EVERYTHING YOU EVER WANTED TO KNOW ABOUT SWEETPOTATO

TOPIC 11

Gender and Diversity Aspects

Reaching Agents of Change Training of Trainers (ToT) manual

October 2018

Building Nutritious Food Baskets

Support Vitamin A Sweetpotato

CIP INTERNATIONAL POTATO CENTER
A CGIAR RESEARCH CENTER

UNIVERSITY of GREENWICH
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Helen Keller INTERNATIONAL

Orange-Fleshed SWEETPOTATO
Rich in Energy & Natural Vitamin A

Everything You Ever Wanted to Know about Sweetpotato. Topic 11 - Gender and Diversity Aspects
Reaching Agents of Change ToT Training Manual

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Contents

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This manual was originally produced as part of the Reaching Agents of Change project in 2013 and updated by the Building Nutritious Food Baskets project in 2017/2018 – both projects funded by the Bill & Melinda Gates Foundation.

Acronyms and Abbreviations

AIs	Adequate Intakes
AVRDC	The World Vegetable Centre
BNFB	Building Nutritious Food Baskets
CBO	Community Based Organisation
CIP	International Potato
DAP	Days After Planting
DFE	Dietary Folate Equivalents
DONATA	Dissemination of New Agricultural Technologies in Africa
DVM	Decentralised Vine Multipliers
dwb	Dry Weight Basis
FAO	Food and Agriculture Organisation of the United Nations
FW	Fresh Weight
HH	Household
HKI	Helen Keller International
IBPGR	Bioversity International
IPM	Integrated Pest Management
IPPM	Integrated Pest & Production Management
K	Potassium
LGA	Local Government Areas
M&E	Monitoring and Evaluation
MAP	Months After Planting
m.a.s.l.	Metres Above Sea Level
Mm	Mass Multiplication
MSC	Most Significant Change
N	Nitrogen
NARO	National Agricultural Research Organisation
NGO	Non-Government Organisations
NHV	Negative Horizontal Ventilation
NRI	Natural Resources Institute
OFSP	Orange-fleshed Sweetpotato
P	Phosphorous
PMCA	Participatory Market Chain Approach
PMS	Primary Multiplication Site
PPP	Public Private Partnership
PVC	Polyvinyl Chloride
QDPM	Quality Declared Planting Material

QDS	Quality Declared Seed
RAC	Reaching Agents of Change
RAE	Retinol Activity Equivalents
RCT	Randomised Control Trial
RDA	Recommended Daily Allowances
RE	Retinol Equivalents
REU	Reaching End Users
RH	Relative Humidity
SASHA	Sweetpotato Action for Security and Health in Africa
SMS	Secondary Multiplication Site
SP	Sweetpotato
SPCSV	Sweetpotato Chlorotic Stunt Virus
SPFMV	Sweetpotato Feathery Mottle Virus
SPKP	Sweetpotato Knowledge Portal
SPVD	Sweetpotato Virus Disease
SSA	Sub-Saharan Africa
ToT	Training of Trainers
TMS	Tertiary Multiplication Site
Tshs.	Tanzanian Shillings
TSNI	Towards Sustainable Nutrition Improvement
UNICEF	United Nations Children's Fund
USD	United States Dollar
Ushs.	Ugandan Shillings
VAD	Vitamin A Deficiency
WAP	Weeks After Planting
WHO	World Health Organisation
WTP	Willingness to Pay

Foreword

During the past decade, interest in sweetpotato in Sub-Saharan Africa (SSA) has expanded, the number of projects utilizing sweetpotato has increased, and the demand for quality training resources, training development practitioners and farmers has subsequently risen. Sweetpotato scientists at the International Potato Center and national research centres often received these requests and frequently held 1-3 day training sessions, drawing on whatever training materials they had or could quickly pull together.

The Reaching Agents of Change (RAC) project in 2011 changed that situation. Jointly implemented by the International Potato Center (CIP) and Helen Keller International (HKI), RAC sought to empower advocates for orange-fleshed sweetpotato (OFSP) to successfully raise awareness about OFSP and mobilize resources for OFSP projects. RAC also sought to build the capacity of public sector extension and non-governmental organizational personnel to effectively implement those projects to promote the dissemination and appropriate use of vitamin A rich, orange-fleshed sweetpotato. The Building Nutritious Food Basket (BNFB) is a three-year project (November 2015 to October 2018) that followed on from the RAC project. The project is implemented in Nigeria and Tanzania and funded by the Bill & Melinda Gates Foundation. The goal of the project is to accelerate and support scaling up of biofortified crops for food and nutrition security and to help reduce hidden hunger by catalyzing sustainable investment for the utilization of biofortified crops (OFSP, PVA maize, high iron beans and vitamin A cassava) at scale. BNFB develops institutional, community and individual capacities to produce and consume biofortified crops. The objectives of the project are to strengthen the enabling environment for increased investments in biofortified crops and to develop institutional and individual capacities to produce and consume biofortified crops.

RAC/BNFB goal of developing and revising the Training of Trainers (ToT) manual on *Everything You Ever Wanted to Know about Sweetpotato* was to see *sustained* capacity for training senior extension personnel about the latest developments in sweetpotato production and utilization in each of the major sub-regions of SSA: Eastern and Central Africa, Southern Africa, and West Africa. Hence, CIP identified local institutions to work with in Mozambique, Tanzania, and Nigeria to host an annual course entitled: *Everything You Ever Wanted to Know about Sweetpotato.* The course has progressed from initially having CIP scientists working closely with national scientists to implement it, to national scientists and partners independently organising and conducting the course. In subsequent years, institutions in Burkina Faso, Ethiopia, Ghana, Malawi and others have been capacitated in conducting the course.

In developing the course content, a long-time collaborator of CIP, Tanya Stathers of the Natural Resources Institute (NRI), University of Greenwich, worked with CIP Scientists to review the existing training material, added in new knowledge from sweetpotato scientists and practitioners, and designed the course with a heavy emphasis on learning-by-doing. The CIP personnel who contributed to the development of the initial manual include, (Robert Mwanga, Ted Carey, Jan Low, Maria Andrade, Margaret McEwan, Jude Njoku, Sam Namanda, Sammy Agili, Jonathan Mkumbira, Joyce Malinga, Godfrey Mulongo), Adiel Mbabu and HKI nutritionists (Margaret Benjamin, Heather Katcher, Jessica Blankenship) and an HKI gender specialist (Sonii David) as well as NRI colleagues (Richard Gibson, Aurelie Bechoff, Keith Tomlins). Some of the materials were adapted from the DONATA project training materials, the Reaching End Users project and many others. After practitioners had used the course and the manual, a review was held in 2012 and the manual and course were subsequently updated, and a standard set of accompanying Power Point presentations created. In 2017-2018, the Building Nutritious Food Baskets project led a further review of the manual working closely with Tanya Stathers, the above mentioned CIP teams again plus Robert Ackatia-Armah, Kwame Ogera, Srini Rajendra, Julius Okello, Fred Grant, Joyce Maru, Hilda Munyua and Netsayi Mudege to update the content of topics 3, 4, 5, 12 and 13 which cover: sweetpotato varietal selection; nutrition; seed systems; monitoring, learning and evaluation; and using the 10 and 5 day ToT course.

This manual is designed to potentially serve a wide variety of audiences (nutritionists and agronomists, policymakers, extension workers, community development workers, leaders of farmer organizations, farmers etc.). Not all the materials will be relevant to all audiences, but facilitators can adapt the content to their audience and facilitation best practices. To ensure sustainability and wide reach; a cascading approach in the delivery of training is recommended; where key experts (agriculturalists, nutritionists, health workers, marketing and gender experts) will attend more detailed ToT workshops. The experts trained will then become primary facilitators and drive the agenda for OFSP. This group will in turn deliver shorter version courses and step-down the training to various levels of audiences (secondary and tertiary) – based on needs identified. This trend will continue until the training cascades down to "farmer trainers" who finally train the end users in their communities.

