

GBI Tools

User Guide to the GBI Standard Operating Procedure for G+ Tools (G+SOP)

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GBI User Guide

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This user guide is intended to disseminate research and practices about gender and plant and animal breeding, as well as to encourage debate and exchange of ideas. The views expressed in the papers are those of the author(s) and do not necessarily reflect the official position of RTB, CGIAR or the publishing institution.

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ACRONYMS

CIPCentro Internacional de la Papa (International Potato Center)G+Gender PlusGBIGender Breeding Ini00tiativeRTBCGIAR Research Program on Roots, Tubers and BananasSOPStandard operating procedure

ABSTRACT

The Standard Operating Procedure (SOP) for the G+ Tools is designed for breeding teams with an interest in improving their gender-responsiveness. The SOP is a guide to using the G+ Tools as an input to team decisions about the importance of gender differences to (i) identify and describe their priority customer segments, and (ii) evaluate which product traits to prioritize for breeding. The SOP lays out a stepwise procedure for a team to organize the available evidence on gender differences in customer segments, identify crucial gaps in the evidence that may need to be filled, interpret the evidence and use the results for team decision-making. The SOP can also be used to generate a standardized G+ Report with the templates provided, so that the team has a record of their decisions about the implications of the gender differences considered, and the supporting evidence.

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The Standard Operating Procedure (SOP) For G+ Tools

GENDER-RESPONSIVE SEGMENTING, TARGETING AND TRAIT PRIORITIZATION FOR BREEDING PROGRAMS

USER GUIDE

INTRODUCTION

Gender-responsive breeding ensures that the perceptions, interests, needs and priorities of women and men (which can differ because of their different roles and responsibilities in farming) will be considered in planning and decision-making for product advancement in a breeding cycle. For a definition of what makes breeding gender-responsive, see Box 1. Breeding programs that overlook women's preferences may develop products (such as crop varieties or animal breeds) that are rejected or that harm women by increasing gender inequality.

Box 1. What can a breeding program do to be gender responsive?

- 1) Know when, where, and why women are an important beneficiary group. Take into account important differences in constraints faced by women and men farmers that breeding can influence.
- 2) Anticipate how design decisions (e.g., defining the plant ideotype, prioritizing traits, targeting and testing varieties with farmers) may impact and be influenced by women's labor, resources and opportunities.
- 3) Design breeding objectives specifically to benefit women farmers when they are an important beneficiary group who require a special approach, and consider their needs, constraints and knowledge more generally in the breeding program.
- 4) Be accountable, making sure that the success of the breeding program is measured in ways that include positive impacts for women, as well as for households or farmers in general.

For breeding programs with an interest in gender-responsiveness, this standard operating procedure (SOP) provides a guide on how to use the G+ Tools (Box 2) in a standardized format during a breeding cycle to assess, and if need be, improve the gender responsiveness of their breeding products.

The G+ Tools were developed to help breeding teams, especially those in programs with welfare objectives, to systematically integrate gender equity into variety design and testing. Using the G+ Customer Profile will help to consider the different demands of women and men while deciding which customers to prioritize when developing a variety. The "customers" for a breeding program are those who produce goods using its products. A customer segment is a group of people who share a common

set of constraints and a common demand for a variety. This does not mean that customers in a segment are identical in all respects: a customer segment can include men and women if they share the same preferences for a breeding product. For example, large-scale food manufacturers may have similar trait preferences, whether they are men or women. But because of gender inequity, women who are smallholders and small-scale, home-based processors typically operate with different constraints from men doing the same job, and so may require different qualities in the varieties they use for processing. Gender -responsive breeding does not mean a program has to breed specifically "for women." Gender -responsiveness means the program has made an evidence-based decision about the desirability of differentiating by gender, any of its customer segments and the breeding products designed for them. That is why one result of using the G+ Tool can be a rationale, supported by evidence, as to why there is no need for gender-differentiation in a program's breeding objectives, customer segments or breeding products. The G+ Tool helps breeding programs to make sure trait evaluation and prioritization is informed by gender analysis rather than being a "gender-blind" decision.

The G+ Tools were designed for use in product advancement by programs targeting customer segments principally composed of resource-poor smallholders. These men and women farmers often express different trait preferences that reflect the gendered division of rights and responsibilities in farming. Use of the G+ Product Profile will help to ensure that decisions about which traits to prioritize in future varieties have considered gender differences among customers that affect acceptability and adoption, including the potential for harmful outcomes.

Box 2. The G+ Tools

G+ Customer Profile Tool

The G+ Customer Profile will help a breeding program include a gender dimension in the definition of its priority target customer segments. The tool uses a combination of gender, other socio-demographic variables and geographic information to segment, target, and profile customers with a gender dimension. Using this tool will help a breeding program to:

- Clearly understand the gender dimension of different markets for its breeding products
- Target well-defined customer segments in those markets, taking gender differences into account
- Understand gender-differentiated demand of customers for breeding products
- See the full User Guide to the G+ Customer Profile Tool (G+ PP) Link.

G+ Product Profile Query Tool

The G+ Product Profile will help a breeding program include a gender-responsive evaluation of plant traits into an existing or proposed product profile. The tool uses analysis of gender relations to interpret gender-differentiated, customer trait preferences and their implications for the acceptability of a trait. Using this tool will help a breeding program to:

- Assess whether a trait has any positive or negative implications for gender equity
- Assess whether a trait meets minimal "do no harm" standards taking gender differences into account

 Assess positive benefits of a trait for different types of customer taking gender into account.

