



# CRP MAIZE



## Strategy for Integrating Gender in MAIZE

by

**Lone Badstue**

International Maize and Wheat Improvement Center, CIMMYT



RESEARCH  
PROGRAM ON  
Maize

January 2013

# CRP MAIZE

January, 2013

## **Strategy for Integrating Gender in MAIZE**

by

**Lone Badstue**

International Maize and Wheat Improvement Center, CIMMYT

Contents.....	ii
Acknowledgements .....	iii
1. Background.....	1
1.2 Introduction .....	1
1.2 CRP MAIZE.....	2
1.3 Objective of this strategy.....	3
1.4 The rationale for integrating gender in MAIZE .....	4
2. Integrating gender in MAIZE.....	4
2.1 The overall approach.....	4
2.2 Impacts .....	7
2.3 Outcomes.....	8
2.4 Outputs .....	8
3. Gender in the MAIZE Impact Pathway and Monitoring & Evaluation .....	14
4. MAIZE gender resource strategy .....	15
5. Organization of gender integration in MAIZE.....	16
6. Assessment of capacity for gender analysis and gender research in CRP MAIZE.....	16
References:.....	18
Annex 1: Logical Framework for MAIZE Gender Strategy.....	19
Annex 2: MAIZE Gender Strategy Implementation Schedule .....	22
Annex 3: MAIZE Impact Pathway.....	23

## Acknowledgements

Special thanks go to Amare Tegbaru, IITA Gender Specialist and Country Representative for Liberia, and Jacqui Ashby, Senior Advisor, Gender and Research, CGIAR Consortium, for providing support and insightful comments on several draft versions and review of the final draft. Thanks also go to Anne Bouma, Consultant; and Tina Beuchelt, CIMMYT for additional constructive inputs at various stages in the strategy development process. An advanced version of the strategy was circulated broadly for consultation and review, and yielded further valuable feedback by a number of people, including Dawit Alemu, Wilfred Mwangi, Vicky Wilde, Monica Fischer, Tsedeke Abate, Bruno Gerard, Marianne Banziger, Victor Kommerell and Dave Watson.

# 1. Background

## 1.2 Introduction

Maize is the preferred staple crop of 900 million of the world's poor and one-third of all malnourished children. Together with rice and wheat, maize provides 30% of all calories for more than 4.5 billion people in 94 developing countries (von Braun et al. 2010). Between now and 2050, the demand for maize in the developing world will double, fuelled by population growth and changing diets. As one of the most important food staples in the world, maize is a crucial part of addressing the issues related to food security.



These challenges form the collective focus of worldwide maize research, a collaboration of more than 300 public and private organizations united to reduce hunger in the developing world. Building on the input, strength and collaboration of partners, the CGIAR Research Program (CRP), MAIZE, combines the strength of farming communities, international and national public and private sector partners, policy makers, and development organizations to stabilize maize prices and double the productivity of maize-based farming systems, making them more resilient and sustainable while significantly increasing farmers' income and livelihood opportunities, without using more land and as climates change and fertilizer, water, and labor costs rise.

CRP MAIZE and its underlying research strategy, together with the research management framework (RMF) "You can't eat potential"<sup>1</sup>, represent new opportunities for integrating gender in maize research for development (R4D). Realizing this potential is the thrust of this gender strategy. The document introduces the MAIZE strategy very briefly, as well as elements of the RMF, but the reader is encouraged to consult the RMF and the MAIZE CRP documents for further information.

The MAIZE gender strategy is conceived as part of a process of continual improvement, where the strategy will be revised periodically as additional knowledge becomes available. As such the strategy, at this point in time, outlines the process that is envisioned, but once the initial strategic elements such as gender audit and systematization of existing knowledge has been undertaken, it will be possible to add more detail and specific depth to the process of integrating gender in MAIZE, and thus to the implementation of the strategy.

---

<sup>1</sup> Badstue, L. B., Riis-Jacobsen, J., Banziger, M. (2012). You can't eat potential. How to use a Research Management Framework to enhance and realize the potential of research and innovation in MAIZE, WHEAT, and CIMMYT. Internal working document, CIMMYT.

## 1.2 CRP MAIZE

The goal of MAIZE is *to ensure that publicly-funded international research contributes to more stable maize prices and to more productive, resilient and sustainable maize-based farming, while significantly improving the incomes and livelihood opportunities of resource poor women, men and children, who depend on maize-based farming systems.*

As set out in the MAIZE document, success of the CRP implies meeting the following impact targets:

1. As compared with current trends, boost maize productivity by at least *an additional 20%* by 2020 and 50% by 2050 in 60 major maize-producing countries of the developing world, thus helping ensure accessible and stable prices for the 900+ million poor maize consumers.
2. Sustainably intensify maize production and ensure stabilization of the total maize area at about 120 million hectares in developing countries, thus avoiding environmental damage.
3. Reduce the frequency of production shortfalls and price volatility in areas and countries where the probability of crop failure in maize-based farming systems is greater than 15%.
4. Diversify maize-based farming systems and enhance their productivity, stability and sustainability, dealing specifically with the systems with the highest poverty concentrations, where over 660 million maize-dependent poor and about 62 million malnourished children live.
5. Ensure that higher rates of maize yield growth are sustained beyond 2020 in the face of climate change impacts, worsening water scarcity, and rising fertilizer prices.
6. Increase opportunities for diverse market participation, including locally emerging companies and women and young adults, and give developing countries access to know-how and technologies comparable to those available in high-income countries.

The first target beneficiary group for MAIZE worldwide is smallholders who live in stress prone environments and have poor market access. This group includes an estimated 640 million poor people who live on USD 2 per day or less, of which 275 million are maize dependent and 72 million of those are malnourished children. The second target group comprises market-oriented smallholders in more favorable production areas and with great potential to supply markets but who lack access to appropriate technology. This group includes 470 million poor, of whom 367 million are maize dependent and among whom there are at least 49 million malnourished children. Beyond these target groups, there will be spill-over benefits to other farmers in developing countries. Across the target groups MAIZE has pledged to apply a special focus on empowering women and young adults as these are considered the population segments that hold the greatest leverage for development.

MAIZE is organized around nine thematic Strategic Initiatives (SI), reflecting high priorities for international maize research and designed for integrated implementation by partners to generate products and services that meet the needs and aspirations of target beneficiaries and leverage the capacities of regional and local research and development partners and smallholder farmers in the target groups, in particular women and young adults. The titles and main outputs of the SIs are listed in the box below.