The original version of the manual has also been translated into Swahili, French, Portuguese, and Amharic are available online at https://www.sweetpotatoknowledge.org/learn-everything-you-ever-wanted-to-know-about-sweetpotato/ with the intension of translating the revised chapters as soon as resources permit. We envision the course to continue to be improved as new knowledge comes in. In this way, we expect the vibrant and knowledgeable sweetpotato community of practice to continue to grow in the coming years. The *Everything You Ever Wanted to Know about Sweetpotato* course will help us to achieve the major objectives of the Sweetpotato Profit and Health Initiative (SPHI). Launched in October 2009, the SPHI seeks to improve the lives of 10 million sub-Saharan African families in 16 countries by 2020 through the diversified use of improved sweetpotato varieties.

Jan W. Low, Leader of the Sweetpotato for Profit and Health Initiative, International Potato Center
October 2018, 2nd edition.

How to Use This Guide

This guide was designed to be used in two ways:

- As self-study material, or
- As a facilitator's guide for classroom training sessions

For each topic we have provided:

- A handbook (this volume)
- A PowerPoint presentation, and
- A handout for classroom training participants

If you plan to deliver this as classroom training, then we would encourage you to read the **Facilitator's Guide** (separate volume) prior to planning your lessons.

Introduction: Gender and Diversity Aspects

Topic Objectives

Upon completing this module, participants should be able to:

- Explain the difference between sex and gender.
- Discuss agricultural gender roles worldwide and in Sub-Saharan Africa (SSA).
- Describe the impact of women's disempowerment on sweetpotato production and other agricultural yields.
- Compare men's and women's roles in the sweetpotato value chain.
- Outline the needs, barriers, and priorities of men and women in sweetpotato farming.
- List the best practices for improving gender balance in sweetpotato growing.

Synopsis

The importance of recognising gender and diversity issues in agriculture and sweetpotato systems is discussed. Situations where sweetpotato is grown as a female crop, and others where it is grown as a male crop or grown by both men and women are presented along with the different constraints, needs and priorities of female and male farmers. Best practice suggestions are made for how gender can be incorporated into sweetpotato programmes.

Unit 1 – Defining Gender and Diversity

Objectives

By the end of this unit, you should be able to:

- Compare the terms "gender" and "sex."
- Explain the basic biological (average) differences between men and women.
- List some basic characteristics of gender related laws and customs in traditional and modern African societies.
- Define gender equality, mainstreaming, and empowerment.

Key Points

- **Sex and gender are interrelated but not identical. "Sex" refers to biological traits that define men and women, while "gender" refers to men and women's roles in a society.**
- **Different societies have different cultural norms around gender, but some norms are more consistent around the world.**
- **For example, in many African societies, inheritance and the family name were traditionally handed down through the woman, whereas the tradition was reversed in the West; but women worldwide do the lion's share of housework.**
- **Because gender roles are a social construct, they can be altered to better suit communities' needs.**
- **Gender equality is a goal state in which men and women have equal rights, responsibilities, and access to resources.**
- **Gender mainstreaming is a process of giving attention to gender issues as an integral principle in a project.**
- **Gender empowerment is the process of giving women power and control over their lives. Empowerment of women does not mean coercing or disempowering men.**
- **Diversity is about more than gender, encompassing all of the different groups that may be disempowered or disadvantaged in society, such as religious minorities, those living in generational poverty, etc.**

Defining Gender and Diversity

The term gender is widely used in the development sector but is often misunderstood. The term "sex" refers to the biological and physiological characteristics that define men and women. "Gender" on the other hand refers to socially constructed roles, behaviours, activities, and attributes that a given society considers appropriate for men and women. Although sex and gender are inter-related, sex is concerned with characteristics in the physical realm that distinguish between male and female (e.g. women give birth, have breasts and menstruate; men have testicles and larger muscles than women) while gender relates to the identities associated with what it means to be a man or a woman. Because gender roles are defined by social norms, what is acceptable as "male" and "female" behaviour, roles and attributes varies across societies and shaped by ideological, religious, ethnic, economic and cultural factors they are dynamic, changing constantly in response to multiple factors. For example:

- In most traditional African societies, women retain their names when they marry, but

"Westernized" women adopt their husband's surnames.

- In Saudi Arabia men are allowed to drive cars while women are not.
- In many matrilineal African societies, inheritance runs through the female line.
- In most of the world, women do more housework than men.
- In most parts of Africa, women are responsible for cooking in the home, but men are often employed as cooks in the formal sector.

Understanding gender roles as being socially constructed means that they *can* change so a more equitable relationship can exist between men and women, with both genders having equal access to resources and opportunities.

Often people mistakenly believe that the concept of gender refers to women when in fact, gender refers to the relationship between men and women and how the social construction of roles, responsibilities, behaviour, activities and attributed affect each other. However, because women are typically more disadvantaged than men (in terms of access to resources, decision-making power etc.), the focus of most gender-related interventions is on women even though gender analysis takes into consideration the roles, responsibilities and position of both men and women in relation to each other.

Looking at the world from a gender perspective alone would overlook the existing complexities brought about by other forms of social differentiation. Diversity refers to differences between people along the lines of wealth, access to assets and resources, age, caste, race, ethnicity, marital status (single, monogamous, polygamous, widowed), type of household (male headed, female headed, child headed) education and other factors which characterizes all societies. When discussing gender, it is important to also consider diversity because, while men and women share common experiences by virtue of their gender, in no society are men or women a homogeneous group. Both genders have different access to assets and resources, belong to different wealth groups, etc.

Important Gender Concepts

Gender equality refers to the equal rights, responsibilities and opportunities of women and men and girls and boys. Equality does not mean that women and men will become the same but that women's and men's rights, responsibilities and opportunities will not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men are taken into consideration, recognizing the diversity of different groups of women and men. Gender equality is not a women's issue but should concern and fully engage men as well as women. Equality between women and men is seen both as a human rights issue and as a precondition for, and indicator of, sustainable people-centred development.

Gender mainstreaming is a means to an end. It requires that attention is given to gender perspectives as an integral part of all activities across all programmes. This involves making gender perspectives – what women and men do and the resources and decision-making processes they have access to – more central to all policy development, research, advocacy, development, implementation and monitoring of norms and standards, and planning, implementation and monitoring of projects.

Empowerment of women: The empowerment of women concerns women gaining power and control over their own lives. It involves awareness-raising, building self-confidence, expansion of choices, increased access to and control over resources and actions to transform the structures and institutions which reinforce and perpetuate gender discrimination and inequality. The process of empowerment is as important as the goal. Empowerment comes from within; women empower themselves. Inputs to promote the empowerment of women should facilitate women's articulation of their needs and priorities and a more active role in promoting these interests and needs. Empowerment of women cannot be achieved in a vacuum; men must be brought along in the process of change. Empowerment should not be seen as a zero-sum game where gains for women automatically imply losses for men. Increasing women's power in empowerment strategies does not refer to power over, or controlling forms of power, but rather to alternative forms of power: power to, power with, and power from within which focus on utilizing individual and collective strengths to work towards common goals without coercion or domination.

Source: UN Women http://www.un.org/womenwatch/osagi/conceptsandefinitions.htm

Review Questions

1. What is the difference between terms 'gender' and 'sex'?
2. Besides gender, what other groups should be considered from the diversity angle?

Unit 2 – Why Gender and Diversity Issues Are Important in Agriculture and in Sweetpotato Enterprise

Objectives

By the end of this unit, you should be able to:

- Explain the links between women's disempowerment and economic underperformance.
- Tell why gender issues are important to understand when facilitating sweetpotato supply chain projects in Sub-Saharan Africa (SSA).
- Discuss the household decisions that tend to be made by men in SSA, and those that are made by women.
- Describe the Towards Sustainable Nutrition Improvement (TSNI) project's approach and findings around gender issues.