Gender responsiveness in the G+ Tools refers to gender equity, rather than equality. Gender equality, meaning women and men should be treated in the same way, is not a suitable approach for breeding. Delivering the same variety in the same way to both men and women will not always produce equitable results. In contrast, a gender equity approach enables different breeding strategies to target men and women differently, if need be, to produce outcomes and impact that are equitable.

See the full User Guide to the G+ Product Profile Query Tool (G+ PP) Link

PURPOSE OF THE SOP

This SOP is a guide on how to use the G+ Tools (Box 1) in a standardized format during a breeding cycle to generate information about gender aspects of customers' varietal choice. The SOP is designed so that this information can be used by a plant or animal breeding team for analysis, discussion and decisions to assess and, if need be, improve the gender-responsiveness of their breeding.

The G+ Tools involve a stepwise process of analysis and decision-making. As a result of using the SOP with the G+ Tools, users will produce a G+ Report that summarizes their main conclusions and decisions along with supporting evidence tables. Like the G+ Tools, the G+ Report is designed in steps, to stimulate frequent discussion among breeders and social scientists as they make consensual judgements about the program's priorities.

INTENDED USERS OF THE SOP

The SOP is designed for use by a breeding team (the "team") that includes and actively involves social scientists in team decisions.

Application of the SOP should be co-managed by a social scientist (economist, sociologist, anthropologist, or social geographer) and a breeder, who are responsible for applying the tools, for synthesizing the analysis in the G+ Report provided by the SOP and for feeding this information progressively into team discussion and decision-making for product advancement.

How to use the SOP

Use the SOP as a guide to use the G+ Tools to integrate gender-responsiveness into deciding which customers to target and which traits to prioritize in developing a variety.

Use of the SOP in a stage gate process

The SOP and G+ Tools are built around the principles of demand-led breeding (Box 3). The SOP and G+ Tools should be used as part of a target-driven approach to demand-led breeding using a development stage plan, with agreed decision points or "stage gates" for product advancement (Figure 1).

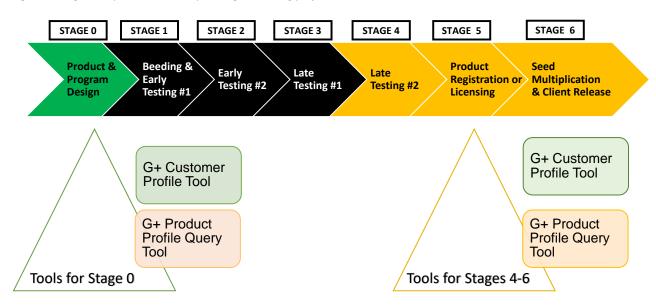


Figure 1. Stage Gate process used for planning a breeding project.

Box 3. The target-driven approach to demand-led breeding

The target-driven approach to delivering new varieties to customers involves

- Variety design: a list of traits with quantified levels of performance defined
- Client quantification: numbers, geographical distribution, market segments and value chains of farmers who are expected to use the variety
- Target levels of expected adoption are set
- Development stage plan: a time plan is agreed for the research, identifying critical decision points or stage gates for progression of breeding lines in the breeding cycle
- Market research: analyzes customer segments and their current or projected demand for different product features relevant for variety design
- Engagement with customers to get their feedback on desired traits
- Satisfying customer needs for new varieties
- A "benefits case" is prepared that states the expected impact for a given set of customers to justify the required investment in breeding
- Target levels of expected adoption for a given set of customers are defined

Source: Persley, G. J., & Anthony, V. M. (Eds.). (2017). *The business of plant breeding: Marketled approaches to new variety design in Africa*. CABI.

The SOP and the G+ Tools will generate an input to product advancement decisions. It is the team, not the tools, that make those decisions. Users cannot use the SOP to mechanically generate conclusions; those depend on the team's development goals, the importance of gender equity for those goals, and team's criteria for setting priorities. Using the SOP can help make users' choices, criteria and judgments related to gender equity explicit, informed and systematic, but the SOP is not a substitute for team decision-making.

The G+ Report

The SOP can be used to generate a G+ Report on the outcomes of using each G+ Tool. The G+ Report will supply a concise record of key decisions informed by gender analysis as a result of applying the G+ Tool, with a link to supporting data and analysis. The G+ Report is designed to facilitate communication of results by the social scientists and breeders who are co-managing application of the SOP and the G+ Tools.

THE SOP AND THE BREEDING CYCLE OR STAGE GATE PROCESS

A breeding cycle (Figure 2) is a set of cyclical decisions that lead to a final outcome which is the breeding product (plant variety) adopted by the customers. Stages in the breeding cycle (the orange diamonds in Figure 2), are associated with seven gender-responsive decisions (yellow squares in Figure 2).

This SOP prioritizes the use of the **G+ Customer Profile Tool** in three decisions at the start of the breeding cycle (Figure 2):

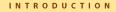
- Who are the potential customers, differentiated by gender, for the program?
- Which gendered customer segments will the program target?
- What product or trait preferences of target customer segment(s) are important?

