
Gender & Development

ISSN: 1355-2074 (Print) 1364-9221 (Online) Journal homepage: http://www.tandfonline.com/loi/cgde20

# Looking within the household: a study on gender, food security, and resilience in cocoa-growing communities

Elizabeth Kiewisch

# Looking within the household: a study on gender, food security, and resilience in cocoa-growing communities

Elizabeth Kiewisch



*Many West African cocoa households experience a 'lean season' before the cocoa harvest, leaving them vulnerable to various events and issues which potentially cause stress – most notably food insecurity. This study, relying primarily on qualitative data from Côte d'Ivoire, examines how income allocation and intra-household dynamics affect household resilience during the lean season. Its findings indicate that in contexts in which women and men's income are separate and destined for different purposes in the household, the fact that men's income is often earmarked for individual spending creates particular problems for households in the lean season. Women's empowerment within the household is essential to improving intra-household resource allocation for resilience. In many contexts, this translates into development programmes supporting women to increase their production and ability to control income independently of men. However, a context of individual gendered agricultural production, and gendered spending obligations, such as West Africa, calls for a slightly different approach. Enhancing agricultural productivity is critical, but in addition it is important to encourage co-operation between women and men in households to result in joint decision-making in the interests of the household.*

*En África Occidental muchos hogares productores de cacao experimentan una temporada de escasez previamente a la cosecha, lo que los deja en una situación de vulnerabilidad ante distintos eventos y cuestiones que pueden provocar el estrés, principalmente frente a la inseguridad alimentaria. Apoyándose de manera particular en información cualitativa recabada en Costa de Marfil, el presente estudio analiza cómo la distribución de ingresos y las dinámicas relacionales al interior de las familias afectan la resiliencia de los hogares durante épocas de carestía. Los resultados dan cuenta de que en aquellos contextos en que los ingresos de las mujeres y los hombres se mantienen separados, siendo destinados a distintos propósitos familiares, el hecho de que el ingreso de los hombres sea reservado para gastos individuales provoca problemas particulares en los hogares durante periodos de escasez. Por ello, si se trata de mejorar la distribución de los recursos familiares para incrementar su resiliencia, resulta esencial el empoderamiento de las mujeres al interior de su hogar. En numerosos contextos, esto significa que los programas de desarrollo deban apoyar a las mujeres a fin de que su producción aumente y mejore su capacidad de controlar sus ingresos sin depender de los hombres. Sin embargo, en el contexto de África*

*Gender & Development*, 2015
Vol. 23, No. 3, 497–513, http://dx.doi.org/10.1080/13552074.2015.1095550

*Occidental, en que tanto las tareas de producción agrícola como los gastos obligatorios son determinados por el género, el enfoque tiene que ser ligeramente distinto. En este sentido, además de que es importante elevar la producción agrícola resulta crucial incentivar la cooperación entre mujeres y hombres al interior de la familia con el fin de que conjuntamente tomen decisiones beneficiosas para el hogar.*

*De nombreux ménages ouest-africains qui cultivent le cacao traversent une « saison de soudure » avant la récolte du cacao, ce qui les met en situation de vulnérabilité face à divers événements et problèmes susceptibles de causer un stress — surtout l'insécurité alimentaire. Cette étude, qui se base principalement sur des données qualitatives provenant de Côte d'Ivoire, examine l'incidence qu'ont la répartition des revenus et la dynamique intra-ménage sur la résilience du ménage durant la saison de soudure. Ses conclusions indiquent que, dans des contextes dans lesquels les revenus des femmes et des hommes sont séparés et destinés à différents usages au sein du ménage, le fait que les revenus des hommes soient souvent assignés à des dépenses individuelles crée des problèmes particuliers pour les ménages durant la saison de soudure. L'autonomisation des femmes au sein du ménage est essentielle pour améliorer la répartition des ressources au sein du ménage en vue de la résilience. Dans de nombreux contextes, cela se traduit en programmes de développement qui aident les femmes à accroître leur production et leur aptitude à contrôler leurs revenus indépendamment des hommes. Cependant, un contexte de production agricole individuelle et d'obligations de dépenses basées sur le genre, comme celui de l'Afrique de l'Ouest, demande une approche légèrement différente. Il est crucial d'améliorer la productivité agricole, mais il est aussi important d'encourager la coopération entre les femmes et les hommes au sein des ménages pour parvenir à une prise de décisions qui profite au ménage.*

*Key words:* intra-household; gender; resilience; food security; seasonality; expenditures



## Introduction

### *Vulnerability and seasonal stressors*

> *At certain times of the year, yes, it is difficult to get food due to lack of money. I purchase food through a loan, since there is no money left from cocoa.* (Interview, Divo, 11 November 2013)

In many West African rural communities, a majority of the population relies on agriculture for its livelihood. However, multiple factors often converge to create a 'lean season'. Many rural households experience recurrent seasonal shortages when the previous season's harvest has been consumed or sold, especially if yields are low or if crops fail. Chronic seasonal vulnerability can result in asset depletion, food insecurity,[1] and unsustainable debt cycles that keep households in poverty, limiting their potential for resilience. Indeed, poorer households are most at risk to both major crisis and recurring stressors.