Key Points

- **Although they grow 50% of the world's food, women's lack of access to resources and opportunities results in reduced food and income production in the sweetpotato market and in agricultural sectors generally.**
- **It is estimated that 12 to 17 percent of hungry people in the world could be fed if women had equal opportunities.**
- **Men tend to control productive resources in SSA and in the agricultural sector.**
- **Sweetpotato farming tends to be dominated by women where it is a food security crop and by men when it becomes a cash crop.**
- **Women are key nutrition decision makers in many parts of SSA, but men make decisions around spending money and planting crops; thus, both sexes must be consulted and informed in sweetpotato development projects.**
- **The TSNI project in Mozambique found that giving women instruction around nutrition for all family members resulted in a drop-in vitamin A deficiency in children, from 60% to 38%. (The project offered information on sweetpotato as well as other rich vitamin A sources such as papaya.) Men were given access to the learning sessions, but they tended to drop off and let the woman continue to represent the family in the sessions.**

Why Gender and Diversity Issues Are Important in Agriculture and in Sweetpotato Enterprise

It is estimated that women farmers produce more than 50% of all food grown in the world. In many parts of Sub-Saharan Africa, women make up 50% of the agricultural labour force. Yet women everywhere face more severe constraints than men in accessing productive resources, markets and services. FAO asserts that one of the key reasons why the agricultural sector is underperforming in many developing countries is because "women do not have equal access to the resources and opportunities they need to be more productive". This "gender gap" in agriculture results in:

- Less food being grown,
- Less income being generated, and
- Higher levels of poverty and food insecurity.

For agriculture to fulfil its potential as a catalyst for development and growth, gender disparities in accessing productive resources, markets and services must be addressed and effectively reduced. It is estimated that if women had equal access to productive resources, yields on their farms would increase by 20 to 30 percent. This could raise total agricultural output in developing countries by 2.5 percent, which could reduce the number of hungry people in the world by 12 to 17 percent. In addition, it is important not to overlook the importance of women's rights as a human rights issue and how this is linked to the fight against hunger.

Another reason for focusing on women in agriculture is related to the multiple roles they play as not only farmers but processors, income earners and care providers. By meeting the practical needs of women in carrying out their multiple responsibilities, improving their control over agricultural produce and increasing their decision-making power in the home where food is distributed and consumed, development efforts benefit not only women, but all household members and society in general. There is considerable research evidence showing that when women gain access to additional income, they spend more of it than men on food, health, clothing and on educating their children.

In Sub-Saharan Africa, gender considerations are important when considering the production of most crops because of the involvement of both men and women in agriculture generally and the dominant role women play in this sector. Specifically, for sweetpotato gender issues are important for the following reasons:

Control of Resources

Men control productive resources including land, water, labour saving technologies such as ploughs and draught animals, and household labour, while in many parts of the continent, sweetpotato is traditionally grown, sold and processed in small quantities by women. This situation coupled with women's limited access to technologies, education, and financial services due to their lack of decision-making power within households contributes to low sweetpotato yields.

The Crop Tends to Be Controlled by Women

Sweetpotato is often one of the crops women control because it is considered a food security crop with limited market value. The situation changes when the crop becomes commercialized, often leading to men adopting sweetpotato production and large-scale intensive systems evolving.

Women Are Key Nutrition Decision-Makers

Because women in Sub-Saharan Africa are typically responsible for child feeding and household nutrition, regardless of who in the household produces sweetpotato, efforts to promote OFSP for improved child and maternal nutrition should focus on them. However, as men play an important role in decision making regards which crops to plant and which foods to purchase it is also important that men are involved in any nutrition learning activities. The approach used by the Towards Sustainable Nutrition Improvement (TSNI) project to work with existing gender roles and nutrition is described in the box below.

In short, achieving the goals of improved child and maternal nutrition, food security and income by promoting SP/OFSP will be determined to a great extent by gender roles and responsibilities in a given society. Gender roles and responsibilities can be assessed by asking the following questions:

- Who grows sweetpotato (i.e. manages the farm): men or women or both?
- Who provides labour on sweetpotato farms?
- Who controls the sweetpotato harvest and how it is allocated?
- Who in the household is responsible for providing food?
- Who in the household is responsible for making decisions regarding household nutrition and child feeding?

- How do men and women allocate income for household welfare expenditures such as food, education, health, clothing?

Case Study from the Towards Sustainable Nutrition Improvement (TSNI) Project

The nutrition extension activities in the TSNI project in Mozambique, covered a range of topics including breastfeeding, hygiene, signs and consequences of malnutrition, and what foods, when, and how to feed infants and young children, men and women and other influential people were targeted with community theatre and radio spots as well as training sessions. This approach aimed to create an environment where women were given information and skills to improve their children's diets, and where behavioural change such as infant feeding practices was supported by the other influential individuals due to them being well informed.

The approach used by the TSNI project involved women in identifying constraints to their adoption of new behaviours, related to women's work, time use and roles. The women then identified practices which they could adopt. The project actively worked with nutrition extensionists who were themselves mothers, so that the women would 'respect' their advice. Over time, the number of men participating in nutrition sessions declined (except for cooking demonstrations), and the number of women participating in agriculture sessions declined. The explanation was that one household representative at each was enough due to other time demands. In response, the project periodically arranged to send the nutrition extensionist to agriculture sessions and the agriculture extensionist to nutrition sessions.

Vitamin A deficiency amongst children dropped from 60% to 38% in the project's intervention areas and remained the same in the control areas. In addition to OFSP, families also increased their consumption of papaya and dark green leaves – two other easy-to-grow sources of vitamin A. Women and men's nutritional knowledge increased significantly in the project areas.

The project recommended that men as well as women's nutritional needs are addressed in future, to help prevent the activities unintentional causing men to think of nutrition as just a woman's concern. Men often purchase foods and are often key decision makers in which crops and how much of each are plants. Increasing their interest in nutrition is likely to result in spill over benefits for the nutrition of women and young children. The project also recommended that the specific benefits of animal source vitamin A rich foods should also be emphasised more in future initiatives to encourage their purchase.

Women's formal educational levels were typically much lower than men's, and this meant more repetitions and simpler explanations were needed. The women preferred and probably gained more from cooking demonstrations, growth monitoring and community theatre activities than from lecture style lessons. Access to radio listening opportunities and as a result its efficacy as an information source may differ between men and women and should be investigated. Men are often more interested when marketing opportunities emerge.

All projects need gender-specific monitoring tools to help maintain the balance between desiring high buy-in from men and assuring sufficient access of women to the educational, nutritional and income benefits from participation.

Despite significant research attention and funds having been dedicated to sweetpotato, few studies assess in detail the roles and responsibilities of men and women along the sweetpotato value chain in Sub-Saharan Africa and how they change in response to different factors and no large-scale cross-country gender and diversity analyses have been undertaken for sweetpotato. A summary of the

studies that exist on gender roles and responsibilities in sweetpotato production and associated constraints and needs is presented in the next two Units. In order to help address and reduce the sweetpotato gender knowledge gap in the future, suggestions of best practices for incorporating gender into the different aspects of sweetpotato programs are presented later, in Unit 5.

Review Questions

1. Worldwide, do women produce more than half of all grown food or less?
2. What are some of the challenges that women face in sweetpotato production?

Unit 3 – Gender Roles and Responsibilities in the Sweetpotato Value Chain

Objectives

By the end of this unit, you should be able to:

- Compare male and female roles in sweetpotato farm ownership, management, and labour input.
- Relate an example of gender roles in sweetpotato production changing in a region over time.

