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AIRS ETHIOPIA

GENDER REVIEW OF IRS OPERATIONS

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ACRONYMS

| CB IRSCommunity-based IRSCPCultural Practice, LLCECEnvironmental ComplianceECOEnvironmental Compliance OfficerFMOHFederal Ministry of HealthHEWHealth Extension WorkerIRSIndoor Residual Spraying |
|---|
| ECEnvironmental ComplianceECOEnvironmental Compliance OfficerFMOHFederal Ministry of HealthHEWHealth Extension Worker |
| ECOEnvironmental Compliance OfficerFMOHFederal Ministry of HealthHEWHealth Extension Worker |
| FMOHFederal Ministry of HealthHEWHealth Extension Worker |
| HEW Health Extension Worker |
| |
| IRS Indoor Residual Spraying |
| |
| MFP Malaria Focal Person |
| M&E Monitoring and Evaluation |
| RHB Regional Health Bureau |
| PMI President's Malaria Initiative |
| PPE Personal Protective Equipment |
| Social Behavioral Change Communication |
| Tot Training of Trainers |
| USAID United States Agency for International Development |

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EXECUTIVE SUMMARY

Background: Africa Indoor Residual Spraying Project (AIRS) is Abt Associates-led program funded by President's Malaria Initiative (PMI) to carry out spraying to reduce the incidence and prevalence of malaria in up to 17 African countries. Abt subcontractor, Cultural Practice, LLC (CP) conducted a gender assessment in Ethiopia in December 2012 to assess the extent to which women and men had equal opportunities to participate in employment at different levels of the spray operations.

Purpose: The gender review focused on differences in women's and men's opportunities in the two different models used for spray campaigns in Ethiopia supported by the President's Malaria Initiative (PMI), the camp-based district model and the community-based model. In 2012, only one district, Kersa, employed the community-based model. The comparison is preliminary as the community model has just been piloted for the first time and in only one district so it is not necessarily representative of how it might work in a greater number of districts with different characteristics. Nevertheless, the comparison yielded some useful initial findings. The key distinguishing factors between the two models is the role of Health Extension Workers (HEWs) in the management and coordination of the spray operations, and their leadership of spray squads in the community model. The assessment also examined the implications of these increased responsibilities for HEWs.

Methodology: The methodology used for the assessment included a review of project, PMI, and government of Ethiopia documents, including the end of spray report, training modules, the Ethiopia PMI Operational Plan for FY 2012, and the USAID/Ethiopia HPN Gender Assessment, among others. Fieldwork was conducted in three districts, Kersa, Diga, and Chewaka. In each district, the gender consultant interviewed a variety of stakeholders, including HEWs, District Health Officers, men and women who had participated in the 2012 spray operations, including spray operators, washers, squad leaders, guards, and storekeepers. In Addis Ababa, the consultant interviewed a representative of the Oromia Regional Health Bureau and the Director of Women and Children's Affairs for Oromia.

Findings: Overall, the assessment found that women's labor participation (25%) in the spray operations is significantly less than men's (74%) across all spray related personnel categories. There were a number of gender-based barriers identified that appear to constrain women's greater participation. Selection criteria, such as preference for previous experience on a spray squad, a perception that women are not strong enough or interested enough, and are able to make their own decisions about participating, prevent women from being selected as spray operators and squad leaders in areas under the district model of spray operations. In the community-based model district, Kersa, women HEWs are the squad leaders but this has not resulted in greater participation of women as spray operators on the spray squads. Among higher level managers and technical specialists, women and men appear to participate in proportion to their representation in key positions in the District Health Offices. For instance, if a woman is the malaria control officer for the District Health Office, she will be the overall coordinator of the spray operations in the district. Similarly if a woman is the environmental officer for the district, she will also play that role in the spray operations. In the district model, however, lower level positions, such as squad leader are generally occupied by men in low level positions in the District Health Office, such as accountants and administrative clerks. Women administrative assistants often assume responsibilities as storekeepers. In both models, washers for spray teams are almost universally women, even when that requires extended stays at the camps in the district-based operations. This is a genderbased constraint, especially for married women and unmarried young women, whose husbands or fathers are unlikely to sanction their participation if they have to be away from home overnight.

Through door-to-door mobilization, about 10% fewer men than women are reached about upcoming spraying (Ethiopia AIRS 2012). There has been less attention to messages to households about potential exposure post-spraying in the process of cleaning up residue, which raises concerns for women who are

pregnant as women are most likely to sweep the floor after spraying. Otherwise, HEWs, district health staff, and both men and women interviewed said that messages were easily understood and followed. The message about repainting and replastering appears to be the only message that some community members find difficult to apply. The spraying leaves a white residue that people are not fond of, and in an effort to spruce up their houses for the holidays, they often ignore the stipulation to leave the walls bare and untreated. When asked who makes the decision to re-plaster, most interviewees said both the husband and wife, but that it doesn't happen unless the man says it should. Without further investigation, it is not clear if this a gender issue or not.

