Garden Project Design Worksheet

TEMPLATES TO CAPTURE INFORMATION AND KEY DECISIONS ABOUT GARDENS MADE DURING PROJECT DESIGN







Use the worksheet alongside the Garden Project Design Guide.





Catholic Relief Services is the official international humanitarian agency of the United States catholic community. CRS' relief and development work is accomplished through programs of emergency response, HIV, health, agriculture, education, microfinance and peacebuilding. CRS eases suffering and provides assistance to people in need in more than 100 countries, without regard to race, religion or nationality.

Catholic Relief Services 228 West Lexington Street Baltimore, Maryland 21201-3413 1.888.277.7575 crs.org

© 2019 Catholic Relief Services. All rights reserved. This material may not be reproduced, displayed, modified or distributed without the express prior written permission of the copyright holder. For permission, contact populications@crs.org.

The information in this worksheet will support the design team in crafting a short paragraph to include in the proposal, ensuring staff and financial resources are appropriately budgeted and donor requirements met. Access a Word version of this worksheet <u>here</u>. This worksheet refers to the *Garden Project Design Guide*, which provides more guidance on answering the questions below. There is also a *Garden Resource Guide* that provides in-depth knowledge on thematic topics. In each step, decisions are captured in blue boxes.

Step 1: Decide garden outcomes

To decide on the garden outcomes, use Table 1 to compile information on nutrient deficiencies, dietary diversity gaps, supply and demand of particular nutrient-rich food, and income opportunities from gardens.

Table 1: Information to guide outcomes

				Information to be gathered	Example	Local context for geographic zone
				Nutrient deficiencies of end-user target audience	Vitamin A deficiency, iron deficiency	
N				Dietary diversity gaps identified for end-user target audience	Limited intake of vitamin A and iron-rich foods	
Nutrit				Home production	Maize, tomatoes, onions, groundnuts, soya beans, OFSP	
	keting	aurship		Market supply of nutrient-rich foods for end-user target audience (market assessment)	Plant-based iron-rich foods available in market; foods rich in vitamin A not available	
	Mar	ntreprene		Demand for nutrient-rich foods (market assessment)	Carrots, animal-sourced foods	
		ш		Income opportunities	OFSP processing; fortified food with OFSP flour	
			Women's empowerment	Key gender dynamics	Women control income from the sale of garden produce	

What is the desired garden project outcome(s)? Why this outcome(s)?

STEP 2: DETERMINE TARGET AUDIENCES

Use Tables 2 to 4 to define the criteria for selecting the households to participate in the intervention, and identify who within the household will receive technical support and resources to build, maintain and benefit from a garden.

Table 2: Household criteria for end users of garden products

Criteria	Example—Burkina Faso context	Criteria thresholds
Vulnerability criteria	Household with children under 5, and pregnant and lactating women	

Table 3: Household criteria for gardeners

(This may be the same audience as the end users or it may be gardeners who grow crops to sell to the market that an end user buys from)

Criteria	Example—Burkina Faso context	Criteria thresholds
Minimum household land size	1.5 Ha	
Wealth profile	Very poor—two goats, six chickens, one bicycle	
Willingness to adopt gardening (stage of behavior change)	Contemplation (heard about gardens and starting to think about adoption)	
Water access/use	Access to lake, dam or well	
Resources/tools	Have access to the minimum tools to use for the garden (shovel, hoe)	

Table 4: Target household members to receive technical guidance and resources

Factors	Example	Local context
Land owner	Male partner	
Manager of garden	Woman	
Laborer	Women and children	
Decision-maker on use of final produce	Women in consultation with male partner	
Controls income from garden sales	Male partner	

Who to target within the household for implementing a garden

Example: The main technical guidance on establishing, maintaining and benefiting from the garden will be targeted at women; however, there will be activities targeted at men with regard to land allocation for gardens, garden benefits, use of final produce, control of income to support women to benefit from their labor, and overall encouragement that garden produce/income will be used for improving household nutrition.

STEP 3: ASSESS THE CONTEXT

Using the information gathered through the assessment, answer the questions in Table 5 below. A diagram of the decision tree is shown in Step 3 of the *Garden Project Design Guide*.