## Strategic Initiatives of MAIZE

- SI 1 Socioeconomics and policies for maize futures.** Increased effectiveness and positive impacts of maize research on food security, poverty reduction, gender equity, and the environment through an improved understanding of maize price developments and better targeting of new technologies, policies, strategic analysis, and institutional innovations.
- SI 2 Sustainable intensification and income opportunities for the poor.** Sustainable intensification and income opportunities in six maize-based farming systems where 315 million of the poorest and 22% of all malnourished children live.
- SI 3 Smallholder precision agriculture.** Crop management advice and practices that allow 20 million information-constrained smallholders to close the maize yield gap, lower production costs, and reduce agriculture's environmental footprint, especially through more efficient fertilizer use.
- SI 4 Stress tolerant maize for the poorest.** Stress tolerant maize varieties that reduce hunger and production shortfalls for 90 million people as climates change and abiotic and biotic stresses become more frequent, widespread, and intense.
- SI 5 Towards doubling maize productivity.** Public-private partnerships with the local seed sector and agroindustry to provide better adapted and diverse maize hybrids to smallholders in emerging markets, allowing them to produce enough maize grain to meet the daily requirements of 160 million consumers while strengthening the local breeding sector.
- SI 6 Integrated postharvest management.** Integrated approaches to improve food safety and reduce post-harvest losses of grain.
- SI 7 Nutritious maize.** Bio-fortified maize varieties that, together with outputs from SI 6, will allow heavy consumers of maize in 15 countries to attain healthy and nutritious diets and farmers to benefit from marketing opportunities.
- SI 8 Seeds of discovery.** Cutting-edge research to open the "black box" of maize genetic diversity, permitting researchers to mobilize its full potential in breeding programs worldwide, especially for hard-to-solve problems related to climate change.
- SI 9 New tools and methods for NARS and SMEs.** Novel tools to give small- and medium-scale public and private seed enterprises in developing countries the same tools as multinational ones, so that they can fill demand niches not attended by those, especially for smallholders.

*Adapted from the MAIZE CRP*

### 1.3 Objective of this strategy

This strategy document outlines the process and approach that MAIZE has adopted in order to contribute to and promote gender equality and equity in agricultural R4D related to maize-based systems. The strategy relates to the period July 2012- June 2015 and reflects the growing awareness, that gender equality and equity are essential elements in the quest to further enhance agricultural growth, food security and sustainable use of the natural resource base.

The objective of the strategy for integrating gender in MAIZE is:

*To strengthen the institutional capacity to address issues of gender in maize R4D, and promote equality of opportunity and outcomes between resource-poor women and men farmers in maize-based systems.*

## 1.4 The rationale for integrating gender in MAIZE

The combined challenges of continued population growth, declining agricultural productivity growth and environmental depletion put pressure on agricultural research and development to work on all fronts to further enhance agricultural productivity and food security. Addressing the gender disparities between women and men farmers in the developing world has a significant development potential in itself, and as such is a key element in meeting these challenges.

Although women play a crucial role in farming and food production, they are often disadvantaged and face greater constraints in agricultural production than men (Meinzen-Dick et al. 2011; World Bank, FAO and IFAD, 2008). Rural women are consistently less likely than men to own land or livestock, adopt new technologies, access credit or other financial services, or receive education or extension advice (FAO 2011). In some cases, they do not even control the use of their own time. The FAO 2011 State of Food and Agriculture report, estimates that if women had the same access to production resources as men, they could increase yields on their fields by 20-30%. The FAO calculates that this alone would raise total agricultural output in developing countries by 2.5-4 %, and that this, in turn, could reduce the number of hungry people in the world by 12-17% or 100-150 million people (FAO 2011).

In addition to this, improvements in gender equality tend to enhance economic efficiency and improve other development outcomes, e.g. family food and nutrition security and education (Fafchamps et al. 2009; Quisumbing and Maluccio 2003). Finally, gender equality is also a development objective in itself: Just as reduction in income poverty or ensuring greater access to justice is part of development, so too is the narrowing of gaps in well-being between men and women (World Bank 2011).

In recognition of the need to address gender disparities in agriculture and harness the capacities, opportunities and empowerment of men and women alike, this strategy aims to leverage the gender potential in maize research for development and to create synergies between maize R4D and gender development goals.

## 2. Integrating gender in MAIZE

### 2.1 The overall approach

In the process of integrating gender in MAIZE, the concept of gender is used as an analytical tool to strengthen the relevance and targeting of maize R4D and enhance development impacts. As part of this, gender analysis is applied to expand the knowledge base concerning gender in relation to maize-based farming and livelihoods to inform and deepen the relevance of other research themes and better address gender constraints related to maize-based systems development.

Whereas several examples of incorporation of gender in maize R4D projects exist<sup>2</sup>, this strategy represents a concerted effort of the maize R4D community to systematically consider and address

---

<sup>2</sup> E.g. Drought Tolerant Maize for Africa (DTMA) funded by Bill & Melinda Gates Foundation; Hill Maize Research Project (HMRP) in Nepal, funded by Swiss Development Corporation and USAID; Sustainable Intensification of Maize-Legume Cropping Systems for Food Security in Eastern and Southern Africa (SIMLESA) funded by ACIAR; Nutritious Maize for Ethiopia (NUME) funded by CIDA.



gender disparities in maize R&D and contribute to the promotion of gender equality in agricultural development in general.

### Some key gender concepts and definitions

**Gender** refers to the socially constructed roles and status of women and men, girls and boys. It is a set of culturally specific characteristics defining the social behavior of women and men, and the relationship between them. Gender roles, status and relations vary according to place (countries, regions, and villages), groups (class, ethnic, religious, and caste), generations and stages of the lifecycle of individuals. Gender is, thus, not about women but about the relationship between women and men.

**Gender equality** entails the concept that all human beings, both men and women, are free to develop their personal abilities and make choices without the limitations set by stereotypes, rigid gender roles, or prejudices. Gender equality means that the different behaviors, aspirations and the needs of women and men are considered, valued and favored equally. It does not mean that women and men have to become the same, but that their rights, responsibilities and opportunities will not depend on whether they are born male or female.

**Gender equity** means fairness of treatment for women and men, according to their respective needs. This may include equal treatment or treatment that is different, but considered equivalent in terms of rights, benefits, obligations and opportunities. In the development context, a gender equity goal often requires built-in measures to compensate for the historical and social disadvantages of women.

**Gender analysis** is a tool to assist in strengthening development planning, implementation, monitoring and evaluation, and to make programs and projects more efficient and relevant. Gender analysis should go beyond cataloguing differences to identifying inequalities and assessing relationships between women and men. Gender analysis helps us to frame questions about women's and men's roles and relations in order to avoid making assumptions about who does what, when and why. The aim of such analysis is to formulate development interventions that are better targeted to meet both women's and men's needs and constraints.

**Empowerment** implies people – both women and men – taking control over their lives by setting their own agendas, gaining skills (or having their own skills and knowledge recognized), increasing their self-confidence, solving problems, and developing self-reliance. It is both a process and an outcome. Empowerment implies an expansion in women's ability to make strategic life choices in a context where this ability was previously denied to them.

**Gender mainstreaming** is a strategy for making women's, as well as men's, concerns and experiences an integral dimension in the design, implementation, monitoring and evaluation of policies and programs in all political, economic and social spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality.

**Gender neutral** approaches do not account for the differences between women and men and do not consider how women and men may be marginalized and harmed or may not benefit from research, programs and policy.

