

### **Gender Innovation Lab Agriculture Projects**

#### 1. Cote d'Ivoire Agricultural Support Project (PSAC) (2.0), World Bank

Working with the Ministry of Agriculture in Cote d'Ivoire, the World Bank is planning two impact evaluations as part of PSAC. The first proposed evaluation will be geared towards understanding how best to structure agricultural extension and training for crops with long prebearing periods (such as rubber) in the context of present-biased farmer preferences. The specific interventions within the scope of this evaluation will likely include the introduction of bi-yearly random checks of plant maintenance, complemented by 3 different incentive schemes (fertilizer subsidy, cash payment, or soft incentive). A further component of this evaluation will be the introduction of couples' agricultural best practices training, which will emphasize sharing of duties as well as intercropping of subsistence crops (traditionally managed by women) among rubber plants (traditionally managed by men). The research questions here will center around whether i) the increase in women's experience with rubber farming (from working alongside husbands) will increase women's take-up of rubber seedlings in the second period; ii) through working on a farmer team with their husbands, inter-gender negotiating ability in the rubber fields spills over into household negotiations, impacting women's bargaining power within the household.

The second proposed evaluation is on the impact of mechanization (specifically animal traction kits), a topic of particular interest for the cotton value-chain. In addition to measuring effects on farmers' yields and household incomes, the team will seek to conduct a more comprehensive analysis of impacts by additionally measuring effects on (i) children's literacy (through the channel of lower manual labor use due to mechanization) and (ii) the magnitude of intervention spillover effects on the income of women in the recipient households. Building on the results from the baseline survey, the team also plans to implement an add-on intervention on how best to address the shortage of hired labor in cotton production (e.g., through reciprocal labor groups or a voucher system, including priority access for female cotton producers), as well as a pilot on how to incentivize female farmers to become cotton producers. This pilot might include introducing a quota system in cooperatives/producer organizations, as well as informational media campaigns with different contents (e.g., transmission of information purely on economic returns of becoming a cotton producer with and without the inclusion of content explicitly addressing cultural/social norms hindering women's participation in cotton production).

#### 2. Cote d'Ivoire Employment for Women in Agro-Processing (OLAM) (2.0)

This project will consist of an in-depth quantitative and qualitative study of formal employment in the cashew processing industry in Côte d'Ivoire. There is a growing body of evidence, particularly from Sub-Saharan Africa, that extended kin networks lead individuals to engage in costly strategies to conceal income from their kin, leading to suboptimal economic outcomes. However, the current evidence comes from framed lab experiments rather than real-world

settings. The cashew processing industry offers ideal characteristics for evaluating the effects of this social pressure to redistribute income on female employees' workplace-level outcomes, motivation and incomes. It also offers the opportunity to study the effects of behavioral factors, such as self-control, on poor workers' income potential and welfare.

Moreover, this project will allow us to measure impacts on processing plants' overall productivity, welfare consequences to the social network as a whole of easing redistribution constraints, as well as the effect of increasing women's autonomy over their income on gender dynamics in the household. The anticipated interventions will include introducing direct deposit of wages into workers' private bank accounts; savings freezes and/or earmarking, and individually varying workers' paydays to maximize income confidentiality. The results of the study will add to our current understanding of the relationship between workplace performance and incentives in formal sector wage jobs in Sub-Saharan Africa.

\*Connected to PSAC Project

# 3. Democratic Republic of Congo Agricultural Rehabilitation and Recovery Support Project (PARRSA) (1.0), Government of the Democratic Republic of Congo, World Bank and Paris School of Economics

PARRSA seeks to revitalize DRC's agricultural sector by raising productivity and production, encouraging agro-industry, and improving marketing channels. The experimental impact evaluation will examine the project's regeneration of the market for improved seeds, the diffusion of improved farming practices through agricultural extension, and the improvement of rural roads infrastructure - analyzing how male and female farmers learn about new technologies and access markets.