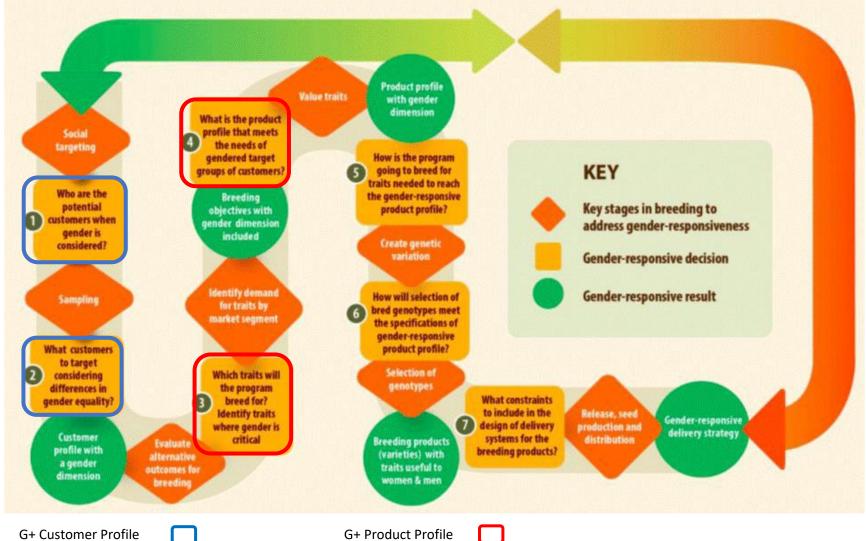
The other tool, the **G+ Product Profile Query Tool**, provides a procedure for working systematically through other decisions outlined in Figure 2:

- 1. What is the product profile that meets the needs of the gendered target group of customers?
- 2. Which traits are significant for reaching the gender-responsive product profile?
- 3. How should the program prioritize traits with a gender dimension?
- 4. Have trait packages considered the potential impact on gender equality for men and women in different customer segments?

USER GUIDE FOR THE G + SOP TOOL

Figure 2. Key gender-responsive decisions in the breeding cycle.





G+ Product Profile

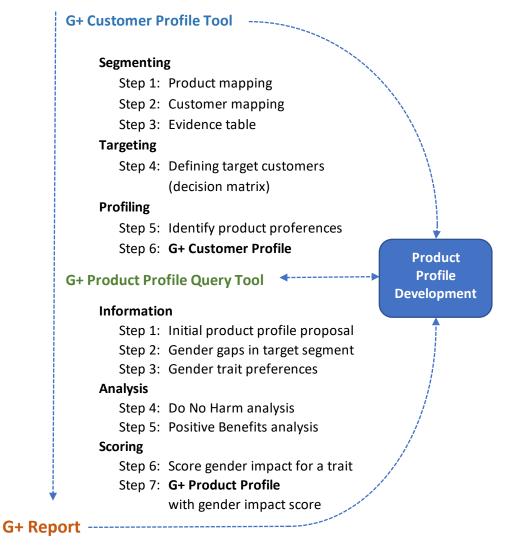
6

ORGANIZATION OF THE SOP FOR STEPWISE USE OF THE G+ TOOLS

Each section of the SOP covers one of the steps in Figure 3.

Figure 3. Sections of the SOP.

Standard Operating Procedure (SOP)



COMPONENTS OF THE SOP

The SOP is divided into sections, each of which has six components, identified as follows.



KEY QUESTION, linked to a decision that needs to be informed by gender analysis.



KEY POINTS FOR CONDUCTING THE GENDER ANALYSIS needed to address the question. This complements guidance provided in the G+ Tools. The SOP is designed to be used with the G+ Tools and does not replace them. Detailed explanations of the steps in analysis supplied in each G+ Tool should always be consulted.



RECORD: Use the <u>SOP template form</u> for recording information and analysis to inform the upcoming key decision.

DECISION POINT which needs to be informed by the preceding gender analysis. This decision will involve consultation between breeders and social scientists.

REPORT: WRITTEN SUMMARY OF THE RATIONALE for the key decision in <u>the G+</u> <u>Report</u>. Documented in this way, the G+ Report will supply a concise, but complete account of each of the G+ Tools' key decisions, with a link to the supporting data and analysis, if entered into the corresponding SOP template form(s).

DECISION POINT WHICH NEEDS AGREEMENT FROM THE TEAM, the team should be informed by discussion of what's in the G+ Report so far, for the analysis to proceed successfully.

G+ CUSTOMER PROFILE

Segmenting demand with a gender dimension

Step 1: Make a product map with a gender dimension

Objective: identify the gender dimensions of demand for a crop and its uses



Which product(s) are a priority for gender-responsive breeding?

Key points for gender analysis for the product map.

- A detailed guide to building a product map is provided in the G+ Customer Profile Tool.
 - Select the criteria (economic, social and spatial variables with sex-disaggregated data) that
 can be used for prioritizing the importance of a food product from a gender perspective:
 for example, number of growers by sex, volume of product by end use (e.g. different types
 of food products) for men and women, value of each food product by end use for men and
 women, projected trends in demand by end use.
 - Understand how gender is measured in the data to be used for describing the general
 population and the population of growers. Differences in the way data is collected in
 different areas may mean that gender is defined in different ways in different geographic
 areas. Gender should refer to the sex of an individual. However, it may have been collected
 as the sex of the head of the farm household: head of household should only be used as a
 last resort, if sex of the individual is not available.
 - Document and quantify gender differences in uses of the crop (include home consumption uses as well as marketed products).
 - Document and quantify gender differences in value chain actors involved in each end use (e.g. food product) of the crop.
 - For each end use of the crop, identify the geographic areas where the people using the crop are located and the number of male and female growers and value chain actors involved in this end use, in each area.
 - Consider including novel or future food products that have potential for improving gender equity by reducing farm women's drudgery, increasing seasonal food availability or nutrition or income under women's control or their returns to labor or their penetration of new markets.