Key Points

- **In some parts of Sub-Saharan Africa, sweetpotato farming is a men-only or women-only enterprise, while elsewhere, both sexes partake.**
- **When discussing the involvement of men and women in sweetpotato farming, it is important to consider the difference between ownership, management, and labour. A man who technically owns a sweetpotato farm may leave management decisions to women.**
- **In many parts of SSA, some crops are considered "male" and others "female." But these categories can fluctuate.**
- **A 1995 survey found that in some regions of Tanzania, women made most decisions and did most of the labour relating to sweetpotato.**
- **However, by 2012, when sweetpotato growing had become more commercialized, and some crops considered "male" were becoming difficult to grow, men were taking over sweetpotato farming.**
- **Intercropping means that sometimes men and women will work different crops in the same field.**

Gender Roles and Responsibilities in the Sweetpotato Value Chain

Male and female ownership / management of sweetpotato fields in most parts of Sub-Saharan Africa can be grouped into three categories:

- Sweetpotato is traditionally a female crop; few or no men grow it
- Sweetpotato is traditionally a male crop; few or no women grow it
- Sweetpotato is grown by both men and women on individually owned plots or family plots

It is important to distinguish between farm ownership in an ideological sense, management (the person who "initiates" the farm and makes most production decisions) and labour input in production activities. Typically, in Africa, because men are considered the "head of the household" and land is "owned" and controlled by men, at one level, all agricultural fields are considered to "belong" to the male head of household regardless of whether or not he works or make decisions about that farm. It is useful to define the farm "manager" as the person who "initiates" the farm and makes most production decisions.

As described below, gender roles in sweetpotato production are dynamic, varying across regions of a country and changing over time.

In many parts of Sub-Saharan Africa including Kenya, Tanzania, Uganda and Mozambique, sweetpotato, like many other food security crops, is traditionally grown, sold and processed in small quantities by women. Women often grow the crop on their own, with little or no input from men.

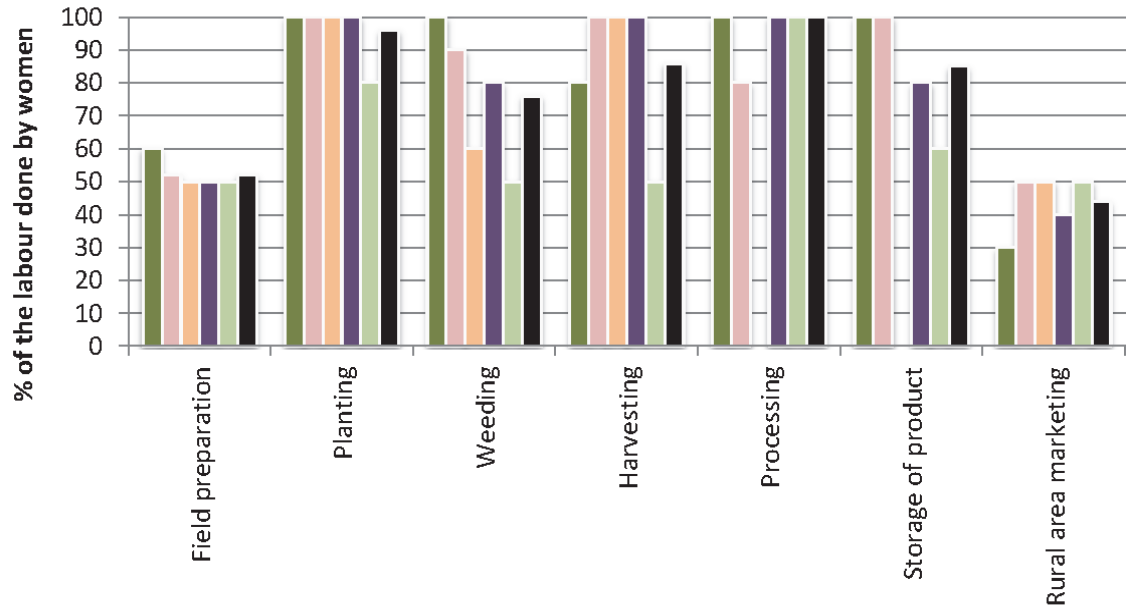
Very often, children will provide some labour. Sweetpotato production in many parts of Tanzania, including the Lake Zone, is characterized by a female dominated production system. A survey carried out in the mid-1990s in several regions of Tanzania showed that women are responsible for finding suitable land for planting sweetpotato, obtaining planting material, selling vines for fodder, planting sweetpotato and harvesting.

Sweetpotato as a female crop

Tasks done jointly by men and women include land preparation and weeding of intercropped fields (see the chart below). Marketing was done jointly or predominantly by women. Studies carried out in the Lake Zone of Tanzania in 2010 and 2011 confirmed that sweetpotato was still regarded as a "woman's crop". In some areas, people would laugh at a man who grew sweetpotato. Women were the key actors in land preparation, ridging, planting, weeding, harvesting, selling and securing planting materials. Men sometimes helped with land preparation, ridging and transport and sale of sweetpotato roots at the local market. Local management and exchange of sweetpotato planting materials was done by women, and sweetpotato vines are perceived to belong to women. Occasionally men had been known to purchase sweetpotato vines. Both the 1995 and 2011 study reported that women were typically helped by their children in their sweetpotato activities.

The 1995 study found that across Tanzania nearly all the households interviewed were producing sweetpotato primarily for home consumption, and some were additionally selling some sweetpotato roots. Where commercialised sweetpotato production was common, such as in Eastern Zone and Kiteto district men had become more actively involved in sweetpotato production and marketing.

Percentage of Sweetpotato Activities Done by Women in Different Zones of Tanzania



Source: Adapted from Kapinga *et al*., 1995

Even where men provide no labour in sweetpotato production, they often play a critical role in its production by allocating women land for growing the crop, since land is typically owned by men in many African societies.

A study carried out in May 2012 however suggests that in some parts of the Lake Zone of Tanzania the situation is rapidly changing, with men becoming increasingly interested and involved in sweetpotato production. Men are now contributing more labour and working together with their wives on sweetpotato fields. Factors contributing to increased male involvement in sweetpotato production include: declining yields of traditional male crops such as maize and cassava due to erratic rainfall, diseases and pests and declining soil fertility; increased market demand for sweetpotato and greater awareness of the nutritional value of the crop due to project interventions.

In some parts of Nigeria, including Ebonyi and Benue States, sweetpotato is considered a female crop. Both men and women in these areas grow other staple crops such as yam, cassava and cocoyam on separate farms. A study carried out in May 2013 in three communities in Ebonyi State found that women constituted 60-85% of sweetpotato producers. Most men only started producing the crop around 2000 when road access and commercialization improved. In the study communities, mounding is a task done exclusively by men, while only women are involved in weeding. Women typically weed their husbands' sweetpotato farms which they intercrop with vegetables and other minor crops as a labour-saving strategy. Women rely on their husbands or hired male labour to prepare mounds. In Ebonyi State the sweetpotato planted by a woman typically belongs to her.

Women obtain land for farming from their husband or his family, from their own families or by purchasing.

Sweetpotato As A Male Crop

In some areas of Sub-Saharan Africa, such as parts of Nigeria, men traditionally produce sweetpotato assisted by women and children. In these largely Muslim areas, men are traditionally responsible for feeding their households; women may help to feed their families if they choose to.

Sweetpotato As A Crop Grown by Both Men and Women

The situation in Nassarawa State, Nigeria shows the dynamic nature of gender roles and responsibilities. Traditionally, men grow the main staple food crops including yam, rice and sweetpotato. In the past 10 years, increased market demand for sweetpotato has brought about changes in the traditional roles and responsibilities related to sweetpotato production in areas of the state. As men began to sell a greater proportion of the sweetpotato harvest, women decided to grow the crop on their own plots to ensure enough food for the household and to earn income for themselves (see the table below).

Farm Ownership and Labour Provision, Obi LGA, Nassarawa State, Nigeria, 2012

Crop	Who manages?	Who provides labour
Yam	Men only	Men + hired male labour
Vegetables	Men/Women depending on the season	Women+ male and female children
Cocoyam	Women only	Women+ children+ men
Cassava	Men/Women	Men, women+ children + hired male labour

Sweetpotato	Men mainly/some women	Men+ women+ hired female labour for harvesting, peeling (for those selling)
Maize	Men only	Men+ male and female children for transporting
Rice	Men mainly/some women	Men+ women +hired male and female labour for transporting
Sorghum	Men mainly/some women	Men + women (for transporting and winnowing) +children
Millet	Men/Women+ family farm	M+ women+ male and female children
Sesame	Men only	Men +women (for transporting)
Cowpea	Men mainly/some women	Men +women (for transporting)
Bambara nuts	Women only	Women
Groundnuts	Women only	Women+ men (for ridging and planting) + male and female children
Soybeans	Women mainly/some men	Women
Egusi	Women only	Women+ men + children

Source: David and Madu, 2012

There has been limited gender analysis of other parts of the sweetpotato value chain. In most parts of Sub-Saharan Africa, processing of sweetpotato for home consumption and retail trade is done by women.

