The gender dimensions of food and nutrition security in the context of climate change in Uganda

Policy Brief First published: November 2012 Second edition: July 2013

The purpose of this policy brief is to provide a field-based perspective to policy makers on the links between gender, climate change and food and nutrition security; and the value of a climate justice approach. Findings are based on a two week field visit in September 2012 to organisations working on food and nutrition security in Uganda. The brief focuses on people's experiences of the impact of climate change on food and nutrition security at a grassroots level and is based on interviews and focus group discussions with over 300 people in eight communities. These were organised in collaboration with the following organisations: Gorta, AFARD, Vi Agroforestry, Osukuru United Womens Network, Rural Women in Development Network, WORUDET Pader, Concern Worldwide and Self Help Africa.



Introduction

The right to food is one of the most basic rights of humankind. However, hunger remains unacceptably widespread in the world, while many systems of food production in use are unsustainable. With the world's population set to reach 9 billion by 2050, agricultural production will need to increase by 60% in order to meet demand.¹ Climate change adds a new dimension to this challenge, leading as it does to changes in growing seasons and rainfall patterns as well as an increase in the frequency of extreme events such as droughts and floods.

The impacts of climate change on food and nutrition security are exacerbating existing inequalities in access to resources, especially for women who are primarily responsible for food production and for feeding their families. This is contributing to an injustice whereby those who have done least to cause the climate change problem are already suffering disproportionately from its impact, which is undermining their right to food, their health and well-being.

The second Climate Vulnerability Monitor Report published in September 2012 estimates that climate change causes an average of 400,000 deaths each year, mainly due to hunger and communicable diseases that particularly affect children in developing countries.²

Undernutrition among mothers and children is the underlying cause of 2.5 million deaths every year. In developing countries, nearly one third of children under five are stunted and will never reach their full potential.² Adequate nutrition is especially critical during the 1,000 days from pregnancy to a child's second birthday. Focusing on improving nutrition for mothers and children in the 1,000 day window offers an important opportunity to have a positive impact on a child's ability to grow, learn and break the cycle of poverty.

¹ United Nations Food and Agriculture Organisation (FAO)) <u>http://www.fao.org/docrep/018/i3300e/i3300e.pdf</u> [Accessed 17 July 2013]

² DARA (2012) 2nd Climate Vulnerability Monitor: A Guide to the Cold Calculus of a Hot Planet. DARA, Madrid

What is a climate justice approach?

A climate justice approach is a people-centred, human rights based approach to climate change that safeguards the rights of the most vulnerable, ensuring that the burdens and benefits of climate change and its resolution are shared equitably and fairly. Climate justice looks at the causes, the impacts and the solutions to the problem from a human perspective. A climate justice approach is founded on the Principles of Climate Justice:

- Respect and Protect Human Rights
- Support the Right to Development
- Share Benefits and Burdens Equitably
- Ensure that Decisions on Climate Change are Participatory, Transparent and Accountable
- Highlight Gender Equality and Equity
- Harness the Transformative Power of Education for Climate Stewardship
- Use Effective Partnerships to Secure Climate Justice



How climate change is impacting on food and nutrition security in Uganda

In Uganda, rainfall patterns and seasons can no longer be predicted and in some locations planting seasons have merged from two distinct seasons into one uncertain season. This means that farmers are no longer able to predict the optimum time to plant.

The Foundation's research found that farmers are increasingly moving away from growing cash crops such as coffee, tobacco and cotton to more reliable drought resistant, early maturing food crops such as cassava, sesame and beans, selling any surplus to cover other household costs. There is also a growing tendency for farmers to harvest crops early, which impacts on the quality of the produce and results in a reduced price for any surplus available for sale.

Shorter growing seasons and declining yields have resulted in reduced access to food such that people may eat only one meal a day and rely on wild foods to supplement their diet. Shortage of food in the community means that people are at greater risk of their crops being stolen. In some cases, the unpredictability of farming is forcing families to sell their land and move to the towns to find work.

These problems are exacerbated by gender-related issues. Women are responsible for the provision of food for the family and provide most if not all the labour for food production yet they do not control or own the land they cultivate. Many women say there is little harmony within the household, with women experiencing conflict over assets and resources as they seek to provide adequate and nutritious food for their families.



"The challenge we have is that almost the whole area does not have enough food, because of short rains, which we are facing these days. You find this time probably (families) eat one meal a day because they cannot afford two meals" Emmanuel Maviiri, farmer, Kafumu village, Mpigi district

Case study 1 conducted September 2012 Agency for Accelerated Regional Development (AFARD) West Nile initiative

AFARD is a rights based organisation funded primarily by Gorta Ireland that works with 82 beneficiary organisations. It aims to empower rural marginalised communities in the West Nile region to transform their energies for the attainment of secure and self-sustaining livelihoods.

