was sprayed with insecticide. In Watson Grove a communal seedbed was established, from which individual households procured such seedlings as callaloo (a green leafy vegetable), pakchoi, tomatoes, sweet pepper and cucumber. Training was provided in the form of a demonstration of plot preparation and, later, demonstrations of sowing and growing vegetables.

# Women's groups

The project aimed at strengthening women's groups through meetings held by RADA. In Bowerbank, the Bureau of



Construction of a chicken coop in Bowerbank



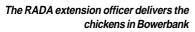
Arrival of project inputs (chicken feeder, feed and water) in

Women's Affairs supported this part of the project. Training was given on team building and economic self-sufficiency, women's role in community development, developing positive self-esteem, and cooperation among urban and poor women. In both communities the women started to organize themselves into formal groups with regular meetings and a budget created by their own contributions.

# **DIFFERENCES IN THE COMMUNITIES**

It was easier to initiate the project in Watson Grove than in Bowerbank. In the peri-urban Watson Grove community women were immediately interested in establishing backyard gardens and poultry production to improve their situation. During the meetings they participated in large numbers and were very keen on starting activities. In Bowerbank, on the other hand, although the economic circumstances were clearly less favourable, the women's initial reaction was one of indifference. During the first activities organized by RADA, FAO and the Bureau of Women's Affairs, the women in Bowerbank needed encouragement to come to the meetings. Enthusiasm for this type of project was limited, and RADA explained to the women that this was the only option for the present but, if the project was a success, other projects were likely to follow. One of the leaders in the community explained to project staff that organizations had often made promises that never materialized. This could explain the lack of interest initially encountered in this community. In addition, Bowerbank's crowded and depressed housing situation and the lack of prospects could have resulted in the different attitudes observed in the two communities.

The community members' reluctance to participate could easily discourage organizations from working in inner-city areas. However, this view changed significantly after the first deliveries of project inputs had been made. It took some time



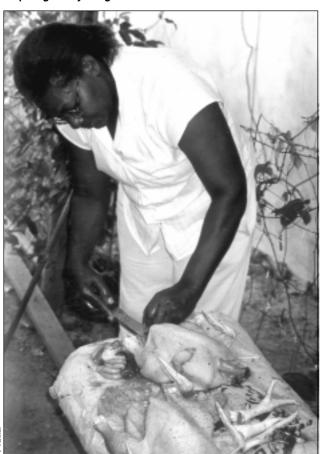




b Live chickens for sale in Watson Grove

and evidence of goodwill (e.g. project inputs), before a trusting relationship could be established. After the first batch of chicks were fully grown, the RADA extension officer said that he was very satisfied with the level of care that participants had displayed. For instance, when heavy rains swept the area on one occasion, the chickens were placed in boxes and taken into houses for protection, and all of them survived.

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Preparing freshly slaughtered chicken for sale in Watson Grove



With regard to the vegetable component, the project had planned to work around a demonstration plot in each community. In Bowerbank, however, none of the participants was prepared to provide any of their own limited land for this purpose. Fear that strangers would walk in and out of their yards was mentioned as the reason. The demonstration plot was subsequently established at the RADA St Andrew parish office.

# **DISCUSSION**

Intersectoral collaboration was crucial for developing the project from the idea stage to implementation. It is interesting to note that a project so small in terms of funding could bring together five organizations and two communities to work together with great enthusiasm. It is, however, too early to say whether the project is sustainable or not. There is the risk that cottage industries will not be able to compete with large industrial production when using the same methods. However, the facts that all participants invested their earnings to restock and that most have even expanded their production indicate that participants are interested in continuing.

As well as working with an inner-city community, the novelty of backyard gardening in urban areas attracted interest from other organizations and the press. RADA's Home Economics Programme has decided to provide its full range of services to the Bowerbank community, beyond the scope of this initial project. While the strengthened women's group in Watson Grove will continue to receive support from RADA's parish home economics officer. Part of this assistance will focus on nutrition education, which is crucial if participants are to be able to make the best use of their increased food availability and improve the nutritional status of the members of their households.

Both the communities involved and RADA are interested in expanding this type of project to other urban communities in need of assistance. Certain factors need to be taken into account, including:

- the environmental impact related to the disposal of feathers and manure;
- the possibility of reusing these chicken by-products in the vegetable gardens;
- the health risks of poultry production in overcrowded housing situations;
- the supply of day-old chicks;
- saturation of the poultry market.

Although the project is still ongoing, some lessons have already been learned, among them:

• It is worth making the extra effort to work with an innercity community.

- It is possible to reach the urban communities who are most in need.
- Urban communities can make their projects succeed.
   It would be interesting to revisit the project sites in a few years' time to assess the long-term impact of this activity.

# **REFERENCES**

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# Summary/Résumé/Resumen

Home-based food production in urban Jamaica

Home gardening often provides a low-cost, sustainable means of increasing household food security by providing direct access to food. This strategy can benefit the poorest segments of the urban population as well as rural communities. Home gardening and small-scale poultry production are being carried out in Jamaica in urban and peri-urban communities under the auspices of the Rural Agricultural Development Authority (RADA) and FAO.