A value chain study carried out in Nigeria documented a clear gender division of labour in the sweetpotato trade, with men dominating the larger end of the retail and wholesale trade, while women are concentrated in the small-scale retail end of the market. Male traders make gross earnings of N9,300 per week on average, compared with N2,000 made by small-scale female retailers.

A study in Zambia found women were involved in the sweetpotato value chain as producers, sellers as well as buyers at both wholesale and retail levels and especially at retailing in urban markets.

Important quantities of sweetpotato are transported by Zambian women to Livingstone, Kazungula and Sesheke for cross-border sales to Botswana, Zimbabwe and Namibia. In Zambia, sweetpotato is an increasingly important cash crop for women living in the vicinity of urban markets and highways. A high proportion of female-headed households are involved in producing and selling sweetpotato.

Review Questions

1. Is the farm owner the same as farm manager?
2. Who is more likely to grow crops for household consumption? For selling?

Unit 4 – Constraints, Needs and Priorities of Male and Female Sweetpotato Farmers

Objectives

By the end of this unit, you should be able to:

- Compare the needs and priorities of men and women in sweetpotato farming.
- Describe examples of women experiencing increased constraints as sweetpotato growers.
- Compare male concerns and female concerns about sweetpotato varietal characteristics.

Key Points

- **Men and women generally have different roles and privileges in various regions of Sub-Saharan Africa and therefore do not experience sweetpotato farming in the same way.**
- **For example, in Nasawara State, Nigeria, men own the land and therefore have access to larger sweetpotato plots to work, as women must rely on men to borrow land and access resources.**
- **Factors such as age and community status also affect individuals' access to resources.**

Constraints Needs and Priorities of Male and Female Sweetpotato Farmers

Because men and women have different roles and responsibilities in the household and have unequal access to assets, resources and opportunities, they face different constraints in growing sweetpotato and often have different needs and priorities. For example, women in areas of the Lake Zone of Tanzania identified lack of labour as a major constraint which limits the size of their farms and contributes to lower productivity. Due to their subordinate social position, women are unable to control male labour and even in households with ploughs, have no access to these implements which are controlled and used by their husbands. In Obi and Adogi LGAs in Nasarawa State, Nigeria, men's sweetpotato plots are larger than women's because men "own" land, whereas women have to rely on men to allocate them land, have access to credit and communal labour and devote more time to farming.

Similarly, wealth status, age, ethnicity and other factors affects individuals' and households' access to productive resources such as land, labour and water. For example, in Adogi LGA a high status, older man used his position to access to land around a water pump for producing sweetpotato vines.

Depending on male and female involvement in producing and processing sweetpotato, who consumes sweetpotato and the extent of commercialization of the crop, men and women sweetpotato farmers may have different interests in varietal characteristics and preferences. Both men and women farmers are concerned about root yields and size, disease and pest resistance, and drought tolerance but women are more likely to mention cooking qualities such as taste of roots and leaves, dry matter content, absorption of oil when frying, while men tend to emphasize market related characteristics such as size of roots.

Review Questions

1. What characteristics are more important to women? Men?
2. Besides gender, what else might affect access to resources?

Unit 5 – Best Practice for Incorporating Gender in Sweetpotato Programs

Objectives

By the end of this unit, you should be able to:

- Describe best practices for studying local gender issues prior to beginning sweetpotato programs.
- List the areas of sweetpotato growing that should receive gender analysis.
- Describe the power, education, and access differences that may exist between groups in the same community.
- Name and describe areas and practices that can be altered to make sweetpotato programs more inclusive for women, young and old people, the poor, and the community as a whole.

Key Points

- **Sweetpotato program facilitators should carry out a gender situation analysis prior to beginning programming.**
- **Program workers can refer to the gender issues sections in each topic in this manual for specific guidelines.**
- **Analyses should include roles and responsibilities in agriculture; access to land and other resources; the role of sweetpotato in food security and family income; power in the household; gender differences in knowledge.**
- **Information can be gathered through group and individual interviews, using participatory tools tailored to rural areas.**
- **Women's empowerment in sweetpotato programs can be aided through gender quotas; programs to ensure women have access to resources they need to participate, such as providing credit; using gender-neutral language and promoting the program in ways that clarify the benefits for both men and women; and exploring communication strategies with all genders, income levels, and age groups.**
- **Development workers should understand who does what and who decides what in every aspect of sweetpotato production.**
- **Decisions about which varietals to work with should incorporate different viewpoints; men and women value different qualities in sweetpotato roots, plants, and vines.**
- **When setting class times, facilitators should consider women's childcare needs and all community members' scheduling needs. Measures should be taken to ensure young people can also participate.**
- **Development workers should consider class and gender when designing seed conservation and vine multiplication systems, as well as plant breeding programs and varietal trials.**
- **Men, women, and other diverse groups in society have different experiences and knowledge about sweetpotato farming.**
- **Nutritional knowledge varies between groups, and nutritional needs vary by sex, age, and workload.**
- **Women are often less well-educated and literate than men in many communities in SSA and may not benefit from written literature.**

Best Practice for Incorporating Gender in Sweetpotato Programs

The following pages contain suggestions which development workers can use for incorporating gender into sweetpotato programs. It should also be noted that each topic of this manual includes a section highlighting the specific gender and diversity aspects relevant to that topic.

Start-up

- Before starting a sweetpotato program, it is critical to carry out a gender situation analysis to get a general understanding of gender roles and responsibilities. Ideally, this analysis should be carried out as part of a wider situation analysis or community needs assessment. Key topics for a gender situation analysis should include:
    - Gender roles and responsibilities in agriculture and sweetpotato production specifically. If both men and women are involved in an activity determine their proportional roles (e.g. 50♂:50♀ or 90♀:10♂ etc.) regards the doing of the activity and the decision making for on the activity.
    - Access to land, labour and other resources for agricultural production and sweetpotato production specifically.
    - Sweetpotato and livelihood strategies (role of sweetpotato in food security and income generation).
    - Power and decision-making within the household.
    - Gender differences in sweetpotato knowledge (varieties, diseases/pests, planting method, nutritional attributes etc.) and practices (vine production/sourcing, labour use).

Methods for gender situation analysis: Group and key informant interviews (see gender situation analysis checklist), with both men and women of different ages and backgrounds, using participatory rural appraisal tools (e.g. ranking, village walks, calendar, wealth ranking to understand wealth and status differences in a community).

Take time to understand the existing gender roles and responsibilities along the sweetpotato value chain in your focal location

Targeting

- Ensure that participant selection and criteria for activities that require specific resources (e.g. land, water, literacy) do not exclude women. For example, where women do not have access to irrigation technologies for vine multiplication schemes, provide credit for them to be able to purchase the necessary equipment.
- Where appropriate, use gender quotas.
- Try and encourage mechanisms to be put in place which ensure that the benefits can be retained by the intended beneficiaries.

Service Provision and Training

- OFSP related technologies, training and services must be gender-relevant and responsive. These interventions also provide an entry point for capacity development training to promote women's empowerment, education and behaviour change.
- Explore together with men, women, youth and elder farmers opportunities for communication strategies which they think would be effective.
- Design training programmes to enable women, men, young, old, poor and middle-income farmers to all benefit from the training experience.
- Include a diverse range of participants, and make sure the selection criteria and course arrangements do not prevent or reduce any particular groups' attendance. For example: the course timing fits with women's other household duties or offers childcare arrangements and avoids residential training to reduce gender associated problems; is attractive to youth who may not own land but who could offer other sweetpotato related services to their communities; criteria such as minimum landholding size, or literacy levels which count against women and youth are not included.
- Are separate training courses needed for men and women, or youth or the poorest households in order to better meet their needs?
- Promote the training course in such a way that both women and men can see the opportunities (health, income and labour wise) that will arise from participating in it.
- The trainers not only need to be competent in the technical content of the course but should also be strong facilitators who empathise with the needs and aspirations of rural women, and do not hold fixed assumptions about gender norms. When using several facilitators, a mix of men and women should be included. Where possible facilitators should have both practical and theoretical knowledge of gender issues and a session on gender and use of participatory training techniques should be included in all pre-training courses for facilitators.
- The training materials and facilitator should use gender-neutral language (e.g. chairperson not chairman), and not promote stereotyping.