The programme supports beneficiaries to achieve food and income security, human development and good governance. It is particularly notable for building people's confidence to tackle their poverty through mobilising their individual and collective resources.



Intervention Focus

Case study 1 conducted September 2012 Agency for Accelerated Regional Development (AFARD) West Nile initiative

Lessons

- Learn to plan: the overarching message from farmers, both men and women, is to learn how to use the resources that they have. Prior to training they tended to plant one or two crops with little attention to land use. Now they are opening up more land, intercropping and developing kitchen gardens.
- **People need diverse ways of making a living** and should not only depend on agriculture. Alternative forms of income need to support farming, unlike in the past when farming generated enough for farmers to invest in income generation activities e.g. a man could buy a bicycle to use as a taxi. This is a necessity for all households, and especially vulnerable households such as those with people living with HIV/AIDS.
- Loan schemes should offer a permanent source of funds to enable people to engage in income generation but also as a cash flow to pay school fees and medical bills until crops/livestock are ready to sell. Access to loans in times of crisis is critical. Cultivation of group gardens can provide additional funds for a village savings and loan scheme. Loans enable women to hire labour to open more land and allow people living with HIV/AIDS, who are often too sick to work the land themselves, to hire local labour.
- **Development of village structures needs time and funding** so that people understand their roles and responsibilities; this requires training and leadership development.
- **Food security is a right:** believing that all people, regardless of socio-economic status, have a right to food. This lesson has been especially valuable to women who are widowed and have lost their land.

Case study 2 conducted September 2012 **Partnership in Food and Nutrition Security and Gender in Pader, Northern Uganda**

The Women and Rural Development Network (WORUDET), the Uganda Land Alliance (ULA), Volunteer Efforts for Development Concerns (VEDCO) and Concern Worldwide have established a partnership programme in Pader, northern Uganda, to address gender issues and gender based violence (GBV), women's land rights and farmer to farmer extension.

Integration of Nutrition

- Water and sanitation are deemed key to reducing diarrhoea and malnutrition and are an integral part of the programme. This is combined with more diverse production especially the 'basket garden' close to the kitchen. Compost is placed in the middle of a four metre diameter circle that is divided into sections (pi-chart basis), and farmers rotate the planting in order to provide them with vegetables throughout the year. Vegetables that have a high nutritional value are chosen including amaranthus, sweet potatoes and beans.
- VEDCO provides farmer to farmer extension training on how to get nutrition into extension work based on the promotion of five food types carbohydrates, plant protein, animal protein, fruit and vegetables, and fats and oils.
- The approach also includes better handling of food including food preparation and storage.
- Fuel efficient stoves are promoted, along with a 'snack basket' which hangs near the warm stove so that children can pick a warm snack to eat during the day while their mother is in the fields.

Lessons

- Core to the partnership is a rights-based approach, with the four organisations sharing a conceptual framework on rights to and control of assets, which includes an analysis of risk and inequality and the drivers of poverty.
- Much of the gender based violence is linked to land and access to land, hence the importance of linking a women's organisation (WORUDET) with a land organisation.
- WORUDET has structures down to the village level and refers survivors of GBV to its counselling unit at sub-county level, and as necessary, refers on to the police and health services for legal action or mediation.
- Concern Worldwide provides a small fund to help survivors in emergency situations (transport, health services, education for traditional leaders and the community, and to support survivors to gain economic empowerment). The partnership enables Concern Worldwide to develop a deeper gender analysis.
- Good quality community based extension is core to the success of the programme.

Adapting to climate change to achieve food security Key messages from communities in Uganda

Interviews and group discussions with over 300 people in eight communities affected by food insecurity and climate change revealed the following key lessons:

Diversification of livelihoods is essential to reduce the risk of food and nutrition insecurity and to adapt to climate change

- In order to spread risk, women and men no longer depend solely on agriculture but seek to diversify and engage in other forms of income generating activity, even if the available space is limited e.g. piggeries, poultry, mushroom growing, handcrafts.
- Income generation activities help to protect households from unreliable farming income and facilitate the payment of school fees – the main cash expenditure for women.
- Village savings and loan schemes are central to diversification strategies, providing quick access to cash and smoothing cash flow problems.
- Livestock provides a source of income that can be used to pay school fees and purchase other livelihood inputs, such as seeds and materials for handcrafts. For this reason, women place a high value on the ownership of goats, poultry and pigs.
- Small businesses are critical for households that can no longer depend on agriculture to provide them with their livelihood.