### 4. Ethiopia Women's Agricultural Leaders Network (WALN) (2.0), USAID and ACDI/VOCA

This program provides business training and woman-to-woman mentorship and networking opportunities for agri-business women. For women entrepreneurs, lacking critical skills and role models/mentors regarding effective business behavior can be a significant barrier to participating in male dominated, higher earnings sectors. Even when women do participate in these sectors, these barriers prevent them from overcoming the gender gap in productivity and earnings. The evaluation will assess the impacts of participation in the WALN program on the abilities and performance of the beneficiary businesswomen as well as on their personal and business networks, including business literacy, cognitive and non-cognitive skills, and psycho-social, economic and networking outcomes.

### 5. Ethiopia Rural Capacity Building Project (RCBP) and Farmer's Innovation Fund (FIF) (1.0), Government of Ethiopia and World Bank

The RCBP focuses on improving and enhancing the delivery of agricultural extension service systems throughout Ethiopia. The evaluation will assess how training delivery agents and upgrading farmer training systems impact farmer productivity. The GIL is using in-depth data on farming practices to investigate access to extension services and identify ways to share

agricultural information with female farmers in order to narrow the gender productivity gap. A sub-component of the Rural Capacity Building Project, FIF is an intervention that involves farmers who group themselves to decide on training methodology options and innovative pilot approaches. The evaluation will assess the impact of the FIF on technology adoption and productivity. The RCBP also has a gender-focused sub-component, which was designed in response to the low turnout of female participants in other RCBP components. This project is intended to increase women's participation in extension services, enhance productivity by providing start-up capital for their group activity, and deliver training in agricultural production and commercialization.

#### 6. Ethiopia Food Security Program (FSP) (1.0), World Bank

This World Bank-funded program offered recurring loans to vulnerable households in food-insecure communities in Ethiopia. Initial analysis of program data suggests that the intervention had higher impacts for female-headed households, who enjoyed increased food security and diversified their economic activities by expanding to off-farm work.

### 7. Ghana World Bank Randomizing access to irrigated land and/or inputs at the household and spousal level (1.0), Government of Ghana and World Bank

Rural households in Sub-Saharan Africa face a number of binding constraints in agricultural producting, including access to quality land, irrigation, and complementary inputs such as improved seeds and fertilizer. Where households do not cooperate fully in their productive decisions, women may be further constrained in their agricultural activities by less access to inputs, services, and credit relative to their husbands. To address the needs of female and male smallholder farmers, the Ghana Commercial Agriculture Project (GCAP) supports a number of contract farming and "nucleus-outgrower" arrangements that partner small-scale farmers with larger entities that are able to provide access to inputs, markets, and land and irrigation services. In this context, we are carrying out a randomized control trial in partnership with GCAP and Ariku farms in the Upper East region of Ghana to study. The study combines two cross-randomized components.

First, access to an irrigated plot of land via rental arrangement with Ariku Farms will be randomly allocated among interested households. This will allow an estimate of the impact of access to irrigated land rental in a region where irrigation is relatively uncommon. Second, for all households who receive rental contracts and inputs or only inputs, either the husband or a wife will be randomly selected to be the sole "contracting member" who contracts with Ariku Farms to receive and pay for any land or inputs on behalf of the household. In a context in which men tend to have stronger access to productive inputs and women tend to have access only through their husbands, this component of the study will offer evidence of whether direct access for women alters production or consumption patterns in the household.

\*Formerly Ghana Commercial Agriculture Project (GCAP)

# 8. Ghana Out-Grower Contracts for Smallholders Rice Farmers in the Accra Plains Region (1.0), GADCO

WIENCO, one of the major rice producers in Ghana, has set up an outgrower program for smallholder rain-fed and irrigated rice farmers in the Volta and Eastern Regions of Ghana. Participants in the program are offered fertilizer, crop protection chemicals, extension services, and mechanization on credit and in exchange give WIENCO exclusive rights to purchase the smallholders' rice crop at the end of each harvest season. This study is a randomized controlled trial impact evaluation of the outgrower program with roughly 1,400 farmers of which 30% are female. Key research questions include (i) What is the economic and social impact of participation in the outgrower scheme on these smallholder farmers? (ii) Specifically, what are the impacts on technology adoption, knowledge transfer, productivity and profits, net indebtedness and credit constraints, the distribution of resources (e.g. labor and inputs) and income within the household, investment in the human capital of children (health and education), intra-household relationships, and income diversification? (iii) How are these impacts different for male vs. female farmers? This study is being carried out in partnership with the Ghana Commercial Agriculture Project (GCAP), the World Bank's Development Research Group's Agriculture and Rural Development Team, and Innovations for Poverty Action.