Record your conclusions drawn from the product map

Complete the template form for the product map.

Select the potential food products that have a significant gender dimension

A key decision point has been reached which needs to be informed by the preceding gender analysis. The expectation in the SOP is that this decision will involve consultation between breeders and social scientists.

Suggestions for discussion:

- 1. Review the team's expected impact, expected outputs, and current breeding objectives for the crop in relation to the product map with a gender dimension:
- 2. What is the product (end use) of highest importance for the gender-responsiveness of the team's breeding objectives and why?

For each end use:

- 1. What is the economic importance of this end use to women compared with men (volume, value, trends)?
- 2. Is the end use different for men and women playing various economic roles (e.g. male farmers, female farmers, female processors)? Whose preferences might need to be consulted?
- 3. What is the size of the sex-disaggregated population involved in this end use and the gender balance (% women, % men) of the people involved?
- 4. What is the size of the sex-disaggregated population involved in post-harvest activities required for this end use and the gender balance (% women, % men) of the people involved?

Report potential product(s) for gender-responsive breeding

Summarize the rationale for the products prioritized in writing in the relevant Section of the G+ Report.

Step 2: Customer mapping

Objective: to identify customer segments with demand for gender-responsive breeding

Definition: The customers for a plant breeding program are those who use its breeding products, i.e. varieties. A customer segment is a group of people who have both a common set of constraints and a common, unique and relatively homogenous need (demand) for a breeding program product.

? Key question

Who are the potential customers with demand or need for gender-responsive breeding?

Key points for gender analysis for customer mapping with a gender dimension.

A detailed guide to customer mapping is provided in the G+ Customer Profile Tool.

- Consider roles in the commodity value chain: growers, traders and processors in the same value chain are customers who face the same consumer demand for certain features of a product.
- Analyze intersectionality: gender inequity can be made worse by other social differences, such as poverty, age, ethnicity, market distance or geographic marginalization. Gender differences can also be diluted by other, positive socio-economic conditions. It is vital for customer mapping to examine these interactions, termed intersectionality.
- Use the analysis of intersectionality to select the criteria (economic, social and spatial variables with sex-disaggregated data) that will be used for segmenting customers from a gender perspective: for example, poor men and women vs non-poor; women and men with good market access vs those having limited market access.
- Understand how gender is measured in the data you have available. Differences in the way
 data is collected in different areas may mean that gender is defined in different ways.
 Gender should refer to the sex of an individual. However, it may have been collected as the
 sex of the head of the farm household: head of household should only be used as a last
 resort, if sex of the individual is not available.

Record your conclusions drawn from the customer mapping

Complete the template form for customer mapping.

Select the potential customer segment(s)

A key decision point has been reached which needs to be informed by the preceding gender analysis. This decision will involve consultation between breeders and social scientists.

Report potential customer segments

The customer segments identified by the analysis will be entered into the evidence table in the next section. Summarize the rationale for the segmentation in writing in the relevant section of <u>the G+</u> <u>Report.</u>

Step 3: Evidence table

Objective: identify the set of potential customer segments and the product(s) of interest that will be considered in the next step: targeting.



Key question

What is the short list of customer segments and products of interest that the team should consider for targeting?

-Key points for gender analysis using the evidence table

A detailed guide to compiling the evidence table is provided in the G+ Customer Profile Tool

The evidence table is the foundation for the next step, customer targeting. The table combines the information collected in product mapping with the information on customer mapping. The evidence table organizes the information needed to choose which segments to target.

There is no fixed set of variables that you must use in the evidence table, because the sexdisaggregated data available varies greatly from region to region and crop to crop.

Record your conclusions drawn from the evidence table

Complete the Template form for the evidence table

Key decision

Define the short-list of customers and the products of interest for targeting.

Suggestions for discussion:

- Review the list of potential customer segments. If this is a long list, then rank segments in order of importance according to your most important criterion e.g., size of the population of women in the segment, poverty level, food insecurity, gender inequity in productivity of the crop etc.
- Review the products (specific foodstuffs or other end uses) of economic importance to this customer segment from the product map.
- Select the set of potential customers for breeding and the product(s) of interest for this segment. These may be existing or novel products.
- The next step, targeting, will require prioritization of one or a few of these potential customer segments. Make sure the customer segments and the products you identify in this step are all acceptable candidates for prioritization as a target by the team.

Report the conclusions

From the evidence table and the gender analysis for customer mapping in written form in the G+ Customer Profile Report

TARGETING

Step 4: Define target customer segments

Objective: use a decision matrix to rank, order and select the customer segments to be targeted by the breeding program. Since it cannot address the needs of all potential customer segments, the breeding program must choose which segments to exclude.

Key question

What customers to target (from among the potential customers) considering differences in gender equity?