Varietal Development and Testing

- Sweetpotato improvement programs need to understand gender roles and responsibilities in sweetpotato production in order to decide which farmers to work with when developing new varieties and technologies. If sweetpotato is largely grown and sold by women, plant breeders should work closely with women farmers to understand their varietal preferences and carry out on-farm trials. If the crop is mainly sold by male traders, breeders should also involve them in evaluating new varieties.
- Since breeding programs have a national focus, it is important for breeders to have a broad understanding of gender roles and responsibilities across the whole country and to be able to monitor changes in gender roles over time. One quick way to get information on gender roles and responsibility is to interview field extension agents (although it should be noted that not all extension workers have an accurate understanding of the relevant socio-cultural

issues in their locations). Such information can be used to produce a sweetpotato gender map which shows who is involved in growing, processing and selling the crop in different areas of a country.

Methods. Gender situation analysis; Participatory varietal selection and evaluation involving women and men farmers and traders; Gender mapping based on interviews with key informants.

- Females and males are often interested in different characteristics of sweetpotato. For example: women tend to be more interested in cooking qualities of the roots such as low oil absorption during frying and the tendency of cooked roots to crumble compared with men. In situations where men are responsible for root sales, they are more likely than women to be interested in market-related characteristics.
- Based on the findings of the need's assessment, the situation analysis and the project's goals, on-farm trials can then be developed involving a diverse and representative group of the community at all stages of the planning and implementation. The farmers involved in the trials should be selected on the basis of gender with regards to the roles they play, wealth status, ethnicity and age. This does not mean involving just one woman or man. The proportion of gender representation should be representative of those growing sweetpotato in the community. This also applies to ensuring the farmers selected are representative of the local wealth structure e.g. 30% poor households, 60% medium wealth households, and 10% wealthy. Where women are the major producers of sweetpotato, but men contribute some labour, it is important to work directly with women rather than men in their role as head of households. However, their husbands should be invited to the planning meeting in order to get their buy-in and alleviate any suspicions about the proposed trials.
- Meetings and field activities should be arranged at locations and times that are convenient and safe for those involved, including women.

Vine Multiplication

- Carrying out a rapid seed systems analysis is an important first step for deciding how to design a sustainable seed system. Such an analysis should incorporate gender elements outlined in the gender situation analysis (see checklist in Appendix 11.1). Specifically, the following topics should be addressed:
  - Sweetpotato planting material multiplication practices: differences between male/female SP farmers; gender analysis of division of labour, resource allocation, decision-making; different strategies farmers use for accessing planting materials, what constraints are faced, how could these be overcome, and how do different types of farmers cope if they do not access sufficient planting materials.
  - Explore female and male farmers' perceptions of qualities of a good sweetpotato vine multiplier and seed system.
  - What resources do existing women and men multipliers use for vine conservation and multiplication?
    - Who has access to these resources in terms of gender, wealth, status etc.?
    - What constraints would women face in accessing these resources?
    - What strategies would be needed to ensure that women could access these resources?
    - What would women and men multipliers need to reach more clients?

Methods. Use a mixture of qualitative survey tools such as: checklists/ semi-structured interviews with gender disaggregated farmer focus groups and key informants (existing vine (and possibly other crop) multipliers, extensionists, NGO workers, sweetpotato traders), observation, calendars, field walks/ transects; and a trans-disciplinary team.

- Decentralised vine multiplier (DVM) selection criteria need to be evaluated to understand

whether they inadvertently lead to the exclusion of any types of people (e.g. do criteria related to literacy, land ownership, labour requirements, training arrangements exclude women), and if so, is there a case for adjusting the criteria to make them more inclusive (e.g. if DVMs could include existing farmer groups, would it help alleviate some of these issues?).

Crop Management

- As part of your gender situation analysis it is important to find out how understanding of sweetpotato pest and disease, and crop management practices vary amongst different groups in the community (men, women, older, younger farmers, different ethnic groups etc.). Their different understanding may be due to experiences they have had while growing sweetpotato, the different roles they have in the production of sweetpotato, the resources they have access to, their information networks and access to training, the importance of sweetpotato in their livelihoods.
- As explained earlier, it is important for development workers to understand who typically does which aspects of sweetpotato production and management, when these activities are done, how they are done, what constraints are typically faced by those doing them, and what activities there are that compete for that labour or the land itself; and what information pathways different people have access to. For example: if women are typically involved in monitoring, weeding and harvesting the sweetpotato crop they may have a great deal of experience in having observed pest behaviours in the field or the patterns of disease spread, and may have evaluated different pest management practices. If men have attended extension trainings on pest and disease management, they may have knowledge about appropriate pest management strategies. The gender cropping calendar in Appendix 11.2 can be a useful tool in building this understanding.
- It is also important to understand who owns, control access to and makes decisions regarding the resources required for sweetpotato production. This would include which area of land the sweetpotato is grown on, the order of priority in planting and caring for different crops, whether the sweetpotato can be intercropped, the labour available for activities such as land preparation, ridge or mound formation, planting, harvesting, transporting and processing, access to irrigation to preserve planting materials, access to manure or fertilisers, and who keeps or can decide on the use of any income generated from sweetpotato sales.
- These factors are all relevant in deciding what type of information to share, who to share it with, which people to target, what information pathways to target and when. The perceived importance of the crop in local livelihoods (which may differ by household type and between men and women), will influence the investment levels farmers are prepared to make in terms or time and resources.
- Such information can then be used to develop a training programme, targeting those who undertake the crop activities during the periods when pest and disease or other crop management strategies can occur and those who make the decisions regards what needs to be done in the field or store. For example: many farmers are unaware of the different stages of insect lifecycles or how plant diseases spread, by sharing this knowledge and helping farmers to make relevant observations one is empowering them to start experimenting with different practices. In some situations, women may have limited access to irrigated areas in which to preserve and produce clean sweetpotato planting materials resulting in delayed planting, use of diseased planting materials, low yields, late harvesting and high weevil infestation. By helping these women and their husbands experiment with use of cleaning planting materials it may help influence decision-making around planting material conservation and quality and lead to higher productivity and reduced losses for the household.
- Pesticides are poisons and children should be kept away from them. It is generally advised

that women and children should not be involved in spraying pesticides; as women may be pregnant or breastfeeding and are also usually the ones responsible for food preparation. Care must be taken in storing pesticides and ensuring they are not stored in food or drink containers which children or adults may accidentally consume.

- In most parts of Sub-Saharan Africa, men are considered the owners of land and make all decisions regarding land allocation even when the crop such as sweetpotato is largely grown and controlled by women. It is critical for development workers to be sensitive to male control over land and ensure that men are consulted about project activities even where they are not directly involved.

Post-Harvest Management, Processing and Utilisation

- Attention needs to be paid to postharvest gender roles and how processing may impact on them, including appropriateness of equipment and whether the introduction of machines or technologies affect gender roles and income benefits in any way.
- Nutritional requirements including vitamin A requirements and dietary preferences vary by age, sex and workloads. Some sweetpotato recipes will be more appealing to certain groups, it is important to find out about the local food culture and see how new nutritious recipes could be combined with it.
- Attention needs to be given not only to imparting appropriate and practical information to those who will be involved in preparing the food (mothers, women) or doing the postharvest or processing activity, but also to those who control access to the raw materials (husbands) and who influence consumption patterns (grandmothers, husbands, traders, community leaders).Timing, duration, location, delivery language, approach and participant composition of training events also need to be considered to ensure certain groups are not unintentionally prevented from accessing it.

