Safeguarding Public Health Concerns, Livelihoods and Productivity in Wastewater Irrigated Urban and Peri-urban Vegetable Farming (PN38/51)

Objectives

Develop integrated and user-oriented strategies to safeguard public health concerns without compromising livelihoods and land and water productivity in wastewater irrigated urban and peri-urban vegetable farming.

Where*:* Urban and Peri-urban Accra & Kumasi, Ghana

Method/Activities

- Assessment of land and water productivity in wastewater irrigated farming;
- Levels of contamination on irrigation water and vegetables quantified at different levels along the food chain (farms, markets and consumer level);
- Appropriate low-cost risk reduction strategies identified and participatory tested with stakeholders at farm and consumer levels.

Key Achievements

- Pre-intervention assessments showed that irrigation water used in irrigated urban vegetable farming in Ghana has high levels of feacal contamination. Vegetables in markets were equally highly polluted with faecal matter and pesticides. Most contamination occurred in the farms.
- A significant achievement was in building human capacity. Various kinds of training and awareness materials have been developed including videos, flip charts and policy briefs. Policy makers plan to integrate best practices identified into their routine extension materials.

Conclusions

- Key stakeholders (farmers and vegetable traders) prefer simple, easily adaptable and low-cost risk reduction interventions. Low-cost farm-based water treatment methods and post-harvest measures have potential for risk reduction, but can achieve more when used in combination.
- Land availability and tenure is the main constraint to urban vegetable farming in Ghana.

Value/relevance for the BDC

- Volta Project V3, *Integrated management of small reservoirs for multiple uses*: PN38 has highlighted the important health concerns associated with multiple uses of water, focusing on wastewater irrigation in a context where awareness of the potential health implications is low. The productivity of water in different uses has to be assessed and enhanced in ways that take account of direct consumption needs and health consequences (for instance, water-related diseases).