Key points for the decision matrix with a gender dimension.

A detailed guide to the decision matrix is provided in the G+ Customer Profile Tool

- Use the evidence table to review the potential customer segments and the products (end uses) of interest to each segment. Select one product or end-use of interest and one potential customer segment to evaluate at a time, using the decision matrix.
- Define the criteria to be used by the team for prioritizing customer segments, based on development goals of the team and information in the evidence table. Enter agreed criteria into the decision matrix table, e.g. expected impact of breeding to improve the products (end uses) of interest to this customer segment on poverty. Define the levels of each criterion to be used to score a customer segment, e.g. high and low.
- Score each customer segment and associated product of interest, using the decision matrix table.
- Complete one decision matrix template for as many potential customer segments and the associated product of interest as required.
- Compare the scores in each completed decision matrix table to rank customer segments in order of priority for targeting.

Record the target customer segments that have been identified

Complete the Decision Matrix Template and the Final Score Table.

Key decision

Select and prioritize customer segments to be targeted for gender responsive breeding.

Suggestions for discussion:

- Review the final scores and rank order of customer segment scores in the decision matrix table.
- Agree on the team's desired approach to gender for each customer segment. See detailed instructions in the G+ Customer Profile Tool.
- Use voting in the team, or another agreed decision-making technique, to rank customer segments in order of the team's priority for gender-responsive breeding.
- Create a list of target customer segments: select the customer segments to be targeted and eliminate the others.
- Select a top priority customer segment. This should be the first target to be analyzed using the G+ Product Profile.



For the decision in written form in the G+Report.

Team buy-in

Is desirable for the selection and prioritization of target customer segments.

PROFILING

Step 5: Identify product preferences

Objective: develop a full description of product preferences for a target customer segment. A customer segment should be homogeneous in terms of product preferences.



Key question

What are the product preferences expressed by members of the priority target customer segment? Do these preferences differ between men and women, and why?

Key points for product preference profiling with a gender dimension.

A detailed guide to product profiling is provided in the G+ Customer Profile Tool. A target segment may already be identified as consisting mainly or entirely of women. Product profiling for the segment remains important as a check that this is a homogeneous customer segment with common preferences. If this turns out not to be the case, the segment will need to be subdivided and possibly re-evaluated as a target.

The focus of this product profiling is to clarify if there are distinct, gender-related differences in preferences. Men and women may value completely different characteristics of a food product, such as the time it takes to cook. This may translate into different preferences for a breeding product or variety, such as grain size, color or growth habit. The same characteristic may be valued differently by men and women. Not all plant or animal characteristics valued by customers will necessarily be identified with a known trait, for example in West Africa some food products are preferred if they stretch just so between the fingers, but there may be no cassava or yam genes for "stickiness." Product profiling should identify all the product characteristics with a gender dimension whether or not there is already knowledge about the traits.

Much preference data is unreliable, especially if it is anecdotal and out of date. For this reason, your data on preferences should be representative, valid and reliable. Do the locations where these data were collected correspond adequately to the geographic area or spatial domains you have defined as the location of your target segment? Are there any gaps in coverage that are likely to have introduced bias? What reasons do you have for confidence that these data are representative of men and women in the target segment? When were these data collected? Are there recent trends in this food product that might cause trait preferences to change? Were these data collected with reliable methods?

If there are sound reasons to doubt the validity of your available data on preferences, summarize these data issues and your recommendations for what needs to be done in the template form provided and bring the issues up for discussion of remedial data collection.

Record product preferences

Complete the Target Segment Product Preference Profile Template.

Key decision

Select end-use product characteristics (and associated traits if known) associated with gender differences to be assessed for gender impact with the G+ Product Profile Tool.



Report

The rationale for the decision in writing in the <u>G+ Report</u>.

Step 6: Construct a gendered customer profile

Objective: provide a detailed description of the customer segment, their preferences and how a given product, existing or novel, will meet their preferences.

Key question

What does the breeding team need to know about the people and their gender relations in the target customer segment in order to develop adoptable breeding products for them?

Key points for customer profiling with a gender dimension.

A detailed guide to customer profiling is provided in the G+ Customer Profile Tool.

- A customer profile contains more detailed demographic, behavioral, and geographic descriptors of the target customer segment than was provided in the evidence table. It should also contain a description of their product preferences.
- The gendered customer profile should focus on descriptors that relate to key aspects of gender inequity that are known to affect this customer segment's varietal choice. What obstacles to adoption by women, and what opportunities is a new variety likely to encounter?

The customer profile is a check on the accuracy of segmentation and targeting. Product profiling for the segment remains important as a check that this is a homogeneous customer segment with common preferences. If this turns out not to be the case, the segment will need to be subdivided and possibly re-evaluated as a target.

The G+ Customer Profile Tool has a detailed questionnaire you can complete in order to compile the information needed for a summary profile

Record the customer profiles

Complete the customer profile template: use the detailed questionnaire in the G+ Customer Profile Tool to compile the information needed.

Report conclusions

Flag any issues raised by customer profiling in written form in the <u>G+ Report</u>.

Team familiarity

Is desirable with the profile(s) of target customer segments and their product preferences.