### 9. Niger Export and Agro-pastoral Market Development Project (PRODEX) (1.0), World Bank

PRODEX seeks to increase the value of targeted agro-pastoral export products, with a broader goal of boosting incomes and stimulating agricultural growth. The impact evaluation analyzes the effects of matching grants to farming and livestock groups for productive activities. The impact evaluation will offer evidence on whether targeted support to female farmer groups has a disproportionately higher impact on their farm yields and sales revenue.

# 10. **Niger Texting for Change: Mobiles, Messages and Savings (1.0)**, World Bank and Tufts University

This research project seeks to understand how mobile phone technology and other tools can be used to promote savings in rural Niger, with a particular focus on savings for an important religious holiday. In particular, the purpose of this research is to provide insights into whether SMS reminders about savings goals and the provision of lockboxes can increase women's and men's ability to save, thereby minimizing the need to sell other assets.

# 11. **Nigeria Feed the Future Nutrition and Livelihood Program, (2.0)** USAID and Catholic Relief Services

This project targets vulnerable households in Northern Nigeria, particularly female members, by providing financial products and in-kind asset transfers to assist them in moving away from subsistence agriculture and into the market. The key outcomes of interest for this evaluation include: intra-household resource allocation, women's economic empowerment, food security, diversified income and consumption, nutrition status of children, resilience, assets, social capital, intra-household decision-making, women's aspirations, and men's attitudes and behaviors

toward gender norms and roles. The study will contribute to knowledge about ways to promote social and economic empowerment for rural and vulnerable women facing severe mobility constraints.

\* Formerly Supporting Vulnerable Households for Accelerate Revenue and Earnings (SHARE)

### 12. Tanzania USAID Agriculture (2.0)

GIL is working with USAID contractors ACDI/VOCA (NAFAKA Project) and Africare (Mwanzo Bora Project) to develop and execute one or more impact evaluations with a focus on gender-differentiated outcomes. The NAFAKA Staples Value Chain Activity is a \$30 million project funded by USAID under the Tanzania Feed the Future (FTF) Initiative. NAFAKA's goal is to sustainably reduce poverty and food insecurity by increasing agricultural production and incomes for smallholder farmers. GIL is primarily focusing on the agricultural extension and private-sector-led out-grower components of NAFAKA. The Mwanzo Bora Nutrition Program's overall goal is to improve the nutritional status of children, and pregnant and lactating women in Tanzania. It achieve this goal, it focusses on strengthening government and local NGO capacity to deliver quality nutrition education and communication; and developing innovative scalable community-based nutrition services and social behavior-changing education to reduce child stunting and maternal anemia. GIL is primarily focusing on the community-based behavior change education to improve take-up of breastfeeding by engaging men, women and community leaders.

#### 13. **Uganda Orange Flesh Sweet Potato Project (2.0),** BRAC and World Bank

This project takes an integrated approach to improving nutrition and food security for children, adolescent girls and women of childbearing age by increasing smallholders' adoption, production and consumption of a nutrient-rich staple crop. The impact evaluation will examine the relative effectiveness of different interventions addressing market and nonmarket barriers, including agriculture extension and input provision, produce marketing services, health and nutrition fora, growth monitoring and promotion (GMP) for under-5 year olds, and conditional food transfers. The evaluation will also study credit, time inconsistency, and price risk barriers that smallholders face in adopting nutrient-rich crops, by offering credit, input vouchers, and insurance.