Resilience can be understood as an individual's or household's ability to mitigate the negative impact of shocks and stresses (USAID 2015, 1), access to sufficient resources is essential to households' short- and longer-term welfare. Seasonal food shortages threaten a household's well-being in the immediate future. In response, the household may sell off productive agricultural assets to purchase food, but meeting present needs in this way reduces the likelihood that the next harvest will be successful, since seeds, fertilizers, tools, and machinery have been sold. This makes these households less able to weather future shortages. When we think about resilience, therefore, it has to be understood in the context of whether an individual or household has access to sufficient resources at critical times.

In West Africa, agriculture forms the backbone of the rural economy. The southern, forested regions of Côte d'Ivoire and Ghana are global cocoa-growing hubs, providing nearly half of the world's production. In addition to cocoa, coffee and rubber are the main cash crops, providing the bulk of household income. Food crops, including rice, cassava, plantains, and yams, both supplement household income and provide for home consumption.

Chronic vulnerability is often considered a problem in subsistence agriculture and semi-arid areas, yet cash crop communities in these areas also experience recurring shortages. Through interviews with farmers and key informants, this research has found that cocoa farmers report difficulty in meeting food needs in August and September, and sometimes as early as July. During this time period, two economic stresses converge: staple crops run out, along with money from cocoa, before the next harvest. Many food crops cannot be harvested in the July to August dry season. The main cocoa harvest, which provides the bulk of farmers' income, typically starts in September and October, while a smaller harvest takes place in May and June. Many farmers are unable to bridge the income gap leading to the main cocoa harvest. However, investments are needed for the next crop cycle at this time. During the lean season, many farmers report buying food on credit, showing economic strain. They also reduce the quality or diversity of food consumed, and even skip meals entirely.

Consequently, food insecurity is not uncommon at the household level. According to the International Food Policy Research Institute (IFPRI)[2] ranking on food security, Côte d'Ivoire's position is classified as 'serious', with 21 per cent of the total population undernourished (Von Grebmer *et al*. 2014, 41). Food insecurity is not limited to the more arid, northern regions of Côte d'Ivoire. While caloric deficiency can be as low as 5 per cent during the cocoa harvest season (data from Management Systems International (MSI) 2013), levels during the lean season could be closer to 50 per cent. One study in the coffee sector in Guatemala (Root Capital 2014, 13) found that food insecurity levels in one co-operative rose from less than 5 per cent to above 60 per cent in the lean season. Table 1 shows the stunting rates of children, a key indicator of chronic malnutrition, in cocoa-growing regions of Côte d'Ivoire and Ghana.

Often, food scarcity affects women more severely than men. Women and girls are often the first to reduce their food intake in times of scarcity, and therefore suffer more severe

*Table 1: Stunting in Côte d'Ivoire and Ghana's cocoa-growing regions*

| Cocoa production area | Stunting rate (% of total children) |
|---|---|
| Côte d'Ivoire | |
| West | 34 |
| Centre-West | 30 |
| South-West | 29 |
| South | 29 |
| Ghana | |
| Ashanti | 27 |
| Western | 27 |

*Source*: *De Vries et al.* (*2012*, 8–9).



health consequences. As they are primarily responsible for meal preparations and household food procurement, women may also be under more pressure than male household members to exhaust their own productive assets to meet household needs.

### *Resilience and intra-household dynamics*

Development interventions aiming to increase resilience often focus on individuals' or households' ability to weather shocks and stressors by accessing resources at critical times. However, relatively little attention has been paid to the use of resources over time for resilience, or to the question of whether available resources are used efficiently. In the context of cocoa-growing communities, a one-time yearly influx of cocoa income intersects with recurrent seasonal shortages. This raises the question of whether households make the best possible use of their income from a resilience perspective.

The assumption that households are a 'black box' within which members operate as a unit has increasingly come under scrutiny, with significant implications for households' resilience. Numerous studies (see e.g., Duflo and Urdy 2004; Quisumbing and Maluccio 2000) have found that households do not, in fact, operate as a unit. Optimal efficiency in the distribution of resources within the household cannot be assumed. In fact, the use and distribution of income within the household is the outcome of a negotiation between household members with separate but inter-connected income streams, and with differing priorities and goals. However, this does not mean that all adult household members have the same experience of being able to generate and command independent sources of income that they manage autonomously. In fact, the extent to which household members contribute to these expenditures is continuously negotiated through a process of bargaining.