G+ PRODUCT PROFILE QUERY TOOL

The G+ Product Profile Query Tool is intended for use by a breeding team using a product profile for variety design that specifies the traits required for product success (e.g. for a new variety) and sets a value for the level of performance desired for each trait. This tool provides a way to inspect and assign a value to the gender impact of traits as an input to trait prioritization.

To be gender-responsive, breeding programs should always perform the "do no harm" analysis provided by this tool in order to avoid inadvertently prioritizing a trait that has some negative implications for gender equity, or that is viewed as undesirable by women growers or indeed, by men and women. This check is necessary even if the end-result is to determine that a product will include no gender-sensitive trait.

Information Gathering

Step 1: Compile a product profile proposal

Objective: identify the plant traits that require a gender impact assessment.



Which traits should be evaluated for gender impact?

Key points for determining the traits to evaluate for gender impact.

A guide to how to decide which traits to evaluate is provided in the G+ Product Profile Tool.

- The G+ Product Profile Tool should only be applied using a well-characterized target customer segment.¹ The target customer segment is a group of customers with similar constraints and product preferences that the breeding team has selected for gender-responsive breeding.
- The G+ Product Profile requires representative, sex-disaggregated information on customers' preferences for specific product attributes and associated traits. This product profile can be compiled during the profiling stage of the G+ Customer Profile or it must be otherwise obtained.

The scoring must be based on preference data and social data that are representative of the target customer segment. Avoid judgements about women and men in general or notions about gender differences based on haphazard or on anecdotal information.

List the traits to be evaluated for gender impact in the team's product profile proposal. An example is provided in the template form.

¹ For a detailed explanation of a customer segment and how to define and characterize one, see The G+ Customer Profile Tool.

Record traits in a product profile proposal

Complete the list of traits in the template for product profile proposal (G+ Product Profile template #1).

Key Decision

Select the traits of a current or proposed product profile that will be evaluated for their gender impact.

Key question

What are the appropriate gender-related social categories for the analysis?



A guide is provided in the G+ Product Profile Tool.

The G+ tool's questionnaire can be applied flexibly to men as well as to women or to any relevant social category which involves the intersection of gender with other social characteristics.

Consider intersections of gender with

- Value chain roles
- Levels of poverty that affect technology choice
- Age, ethnic or education characteristics of the individual that are strong sources of gender inequality and that influence technology choice.
- •

Adapt the Questionnaire:

To apply the Tool's Questionnaire flexibly to different gender-related social categories, the gender-related social category of interest should be inserted into the Tool Questionnaire as illustrated in the G+ Product Profile Tool.

- if you plan to use different social categories from "women" and "men" then insert your category into one version of the Questionnaire for each category you plan to use.
- Each social category you plan to use e.g. women growers, men growers, women processors etc. will require a Scoring Matrix and will obtain positive, neutral or negative gender impact scores for each trait evaluated.

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Report the list of selected traits and the social category identified in the G+ Report

Team buy-in

Is desirable for the decision of which traits to evaluate and which social categories to use for Gender Impact.

Step 2: Analyze gender gaps in a target customer segment

Objectives:

- Verify that the available evidence on gender gaps is representative of the target customer segment and adequate for the "do no harm" and "positive benefits" analysis with the G+ Product Profile Questionnaire for Do No Harm and Positive Benefit Analysis.
- Verify that gender researchers and breeders share and agree on standards for what constitutes satisfactory evidence.



Is the available evidence on gender adequate for assessing likely outcomes of plant traits for women compared with men?



Key points for assessing plant traits in the light of significant gender gaps

Review the gender gap questions in the G+ Product Profile Questionnaire for do no harm and positive benefits analysis.

Note: if you plan to use different social categories from "women" and "men" (e.g. "youth" or a disadvantaged group) then insert your category into one version of the Questionnaire for each category you plan to use.

For each trait under consideration in the product profile proposal, you will need appropriate data, representative of the target customer segment, to assemble a gender gap analysis based on these 4 questions:

- 1. Does the trait involve changes in unpaid farm labor use?
- 2. Does the trait involve changes in employment or other forms of income generation?
- 3. Does the trait *require* use of an input to which men and women in the target customer segment have different levels of access?
- 4. Does the trait involve changes in control over produce, by-products, sales, income or other direct benefits from the crop or animal in question?

For each question, you will need to be able to assess:

- Is the change different for women or men in the target customer segment?
- What proportion of women in the target customer segment could this change affect? What proportion of men?
- What is the level or extent of this change for women or for men: is it positive or negative and is it insignificant or major?

Record your assessment of data available for the gender gap analysis

Record important evidence sources for each gender gap question in the column provided in G+ Product Profile Template #2. Use one template for each trait in the product profile proposal #4.

Note data quality issues in the column provided in G+ Product Profile Template #2. You will need to summarize these issues at the end of this step.

Key decision

The available evidence on gender gaps is (or is not) sufficiently reliable and conclusive to be used as a basis for the next step in the G+ Product Profile, the analysis of "do no harm" and "positive benefits." Decide how to address any need for additional data.



Report the assessment

of data quality, including any remedial action needed to secure adequate data, in the G+ Report. Write a narrative summary of your conclusions addressing the key question: Is the available evidence on gender adequate for assessing gender implications of the traits in the product profile proposal.

Step 3: analyze trait preferences in a target customer segment.