The project began in October 1997 and seeks to improve food security through increasing vegetable and poultry production. Twenty women are raising chickens for sale and home consumption. Women used their own resources to build chicken coops and were assisted with inputs and technical advice for raising chicks. The vegetable component of the project began in April 1999. Women involved in vegetable growing received agricultural inputs for growing *callaloo* (a green leafy vegetable), *pakchoi*, tomatoes, sweet pepper and cucumber.

The strengthening of women's groups was one of the project's objectives. Women were trained in team building, economic self-sufficiency, women's role in community development, developing positive self-esteem, and cooperation among urban and poor women. Women have started to organize themselves into formal women's groups with regular meetings and a budget created by their own contributions.

This article discusses the successful experiences of the project and raises issues about constraints to home gardening in urban areas, such as poor women's reluctance to participate in projects, health and environmental risks and market conditions.

La production familiale de denrées alimentaires dans les zones urbaines de la Jamaïque Le jardin potager domestique, qui permet un accès direct à la nourriture, représente souvent un moyen peu onéreux et durable d'amélioration de la sécurité alimentaire du ménage. Cette stratégie peut être profitable aux couches les plus pauvres de la population urbaine de même qu'aux communautés rurales. En Jamaïque, le potager et le poulailler domestiques sont encouragés dans des localités urbaines et périurbaines, sous les auspices de la Rural Agricultural Development Authority (RADA) et de la FAO.

Le projet, lancé en octobre 1997, vise à améliorer la sécurité alimentaire par un accroissement de la production de légumes et de volailles. C'est ainsi que 20 femmes élèvent actuellement des poulets destinés à la vente comme à l'autoconsommation. Ces femmes, qui ont puisé dans leurs propres ressources pour construire les poulaillers, ont été assistées sous forme d'intrants et de conseils techniques dans l'aviculture. Quant au volet du projet concernant le potager, il a été mis en œuvre en avril 1999: les femmes ont reçu des intrants agricoles pour la culture du *callaloo*, légume vert à feuilles, du *pakchoi*, des tomates, du poivron et du concombre.

Le projet avait notamment pour objectif de renforcer les associations féminines. Les intéressées ont bénéficié d'une formation en matière de constitution d'équipe, d'autonomie économique, de sensibilisation au rôle des femmes dans le développement communautaire, de renforcement de l'estime de soi et de coopération entre femmes des catégories défavorisées en milieu urbain. Ces femmes ont donc commencé à s'organiser en associations féminines structurées qui tiennent des réunions à intervalles réguliers et disposent d'un budget alimenté par leurs cotisations.

Cet article décrit et analyse les expériences réussies du projet et soulève un certain nombre de questions concernant les obstacles à la tenue d'un jardin potager dans les zones urbaines, parmi lesquels la réticence des femmes pauvres à s'impliquer dans des projets, les risques pour la santé et pour l'environnement, ainsi que les conditions du marché.

Producción doméstica de alimentos en zonas urbanas de Jamaica La horticultura doméstica a menudo constituye un medio sostenible y a bajo costo que sirve para aumentar la seguridad alimentaria del hogar ya que permite un acceso directo a los alimentos. Esta estrategia puede favorecer tanto a los sectores más pobres de la población urbana como a las comunidades rurales. La horticultura doméstica y la cría de aves de corral en pequeña escala se llevan a cabo en Jamaica en las comunidades urbanas y periurbanas bajo los auspicios de la Administración de Desarrollo Agrícola y Rural (RADA) y la FAO.

# Summary/Résumé/Resumen

El proyecto comenzó en octubre de 1997 y tiene por objeto mejorar la seguridad alimentaria mediante el incremento de la producción de hortalizas y aves de corral. Veinte mujeres crían pollos para la venta y el consumo doméstico. Ellas utilizaron sus propios recursos para construir los gallineros, y obtuvieron ayuda para recibir información y el asesoramiento técnico necesario. La parte del proyecto relacionada con la producción de hortalizas comenzó en abril de 1999. Otras mujeres recibieron insumos agrícolas para cultivar calalú (una clase de verdura), col de China, tomates, pimientos dulces y pepinos.

El fortalecimiento de los grupos femeninos era uno de los objetivos del proyecto. Otros objetivos eran la capacitación relacionada con la creación de grupos de trabajo, la autosuficiencia económica, la función de la mujer en el desarrollo de la comunidad, el fomento de la autoestima y la cooperación entre las mujeres de las zonas urbanas y las que procedan de las zonas más pobres. Las mujeres han comenzado a organizarse en grupos oficialmente reconocidos que se reúnen periódicamente y disponen de un presupuesto creado con sus aportaciones.

El artículo examina el éxito alcanzado en distintas actividades del proyecto y plantea algunos problemas relacionados con las dificultades de la horticultura doméstica en zonas urbanas tales como la renuencia de las mujeres pobres a participar en los proyectos, los riesgos para la salud y el medio ambiente, y las condiciones del mercado. •