Gender dynamics are central to the ways household members earn, control, and allocate resources, and women typically have less power in bargaining processes than men. Gender roles and relations influence the productive activities an individual can undertake, his or her access to the resources needed for the activity, and freedom to manage the income from livelihood activities. Men and women contribute to their household's livelihood in different ways, and have different, gendered obligations to meet. The bargaining process that determines income contributions within the household is itself influenced by gender, defined within the broader social context. The bargaining process contains elements of both co-operation and competition (Sen 1987). In terms of outcomes, while some arrangements may benefit the whole household, others may cause one household member to lose out while another gains. Which arrangement is adopted – and which household member benefits from it – depends on their relative bargaining power. Men and women have different levels of bargaining power because of their social roles and responsibilities, their relative economic assets, and the disadvantages and risks they face if they do not co-operate and contribute.[3]

In this article, I explore how these gendered bargaining dynamics play out in a cocoa-growing context, and how they affect households' and individuals' resilience to seasonal shocks and stresses. By looking within the household, I am able to explore how gender dynamics affect seasonal vulnerability.

Gender and development research in various contexts has resulted in a diverse picture of different marital and intra-household patterns of roles and responsibilities. It has tended to emphasise the importance to women, and their dependants, of increasing their ability to control assets independent of men, challenging norms of sharing and joint interests in a context of gender inequality. In the West African context, although women are often able to retain control of their own, separate livelihood activities, their obligations towards the household is intricately linked to their household's and spouse's expenditure decision-making. The research discussed here explores the complex reality of intra-household bargaining in cocoa-growing households in Côte d'Ivoire and other West African contexts, and highlights some of the implications for development policymakers and practitioners focusing on building resilience. It makes a contribution to the gender and development literature on women's empowerment and gender equality, emphasising the limits of a focus on women's autonomy in households facing seasonal stresses and shocks, and the potential of collaborative approaches.

## The research

The primary source of data for the study on which this article draws is qualitative, semi-structured interviews and focus group discussions, conducted in four different regions of Côte d'Ivoire (Divo, Soubré, San Pedro, and Abengourou). The research was conducted between September 2013 and February 2015, through a series of site visits sponsored by the World Cocoa Foundation (WCF).[4] Six key informant interviews, 21 farmer interviews (12 women, nine men) and five focus group discussions with farmers (two all-male, two all-female, and one mixed) were conducted. Interview sites covered a broad geographic range within the cocoa-growing regions of Côte d'Ivoire to account for significant regional cultural variations. The sampling method used for the interviews and focus groups was purposive, relying on criteria that included the household's agricultural production and income level as well as the respondent's marital status. These criteria controlled for a range of factors predicted to influence intra-household dynamics according to key informant interviews. Individual interviews focused on household livelihood strategies, especially agricultural production and investments, as well as decision-making processes and food security status. Focus group discussions addressed typical gender norms, roles, and responsibilities, as well as income management and expenditures. All quotes are translated from French.

In addition, the study draws on quantitative data from the WCF's Cocoa Livelihood Programme's (CLP) evaluation, collected by MSI (2013) to provide background information and validate and quantify qualitative conclusions. For this study, an independent analysis of the raw data was conducted. The data-set included 2,770 respondents, 22 per cent of whom are female and 78 per cent male, from Côte d'Ivoire, Ghana, Nigeria, and Cameroon. While survey respondents included only cocoa farm managers, the data concerned the households' production as a whole. Further secondary data from desk research was used to build the theoretical framework, triangulate and complement findings, and investigate examples of promising interventions to draw programmatic conclusions.



## Defining limited sharing obligations in an agricultural context

### *What's mine is mine? Separate incomes within the household*

> *I lend each of my wives a parcel of the land I own for them to grow vegetables. We eat the vegetables at home, and my wives sell what is left for their own small expenses.* (Interview, San Pedro, 16 November 2014)

Agricultural production in cocoa households is intricately bound to gender roles and relations. Women are primarily responsible for food crop production, while cocoa is, by and large, considered a 'man's crop' – that is, a lucrative cash crop, which yields profits controlled and disbursed by the male household head. Women constitute on average just 25 per cent of cocoa farmer owners in West Africa, while the rate in Côte d'Ivoire is significantly lower (Dalberg Global Development Advisors 2012, 30). However, women are important actors in the cocoa value chain. They often work as family labour, and provide close to half of cocoa production labour. Women are typically most heavily involved in cocoa harvest and post-harvest activities, including pod-breaking, bean fermentation, and transportation, as well as plot maintenance and weeding. As the primary producers of food crops, they additionally provide 85 per cent of food crop labour, primarily for home consumption (Dalberg Global Development Advisors 2012, 30).

Although it is not uncommon for households to have a single, joint family plot, men and women in the same household often farm separate plots of land with different

*Table 2: Average household annual income by source, converted to US dollars (data from MSI 2013, showing 5% trimmed means)*

| Total annual income (US$) | Cocoa income (US$) | Non-cocoa crop income (US$) |
|---|---|---|
| 4,843 | 1,245 | 435 |

crops, with implications that extend beyond the field. Women face more difficulties accessing agricultural land to cultivate, and many have precarious tenure of the plots they do control, due in large part to discriminatory inheritance laws. While some women are landowners, others have 'access-only' rights (usufruct rights) to cultivate a plot of land their husband owns and allocates to them. These land constraints limit many women to cultivating annual crops, mainly food crops and particularly vegetables, which are seen as 'female' crops. Of the women interviewed for this study, only those who described themselves as owners of the land cultivated perennial cash crops such as cocoa.