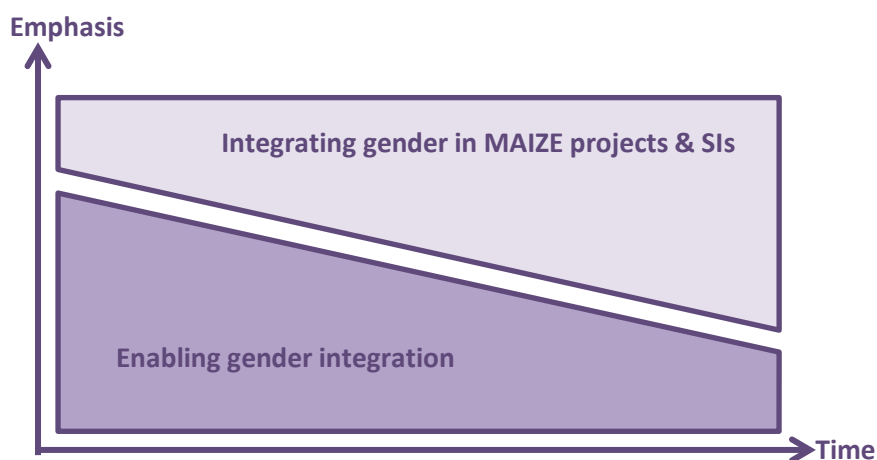
**Gender responsive** (or -aware) approaches are designed to meet both women's and men's needs. These approaches ensure that both women and men will benefit and neither will be harmed by research, programs and policy, such as, for example, by exacerbating their work burdens.

**Gender transformative** approaches actively strive to examine, question, and change rigid gender norms and the imbalance of power as a means of achieving development goals as well as meeting gender equity objectives. These research, programmatic and policy approaches challenge the distribution of resources and allocation of duties between men and women.

*Source: ILRI 2012 "Strategy and Plan of Action to Mainstream Gender in ILRI"*

The integration of gender in MAIZE is conceived as a process of continual improvement of which this gender strategy addresses the first three years (July 2012 –June 2015). The scope of the strategy includes: a) Institutional capacity strengthening for gender sensitive maize R4D; b) Consolidation and strategic expansion of the maize-and-gender knowledge base; and c) Integration of gender in maize R&D projects as and where appropriate.

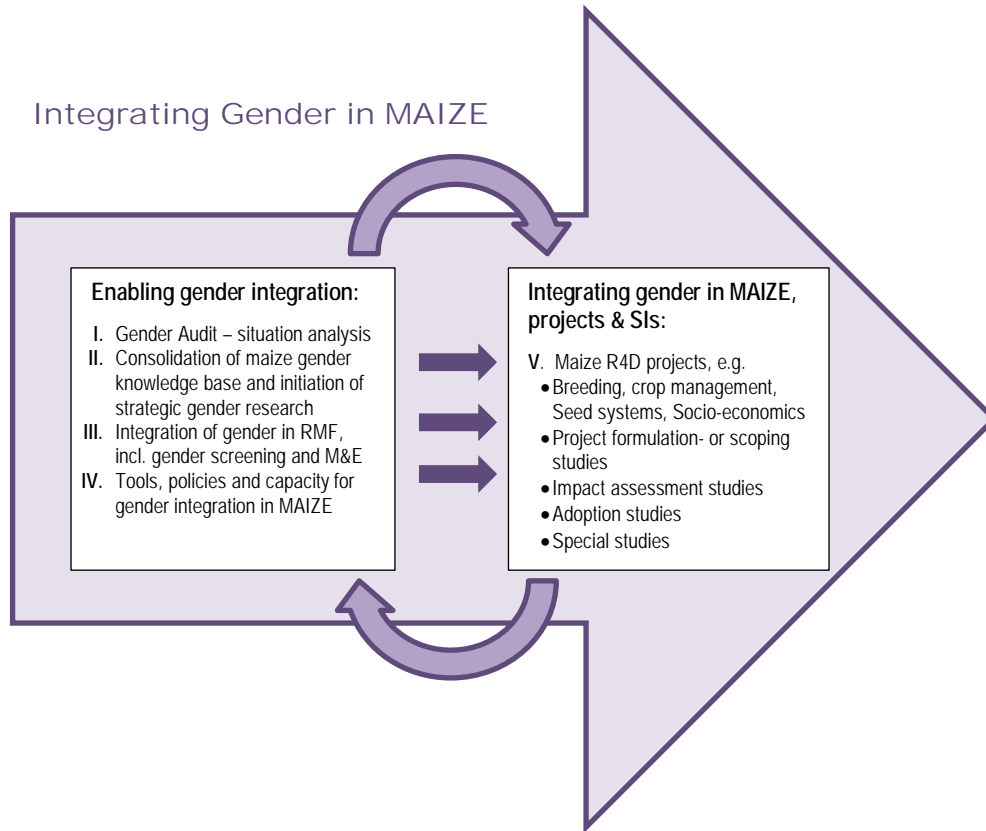
In the first instance, emphasis of the MAIZE gender strategy will be directed to laying the foundation for gender integration, i.e. building the enabling institutional conditions and resources that will encourage and facilitate the systematic consideration and integration of gender in research design and implementation. As the institutional framework and the incentives for gender integration are strengthened, this will influence research operations and lead to greater integration of gender in projects and SIs. This shift in focus is illustrated in figure 1.



**Figure 1:** In the first phase of implementation of the MAIZE gender strategy, emphasis will be on building the enabling institutional conditions for gender integration. As these are developed and operationalized, the balance will shift as the integration of gender in project- and SI implementation increases. Eventually, the main emphasis will be on gender in research projects and SI implementation, while a moderate emphasis on enabling conditions will continue to be required in order to run and maintain the institutional structures and resources for gender integration and related technical backstopping.

As results and lessons learnt are generated in research implementation, these will provide feed-back to the institutional learning processes and contribute to further development and adjustment of the institutional frameworks, which, in turn, will inform the next generation of research projects and adjustments in SI implementation. As these dynamics progress and gain traction, the integration of gender in MAIZE continues to expand and improve. The strategy for integration of gender in MAIZE is illustrated in figure 2 below. Its main outcomes and outputs are outlined in the following, and summarized in a logical framework table in annex 1, while an overview of the implementation schedule is provided in the Gantt chart in annex 2.

Figure 2:



## 2.2 Impacts

The overall goal of the Strategy for Integration of Gender in MAIZE is to increase the quality, efficiency and impact of maize R4D and that the outputs and outcomes of maize R4D reach and benefit as many men and women as possible, thus helping to promote equality of opportunity and outcomes between women and men maize farmers.

The expected long term impacts of the strategy are: improved livelihoods of smallholder families due to improved gender equality in agriculture in the form of better access for female as well as male farmers to improved maize technologies that address the needs, preferences and constraints of both women and men.

The successful implementation of this strategy for integration of gender in MAIZE will help address research questions such as:

- Why is the productivity of male and female farmers different, and how can this be characterized in a way that enables us to better target our maize research?
- Maize research for development produces improved maize technologies intended to help resource poor farmers improve their productivity and livelihoods. Many of these farmers are women. However, to what extent are the needs, preferences and constraints of both female and male farmers duly considered in the technology development process? And are male and female farmers equally able to access, use and benefit from these technologies?