RECOMMENDATIONS:

The more that equal participation of men and women can be modeled by the district health personnel, the more likely community members will be to feel greater comfort about women's participation on the spray squads. While it may not be easy to influence who from the district health services participate on the spray teams, the project can state in their communications about training that women and men are encouraged to participate and that the project is committed to meeting the Federal Republic of Ethiopia's and USAID's gender equality goals.

1. Implement measures that will allow more women to serve as team and squad leaders, spray operators, guards, and porters.

These may include:

- Making explicit statements to district health officers and kebele leaders involved in the recruitment of the spray team actors that all positions on spray team are open to women and men.
- Recruiting squad members from kebeles surrounding spraying sites in the district-based models so they can return home to sleep at night instead of residing in the camps
- Examine the camp set up to ensure that men and women have separate sleeping and bathing quarters. The accommodations made in the camp should be communicated as part of the community outreach to recruit spray team members.
- Create model squads that have two women and two men as spray operators in communitybased spray operations, starting with 30% of kebeles in Kersa for 2014, and a similar percentage in 2015 in districts that employ the community model for the first time.

2. Conduct end of spray operations feedback sessions with spray squads to get their perspectives and recommendations on the process.

Ensure that both women's and men's views are solicited. Analyze any difficulties that may have been encountered by women that are different than those faced by men. Use findings to make adjustments in training. Engage HEWs who have served as squad leaders in the training of other HEWS and women spray operator candidates.

3. Trainings should incorporate key gender messages about equal opportunity and respect.

It also would be useful to incorporate some basic management capacity development into the training of trainers and squad leaders training, especially but not exclusively, for the community-based model squad leaders. Solicit feedback from HEWs about their experiences and challenges in leading teams.

4. Monitor potential gender issues that may arise during the spraying.

Ask team leaders/supervisors to keep track of any difficulties that HEWs have in managing spray squads and problems encountered by women spray squad team members. Ask HEWs and team leaders/supervisors to record these incidents, so that they can be analyzed to see if any of them might be related to gender inequalities, such as:

- Men spray operators not following directions of or disrespecting HEWs
- Disparagement or harassment of women who work as spray operators
- Differences in women's and men's support from households (their own and others) in carrying out their IRS activities.

5. Conduct periodic community consultations on the spray operations to solicit men's and women's perspectives on their experience with the process, recommendations for improvements, and ideas about how to solve problems.

Discussion with gender experts at World Learning and Pathfinder suggested that the Project could do more outreach in the communities through local NGOs working on gender issues and through discussions with women's groups, the contact information of which they can provide upon request. While the AIRS Project does not have year round presence in the communities and districts they work in, many other organizations do through their health work. The Project could enlist these organizations as allies to further sensitize leaders and community members about the opportunities for both men and women in the spray operations.

The Project can work through local non-government organizations supporting gender equality, as well as with HEWs, who can work with the women's groups (including the Women's Development Army when and where permitted) to promote more equitable opportunities on spray teams. The Women's Development Army provides a forum where men and women meet together to discuss issues regarding gender equality (Greene et al 2012). IRS team participation is a topic to introduce in these discussions. The project could develop a discussion guide for recruitment of spray team members.

I. BACKGROUND

I.I AIRS PROGRAM OBJECTIVES IN ETHIOPIA

Africa Indoor Residual Spraying Project (AIRS) is an Abt Associates-led program funded by President's Malaria Initiative (PMI) to carry out spraying to reduce the incidence and prevalence of malaria in up to 17 African countries. Cultural Practice, LLC (CP) is a subcontractor to Abt Associates on AIRS project. It provides the analysis and operational strategies for carrying out the commitment of AIRS country programs to provide equal opportunities for women to participate on IRS programs at all levels. The role and responsibility of CP is to ensure the project supports equitable opportunities for both women and men in conducting IRS activities, as well as protecting the safety, privacy, and dignity of all participants during the IRS campaigns.

In collaboration with the Federal Ministry of Health (FMOH), and the Oromia Regional Health Bureau (RHB), the 2012 AIRS Project's Objectives in Ethiopia, were to:

- Spray up to 490,000 structures in 36 districts (up to 353,625 structures in 26 graduating and up to 130,000 structures in 10 new) and provide technical support to IRS operations in 24 graduated districts (up to 512,357 structures) of Oromia in 2012 supporting the total estimate of 1,002,357 structures;
- Reach a minimum coverage of 85% of the structures found in targeted villages by implementing high quality IRS operations;
- Build capacity at the national, regional state, district, and local levels to manage IRS operations, including planning, spraying, resource allocation, and M&E;
- Support development and implementation of a pilot kebele¹-based IRS campaign; and
- Monitor the impact of IRS operations on selected entomological and health facility indicators (AIRS Ethiopia June 10, 2012).

I.2 OBJECTIVES AND METHODOLOGY OF THE GENDER ASSESSMENT

As part of the AIRS project, Abt Associates, Inc. requested that a review of the gender issues relevant to IRS activities be conducted in Ethiopia. The objectives of the gender review include the following:

- I. Identify key gender-based constraints and opportunities with regard to spray operations.
- 2. Provide recommendations for developing appropriate interventions to offset existing genderbased differences and/or disparities
- 3. Set overall and intermediary annual benchmarks for women's employment in labor categories in which they are underrepresented in the spray operation.