Objectives:

- Verify that the available evidence on gender-differentiated trait preferences is representative of the target customer segment and adequate for the "do no harm" and "positive benefits" analysis with the tool.
- Verify that gender researchers and breeders share and agree on standards for what constitutes satisfactory evidence.



Key question

Is the available evidence on gender-differentiated trait preferences adequate for assessing likely outcomes of plant traits for women compared with men?



A guide to the interpretation of trait preferences is provided in the G+ Product Profile Query Tool.

Review the trait preference questions in the G+ Product Profile questionnaire for "do no harm" and "positive benefits" analysis

For each trait under consideration in the product profile proposal, you will need appropriate data, representative of the target customer segment, to make the following analysis:

- Assess gender-differentiated trait preferences that have positive implications for the trait in question.
- Examine men's and women's preferences to identify agreement or conflict of opinion and whether men and women favor different trade-offs on a given trait.
- Assess gender-differentiated trait preferences that have negative implications for the trait in question.

The information needed for this analysis will be available from the G+ Customer Profile template form #5 target segment preferences, if it has been completed.

Record your assessment of the data available on gender*differences in trait preferences.*

Record important evidence sources for each trait preference question in the column provided in G+ Product Profile Template #2. Use one template for each trait in the product profile proposal #4.

Note data quality issues in the column provided in G+ Product Profile Template #2. You will need to summarize these issues at the end of <u>this step</u>.

Key decision

The available evidence on gender gaps is (or is not) sufficiently reliable and conclusive to be used as a basis for the analysis of "do no harm" and "positive benefits," the next step in the G+ Product Profile.

Decide how to address any need for additional data.

Report the assessment of data quality for trait preferences

Including any remedial action needed to secure adequate data, in writing in the G+ Report. Write a narrative summary of your conclusions addressing the key question: Is the available evidence on gender adequate for assessing gender implications of the traits in the product profile proposal?

Key question

Does the gender gap analysis or the analysis of trait preferences suggest a strong, genderdifferentiated preference for a trait that is not included in the product profile proposal but that might be decisive for acceptance of the new variety?

Record the proposed new trait

In a new row in the product proposal template, note the rationale for adding a trait to the G+ Product Profile in the space provided for narrative summary in the product profile proposal template.

ANALYSIS OF INFORMATION

Step 4: Do no harm analysis

Objective: complete the analysis of do no harm, using the scoring matrix to generate a value for a plant trait. Step 4 can be repeated for each trait in the product profile proposal.

Reminder:

To be gender-responsive, breeding programs should always perform a "do no harm" analysis.

This will help to avoid releasing a variety that has some negative implications for gender equity, or that is viewed as undesirable by growers, men as well as women.

This check is necessary even if the end-result determines that a variety will include no gender-sensitive trait.

Key question Will women be worse off because of this trait?



Key points for doing the "do no harm" analysis

To complete the "do no harm" analysis you must use the full questionnaire provided in Annex 1 of the G+ Product Profile Tool. Applying the questions generates a set of values from -2 to +2 for a trait that can be analyzed using the Tool's Scoring Matrix, explained in detail in the G+ Product Profile Tool.

Part 1: Gender gap evaluation

Use the tool questionnaire to examine four criteria related to gender equity in agriculture that represent a standard for "do no harm", meaning that women should not be worse off in any one of these four aspects. Each criterion is related to a change that can occur to increase gender inequity when a new variety is introduced.

Question 1: Increase drudgery?

Question 2: Displace of women's productive activity?

Question 3: Reduce or remove control of production inputs?

Question 4: Reduce or remove control of products and by-products?

Part 2: Negative trait preferences

Use the tool questionnaire to assess gender-differentiated trait preferences that have negative implications for the trait in question. Examine men's and women's preferences to identify agreement or conflict of opinion and whether men and women favor different trade-offs on a given trait.

Question 5: Are there women's negative trait preferences?

Question 6: Are there men's negative trait preferences.

Record the values for "do no harm" in the scoring matrix sheet

From answering questions 1-6 in the G+ Product Profile questionnaire for one trait, assigning either -2, -1 or 0.

Key decision

Does the "do no harm" analysis identify strong reasons to reject or avoid the trait in question?

Step 5: "positive benefits" analysis

Objective: complete the analysis of positive benefits, using the scoring matrix sheet to generate values for a plant trait. Step 5 can be repeated for each trait in the product profile proposal.

² Key question

Will women be better-off because of this trait?

Key points for doing the "positive benefits" analysis

To complete the positive benefits analysis, you must use the full questionnaire provided in the G+ Product Profile Tool. Applying the questions generates a set of values from -2 to +2 for a trait that can be analyzed using the tool's scoring matrix, explained in detail in the G+ Product Profile Tool.

Part 1: Gender gap evaluation

Use the tool to examine three types of benefit that are critical for determining whether women producers will benefit from a breeding product. A benefit is defined as an advantage derived from use of a breeding product, including the satisfaction of practical needs (e.g. nutritious food) and strategic needs (e.g. market power).

Question 7: Reduce drudgery?

Question 8: Create or increase employment for own income generation?

Question 9: Are women-controlled products or by-products increased or improved?

Part 2: Positive trait preferences

Use the tool questionnaire to assess gender-differentiated trait preferences that have positive implications. Examine men's and women's preferences to identify agreement or conflict of opinion and whether men and women favor different trade-offs on a given trait.

Question 10: Are there women's positive trait preferences?