- Is maize R&D partners' understanding of gender issues in agriculture, and their capacity to address this, increasing? And is this reflected in greater incorporation of female and male farmers' perspectives in maize technology development and delivery?
- When male and female farmers have equal access to and make use of improved maize technologies does this help promote equality of opportunity and outcomes between women and men maize farmers?

## 2.3 Outcomes

The expected outcomes include:

- 1) Increased institutional capacity in MAIZE to systematically address issues of gender and social differentiation in R&D related to maize-based systems; and
- 2) Greater incorporation of female and male farmers' perspectives in the technology development and diffusion processes; increased gender responsiveness of maize R&D partners; and enhanced generation and dissemination of evidence on gender in relation to development of maize-based systems

As a result of implementation of this strategy, in 2015 the first phase of gender mainstreaming of MAIZE will have been completed. By then a key set of institutional frameworks, policies and procedures will be in place, which are used systematically to ensure appropriate integration of gender in research design, implementation and monitoring & evaluation. At least 50 % of projects leaders and management will have received general gender awareness training, and the use of standard guidelines for gender disaggregated data collection and social inclusion in participatory research activities is institutionalized.

Due to the enhanced institutional frameworks and procedures and the strengthened gender awareness of staff and partners, the evidence base on gender in relation to maize research and maize-based livelihoods will be expanding, the number of gender responsive R4D initiatives under MAIZE will have increased significantly, and the proportion of female farmers', who provide feedback to participatory research activities will have grown substantially. Together these changes inform the research process as well as the research targeting and priority setting. It is expected that this will lead to better targeting of research outputs and dissemination, and that this, in turn, in a longer term outcome perspective will stimulate increased and accelerated adoption of improved maize technologies by female as well as male farmers.

## 2.4 Outputs

The major outputs of the MAIZE gender strategy, arranged under 5 components, include the following:

### **Output I: Gender Audit**

In order to assess how better to address gender-specific needs and enhance the empowerment of women and young adults, MAIZE will undertake a gender audit across all nine SIs. The audit will be undertaken by an external consultant, and the findings will serve as a situation analysis and baseline with

regards to the integration of gender in MAIZE. Furthermore, the findings will contribute significant background for defining and prioritizing key avenues for strengthening the integration of effective gender specific measures in MAIZE. In addition, the audit will provide a basis for formulating practical steps and advice for MAIZE researchers to be more effective in implementing gender-sensitive R4D approaches.

Activities under this output will include:

- Development of Terms of Reference and procurement of consultancy services
- Execution of Gender Audit
- Interaction with, and supervision of consultant
- Formulation of Gender Action Plan based on Audit findings

Specific deliverables for output I include:

- MAIZE gender audit report and gender action plan

### **Output II: Consolidation of maize gender knowledge base and initiation of strategic gender research related to identified gaps in the knowledge base**

In this initial phase of MAIZE the consolidation of the maize gender knowledge base focuses on three aspects: Firstly, creating an overview of the current gender knowledge specifically related to maize R4D. This will be achieved via analysis and systematization of the current literature base. Secondly, a compilation of particularly relevant gender support materials will be initiated, and thirdly, a MAIZE intranet portal for maize gender knowledge and -resources will be created for the convenience and use of project leaders, research teams and partners in MAIZE.

As implementation of MAIZE progresses, topics for strategic gender research related to maize will be identified based on gaps in the current knowledge base on gender and maize and the emergence of strategic questions involving gender specific issues in relation to the development of maize based systems<sup>3</sup>. A plan for strategic gender research will be developed and periodically updated. Practical implementation of strategic gender research in relation to maize-based systems will be carried out, where identified as a priority.

Activities under this output will include:

- Overview of current maize-gender knowledge base and additional key gender literature relevant for R4D of maize-based system in key target regions
- Identification of strategic gaps in maize gender knowledge
- Planning, undertaking and supervising strategic gender research
- Compilation of gender support materials
- Create intranet portal for gender resources and knowledge

---

<sup>3</sup> Some examples of possible topics for strategic gender research in relation to maize-based systems include: Relationship between intra-household dynamics and adoption of improved maize technologies; Female and male farmers' needs, preferences and/or constraints with regards to germplasm characteristics/crop management practices/access to technology, information and inputs; Gendered division of labor and time allocation in maize-based farming; The issue of gender in maize value-chain development.

Specific deliverables for output II include:

- Overview of literature on gender in relation to R4D of maize based systems
- Pipeline for relevant strategic gender research
- Study report for each strategic gender study undertaken
- Intranet portal for maize gender resources and knowledge

### **Output III: Gender mainstreaming of the Research Management Framework**

“You Can’t Eat Potential” is the title of the overall Research Management Framework for MAIZE. The framework is based on best practices from the fields of project management and monitoring and evaluation, and applied to international maize research for development.

The purpose of mainstreaming gender into the Research Management Framework is to ensure that the institutional frameworks and procedures that guide the research management process throughout the project cycle, actively promote the consideration of gender issues in relation to the research in question, and ensure that such issues are addressed, whenever it is relevant and appropriate. A key element in this regard is the establishment and piloting of a proposal screening procedure, which ensures that the relevance of gender is considered for all new projects, and, appropriately addressed when found necessary. If gender is not relevant for the research in question, this is duly noted and the proposal simply moves on to the next step in the project processing. For the proposals where issues relating to gender are identified and in need of addressing, the gender screening will serve as a quality check<sup>4</sup> in terms of the approach and specific measures taken, appropriate output and outcome formulation, as well as the related funding requirements in the project budget. This in turn will constitute the foundation for follow-up on integration of gender in implementation, as well as in output and outcome monitoring.

In order to support project leaders to meet the requirements for gender sensitive project design, as well as to facilitate the implementation of the Gender Screening Procedure, basic guidelines for incorporation of gender concerns in project design will be elaborated. This will be complemented by a support tool for project leaders to ensure due consideration of gender in sub-grant implementation and sub-grant deliverables where appropriate.

Information about the integration of gender in the RMF and its implications for project development and research management procedures in general will be developed and disseminated; and initiatives to raise awareness about the rationale for addressing gender in agricultural research for development will be undertaken. Furthermore, in order to be able to monitor overall progress in integration of gender in MAIZE and help projects address critical issues like the ones outlined in section 2.2 above, a set of gender performance indicators will be defined and monitored at regular intervals.

---

<sup>4</sup>Increasingly, due integration of gender considerations in project proposals enhances the chances of funding, as more and more donors consider gender responsiveness in their evaluation of funding applications. One good example is the Bill and Melinda Gates Foundation, which, in their 2012 orientation document for agricultural development grant seekers, clearly states: “We do not support gender-neutral grants”.

In summary, successful gender mainstreaming of the RMF will lead to maize research projects with gender responsive, or even transformative, approaches, which in turn will lead to progress with regards to: Increased access to and benefits from improved maize technologies by men and women alike; greater incorporation of both male and female farmers perspectives in maize technology development and diffusion; and ultimately, increased equality of opportunity and outcomes between female and male maize farmers.

Activities for this output include:

- Development, piloting and implementation of Gender Screening Procedure for new projects
- Establishment of procedure/guidelines for capturing gender in M&E (Output and outcome levels).
- Development of support tools for scientists/project leaders for incorporation of gender in project design, and for due incorporation of gender concerns in sub-grant agreements.
- Conception and collection of gender performance indicators for MAIZE.