Food Security, Marketing and Decision Making

- It is important for development workers to understand who is typically involved in which aspects of the sweetpotato value chain, as well as what these players do, when and how, and what constraints they typically face. In addition to understanding who does which tasks it is also important to understand who makes the decisions, and who reaps what benefits at each stage of the value chain.
- As market demand for OFSP increases, devise approaches that support the production activities of both genders so that women are not consigned to subsistence production of OFSP for household consumption but have equal opportunity to engage in commercial production.
- At household level it is important to devise approaches that can help ensure that sufficient quantities of harvested OFSP are set aside for household consumption and that OFSP income is used equitably.

Methods for understanding gender roles in the value chain and ensuring gender equitable intra- household decision-making:

Gender sensitive value chain analysis combined with a participatory exercise on what the benefits and challenges of women playing the different roles in the value chain. Training both men and women on food security planning and decision-making. It is important to be aware of typical food access strategies, who is involved in the decision making and actual doing of their different strategies (growing, purchasing, borrowing etc.) and what criteria do they use.

Vitamin A Nutrition Messaging

- Nutritional requirements including vitamin A requirements vary by age, sex and workloads.
- When working with OFSP it is critical to develop nutritional messages that focus on how OFSP provides vitamin A and reduces deficiency among young children and pregnant and breastfeeding women.
- The content of nutrition messaging should be gender and culturally specific. It is important to understand local nutritional practices and beliefs and how these can be combined with improved nutritional behaviours and outcomes.
- Target women with both nutrition and production messages using a combination of approaches including behaviour change communications.
- Nutrition messaging should also target men as they often play an important role in deciding on child feeding practices, purchasing food and use of health care facilities. Grandmothers, traders, local leaders may also be influential regarding nutrition and food consumption behaviours and it may be worth involving them to help increase nutritional awareness and understanding in order to bring about behavioural change.
- It is important to monitor and evaluate nutrition activities in order to learn whether promotional messages and activities are being correctly understood and utilised by the target audiences for whom they were designed; and if not, what changes are needed in order to improve their effectiveness.

Demand Creation and Promotion

- It is important to be aware of differences between men and women in terms of availability and timing of free time, mobility (e.g. ability to travel), literacy and access to information channels such as radio and television.
- Village meetings, religious meetings, and town criers are a good way to provide information to communities, but it is important to hold such meetings at a time convenient for women. Special effort should be paid to getting women to attend community meetings
- Use schools to increase awareness about OFSP or new SP varieties among children who will take the message home. Women can be registered through their children to receive vine cuttings
- Use “market storms” and market day promotions to increase awareness of both men and women
- Advertise vine dissemination days according to your gender target e.g. at water points and other areas where women gather; at bars and local meeting places where men gather
- While radio is a cheap channel for widely disseminating information, often women do not have the time to listen to radio or don’t own one.
- Since women tend to be less literate than men, written extension materials are likely to be biased toward men.

Monitoring and Evaluation

- Females and males have different development priorities, needs and constraints, and are therefore affected differently by development projects, programs, and policies.
- Timely and systematic collection of sex disaggregated, and gender information helps to inform managers and other stakeholders whether the intervention is benefiting both males and females. Such information allows for appropriate refining of project design to improve overall development effectiveness, when an adverse impact on either sex is identified.
- Interest in the gender and diversity aspects of the project’s outcomes and impacts needs to begin at the start of the project, gender should be integrated throughout the program logic.

- Subsequent evaluation questions might then aim to understand:
  - To what extent did the intervention increase the participation of women in sweetpotato economic activities?
  - To what extent did the intervention reduce the incidence of vitamin A deficiency in under 5-year-old (girls and boys)?
  - To what extent did the intervention increase awareness of the importance of vitamin A rich food consumption for children and pregnant and breastfeeding women amongst grandmothers?
  - To what extent did the intervention influence institutional changes that support the advancement of women?
  - To what extent did the intervention help to reduce gender and diversity disparities in the health and agriculture sectors?
- Some common gender challenges faced in M&E include: the assumption that M&E frameworks are gender neutral; inadequate inclusion of gender aspects during the initial project planning; limited gender awareness and capacity of M&E staff; barriers to free and open participation by female respondents due to under-representation of women in evaluation and interview teams.

Review Questions

1. Prior to developing an intervention programme, what gender-related factors should be analysed?
2. What are some of the factors to be looked at when evaluating the intervention effectiveness from the gender perspective?

Activities

Activity 11.1 Gender-Sensitivity Situations

Objectives

To be able to recognize gender sensitivity situations and to successfully solve the problem, if possible.

Time

30 minutes

Materials

- Pens
- Flip chart

Steps

1. Ask the class to name a few examples of obvious gender sensitivity that they have witnessed.
2. Write the examples on the flip chart where everyone can see them.
3. Then, ask the class to come up with solutions to the situations.

Answers to Review Questions

Unit 1

1. What is the difference between terms 'gender' and 'sex'?
   - *"Sex" refers to biological traits that define men and women; "Gender" refers to men and women's societal roles, behaviours, activities, attributes.*
2. Besides gender, what other groups should be considered from the diversity angle?
   - *Religious groups, poorer groups.*

Unit 2

1. Worldwide, do women produce more than half of all grown food or less?
   - *More*
2. What are some of the challenges that women face in sweetpotato production?
   - *Access to resources, access to markets, men control commercialised crop.*

Unit 3

1. Is the farm owner the same as farm manager?
   - *No. Owner makes legal decisions. Manager 'initiates' the farm.*
2. Who is more likely to grow crops for household consumption? For selling?
   - *Women for household consumption. Men for commercialised crops.*

Unit 4

1. What characteristics are more important to women? Men?
   - *Age, community status*
2. Besides gender, what else might affect access to resources?
   - *Women: cooking qualities, taste, dry matter content: Men: market-related characteristics.*

Unit 5

1. Prior to developing an intervention programme, what gender-related factors should be analysed?
   - *Roles and responsibilities in agriculture; Access to land and other resources; Role of sweetpotato in food security and family income; Power in household; Gender differences in knowledge.*
2. What are some of the factors to be looked at when evaluating the intervention effectiveness from the gender perspective?
   - *Increased the participation of women in sweetpotato economic activities; reduced incidence of vitamin A deficiency; influenced institutional changes that support the advancement of women; reduced gender and diversity disparities in the health and agriculture sectors.*

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Appendix 11

Appendix 11.1 Gender Situation Analysis Checklist for Group Interviews

Organize a meeting with a mixed group of sweetpotato farmers

- Materials needed: flip chart paper, stand and markers

<u>Purpose of exercise</u>: Explain to the group that we are interested in understanding how men and women are involved in sweetpotato production, how their farming practices may be similar or different, whether the problems they face in growing sweetpotato are similar or different. The purpose is to see how we can help both men and women to produce more sweetpotato and benefit from the crop for food or income or both.

Record the following information:

Location

1. Date
2. Name of village, district, province etc.
3. Criteria for selection
4. Major ethnic group found in the area
5. Predominant religion
6. Other observations (e.g. OFSP on-farm trials conducted nearby)

Group

1. Number of farmers present, women/men
2. Which officials or outsiders were present
3. Location of discussions
4. Observations about bias in the selection of the farmers (e.g. mainly wealthy, commercial farmers, religious groups represented etc.)

General/plenary Session

1. What are the main food and cash crops grown in this area? Is any crop grown mainly for sale? How is the crop grown by husbands and wives: family farm; separate plots belonging to husband and wife; plot belonging to husband only; plot belonging to wife? Who provides labour?