Both men and women within the household typically control the income from the crops they manage or own, whether cash crops or food crops. Overwhelmingly, spouses and adult household members describe their incomes as separate. Ownership and management, rather than labour inputs or time allocation, are key predictors of income control. Despite their significant contribution to cocoa production, women working on their husband's cocoa farms are not entitled to claim cocoa income. This study further confirmed the widespread phenomenon of cash crop marketing being dominated by men and that of food crops by women, following gendered production trends.

Due to differences in agricultural production, men and women's relative income levels differ significantly. Households earn an average of US$1,245 annually from cocoa, compared to $435 from non-cocoa crops (typically food crops), as illustrated in Table 2. Unsurprisingly, given women's limited production potential, a study conducted by CARE Côte d'Ivoire (2014, 42) found that their income was on average less than one-third of men's, at $157. Of course, women's lower income pattern must not be considered a generalisable truth, but rather an emerging pattern.

The following section will look at how household members negotiate relative contributions to joint household expenses, and considers what implications men and women's earning patterns have for these negotiations, building on the notions of bargaining power explored above.

### Who pays? Defining and negotiating limited sharing obligations

> *You can't ask the men for money once the cocoa* [income] *is out. They have none! Then it is up to us* [women]. (Focus group, Abengouros, 17 February 2015)

While each household member managed income from his or her own crops, he or she also had obligations to the household and contributes to common expenses. An individual's income was subject to limited sharing obligations to meet these common expenses. Farmers and key informants interviewed for this study described clear patterns of financial responsibility, though the specific responsibilities vary by household. Heads of household – most commonly men – reported that they were typically responsible for larger, one-time expenses, including school fees, house construction and maintenance, or medical fees. These expenses mimic cocoa income patterns that produce relatively large, single payoffs at harvest.

A much smaller proportion of household income was derived from food crops. Women, as the primary producers of food crops, tended to be responsible for a smaller subset of household expenditures. They assumed recurring household expenses such as soap or coal, which correspond to the longer, more continuous, but lower-return, production cycle of food crops.

In short, expenditure responsibilities are linked to production and income-earning potential. High earners (typically men) took on larger expenses and low earners (typically women) met smaller requirements.

Once a household member's obligations had been met, a portion of his or her income can be kept for individual use, if there is any left over. One male focus group participant stated:

> *We ensure that there is some food for the family, and provide children's education, but there is still some money saved for our own needs.* (Focus group, Soubré, 14 November 2013)

Individual expenses ranged from money transfers to extended family members to 'prestige goods' such as jewellery, alcohol, or cigarettes.

The limits of sharing obligations were not rigid, but continuously negotiated, whether explicitly or implicitly. Sharing arrangements were often modified to match an individual's earning potential. One woman, who cultivates five hectares of cocoa while her husband cultivates three, stated:

> *I use my money from cocoa to pay for the household needs, and to pay for the children's schooling. Sometimes, I also help my parents. My husband uses his income to help his children who are abroad, and to get by in town.* (Interview, Soubré, 14 November 2013)

In this case, the respondent's income from cocoa appeared to influence her sharing obligations, shifting her responsibilities into traditionally male expenses such as children's school fees. Sharing obligations are also negotiated across time, according to seasonality, availability, and need: whichever household member has income available becomes responsible for meeting household needs. As another female focus group participant explains:

> *My husband will buy the food we need if he has money. If he doesn't have money, I will buy the food if I am successful selling my vegetables on the market.* (Focus group, San Pedro, 15 November 2015)

To maintain the boundaries of limited sharing obligations, household members do not divulge income amounts. When asked about her husband's expenditures, one interviewee responded:

> *He is spending, but as I don't have an idea of his pocket, I am not informed of his expenses.* (Interview, Soubré, 14 November 2013)

If income amounts are known, other members of the household can make claims on the money. As one focus group participant colourfully stated:

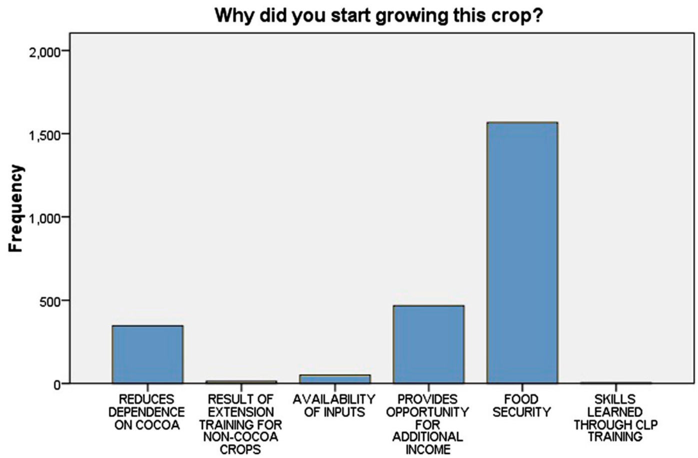
> *If our wives know how much money we have, we are sunk!* (Focus group, Soubré, 14 November 2013)