Deliverables under output III include:

- Document describing procedure for gender screening of MAIZE R4D project proposals
- Guidelines for integrating gender in output and outcome M&E
- Definition of and yearly collection of gender performance indicators for MAIZE.
- Guidelines for project leaders on incorporation of gender in project design
- Document describing procedure for ensuring due consideration of gender in sub-grant agreements

#### **Output IV: Tools, policies and capacity strengthening for gender integration in MAIZE**

To further encourage and strengthen the incorporation of gender consideration in project design and implementation a series of policies and practical guidelines for their implementation in maize research for development will be developed. This will entail the formulation of a gender policy for MAIZE including a value statement and the explicit commitments and principles of CRP MAIZE with regards to the promotion gender equality; as well as the development of practical support tools to enhance gender integration in research; for example a protocol for gender disaggregated data collection and analysis; and guidelines for social inclusion in participatory research activities. Based on needs and opportunities, training or awareness raising concerning specific gender issues related to MAIZE may be undertaken. Complementary to this, and in order to further strengthen the capacity for addressing gender issues in research in MAIZE, a network of gender focal points in key research teams throughout MAIZE will be established towards the end of year 2. The gender focal points will be individuals who are capable and willing to serve as gender champions in their respective research teams on a day to day basis. To strengthen them in this role as internal change agents, they will receive training and remain in regular contact with the MAIZE gender experts.

MAIZE is represented in the CGIAR Gender and Agriculture Research Network by the Gender Specialists of CIMMYT and IITA. The Gender and Agriculture Research Network constitutes a forum for identifying

and taking forward strategic issues related to gender analysis and gender research across the CRPs, in addition to identifying needs and opportunities for cross CRP collaboration in research and capacity strengthening and ways of addressing these. The network operates as a virtual community and meets twice yearly.

Activities under this output include:

- Formulation of gender policy
- Development of specific gender integration support tools, e.g. protocols for gender disaggregated data collection, and social inclusion in participatory research activities.
- Gender capacity/awareness training for project leaders and Senior Management
- Establishment and coaching of network of gender focal points
- Participation in the CGIAR Gender and Agriculture Research Network

Specific deliverables for output IV include:

- Gender Policy
- Practical support tools for enhancing gender integration in maize R4D, aimed at Project Leaders and researchers, e.g. protocol for gender disaggregated data collection, and protocol for social inclusion in participatory research activities
- Network of gender focal points established

#### **Output V: Integration of gender in projects and SI implementation**

This output directly depends on the implementation of the gender screening procedure: All new projects under the MAIZE portfolio with a yearly budget equal to or above USD 500,000 will undergo the Gender Screening Procedure mentioned above as part of the project development process. Thus, in the course of this first phase of MAIZE, the proportion of projects in the MAIZE portfolio that explicitly address gender in research design, budgeting and implementation, will continue to grow as current projects are completed, and new projects are approved.

The integration of gender in project formulation includes appropriate integration of gender in output formulation, and gender monitoring at project level will subsequently take place as an integral part of the Research Output Management component of the RMF, which includes monitoring of physical as well as financial implementation.

As described further below in section 5 on monitoring and evaluation, outcome monitoring in MAIZE, including in relation to gender, will primarily take place at the SI level. Monitoring outcomes and assessing impacts require an additional effort, often in the form of special studies, as this implies obtaining information on what beneficiaries are doing with the technologies or knowledge generated, and what benefits or challenges this gives rise to. For gender sensitive outcome monitoring this will imply the incorporation of a gender perspective in special studies as well as in the SI level discussions of research impact pathways and partnerships.





The specific activities and deliverables related to this output depend on several factors, including the objectives, focus and location of the particular projects in question and the results of the gender screening as part of the project development process. As such, it is not possible at this stage to detail the exact activities; however, the following are examples of activities that are likely to form part of gender responsive maize R4D projects.

Examples of likely activities under this output include:

- Integrating gender responsive approaches/measures in project activity implementation (e.g. in relation to surveys, participatory varietal selection, farmer managed trials, introduction/testing of improved technologies/practices, training)
- Gender awareness/capacity strengthening for project staff and partners
- Gender responsive special studies related to specific aspects of project implementation, e.g. local knowledge and practices, livelihood strategies, intra-household dynamics etc.
- Gender sensitive output monitoring
- Integration of gender in project reporting and communication
- Special studies on gender and outcome monitoring

Examples of specific deliverables likely to be achieved as part of output V include:

- Gender disaggregated data sets from surveys and participatory research activities
- Increased staff and partner gender awareness and capacity to address gender issues in project implementation
- Gender analysis of specific project issues
- Improved evidence and understanding of gender issues in relation to maize R4D, including the needs, preferences and constraints of female and male maize farmers and consumers.
- Gender sensitive output M&E, reporting and communication
- Gender sensitive outcome monitoring

### **3. Gender in the MAIZE Impact Pathway and Monitoring & Evaluation**

The MAIZE CRP Document contains an outline of how the different SIs complement each other and combine into an overall impact pathway (see diagram in Annex 3). In addition to this the Research Management Framework (RMF) outlines how the MAIZE strategy is operationalized and managed. The gender impact pathway is part of the general MAIZE impact pathway, and the strategy for pursuing it is to use the RMF as the framework for mainstreaming gender in MAIZE.

The successful integration of gender into the RMF for MAIZE ensures that the consideration of gender issues becomes an integral part of formal research management and procedures. Accompanied by strengthening of capacity and technical support in the area of gender, this, in turn, ensures that new MAIZE research for development projects explicitly consider gender in relation to the specific research in question. If special gender considerations are found to be relevant, they must be addressed in project design and budgeting. Conversely, if gender is found not to be a relevant concern for the research proposed, this shall be appropriately explained.

Thus, the integration of gender into the RMF along with additional enabling, institutional circumstances for systematic gender consideration, will drive the integration of gender into the research project portfolio and the related budgeting and funding aspects. At the same time, to further strengthen the knowledge base, strategic gender research will be carried out to address issues of strategic importance. Ultimately, all of this will lead to more gender responsive maize research for development, greater and more equitable benefit sharing and contribute to closing the gender gap in maize-based agriculture.

Monitoring and Evaluation (M&E) is a key part of the RMF, and follow up on gender issues at project and SI level will be an integral part of CRP M&E. Special emphasis is given to outcome monitoring with the aim of enhancing the chances for research outputs to also achieve the planned outcomes, including the gendered aspects of these. M&E of the integration of gender in MAIZE is mainstreamed into the Research Management Framework at the following levels:

On the strategic level, Research Impact Pathway Enhancement (RIPE) is used to cultivate continual improvement of the impact pathways for each SI in MAIZE. RIPE is an adaptation of the Participatory Impact Pathway Analysis (PIPA)<sup>5</sup>. The RIPE process consists of an initial analysis phase and subsequent annual follow-ups with the purpose of refining/adjusting the impact pathway of research as it develops.