Table 5: Decision tree

Theme	#	Question	Response	Next step
eo	1	Do gardens exist in the community?		If yes, continue to Q3. If no, continue to Q2.
ceptan	2	Do gardens provide benefits to similar settings in nearby communities?		If yes, continue to Q5. If no, go to Q4.
ieneral ac	3	Do gardens provide benefits to existing gardeners?		If project will assess, go to Q5. If no, gardens not appropriate.
Gei	4	Will the project assess why existing gardeners are not benefitting?		If yes, continue to Q5. If no, gardens not appropriate.
	5	Does the targeted audience have access to land (size) appropriate for garden outcome(s) and type?		If yes, continue to Q7. If no, continue to Q6.
and	6	Is land locally available that the targeted audience can use and afford?		If yes, continue to Q6. If no, gardens not appropriate.
-	7	What is the quality of this land for the garden?		If good quality, continue to Q9. If poor quality, continue to Q8.
	8	Will the project provide support to improve land quality for gardens?		If yes, continue to Q8. If no, gardens not appropriate.
	9	Does the targeted audience have access to affordable water for their gardens?		If yes, continue to Q11. If no, continue to Q10.
	10	Will the project provide support to improve access to affordable water for gardens?		If yes, continue to Q11. If no, gardens not appropriate.
Water	11	Is it feasible for the target audience to transport water to the garden site?		If yes, continue to Q14. If no, continue to Q12.
	12	If needed, is the targeted audience willing to use greywater?		If yes, continue to Q14. If no, continue to Q13.
	13	Will the project provide support to deliver water to the garden site?		If yes, continue to Q14. If no, gardens not appropriate.
	14	Is there sufficient labor to manage the garden?		If yes, continue to Q17. If no, continue to Q15.
Labor	15	Can the target audience hire labor?		If yes, continue to Q17. If no, continue to Q16.
	16	Will the project provide support to help manage workloads?		If yes, continue to Q17. If no, gardens not appropriate.
S	17	Does the targeted audience have access to resources in the market (seeds, tools, etc.)?		If yes, continue to Q19. If no, continue to Q18.
esource	18	Will the project provide support to help improve access to resources for gardens?		If yes, continue to Q19. If no, gardens not appropriate.
Å	19	Is the targeted audience willing to use these resources for their garden?		If yes, continue to Q20. If no, gardens not appropriate.
der	20	Are there gender dynamics to consider?		If yes, continue to Q21. If no, gardens are appropriate.
Gen	21	Will the project include activities to address gender considerations relevant to gardens?		If yes, gardens appropriate. If no, gardens not appropriate.

Will the project include the scaling up of gardens? If not, why not?

STEP 4: DETERMINE GARDEN TYPE

Use Table 6 to identify appropriate garden types for the project. In the local context column, capture the information from the literature review, assessments and staff; then identify what garden type is appropriate, based on the local context. Although there are more garden types, seven garden types are included in this guide: container garden, conventional row garden, keyhole garden, permagarden, raised bed, sunken bed, vertical garden.

Table 6: Garden type selection

Factors to	Local context	Garden types appropriate for this local context and anticipated support							
determine garden type	and anticipated project support	Container garden	Conven- tional row garden	Keyhole garden	Perma garden	Raised bed	Sunken bed	Vertical garden	
Climate/ location	Urban	X						X	
Land size	Limited	X		Х				X	
Water resources	Greywater			Х					
Labor available	Available daily for watering; low maintenance; some labor for establishment	X	X	X	X	X	X	X	
Food preference	Tomatoes	X	Х		Х	X	X	Х	
Materials available	Containers	X						X	

Factors to	Local context	Garden types appropriate for this local context and anticipated support								
determine garden type	and anticipated project support	Container garden	Conven- tional row garden	Keyhole garden	Perma garden	Raised bed	Sunken bed	Vertical garden		
Climate/ location										
Land size										
Water resources										
Labor available										
Food preference										
Materials available										

What garden type(s) will the project promote?

Example: Based on the table, this project would promote container and vertical gardens.

STEP 5: DETERMINE CROPS TO PROMOTE FOR THE GARDEN

It is recommended that the Technical and Operational Performance Support (TOPS) <u>A Tool for Framing a Discussion between Nutrition and Agriculture</u> <u>Specialists</u> guide is used. A CRS-adapted version of the Excel sheet is available here. It simplifies the data entry process and includes content related to gender, soils and seed-saving. It is recommended that the country program nutrition and agriculture teams complete the exercises and provide feedback to the project design team. The country sector teams should be reminded to include indigenous vegetables in this exercise. For information on factors that affect crop selection decisions and a summary of key factors for the selection of crops, see Step 5 in the Garden Project Design Guide. After identifying the crops jointly through the exercise, three follow-on steps should be taken to finalize the crop selection.