The same male focus group participant further explained that if men's wives knew how much money was available, they would be in a position to make demands on the money. For women, secrecy around income was seen as essential to safeguarding earnings, as they feared they would be asked to take on additional financial responsibilities if their income were known. Secrecy around income was, therefore, an important component of maintaining the 'limits' of limited sharing obligation. Without revealing how much money was available, household members were able to contribute and retain income at their own discretion.

Secrecy creates a competitive dynamic where household members seek to protect their own financial interests. Participants in the study sometimes urged their spouse to take on additional joint financial responsibilities; one male focus group participant stated that he used different 'strategies' to get his wife to pay for more of the household expenses, for example by giving her a small portion of his cocoa income to encourage her to pay for household needs later in the season. This example clearly demonstrates that households do not operate as a single unit, and cannot be considered a 'black box'. Household members have varying interests and priorities, and can be motivated to safeguard their individual income rather than pay for joint household expenses.

Limited sharing obligations are applied differently to food crops, however. Food crops are grown primarily for home consumption, and are mostly used by the household in kind instead of sold. Indeed, a majority (about 65 per cent) of cocoa farmers cited food security as their primary motivation for food crop production, as shown in Figure 1 (data from MSI 2013). Food crops are therefore first used for home consumption, with only the surplus sold. Because food crops are first shared within the household, they are sold only once the household's needs are met.[5] The food crop producer therefore has less individual control over how much he or she contributes or retains. This influences both the

*Figure 1: Motivation for food crop production (data from MSI 2013)*




household's food security status and the level of discretionary income available to the food crop producer, typically women. Women relying on food crops for their income therefore have less scope to retain a discretionary amount of income, as well as less income overall.

The limits and boundaries of sharing obligations are often defined in male-dominated settings. Male heads of household are commonly seen as the 'chiefs' and 'providers'. They are responsible for the household – including its income management and expenditure decision-making. CARE Côte d'Ivoire (2014, 51) found that 85 per cent of women surveyed in Côte d'Ivoire did not consider their opinion essential to expenditure decisions, against only 35 per cent of men. Group discussions revealed that household harmony and mutual agreement is considered a key benefit of established sharing arrangements. This suggests that women may be reluctant to upset established gender dynamics by challenging their spouses' individual spending. They may fear negative repercussions, such as gender-based violence within the household. The limits of sharing obligations and the contributions that each member makes to household expenditures are therefore negotiated within a context of unequal power relations, where men have a greater say on how to spend – or retain – their income.

Money is intrinsically tied to power. In line with notions of men as 'chiefs' of the household, focus group discussions revealed that husbands fear their wives will lose respect for them if they know how much money is available, and when it will run out. Research findings further indicate that money can increase decision-making power within the household (CARE Côte d'Ivoire 2014, 48). This is, after all, the theory which underpins the many thousands of development projects which claim to empower women by supporting entrepreneurship. One female interviewee explained that when she brought more money to the table, she had more influence on a joint construction project with her husband.

Given the unbalanced earning potential of male and female household members seen above, men tend to have greater amounts of income available. Their larger income consolidates their position as decision-makers for household expenditure, and reinforces patriarchal norms. Unequal earning potential gives men a more powerful position in negotiations on sharing obligations. However, it is important to nuance this finding according to the cultural context. According to key informants, women can in some contexts exert greater power within the household than they display in public, and leverage cultural norms of the male 'provider' to safeguard most or all of their own income for individual use. For example, women may refuse to take on a typically 'male' expense, despite having the means to do so, because it falls outside their traditional scope of responsibility.



## The price of limited sharing: implications for food security and resilience

### *Limited sharing obligations and partial insurance*

> *Our wives sometimes spend money on 'pagnes'* [cloth] *without thinking of tomorrow's needs. Some men also spend money on their girlfriends instead of buying fish.* (Focus group, Abengourou, 17 February 2015)

When household members do not divulge income amounts to each other, financial planning is less effective. Households cannot make optimal livelihood decisions as a unit. Individuals are entitled to discretionary spending which, because of the boundaries of sharing obligations, does not need to be put towards household welfare. Money can be spent on individual goods rather than saved for future needs in the lean season. In a context such as that of cocoa-growing households, where earnings are seasonal, this results in only partial insurance against expected or unexpected shocks. Such spending patterns can exacerbate seasonal vulnerability to shocks and stresses. One female interviewee in our research stated:

> *Once my cassava is out of the ground, I have to manage money carefully* [because there is no more income]. *The money from cocoa is gone. It is especially a problem when children get sick, which can be a big expense that takes up all the money.* (Interview, Soubré, 14 November 2013)