RIPE focuses on the research outcome level. Gender is mainstreamed into the RIPE process, starting with the revision of the impact pathways where gender sensitive indicators towards outcomes will also be defined. The results of the initial RIPE workshop constitute the basis for M&E of the outcomes of each SI and the projects they include.

---

<sup>5</sup> Douthwaite et al, 2008, see also Alvarez et al. 2010; Douthwaite et al. 2007; and Douthwaite et al. 2003. RIPE is inspired by and builds on PIPA, and due credit should be paid to the originators of PIPA. However, as it is foreseen that the approach will develop and be adapted over the coming year to the specific needs for CRP outcome and impact pathway monitoring, a different term was chosen from the on-set in order to avoid confusion with the original concept.

The Research Output Management system provides information on the progress towards the outputs of the different projects. This must all be considered together with the information gathered on the progress towards the SI outcomes, and the network and partner analysis. The forum for this is the annual RIPE Reflection and Adjustment Workshop. The Reflection and Adjustment Workshop is critical in maintaining a strategic focus for the project portfolio in a SI, and the periodic revision ensures that the projects not only do the things right, but even more importantly, that they do the right things. The RIPE process furthermore constitutes a critical mechanism for findings and lessons from all parts of the Research Management Framework to feed back into the research and decision making processes of partners in MAIZE.

At the project level, the focus is on achieving due consideration of gender in the project design phase and appropriate incorporation of gender in project outputs and budgets. This will be ensured through a systematic gender screening in the project development process, which serves as a quality-check to ensure that relevant gender considerations have been addressed and incorporated as appropriate in project outputs and milestones. Through this procedure the monitoring of gender in outputs and milestones becomes an integral part of the general project management system, where progress is registered on a quarterly basis.

Complementary to this, special studies will be undertaken in order to expand the knowledge base related to specific or strategic gender issues in maize-based farming systems, or more particularly to understand the issues related to specific outcomes.

#### **4. MAIZE gender resource strategy**

Gender budgeting in MAIZE will be addressed using a two-tiered strategy, aligned with the twin-track approach in figure 2 above: From the Windows 1 & 2 institutional management resources allocated to MAIZE, funds are allocated to gender mainstreaming in MAIZE. These resources provide the basis for strengthening the institutional capacity to ensure adequate integration of gender in the overall Research Management Framework and technical support. This establishes the enabling conditions (components I-IV in figure 2), which, in turn, provide the grounds for appropriate integration of gender considerations in project design, including adequate budgeting for gender implementation at project level.

A certain level of core institutional gender expertise will be required to provide technical support and develop and oversee the application of policies and procedures in support of gender integration. This will require special funding, either as part of the Windows 1&2 funding or via special projects. In most situations this funding aspect will be similar in the case of strategic gender research. Meanwhile, the idea is that the implementation of gender integration in other research, e.g. crop improvement or maize seed value chain development (component V in figure 2) shall be funded via the specific projects themselves. Special studies, which can include strategic gender research, or be related to gender outcome monitoring or diagnostic assessments, can be funded via special funding or as part of a particular project.

## **5. Organization of gender integration in MAIZE**

A Gender and Monitoring & Evaluation Specialist was recruited by CIMMYT in October 2011 to lead the overall integration of gender, as well as the M&E work, in MAIZE and in CRP 3.1, WHEAT, which is also led by CIMMYT. In terms of management structures, the CIMMYT Gender and M&E Specialist forms part of the CIMMYT Socio-Economics Program (SEP) and reports to the Director of SEP, who, in turn forms part of the MAIZE Management Committee. In a similar way, as a co-lead center, IITA shares responsibility for the integration of gender in MAIZE through the contributions of the IITA Gender Specialist.

To ensure alignment with the gender strategy, staff for who gender makes up an important part of their work, form part of the gender unit and report to the Gender and M&E specialist. Under the leadership of the Gender and M&E Specialist, the gender unit manages the gender strategy budget and is responsible for providing technical support to Project- and SI Leaders and other researchers with respect to gender integration and the overall strengthening of gender awareness and gender analysis capacity; as well as guidance and recommendations with regards to strategic gender research and targeting. All gender staff recruitment will be the responsibility of the Gender and M&E Specialist.

The incorporation of gender in planning, implementation and reporting at the individual project level will follow the steps and procedures laid out in the Research Management Framework, and are the responsibility of the Project Leader and, ultimately, the respective Program Director. Whenever possible, gender concerns in project implementation are addressed via partner expertise. Gender integration in processes at the SI and CRP level is the responsibility of SI leaders and the CRP manager.

## **6. Assessment of capacity for gender analysis and gender research in CRP MAIZE**

In order to follow up on this strategy for integration of gender in MAIZE, significant investment is needed. A more comprehensive assessment of the capacity for gender analysis and gender research will be carried out as part of an overall Gender Audit of MAIZE, scheduled to be undertaken in the second part of 2012 or early 2013. The Gender Audit will be carried out by an external consultant with experience in the subject matter.

The Gender Audit will appraise the level of incorporation of gender considerations in individual projects and SIs under MAIZE. Furthermore, it will include assessment of the gender knowledge, attitudes and awareness of research staff and managers of the lead Centers and key partners, as well as an assessment of the institutional procedures and mechanisms in place for enabling systematic integration of gender considerations in MAIZE research and development interventions. The results of the audit will provide a baseline against which integration of gender in the implementation of MAIZE can be monitored and progress measured. Based on the audit findings, key challenges and opportunities for strengthening

institutional capacity to address gender issues related to improving livelihoods and productivity of maize-based farming systems will be identified. This, in turn, will provide the basis for elaboration of a detailed Gender Action Plan.

## References:

- Alvarez, S.; B. Douthwaite; G. Thiele; R. Mackay; D. Cordoba and K. Tehelen (2010) Participatory Impact Pathways Analysis: a practical method for project planning and evaluation, *Development in Practice*, 20:8, 946-958.
- Badstue, L. B., Riis-Jacobsen, J., Banziger, M. (2012). You can't eat potential. How to use a Research Management Framework to enhance and realize the potential of research and innovation in MAIZE, WHEAT, and CIMMYT. Internal working document, CIMMYT.
- Bill and Melinda Gates Foundation (2012). Creating gender responsive agricultural development programs. An orientation document. BMGF, 2012. Available at:  
<http://www.gatesfoundation.org/learning/Documents/gender-responsive-orientation-document.pdf>
- CIMMYT & IITA (2011) MAIZE – Global Alliance for Improving Food Security and the Livelihoods of the Resource-poor in the Developing World. CRP Document. CIMMYT, Mexico.
- Douthwaite, B.; S. Alvarez; G. Thiele and R. Mackay (2008) Participatory Impact Pathways Analysis: A practical method for project planning and evaluation. ILAC Brief 17.
- Douthwaite, B.; S. Alvarez; G. Thiele and R. Mackay (2007) Participatory Impact Pathways Analysis. Draft prepared for the international workshop: Farmer First Revisited. Innovation for Agricultural Research and Development. Institute of Development Studies, December 2007.
- Douthwaite, B.; T. Kuby; E. van de Fliert; Steffen Schulz (2003) Impact pathway evaluation: an approach for achieving and attributing impact in complex systems. *Agricultural Systems*, 78: 243-265.
- Fafchamps, M., Kebede, B., Quisumbing, A. (2009) Intrahousehold welfare in rural Ethiopia. *Oxford Bulletin of Economics and Statistics* 71 (4) 567-599.
- FAO (2011). The State of Food and Agriculture 2010–11. Women in Agriculture: Closing the Gender Gap for Development. FAO, Rome.
- ILRI (2012) Strategy and plan of action to mainstream gender in ILRI. Nairobi:  
ILRI <http://mahider.ilri.org/handle/10568/16688>
- Meinzen-Dick, R., Quisumbing, A., Behrmann, J., Biermayr-Jenzano, P., Wilde, V., Noordeloos, M., Ragasa, C., Beintema, N. (2011) Engendering agricultural research, development and extension. International Food Policy Research Institute, Washington, D.C.
- Quisumbing, A. and Maluccio, J. (2003) Resources at marriage and intrahousehold allocation: Evidence from Bangladesh, Ethiopia, Indonesia, and South Africa. *Oxford Bulletin of Economics and Statistics* 65 (3): 283-328.
- von Braun, J., Byerlee, Derek, Chartres, Colin, Lumpkin, Tom, Olembo, Norah and Waage, Jeff (2010) A Draft Strategy and Results Framework for the CGIAR. 20 March 2010. CGIAR, The World Bank, Washington D.C.
- World Bank (2011) Gender Equality and Development. World Development Report 2012. World Bank, Washington, D.C.
- World Bank, Food and Agriculture Organization, International Fund for Agricultural Development (2008) Gender in Agriculture Sourcebook. World Bank, Washington, D.C.