Question 11: Are there men's positive trait preferences?

Question 12: Compare men's and women's ranking of a trait.

Record the values for positive benefits

In the Scoring Matrix sheet (Template #4) from answering questions 7 through 12 in the questionnaire: assigning values of either +2, +1 or 0.

Key decision

Does the positive benefits analysis identify strong reasons to continue to include the trait in the product profile proposal? Is further research needed to clarify this conclusion?

SCORING OF TRAITS

Step 6 of G+ Product Profile: Score the gender impact

Objectives: use the tool's scoring matrix sheet to analyze the set of 12 coded judgments for an individual trait generated by applying the tool's questionnaire. Record the result in the positive benefits or do no harm column of the product profile proposal

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Key points for scoring gender impact

Follow the scoring guide in the SCORING MATRIX sheet to generate scores for each trait:

Do no harm:

Reject the trait: -2

Avoid or amend if feasible: -1

The trait is neutral for gender impact: 0

Positive Benefits

Require the trait: +3

Important to have the trait: +2

Nice to have the trait: +1

The trait is neutral for gender impact: 0

- Remember that the gender impact scores are ordinal: in other words, we know that "nice to have" is better than "reject" but we can't quantify how much better it is.
- The scores are the product of expert judgment. A score is only as valid and reliable as the evidence and the interpretation supporting the judgment.
- The gender impact score is reported in two separate columns: one number for "do no harm" and one number for "positive benefits." This is to enable discussion about the trade-off between the benefits of a trait and its potential for harm in Step 7.

Key decision

Does the gender impact score for do no harm or for positive benefits identify strong reasons to prioritize the trait in the product profile proposal? Is further research needed to clarify this conclusion?

Record the gender impact scores for each trait that has been evaluated in the "do no harm" and "positive benefits" columns of the product profile proposal template

Note this is G+ Product Profile Template #1

Step 7: Complete the product profile proposal with gender impact score

Objectives: form a picture of the gender dimensions of the whole breeding product. Compare do no harm and positive benefits scores of all the traits evaluated in the product profile proposal to identify tradeoffs.

Key question

Is there any indication of a trade-off between the risk of doing harm and the opportunity for providing benefit?



Key points for comparing scores

1. Trade-offs on a single trait: compare gender impact scores of the same trait. Does the positive benefit of the trait outweigh the risk of harm for the customer?

IF YOU HAVE COMPLETED THE SCORING MATRIX FOR MORE THAN ONE TRAIT IN THE PRODUCT PROFILE PROPOSAL

2. Trade-offs between multiple traits for one customer: compare gender impact scores of different traits for one customer. Does the positive benefit of one trait outweigh the negative harm of a different trait?

IF YOU HAVE COMPLETED THE SCORING MATRIX FOR MORE THAN ONE CUSTOMER SEGMENT

3. Trade-offs between social groups: compare gender impact scores on all the traits for women and on all the traits for men (or all the social categories considered). Is it important to include traits in the final product profile that benefit one social group more than another?

Note: the identification of socio-economic trade-offs should be informed by further economic analysis if this is available.

Record the gender trade-off among social groups in proposed product profile

Key decision: does the analysis of trade-offs identify strong reasons to weight the risk of harm higher than the positive benefits, i.e. to be risk averse?

If yes, then weight the do no harm gender impact score more heavily than the positive benefit score for the trait in question in the product profile proposal. Is further research needed to clarify this conclusion?

Key decision: does the analysis of trade-offs identify strong reasons to weight a potential benefit over the risk of harm?

If yes, then weight the "positive benefits" gender impact score more heavily than the "do no harm" score for the trait in question in the product profile proposal. Is further research needed to clarify this conclusion?

Report decisions about trade-offs in the G+ Report

Add a summary note with the narrative explanation for the final gender impact scores for each trait evaluated in the "do no harm" and "positive benefits" columns of the product profile proposal template. Note this is G+ Product Profile Template #1

Key points for discussion:

A gender-responsive breeding program should aim for a value of 0 on "do no harm" in a product profile.

A value of 0 on both "do no harm" and on "positive benefits" identifies a gender-neutral product.

A program that aims to positively benefit women will opt for a positive value for some traits; this is a program management decision.

Compare the results of "do no harm" and "positive benefits" analyses for a single trait: there may be trade-offs between advantages and disadvantages of a trait.

Compare the gender impact scores for all the traits in a product profile proposal to form an aggregate picture of how gender-responsive the product is.

Key decision

Do the gender impact scores and the G+ Report support a recommendation to increase the importance of a trait, exclude a trait or introduce a new trait into the product profile proposal so that it is more gender-responsive?

Team buy-in

Is desirable with the results and interpretation of the "do no harm" analysis and the "positive benefits" analysis and the final gender impact scores.

To this end, provide the team with a copy of the G+ Report and the product profile proposal with gender impact scores for discussion

Report the product profile proposal with gender impact scores, together with recommendations and decisions, in the G+ Report



The CGIAR Gender and Breeding Initiative brings together plant and animal breeders and social scientists to develop a strategy for gender-responsive breeding with supporting methods, tools and practices. The Initiative includes experts from across CGIAR centers and Research Programs, is coordinated by the CGIAR Research Program on Roots, Tubers and Bananas and the International Potato Center, and is supported by CGIAR Funders.