Further, individuals often sought to protect their own financial interests by avoiding household expenses. This exacerbated seasonal food insecurity trends. Key informant interviews as well as focus group discussions revealed that alcohol consumption and other personal spending after the cocoa harvest remains prevalent, despite the fact that the lean season had created unmet needs of various kinds which still needed addressing. One female focus group participant shared:

> *Oh, the men, once the cocoa harvest comes in, they disappear and you don't see them for days, until the money runs out!* (Focus group, Abengourou, 17 February 2015)

Individual spending is not necessarily condoned and seen as legitimate, but it is nevertheless facilitated by the fact that obligations to share are limited. While spending on non-essential goods was by and large morally condemned, it remained a common occurrence. This held particularly true for men, who had the power to negotiate sharing terms which were more favourable to them, based on their greater influence within the household, and often had more leeway for discretionary spending. Despite the fact that women also engaged in individual spending, they tended to spend proportionally more on food and household welfare, such as health or education. This supports the notions of women's greater altruism which underpin countless development projects promoting women's control of financial assets.

A World Bank, Food and Agriculture Organization, and International Fund for Agricultural Development study (Ashby *et al*. 2008, 2), for instance, found that a \$10 increase in women's income would require a \$110 increase in men's income to bring about the same child health and nutrition benefits in the Ivoirian context. Esther Duflo and Christopher Urdy (2004) focused research on spending patterns in the context of agricultural production shocks affecting either typically 'male' or typically 'female' crops, in their paper on intra-household resource allocation in Côte d'Ivoire. They found, predictably, that production shocks affecting 'female' crops, or crops which earn income typically spent on household expenses, significantly affect spending on food, education,[6] and health.

However, production shocks that affect cash crops or other typically 'male' crops have no impact on food expenditures, but affect individual spending. For instance, a favourable rainfall pattern for 'male' crops resulted in additional individual spending, but not in an increase in health expenditures, as these expenses were typically met by women. The household thus cannot be considered a unit, ensuring optimal spending on household needs; rather, gendered roles and responsibilities mean that women tend to spend proportionally more on the household.

### *Household income potential: cocoa and food crop productivity*

Limited sharing obligations impact cocoa-growing households' agricultural productivity. Where women have only partial or indirect benefits from cocoa, they lack motivation to increase cocoa productivity or quality. Women who are not farm owners typically have very limited access to cocoa income. When asked which of their household's crop production they would like to increase, female respondents who did not grow their own cocoa cited food crops, despite consistently recognising that cocoa was their households' most lucrative crop. Given women's extensive involvement in the cocoa cultivation process, this trend has implications for cocoa productivity.

Where women are not primary producers of cocoa, they are nevertheless essential actors in the cocoa 'value chain' (that is, the set of activities and actors that produce and transform an agricultural product, from cultivation in the field to consumption; for a full description of value chains, see Bolzani *et al*. 2010). Women's predominance in post-harvest activities, for instance, makes them essential to cocoa quality. However, women who do not benefit directly from cocoa production may be less willing to adopt new practices that would improve cocoa quality during the post-harvest process, especially if these are more time-intensive. Similarly, women are key actors throughout the cocoa production cycle, but they may not be willing to 'go the extra mile' to ensure increased yields by adopting or applying improved practices. Women may also be reluctant to pool their income with men's in a joint investment in agricultural inputs used for cocoa, which could improve yields. Limited obligations to share in these cultural contexts can therefore negatively impact cocoa productivity and quality as well as overall household income. However, further research would be needed to determine the extent and impact of this trend on cocoa productivity.

Seasonal income shortages can in themselves hamper agricultural productivity. Interviewees often reported having insufficient income to make desired farm investments, including hiring labour, or purchasing fertilizer or pesticides. Often, this is the result of unexpected financial demands that drain available resources. One female farmer reports:

> *Usually, my husband purchases inputs for the farm. This year, we had problems and didn't have enough money to buy them.* (Interview, Soubré, 13 November 2013)

Reducing seasonal income gaps by improving income allocation would increase agricultural productivity. One study, for instance, found that farm productivity could be increased by 10–15 per cent through more efficient intra-household resource distribution (Urdy *et al*. 1995, 407). Food crop productivity has particular implications for improved household food security. As food crops are primarily grown for home consumption, there is a direct link to seasonal food shortages. Several respondents stated that they experienced seasonal strain only when the growing season was unfavourable and the food crop harvest was low. Food crops further have an important role to play in smoothing income patterns, supplementing cocoa income due to the longer growing cycle. Figure 1 shows that additional income and reduced dependence on cocoa are the main secondary motivations for food crop production, after food security. It is, of course, true that if households can increase their agricultural productivity, resilience against shocks is far stronger, lessening the severity of the lean season.