## Annex 1: Logical Framework for MAIZE Gender Strategy

<b>Logical Framework: MAIZE Gender Strategy 2013-2015</b>			
<b>HIERARCHY OF OBJECTIVES</b>	<b>EXPECTED RESULTS</b>	<b>TARGET GROUPS</b>	<b>PERFORMANCE INDICATORS</b>
<b>OVERALL STRATEGY OBJECTIVE:</b>	<b>IMPACTS</b>	<b>TARGET GROUPS</b>	<b>PERFORMANCE INDICATORS</b>
To increase the quality, efficiency and impact of maize R4D for its outputs to reach and benefit as many men and women as possible; and promote equality of opportunity and outcomes between women and men maize farmers	Improved, gender responsive maize technologies help women and men farmers improve the food security and livelihoods of their households and contribute to closing the gender gap in agriculture.	Female and male farmer and their dependents, Governments, R&D sectors, Donors	<ul style="list-style-type: none"> <li>• Access to, and use of improved maize technologies by men and women increases and is associated with improved equality in the distribution of the benefits of maize research</li> </ul>
<b>SPECIFIC STRATEGY OBJECTIVES</b>	<b>OUTCOMES</b>	<b>TARGET GROUPS</b>	<b>PERFORMANCE INDICATORS</b>
<p>1: Mainstream gender in institutional frameworks and procedures of MAIZE</p> <p>2: Facilitate and strengthen the integration of a gender perspective in MAIZE projects and SIs wherever relevant and appropriate, ensuring that technology development and diffusion consider and address the needs, preferences and constraints of women and men target beneficiaries.</p>	<p>Increased institutional capacity in MAIZE to address issues of gender and social differentiation in R&amp;D related to maize-based systems</p> <p>Increased gender responsiveness of maize R&amp;D partners and greater incorporation of female and male farmers' perspectives in the technology development and diffusion processes</p>	<p>CIMMYT and partners, Donors</p> <p>CIMMYT and partners, female and male farmers, Donors</p>	<ul style="list-style-type: none"> <li>• Increased number of MAIZE projects with explicit gender commitments and budgeting.</li> <li>• Integration of gender in impact pathways for SIs 1-7.</li> <li>• Increasing numbers of female and young farmers involved in and providing feedback to participatory research activities</li> <li>• Increasing number of female and young farmers hosting on-farms trials and demos</li> <li>• Systematic use of gender disaggregation in socio-economic data collection and participatory research</li> </ul>

ACTIVITIES	OUTPUTS	TARGET GROUPS	PERFORMANCE INDICATORS
<ol style="list-style-type: none"> <li>1) Finalize ToRs and Procure Consultancy services</li> <li>2) Execution of Gender Audit</li> <li>3) Interaction &amp; supervision of consultant</li> <li>4) Update of Gender Action Plan based on Audit findings</li> </ol>	<b>I. Gender Audit of CRP MAIZE</b>	CIMMYT and partners	<ul style="list-style-type: none"> <li>• MAIZE Gender audit report &amp; Gender Mainstreaming Action Plan</li> </ul>
<ol style="list-style-type: none"> <li>1) Analysis and systematization of current maize and gender knowledge base</li> <li>2) Compilation of gender support materials</li> <li>3) Create intranet portal for Maize gender resources and knowledge</li> <li>4) Identification of strategic gaps in maize gender knowledge</li> <li>5) Plan for strategic gender research</li> <li>6) Design and undertake strategic gender studies</li> <li>7) Supervision of strategic gender studies</li> </ol>	<b>II. Consolidation of maize gender knowledge base and initiation of strategic gender research related to identified gaps in knowledge base</b>	CIMMYT and partners	<ul style="list-style-type: none"> <li>• Literature review paper on gender in relation to research on development of maize based systems</li> <li>• Intranet portal for Maize gender resources and knowledge</li> <li>• Proposal for strategic gender research pipeline</li> <li>• 2 studies initiated in yr. 2, 3 studies initiated in yr. 3</li> </ul>
<ol style="list-style-type: none"> <li>1) Develop and pilot Gender Screening of proposals</li> <li>2) Define procedure for capturing gender in output M&amp;E</li> <li>3) Integration of gender in guidelines for RIPE process</li> <li>4) Conception of Gender Performance Indicators for MAIZE</li> <li>5) Gender Support tool for scientists/project leaders for incorporation in project design</li> <li>6) Develop &amp; implement Gender screening of sub-grant agreements</li> </ol>	<b>III. Gender mainstreamed RMF</b>	CIMMYT and partners	<ul style="list-style-type: none"> <li>• Gender screening procedure developed, piloted, and institutionalized</li> <li>• Note on procedure for capturing gender in output M&amp;E</li> <li>• Note on procedure for integrating gender in RIPE process</li> <li>• Gender Performance Indicators defined</li> <li>• Guidelines for integration of gender in project design</li> <li>• Procedure for integration of gender in sub-grant agreements established</li> </ul>