- Matching crop to desired garden outcome(s): Does the selection of crops match the desired outcome(s) identified in Step 1?
- Nutrition: Does the final selection of crops include those that can address the nutrient deficiencies and dietary diversity gaps identified in Step 1.
- Appropriate garden type: Is the garden type(s) selected for promotion in Step 4 appropriate for the crops selected?

Use Table 7 to answer these three final questions regarding crop selection.



Table 7: Finalizing the crop selection

Step 1: Garden outcome(s)	Selected crops that contribute to this outcome(s)
CU5 nutrition	Peas, groundnuts, okra, sorrel leaves, tomatoes, onions, eggplant, cabbage, string beans, lettuce, potatoes, OFSP, cowpeas, carrots, cucumber, eggplant, bulcanka, moringa, mango, papaya, watermelon, indigenous vegetables, tomatoes, onions
Income	Tomatoes and onions
Step 2: Nutrient deficiency/ dietary diversity gap	Selected crops from the above list that contribute the identified missing micronutrients
Iron	Groundnuts, haricots (low), cowpea, soyabean
Vitamin A	Sorrel leaves, lettuce, OFSP, carrots, cucumber (low); moringa; mango, papaya
Zinc	What crops could we promote - new crops to introduce?
Step 3: Selected crop for promotion	Determine the appropriate garden type for each crop to be promoted
Onions/tomatoes, beans, tuber crops	Row gardens
Non-tuber crops	Raised bed/sunken bed
Step 1: Garden outcome(s)	Selected crops that contribute to this outcome(s)
Step 2: Nutrient deficiency/ dietary diversity gap	Selected crops from the above list that contribute the identified missing micronutrients
Step 3: Selected crop for promotion	Determine the appropriate garden type for each crop to be promoted

What crops/varieties will the project promote to meet its objectives in the local context?

STEP 6: DETERMINE ADDITIONAL PROJECT SUPPORT FOR SUSTAINABLE GARDENS

The project design team needs to identify additional activities to ensure gardens are successful and sustainable. This section considers what is being planned for the larger project as a whole that can support gardens and also helps design teams reflect on what each sector needs to do to support successful gardens. Be sure to engage CRS technical staff from relevant sectors (agriculture, nutrition, water, gender and behavior change). Also see Chapters 5-13 in the *Garden Resource Book* for ideas to consider and discuss with technical experts. Table 8 captures some core activities to consider to accompany the garden intervention.

Table 8: Core activities to consider

Theme	Question	Activities selected	Who implements
	Is the project gender-responsive or gender-transformative?		
Gender	 If gender responsive, what project activities/adaptations will be included to support the garden intervention? See Chapter 5 of the <i>Garden Resource Guide</i> for considerations. Choosing crops/varieties based on women's preferences and identifying who controls produce use and income Supporting women-specific garden roles and responsibilities Ensuring women meaningfully participate in trainings (timing, location, childcare and female trainers) Holding forums with men on supporting women and gardens Holding voucher fairs to bring vendors closer to the women Prioritizing women-only agricultural associations Other (describe) 		
	 If gender transformative, what accompanying activities will the project include to support the garden intervention? See Chapter 5 of the <i>Garden Resource Guide</i> for considerations. Creating a women's entrepreneurial program for garden-related microbusinesses Helping women secure land tenure Building up a community-based input distribution network of enterprises; helping women farmers become owners Encouraging gender-sensitive cooperative constitutions Using couple communications approaches such as <u>CRS SMART</u> <u>Couples Approach</u> to strengthen joint decision-making Using community approaches to building knowledge on gender issues such as inequitable decision-making (e.g., <u>Area Association Model</u> used in Zambia and gender champions) Other (describe) 		
Nutrition	 What accompanying nutrition activities will be included? Communicating social and behavior change messages on consumption Holding cooking demonstrations Offering recipe books/cooking tips Other (describe) 		
Seed	How will the project promote the source of seed?Seed-savingLocal productionCommercial purchase		