## Programmatic implications and promising interventions

Limited sharing obligations prevent efficient income allocation across seasons by opening the door to individual decision-making about spending. Household-level financial planning has the potential to increase productivity, reduce seasonal deficits, and improve collaboration on joint productive ventures, such as cocoa production. It may sound draconian to imply that individuals should not retain money for their own independent use, and this does not necessarily mean that individual spending on, for example, socialising, is to be dismissed as waste or selfishness. Studies of the ways in which social capital is built up emphasise the importance of social activities in building relationships of reciprocity and trust, for example. Household members that share information and make decisions jointly can adopt a longer-term planning outlook and curb excesses. Collaborative decision-making curtails competitive behaviour. Individuals are no longer trying to retain their income for their own use when this is clearly against the interests of the wider household, but are instead contributing to agreed-upon, shared objectives.

Initiatives that focus on household financial planning, like Oxfam's Gender Action Learning System (GALS) methodology, limit the negative influence of limited sharing obligations through promoting collaborative decision-making. A study of GALS in Uganda (Farnworth *et al*. 2013) found that coffee-growing households made significant economic gains through participatory household planning. The coffee value chain itself saw improvements in quantity and quality due to improved collaboration. GALS participants reported increases in both agricultural output and food security through improved agricultural investments. GALS and other household-based development methodologies can similarly increase welfare and food security in cocoa-growing households. They can promote long-term gains in resilience through improved agricultural investments, strengthening the cocoa value chain.

Addressing gender dynamics within the household is central to improving resilience. Limited access to income and decision-making power present barriers to women's empowerment. Given their proportionally higher spending on food and health, increasing women's earning potential as well as decision-making power can have a positive impact on household welfare across seasons, both in the short and long term. However, it is important to note that cocoa is the primary source of revenue for many West African households, and men remain by and large the primary financial contributors to household expenses. Addressing gender relations – as opposed to women only – is crucial to promoting resilience through intra-household dynamics. Failing to include men in women's empowerment initiatives, especially income-generating activities, can have a range of detrimental effects, from inefficacity of interventions to increased gender-based violence.

CARE's Village Savings and Loan (VSL) Program demonstrates the efficacy of addressing gender dynamics for improved economic welfare. The VSL methodology promotes women's access to community-based loans while targeting men as allies. An evaluation study (Slegh *et al*. 2013) found that families combining savings and loans activities with mixed male and female discussion groups fared better economically than those involved only with savings and loans. However, promoting sustained changes for women's empowerment was a challenge. Deep-seated gender norms can remain anchored despite positive behavioural changes. A sustained focus on women's empowerment within the household through gender mainstreaming is essential to long-term success.



## Conclusion

Resilience is often determined by the access to resources – be they food, shelter, or income – at critical times. Many resilience programmes therefore focus on bridging the resource gaps that leave households vulnerable to shocks and stressors. Resilience interventions aim to increase or diversify household activities and assets to bridge these gaps, or to promote social safety nets in times of acute stress. This study suggests that in addition to such efforts, households' use of existing resources should be considered. The efficient use of resources across seasons can have a significant impact on resilience outcomes. While intra-household dynamics are clearly not the only factor to consider in promoting resilience, they are an important component.

In the highly seasonal context of cocoa-growing households, limited sharing obligations create bottlenecks for food security and household welfare. This results in partial insurance against seasonal shocks and aggravates seasonal food deficits. Women's reduced earning potential and scope of influence in the household is a limiting factor for resilience. Seasonal stresses can have significant implications for long-term household resilience, causing chronic food insecurity and preventing investments in productive activities like agriculture, perpetuating a cycle of chronic vulnerability. Understanding intra-household dynamics and how these affect income and expenditure decisions across seasons is an important component of initiatives aiming to promote resilience, including food security. These initiatives should consider both barriers to joint financial planning as well as women's empowerment.

*Elizabeth Kiewisch is a Leland Fellow at the Congressional Hunger Center working with the World Cocoa Foundation. Postal address: 2217 40th Place NW Apt 1, Washington, DC 20007, USA. Email: elizabeth.kiewisch@gmail.com*

## Notes

**1** Food security is the access to sufficient, safe, nutritious food to maintain a healthy and active life, in accordance with the 1996 World Food Summit. This study focuses on the consistent access to sufficient food, particularly during the lean season, as a key component of food security.

**2** IFPRI is a research centre that provides research-based policy solutions to sustainably reduce poverty and end hunger and malnutrition in developing countries. For more information, see http://www.ifpri.org/ (last checked by the author 9 September 2015).

**3** Women often face greater disadvantages and risks if they do not co-operate with household sharing arrangements. They tend to have fewer economic assets, such as land, and therefore have less livelihood options to rely on should their marriage become conflictual or fail. In addition, they are more vulnerable to gender-based violence, which can result from a refusal to co-operate. As such, women have less influence on household spending decisions, and are often compelled to contribute relatively larger shares of their income to the household (Agarwal 1997). Social norms by and large also tend to reinforce men's role as dominant within the household in the West African context.