In situations where food is limited, women prioritise feeding children and men first, reducing their own food intake.

Adapting to climate change to achieve food security Key messages from communities in Uganda

For food and nutrition security programmes to be successful, they must promote greater equality between women and men, encouraging men to undertake a greater share of the responsibility for household duties and food production

- There needs to be a focus on working with men to encourage them to share responsibilities with women. Otherwise there is a risk that climate change impacts will contribute to greater inequality between men and women.
- Adaptation measures evolving at community level to cope with climate change result in women taking on enormous labour burdens as they seek to intensify and expand production of food crops and earn cash, as well as undertaking all the household work and care of children and the elderly.
- However, these investments of time, labour and physical energy by women are not necessarily
 leading to greater gender equality as women receive little household support from men. In some
 cases women are taking on more responsibilities and earning an income so that they no longer
 ask their husbands for money, rather than working towards a model of shared responsibilities and
 decision making between husband and wife.

Access to energy has an important role to play in addressing food and nutrition security

- Food and nutrition security programmes need to address the increased labour burden, particularly
 on women, resulting from adaptation strategies. Farmers have little or no access to technology and
 as a result, daily activities are very labour intensive. Access to energy can play an important role
 in reducing the labour inputs required throughout the cultivation cycle, can add value to products
 and reduce wastage. Irrigation is also of growing importance given the unpredictability of the rainy
 season. Processing technologies such as grinding mills can reduce the workload on women and
 children, enabling them to spend time on other activities and school work.
- Fuel efficient stoves reduce the time women spend collecting firewood and make it easier to provide warm meals to sick children, the elderly and people living with HIV/AIDS. Regular small meals are essential to increasing and maintaining nutrition levels. Fuel efficient stoves retain heat so that food stays warm for longer, allowing sick and vulnerable family members to access warm food while women are out working in the fields.

Adapting to climate change to achieve food security Key messages from communities in Uganda

Incorporating nutrition within food security programmes delivers dividends

- Short, hands-on practical training and educational awareness on nutrition alters how women perceive food and diet, how and what they cook. Training raises awareness of the different nutritional needs of different family members e.g. pregnant women, children, those living with HIV/AIDS.
- Promotion of a wider variety of vegetables in kitchen gardens helps to significantly improve nutrition.
- Additional income generation activities allow for a greater variety of food to be included in a household's diet, including eggs, mushrooms, meat and fish.

Food and nutrition security programmes require a multi-dimensional approach

- A multi-dimensional approach to food and nutrition security that includes support for livelihood diversification, preventive health and education will yield greater dividends than addressing the issues separately.
- Improved farming practices such as the use of early maturing and higher yielding varieties, and training in agronomy need to be combined with other interventions, such as livestock, income generating opportunities, savings and loan schemes.
- Integrating basic preventive health care is an important starting point in food and nutrition security
 programmes. Unhealthy people are not able to work effectively or efficiently in their fields, while
 caring for sick children and taking them to clinics/hospitals diverts women's time from both
 household responsibilities and productive work.
- Sanitation and hygiene promotion, along with the provision of safe drinking water, significantly
 improves the well-being of families and enables them to focus on achieving food security and
 developing alternative livelihoods. Much can be done by communities themselves to improve
 sanitation and hygiene such as building latrines and bathing huts, keeping compounds clean,
 attention to the care and hygiene of children, animal care and management.

How men and women are experiencing the impacts of climate change on food and nutrition security differently

Adaptation strategies evolving at a community level to cope with the impacts of climate change on food and nutrition security can have negative consequences for women.

Tension between food crops and cash crops

In the communities visited, women are responsible for providing food for the family and hence women's priority is for food crops. Men's priority is to earn money and thus their priority is cash crops. With reduced rainfall and a growing season that is concentrated into a few months, there is a risk that conflict between the demand for food and cash will compromise food security. This is especially the case where land and/or labour are scarce and where women have no control over decision-making on what crops to grow, as is the case in many polygamous households.

Increased labour demand on women

- As the production season is now concentrated into a few short months and with women responsible for almost all of the cultivation cycle (planting, weeding, harvesting, post-harvest management, and processing), there is an increased labour burden on women.
- The strategy of expanding the land area brought into cultivation in order to cope with uncertain rainfall increases the workload of women. As a result, women's ability to hire labour is crucial, hence the need for access to loans. In some situations, women are able to come together to pool their labour and help each other.
- The absence of technology either for agriculture or food processing exacerbates the workload for women and limits their options on adding value to their produce. Lack of capital is cited as a primary reason for households not investing in technology.
- Poor diet and low nutritional levels, combined with poor hygiene, sanitation and malaria results in women spending up to a week per month caring for the sick.
- A benefit of improved farming practices such as planting in rows is that some men will assist with weeding using a hoe but will not weed by hand which the broadcasting/seed scattering method necessitates.