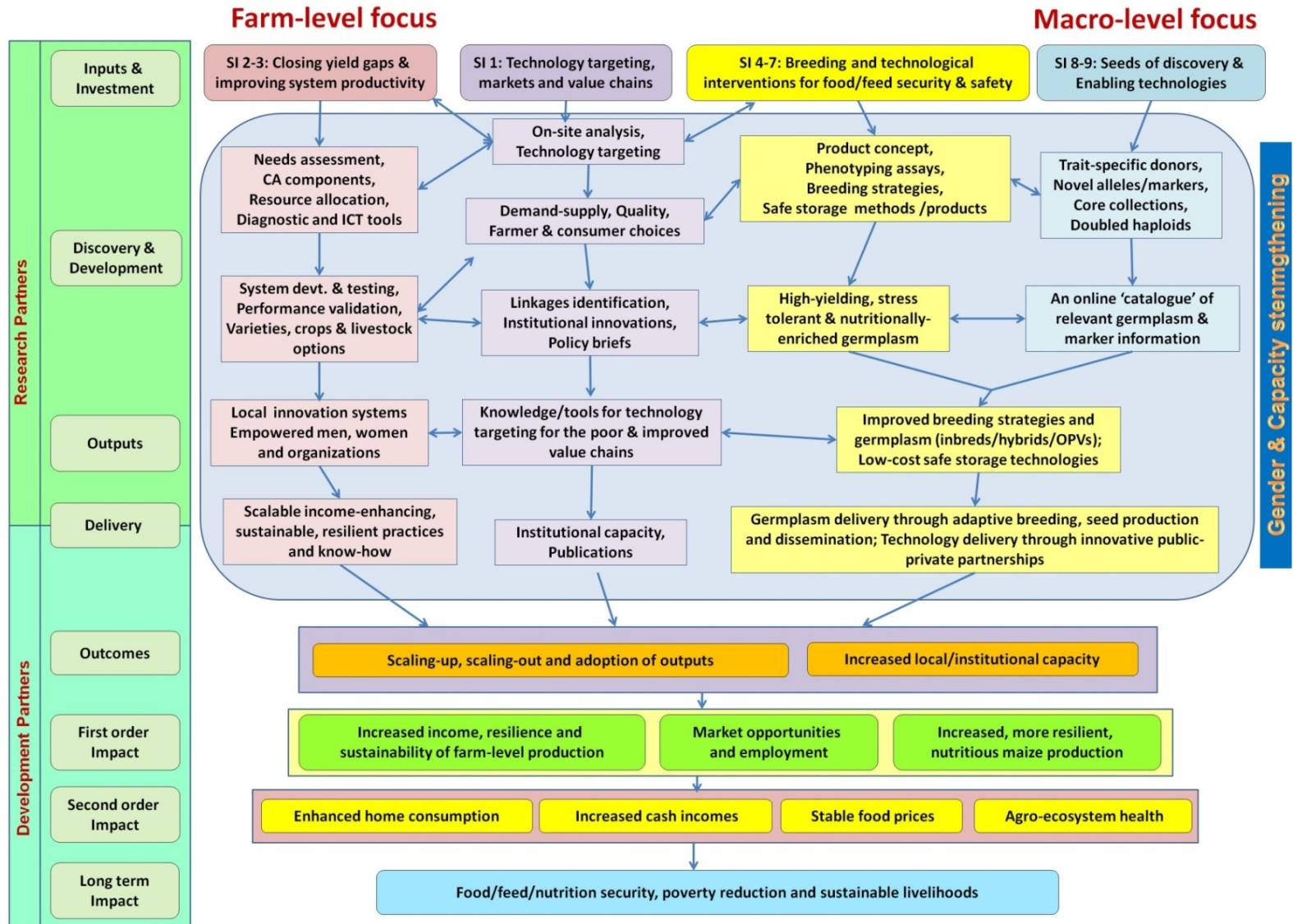


ACTIVITIES	OUTPUTS	TARGET GROUPS	PERFORMANCE INDICATORS
<ol style="list-style-type: none"> <li>1) Development and adoption of gender policy for MAIZE and CIMMYT</li> <li>2) Develop and implement protocol for gender disaggregated data collection</li> <li>3) Develop and implement protocol for social inclusion in Participatory Research</li> <li>4) Develop and implement protocol for social inclusion in training</li> <li>5) Establish and empower institutional network of gender focal points</li> <li>6) Gender capacity strengthening planning &amp; implementation (training, tools, methods)</li> <li>7) Representation of MAIZE in CGIAR Gender and Agriculture Research Network</li> </ol>	<p><b>IV. Basic tools, policies and strengthened capacity for gender integration in MAIZE</b></p>	<p>CIMMYT and partners</p>	<ul style="list-style-type: none"> <li>• Gender policy developed and adopted</li> <li>• Protocol for gender disaggregated data collection</li> <li>• Protocol for social inclusion in Participatory Research</li> <li>• Gender Focal Points identified and trained.</li> <li>• Gender capacity strengthening plan developed</li> <li>• Senior Mgt and &gt;50% of project leaders have passed basic gender awareness test</li> </ul>
<ol style="list-style-type: none"> <li>1) Implement Gender Screening process</li> <li>2) Gender specialist participation in RIPE Process</li> <li>3) Implement procedure for gender in output M&amp;E</li> <li>4) Collect and analyze Gender Performance Indicators</li> <li>5) Special studies for Gender Outcome Monitoring in MAIZE</li> <li>6) Gender sensitive studies or gender studies as part of project implementation</li> </ol>	<p><b>V. Gender integrated in SIs and projects</b></p>	<p>Male and female farmers and their families, CIMMYT and partners</p>	<ul style="list-style-type: none"> <li>• Gender screening reports</li> <li>• MAIZE Gender Performance Indicators collected yearly</li> <li>• 2 studies initiated in yr. 2 and 3 studies initiated in yr. 3</li> <li>• Depends on project portfolio</li> </ul>

## Annex 2: MAIZE Gender Strategy Implementation Schedule

Component/activity	2013				2014				2015			
	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec
<b>Gender Audit</b>												
Execution of Gender Audit												
Update of Gender Action Plan based on Audit findings												
<b>Consolidation of Maize and Wheat gender knowledge</b>												
Overview of current maize-gender knowledge												
Overview of additional key gender literature relevant to maize/wheat												
Create intranet portal for Maize/Wheat gender knowledge												
Identification of strategic gaps in maize gender knowledge												
Plan for strategic gender research												
Undertake strategic gender studies												
<b>GM in Research Management Framework</b>												
Develop and pilot Gender Screening of proposals												
Define procedure for capturing gender in outputs												
Integration of gender in guidelines for RIPE projects												
Conception of Gender KPI for MAIZE and WHEAT												
Gender Support tools for scientists/project leaders												
Develop & implement Gender screening of sub-projects												
<b>Tools, policies and capacity strengthening for gender</b>												
Drafting of gender policy												
Develop and implement protocol for gender dissemination												
Develop and implement protocol for social inclusion												
Develop and implement protocol for social inclusion												
Establish and empower institutional network of gender experts												
Gender capacity / awareness assessment for key stakeholders												
Develop and start implementing plan for gender capacity strengthening												
Gender capacity strengthening plan (training, tools, etc.)												
CGIAR Gender & Agr. Research Network												
MAIZE Gender Strategy (reviewing and reporting)												
<b>V. Integration of gender in project and SI implementation</b>												
Implement Gender Screening process												
Provision of technical support on integration of gender in project design / implementation												
Gender analysis as part of project design / implementation												
Gender specialist participation in RIPE Process												
Special studies for Gender Outcome Monitoring												
Collect and analyse Gender KPI for MAIZE												

# Annex 3: MAIZE Impact Pathway



From the MAIZE CRP Document