Theme	Question	Activities selected	Who implements
Seed	 What seed access strategy will the project use? Seed supply development (private sector) Training and demonstration plots Agriculture and voucher fairs (e.g. SVF, DiNERs, livelihood fairs) Ledger system (subsidy) Direct seed distribution (free) Other (describe) 		
gement	 What DIY tests will the project use to help farmers test their soil? Soil texture and structure Drainage Depth of topsoil Earthworms to indicate soil quality Soil pH (acidity or alkalinity) 		
Integrated soil health manag	 What strategies will the project train on to improve soil quality in the gardens of target audience(s)? Minimum tillage Composting Green manure/cover crops (gm/cc) Mulching Rotted animal manure Commercial inorganic fertilizer Crop rotation Adding lime Growing live barriers Terracing fields when on slope Other (describe) 		
Integrated pest management	 How will the project support pest and disease management? Prevention practices Non-chemical controls: cultural, biological, mechanical Promotion of biopesticides (natural) Provide instruction on using pesticides appropriately 		
esources	 Will the project support access to water? If so, how? Wells Rainwater catchment system Berms-and-swales system Greywater promotion 		
Water re	 What approaches will the project use to promote watering of the garden? Hand watering Clay pot/pitcher irrigation/bottle irrigation Low-cost drip irrigation kits Other (describe) 		
Postharvest	 What harvesting practices will the project promote? Harvesting at the appropriate maturity Using clean, sharp tools Wearing picking bags or harvesting sacks Disposing of diseased and damaged produce Weather forecasting to inform harvest and drying times Other (describe) 		

Theme	Question	Activities selected	Who implements
Postharvest	 What postharvest practices will the project promote? Gentle handling Shade in the field Curing practices Other (describe) 		
	 What storage practices will the project promote? Temperature control Relative humidity monitoring Ventilation and air circulation Avoiding storage of incompatible product mixes Other (describe) 		
	 Will the project promote cool storage structures? If yes, which ones? Evaporative cool storage Desert cooler Pot-in-pot storage system Zero-energy cool chamber Communal pit storage Other (describe) 		
	 Will the project promote small-scale food processing? If so, which methods? Drying Shade Solar Electric Fossil fuel Canning Fermenting (jams, jellies, candies) 		
	 What food safety practices will be promoted along with gardens? Clean soil Clean water Clean surfaces Clean hands 		
Marketing	 Will the project strengthen gardeners' capacity in the basics of marketing? Will agricultural organizations be used to market garden produce? Will the <i>Garden Business Workbooks</i> be used? Other (describe) 		
Behavior change	 What are the key behaviors that need to change to ensure adoption of gardens and use of garden produce? If behaviors need to be changed, will the project conduct formative research related to the adoption of gardens or use of their end products? What behavior change approaches will the project promote? 		

STEP 7: DETERMINE THE SCALE OF THE GARDEN INTERVENTION

Refer to the decisions made in Steps 4 and 6 to plan for adequate staff and financial resources. Use the staff requirement spreadsheet (<u>Annex 2</u>) to calculate the number of field agents needed to support this intervention. Then use the budget template (<u>Annex 3</u>) to calculate the estimated budget to implement the garden intervention for the number of intended beneficiaries. If a market-oriented approach (income generation) is the desired outcome of of the garden, conduct an economic analysis using the cost-benefit analysis spreadsheet to determine whether sufficient income can be generated to cover costs and provide a profit (<u>Annex 4</u>).

Actions

- Use the staff requirement spreadsheet in Annex 2 to calculate number of total beneficiaries to reach and number of field agents.
- Use the budget template in Annex 3 to calculate budget to support garden intervention.
- Use the cost-benefit analysis spreadsheet in Annex 4 to calculate cost-benefit if outcome is income-oriented.
 - What is the total number of beneficiaries to be reached by the garden intervention?
 - What is the total number of staff (paid and volunteer) needed to reach the selected number of beneficiaries?
 - What is the full budget needed to reach the targeted number of beneficiaries?
 - For income-oriented gardens, is it economically sound to promote gardens for income generation? If so, what is the estimated profit for beneficiaries?

STEP 8: SELECT INDICATOR TO MONITOR PROGRESS AND ASSESS GARDEN-RELATED OUTCOMES

Based on the garden outcome(s), determine the qualitative and quantitative indicators that the project will collect annually for performance monitoring and to be measured at baseline, midterm and endline. Guidance on measuring progress and outcomes is available in the *Garden Project Design Guide* and Chapter 14 of the *Garden Resource Guide*.

What indicators and qualitative data will the project collect to monitor performance and outcomes of the garden interventions?

STEP 9: DRAFT PARAGRAPH FOR THE PROPOSAL

A substantial amount of information has been collated using this worksheet. All decisions are important to guide the design, including staffing and financial resources needs, but not all information will be in the proposal. An example paragraph can be viewed in the *Garden Project Design Guide* under Step 9.

Draft paragraph to be included in proposal.

faith. action. results.

Catholic Relief Services, 228 West Lexington Street, Baltimore, Maryland 21201-3443 crs.org