How men and women are experiencing the impacts of climate change on food and nutrition security differently

Decision-making and ownership

- Lack of food and money in a household causes problems between couples, and there is often hostility if the woman asks her husband for money.
- In polygamous households, men decide which land a woman will have to cultivate food crops. This
 decision is not usually taken until the rains arrive which makes it difficult for women to plan, results
 in late planting and a risk of reduced yield.
- Women do not own land unless they buy it themselves; men generally refuse to give women additional land to cultivate, especially in polygamous households. In such situations women try to rent land or borrow from a brother or other family member to feed the family.

Conflict over assets and resources, gender based violence (GBV)

- Gender based violence can be linked to land and access to land. Women point to conflict and hostility in the household over decision-making during the busy cultivation and harvesting period. In such situations many women focus on developing a kitchen garden where they have full ownership of the produce.
- Women's organisations highlight the seasonal dimension to gender based violence, with a high increase at harvesting time which they believe is intended to deliberately alienate women from land and give men control of the harvest. Women are sometimes thrown out of the house at this time.

Reduced share of food for women

Women have seen their own share of food decline from a situation where food could be divided equally between men/boys and women/girls. In situations where food is limited, women prioritise feeding children and men first, reducing their own food intake.

Productivity

Households where the man and woman plan together and are in harmony are the most successful households in terms of food and nutrition security.

How men and women are experiencing the impacts of climate change on food and nutrition security differently

Education

- The main expenditure for women is school fees and related school costs, which people say are increasing year on year. Many men do not contribute to paying school fees but previously the twice-yearly harvest enabled women to feed their families and pay school fees when the term began. In places where there is now only one season, mothers say they worry about whether or not they will be able to pay school fees. There is a social stigma associated with children not going to school, which appears to be felt more acutely by mothers.
- Poor yields from agriculture mean parents are promoting alternative livelihoods as options for their children, with many aiming to send their children to secondary school or to vocational training institutes.
- Sensitisation of young men on gender issues may work better as youth are more responsive to considering equal roles and responsibilities between men and women.



"I would rather be a man than a woman because women work a lot harder"

Scovia Nambeiza, Gwero village, Kayunga district

Spreading the risk How households and communities are responding to the challenge of climate change

Smallholder farmers, both women and men, are innovating at a grassroots level and adapting to climate change by identifying strategies to deal with the changes in the climate:

- Improved land use and management with training, couples are consciously planning how to use the assets they have more effectively. For example, using all the land they have and growing a few different crops when previously they may have only grown one crop and used only part of their land.
- Cultivating larger land areas where feasible, e.g. using their own land, renting land, borrowing unused land from family members to try and counteract the effects of reduced yields due to unpredictable rainfall.
- Early preparation of land so that farmers are ready to plant when the rain comes.
- Use of drought resistant seed and early maturing varieties ('short term' crops).
- Intercropping to maximise labour and land, and to spread risk, e.g. planting both maize and cassava so that if the cassava rots from too much rain, there is a chance the maize will produce a good yield.
- Reducing the range of crops grown to include only those that are likely to be reliable; moving away from cash crops (cotton, tobacco) to using food crops as cash crops.
- Combining the harvest of a number of farmers together in a community so that it can be stored and, if necessary, sold at a higher price.
- Diversifying from arable agriculture into livestock (goats, pigs and poultry).
- Developing small businesses with the support of village savings and loans.
- Migration may be an option for some young men but even this possibility can be constrained in areas of conflict.



"Some people may have planted already and when it rains they plant again and at a time when a lot of rain is expected, then sun shines but because the sun comes after all the planting has been done, most of the plants either don't germinate at all or others do germinate but later wither away. And when we plant at a time when there are heavy rains, it is another challenge" **Rita Nanumddu, farmer, Kafumu village, Mpigi district** Unless men are encouraged to undertake a greater share of the responsibility for household duties and food production, climate change will contribute to greater inequality between men and women.

Diversification and income generation

Different income generation options are pursued by men and women. The majority of men's activities relate to establishing small business and using skills, whereas income generation by women tends to be confined mainly to food-related activities.

Activities of Men

- Bricklaying
- Short-term crops e.g. soya, ground nuts, beans
- Cash crops
- Second hand clothes
- Coffee selling to dealers
- Carpentry
- Building
- Butchery
- Buying and selling fish
- Men with bicycles engage in petty trading.