Crop	Crops grown mainly for sale	Who owns farm	Who provides labour
		Men ☐ Women ☐ Both together ☐	Land preparation Ridging Planting Weeding Harvesting Transporting Selling Men, women, male children, female children, male hired labour, female hired labour

2. What is the main staple food(s) in the area?

Sweetpotato

3. How do you cook/eat sweetpotato in this area? How do you process sweetpotato? What do you do with sweetpotato leaves?
4. About what proportion of households grow sweetpotato in this LGA (use the idea of 10 stones to get percent)?
5. Of the sweetpotato farmers in this area (those who manage their own farms), how many are men and how many are women (NOTE: include both farmers who grow for subsistence and market: use the idea of 10 stones to get percent)

   Men:
   Women:
   Total=10
6. How do husbands and wives grow sweetpotato in this area?
   a) Separately, husband has his farm and the wife has her farm
   b) Wife only has an sweetpotato farm
   c) Husband only has a sweetpotato farm
   d) Sweetpotato grown on family farm
7. Has there been a change in the number of farmers growing sweetpotato: 10 years ago (2002)? 20 years ago (1992)?

If the number has changed, how has it changed and why? Which gender has changed in terms of numbers growing SP-men or women or both?

8. Do most farmers have one sweetpotato plot or several plots?
9. Is there a difference in the size of sweetpotato farms now and 10 years ago? How and why?
10. Do any farmers in the area rent land for planting sweetpotato? Why do they rent land? Who rents land: men or women?

11. How do farmers plant sweetpotato in this area: mound, ridges, flatground?
12. How many times a year do people plant sweetpotato?

Appendix 11.2 Checklist for Groups of Female or Male Farm Managers (Where Men and Women Have Separate Sweetpotato Farms)

Women's group

1. Is it difficult for women to get land for planting SP? For other crops?
2. How many SP farms do most women in this area have? Get average area planted by women to SP if possible (use local measurement, convert to acres/ha)?
3. Do women grow SP with other crops? What are the intercrops?
4. If you look at the SP farm managed by a man, generally would it look different from that of a woman? How and why are they different?
5. Rank most important crops that provide women with money (explain reason for ranking in terms of amount of income, timing of income etc.)
6. SP cropping calendar by month and gender (for farms managed by women) (FIRST CHECK TO MAKE SURE FARMERS AGREE WITH THE LIST OF ALL THE TASKS BELOW)

Task	Month												Who is involved?	Other activities/ crops competing for women's labour at this time
	J	F	M	A	M	Jn	Jy	Ag	S	O	N	D	Men, Women, Male children, female children, hired male labour, hired female labour	
Land preparation														
Land clearing														
Making mounds/ ridges														
Obtaining vines														
Transporting vines														
Planting														
Weeding														
Applying fertilizer														
Harvesting														
Transport to market														
Selling														
Processing														

7. Where do most women farmers sell SP (traders who come to village, local market, nearby market)? (rank by proportion of women) If in nearby market, who transports the SP and by what means?
8. Who mainly sells SP in the local markets in this area: men, women, both?

SP Varieties and Preferred Characteristics

For the facilitator:

Examples of SP characteristics:

Taste (roots, leaves)

Dry matter content (firm /watery)

Cooking time

Flesh colour

- Root yield and size
- Time to produce (maturity period)
- Vine yield
- Harvesting (piecemeal, all at the same time)
- Storability
- Resistance to pests/disease
- Ability to withstand drought
- Marketability
- Input level /production costs
- Labour requirements

V1. What SP varieties do farmers in this village/area grow? Get a description of the following for each variety:

- Flesh colour
- Production objective (food, feed, market?)
- What is good about each variety? What is bad about this variety?
- How variety is used (e.g. boiling, frying, flour etc.)

V2. Rank varieties in terms of preference and explain reasons for rank (IF FARMER IDENTIFY MORE THAN 4 VARIETIES, ASK THEM TO SELECT 4 FOR RANKING)

	Variety A	Variety B	Variety C	
Flesh colour				
Production objective				
Likes about variety				
Dislikes with variety				
Main use				
Rank in terms of overall preference				

V3. How many SP varieties do most women farmers grow on average? Do they plant different varieties on the same plot/mound/ridge? If so why?

V4. Are there some varieties of SP that farmers no longer grow? Name of lost varieties? Why don't people grow them anymore?

V5. Have you ever seen/grown an orange-fleshed SP?

V6. If OFSP is being grown, who grows it: men, women or both? (IF ONE GROUP IS EXCLUDED OR NOT WELL REPRESENTED, FIND OUT WHY)

V7. What do farmers do with the OFSP roots: eat, sell, both, process?

What sources do women farmers rely on for technical information about agriculture?

Seed Systems

For the facilitator:

Major sources of SP vines:

- Own farm
- Gift from other farmers in same village
- Gift from other farmers in other villages
- Buy from farmers in same village
- Buy from farmers in other villages
- From extension/research (government)
- From NGOs, projects
-

On-farm vine production approaches:

Leaving some roots in the field to sprout at the start of the rains

Planting some vines near the house or a water source

Leaving a section of the farm unharvested

S1. Where do women SP farmers get vines to plant in most years? Which source is most important (in terms of frequency used), least important? Rank in terms of importance

S2. Is there ever a situation where many or most farmers have no SP planting material? What causes this situation? Where do farmers get vines from when this happens?

S3. There are many practices that farmers use to get vines from their own farms. What are the practices used in this area?

S4. How do farmers get SP vines from other farmers: buying, gifts, borrowing? S5. How much do vines cost in this area? (NOTE THE QUANTITIES INVOLVED)?

S6. If you get vines from other farmers (gift, brought), are they usually women, men or both? If only from one sex, why?

S7. Are there some farmers in this area who are known to have good quality SP vines or grow vines to provide to others? Are they men/women? How many of these farmers do you know?

Production Constraints

PC1. What is the major problem that women SP farmers face in growing the crop? Rank by importance

Decision Making

DM1. Who decides what to do with the SP harvested from a farm managed by a married woman?

DM2. Where married women sell SP that they grow on their own farms, who decides on how they spend the money?

DM3. In most cases, what proportion of SP grown by married women is used for food and for sale?

DM4. In most cases, what proportion of SP grown by a married man is used for food and for sale? (IF THE PROPORTIONS ARE SIGNIFICANTLY DIFFERENT BETWEEN MEN AND WOMEN, ASK WHY)

Household Food Consumption

FC1. In some places, people believe that ONLY/MAINLY women should be responsible to make sure their households eat well. What do people in this area believe? What role do men play in deciding what food households eats?

FC2. Generally, in this area, who in the home is responsible for providing food either by growing it on or buying it?

Foods	Husband provides from farm	Husband buys	Wife provides from farm	Wife buys (with own money)	Both provide from farm	Both buy with own money
Main staple (cassava, maize, rice etc.)						
Animal protein (meat, fish)						
Cooking oil						

FC3. In this area, who decides every day what to cook every day in most homes? FC4. Do men play in deciding how young children are fed? What role do they play?

FC5. Who else besides the parents provides advice on how to feed and what to feed young children eat (health centre, grandmother etc.)?

FC6. Do mothers in this area feed SP to young children? At what age do children start eating SP? In what form do young children (up to 5) eat SP

Sweetpotato Processing

1. How many people in this group process SP for home use or for sale?
2. What processed products do women in this area make from SP (SEPARATE BY PRODUCTS FOR HOME USE (e.g. flour) AND PRODUCTS FOR SALE E.G. “sparri”—roasted granules, SP mandazi, SP juice, SP chapatti, SP puff-puff, SP cakes, chips, etc.)
3. Do men process SP? What products do they produce?
4. Where do women in this area sell SP products (from house, roadside, market etc.)? Who sells processed SP (women, men, children)?
5. Who buys SP processed products (all types of people, school children, labourers etc.)?
6. Are there some women who process SP but don’t grow the crop? Where do they get the roots from? Do any women get roots from their husbands? How do they get the roots from their husbands (buy, exchange etc.)

[NOTE: the checklist can be altered for use with men]

The International Potato Center (known by its Spanish acronym CIP) is a research-for-development organization with a focus on potato, sweetpotato, and Andean roots and tubers. CIP is dedicated to delivering sustainable science-based solutions to the pressing world issues of hunger, poverty, gender equity, climate change and the preservation of our Earth's fragile biodiversity and natural resources.
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