**4** The WCF is an international membership organisation that promotes sustainability in the cocoa sector. WCF provides cocoa farmers with the support they need to grow more quality cocoa and socially and economically strengthen their communities. WCF's members include cocoa and chocolate manufacturers, processors, supply chain managers, and other companies worldwide, representing more than 80 per cent of the global cocoa market. WCF's programmes benefit farmers and their communities in cocoa-growing regions of Africa, South-East Asia, and the Americas.

**5** The definition of food needs can be subjective, and can vary according to the individual family's circumstances. Often, in the research context at hand, families aim to have sufficient amounts of staple crops to bridge the lean season gap without reducing food intake. They seek to minimise or eliminate food-related purchases. While a household's food needs can be satisfied through different strategies, for example by reducing the quality or diversity of food, the fact that food crops are shared in-kind tends to limit the individual's overall ability to control income from the crop, and the amount of discretionary income available.

**6** While men typically assume larger education expenses, most notably school fees, women also contribute to children's education through smaller expenses, for example through school lunches. Women may also take on educational expenses if no other income source is available, particular if educational needs arise when cocoa is not in season.

## References

**Agawal, Bina** (1997) '"Bargaining" and gender relations: within and beyond the household', *Feminist Economics* 3(1): 1–51

**Ashby, Jacqueline, Maria Hartl, Yianna Lambrou, Gunnar Larson, Annina Lubbock, Eija Pehu and Catherine Ragasa** (2008) *Executive Summary: Investing in Women as Drivers of Economic Growth*, Gender in A Sourcebook, Washington, DC: World Bank, FAO, IFAD

**Bolzani, Daniela, Soline de Villard and Jennie Dey de Pryck** (2010) *Gender and Rural Employment Policy Brief #4* Rome: Food and Agriculture Organization (FAO)

**CARE Côte d'Ivoire** (2014) *Analyse du Genre sur les Opportunités Economiques et les Obstacles Pertinents à l'Autonomisation des Femmes*, Care International Internal Document

**Dalberg Global Development Advisors** (2012) *Analysis of IFPRI (2002) 'Empowering Women and Fighting Poverty: Cocoa and Land Rights in West Africa'*, Dalberg Global Development Advisors Internal Document

**De Vries, Klass, Bonnie McClafferty, Marianne Van Dorp, and Bärbel Weiligmann** (2012) *Increasing Cocoa Productivity through Improved Nutrition – A call to Action*, Concept Brief, Global Alliance for Improved Nutrition (GAIN), Wageningen: Wageningen University and Research Centre

**Duflo, Esther and Christopher Urdy** (2004) *Intrahousehold Resource Allocation in Côte d'Ivoire: Social Norms, Separate Accounts and Consumption Choices*, NBER Working Paper 10498, Cambridge, MA: National Bureau of Economic Research

**Farnworth, Cathy, Melinda Fones Sundell, Akinyi Nzioki, Violet Shivutse and Marion Davis** (2013) *Transforming Gender Relations in Agriculture in Sub-Saharan Africa*, Stockholm, Sweden: Swedish International Agricultural Network Initiative (SIANI)

**Management Systems International** (2013) data from 'Cocoa Livelihoods Program: Phase I Evaluation/Phase II Baseline', author analysis

**Quisumbing, Agnes and John A. Maluccio** (2000) *Intrahousehold Allocation and Gender Relations: New Empirical Evidence from Four Developing Countries*, Washington, DC: IFPRI

**Root Capital, Multilateral Investment Fund** (2014) *Improving Rural Livelihoods: A study of Four Guatemalan Coffee Cooperatives*, Cambridge, MA: Root Capital

**Sen, Amayarta** (1987) *Gender and Cooperative Conflicts*, Helsinki: World Institute for Development Economics Research

**Slegh, Henny, Gary Barker, Augustin Kimonyo, Prudence Ndolimana, and Matt Bannerman** (2013) 'I can do women's work: reflections on engaging men as allies in women's economic empowerment in Rwanda', *Gender & Development* 21(1): 15–30

**Urdy, Christopher, John Hoddinott, Harold Alderman, and Lawrence Haddad** (1995) 'Gender Differentials in Farm Productivity: Implications for Household Efficiency and Agricultural Policy', *Food Policy* 20(5): 407–423

**USAID (United States International Development Agency)** (2015) *Resilience at USAID – Factsheet*, https://scms.usaid.gov/sites/default/files/documents/1867/06.30.2015%20-%20Resilience%20Fact%20Sheet.pdf (last checked by the author 15 October 2015)

**Von Grebmer, Klaus, Amy Salzman, Ekin Birol, Doris Wiesmann, Nilam Prasai, Sandra Yin, Yisehac Yohannes, Purnima Menon, Jennifer Thompson and Andrea Sonntag** (2014) *Global Hunger Index: The Challenge of Hidden Hunger*, Bonn, Washington, DC and Dublin: Welthungerhilfe, IFPRI and Concern Worldwide