Activities of Women

- Marketing food crops
- Making breads
- Small scale commercial farming e.g. Irish potatoes, beans
- Selling food crops
- Selling goats
- Buying cassava in the field, processing it and selling it on
- Brewing beer from cassava
- Handcrafts
- Women collect firewood in community forest reserves and travel long distances to sell in the neighbouring districts – with long term health implications.

The value of a climate justice approach Participation, transparency and accountability in action

The Foundation's work is centred on the seven Principles of Climate Justice, one of which is to **ensure that decisions on climate change are participatory, transparent and accountable.** From discussions with networks and groups in Uganda, some key themes emerged on the role of group participation in promoting transparency and accountability.

Rights and decision-making

Participation in a group means that decisions at general meetings are taken by the group, and every member has rights that are embodied in the group constitution. All members have rights to group assets e.g. produce from group gardens.

Harmony

Working in groups brings people together and promotes harmony in villages, helping farmers to cooperate and learn from each other. The experience of working in a group results in increased confidence among members, who are no longer afraid to speak in public.

Advocacy and voice

Coming together in groups and networks facilitates advocacy and a collective voice. For example, when farmers share common problems such as pests or disease epidemics, a network or group can approach the authorities about the widespread problem. It is much more difficult for an individual farmer to get a response. Networks are usually seen as apolitical and hence can represent the interests of their members. Additionally, there is increasing collaboration with local government in designing and planning programmes, and involving officials in monitoring visits.

Supporting livelihoods

Through participation with others, farmers can practice collective buying of inputs and distribute these to satisfy the varying needs of different farmers. Collective selling helps sustain the market for buyers when produce can be collected at a central location. A group or network can negotiate prices on behalf of members and organise transport which can be very expensive for individual farmers. Shared training and experience can promote positive competition between farmers. Most importantly, groups provide guarantees for individuals to access loans.

The value of a climate justice approach Ensure gender equality and equity

The Foundation's work is centred on the seven Principles of Climate Justice, one of which is to **highlight gender equality and equity.** Women's leadership is linked to women's empowerment and empowering women will lead to gender equality. From discussions with men and women in Uganda, some key messages emerged on the benefits of women's leadership and participation at a grassroots level.

Having women in leadership positions brings a range of benefits:

- Including both women and men in leadership gives voice to the whole village women will identify women's needs and men will identify men's needs.
- Leadership helps women to gain confidence in speaking out and controlling meetings in a constructive way. This counteracts perceptions of women as subordinate, uneducated and shy.
- When women participate, information passes quickly to other women who then discuss issues among themselves.
- Women can point out the mistakes of others if they are in a leadership position; otherwise they often have to keep quiet.
- Women in leadership positions earn the respect of the community.
- Women in leadership positions are seen to reduce conflict and dishonesty.
- Women are seen, by some men, as adopting new ideas quicker than men.
- Women in leadership positions make men more accountable to women.

The value of a climate justice approach Harness the transformative power of education for climate stewardship

The Foundation's work is centred on the seven Principles of Climate Justice, one of which is to harness the transformative power of education for climate stewardship.

School fees are the main priority expenditure for farming households, reflecting the value placed on education within communities. Parents, particularly mothers, are insisting that their children go to school so that they will not be entirely dependent on agriculture for their livelihoods. Linked to this is a demand for vocational training to learn marketable skills.

Education on agricultural practices such as intercropping, drought resistant seeds and early maturing varieties is important in helping farmers to adapt to climate change.

There is a demand by women for adult education. Women want practical education e.g. they want to be able to read letters. Men are also interested in adult literacy but say they would be ashamed to participate in adult education in front of women, prompting the need for separate lessons.

Local communities highlight how a literate community is easier to mobilise, with more members able to offer constructive ideas, with the old leadership gradually being replaced by a literate leadership.



Acknowledgements

This paper is based on fieldwork carried out in September 2012 in the districts of Yumbe, Nebbi, Arua, Mpigi, Mityana and Kayunga in Uganda. The Foundation would like to thank the staff of Gorta, AFARD, Vi Agroforestry, Osukuru United Womens Network, Rural Women in Development Network (WORUDET) Pader, Concern Worldwide and Self Help Africa for facilitating the visit. Special thanks to the communities who gave such a warm welcome and shared their experience so that others can benefit: Niziri Village, Nebbi District; Ndara and Asaroa villages in Arua District; Aliamu, Okuvuru and Kisimua villages in Yumbe; Kasejjere village, Mityana District; Mpigi and Kufumu villages, Mpigi District and Gwero village, Kayunga district.