Ethiopia is the first country where CP has undertaken a gender review for the AIRS Project, consequently it was also the first opportunity to pilot test the approach and data collection tools (Annex C). The program in Ethiopia also has some unique characteristics as it is the only AIRS country where two different spray campaign models are in use simultaneously, which provided an opportunity to make an initial comparison of the two models in terms of provision of gender equitable employment opportunities for women and men.

¹ Kebele is the smallest administrative unit in Ethiopia; it comprises of approximately 1,000 households.

Deborah Caro, Director and Senior Gender Analyst at CP conducted the review. It consisted of a pretravel review of documents on malaria, IRS, and relevant gender issues related to women's and men's rural economic opportunities and participation in malaria prevention. The field portion of the work took place between November 25 and December 21, 2012. While in-country, the CP gender expert, Deborah Caro, conducted a qualitative assessment based on key informant interviews with the AIRS team, Oromia RHB staff, District Health officials, health extension workers, and men and women on the spray operations and community mobilization teams in three AIRS districts (woredas) in Oromia Regional State (Kersa, Chewaka, and Diga).² She compared the content of these interviews with monitoring data collected by the project and with information collected and analyzed from published literature and unpublished reports on gender relations and inequalities in Ethiopia. Different interview guides were developed for each type of stakeholder.

This report offers the results of a targeted gender analysis to better understand gender issues related to the IRS project to ensure that it contributes to not only equitable opportunities for both men and women but also protecting gender safety, privacy, and dignity during all phases program activities implementation. The report is not intended to be a full national or a sectoral gender assessment such as those conducted by other USAID Bureaus for the USAID/Ethiopia Mission (e.g., Greene et al 2012).

1.3 OVERVIEW OF GENDER EQUALITY ISSUES IN ETHIOPIA³

The Ethiopian Government has committed to promoting gender equality throughout the country by signing on to major international accords, such as CEDAW (1981), Beijing Platform for Action (1995), and the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (2003). In addition, the Ethiopian Constitution's Article 35 guarantees women and men equal rights and protections from discrimination, and several sectoral policies grant women equality in education, health, land and business ownership, and political participation (World Bank 2009, Muleugeta nd). In 2005 the Ethiopian Criminal Code was enacted to address human, women's and children's rights.

As a result of these commitments and programs to implement them, women and girls in Ethiopia have made some gains in education, health outcomes, political participation, and economic empowerment. Nevertheless the gaps between men and women continue to be significant, especially in rural areas.

In rural areas, both men's literacy rates and educational levels are quite low, but women's literacy rates are considerably lower than men's. The median number of school years completed by rural women is zero compared to two for men, and 69% of rural women compared to 38% of rural men cannot read (Central Statistical Agency [Ethiopia] and ICF International. 2012).

There is evidence of disparities within the household in terms of decision making, allocation of food, and ownership and control of assets. While female headed households, on average, are not poorer than male headed households, women in both types of households have fewer livelihood options than men (World Bank 2009). According to the DHS About half of currently married women participate in three important decisions, pertaining to the woman's own health care, major household purchases, and visits to her family or relatives. In rural areas, approximately one third of married women decide alone how

² Kersa Health District is in the Jimna Zone, Chewaka Health District is in the Illubabor Zone, and Diga is in the East Wollega Zone of Oromia Regional State.

³ This discussion focuses on economic activity and political participation as those are the two sectors most relevant to women's and men's participation in the spray operation. For a more in-depth analysis of gender-based health disparities, see Greene et al 2012.

to spend money they have earned, compared to 55% who decide jointly with their partners and 10% whose partners' decide. Men report more joint decision making over their cash income (74%) than women (67%). Within the household about 50% of married women say that they participate in decisions about visiting relatives, making large purchases, and seeking healthcare (Central Statistical Agency [Ethiopia] and ICF International. 2012).

Women are chiefly responsible for gathering fire wood and for getting water. According to the 2011 EDHS, adult women are responsible for water collection in 71% of rural households. Deforestation in many areas of the country has made both of these tasks increasingly more arduous and time consuming. The 2005 Ethiopia Labor Force Survey demonstrates that rural women spend on average 5.6 hours a week getting water, compared to 1.6 by men, and 4.2 hours collecting fire wood compared to 1.9 by men. The EDHS found that 56% of households spend more than 30 minutes per day collecting water and no rural households reported having water in the household (EDHS 2011). Overall, rural women spend 37.9 hours on household labor as compared to only 6.4 hours by men (World Bank 2009 p. 31).

Women's economic opportunities are limited by a gendered division of labor in which women have fewer marketable skills, less education, poorer health, restricted mobility, and are responsible for a greater proportion of household labor (MOWA 2006, World Bank 2009). Therefore, women's employment in formal sector industries, professional services (10%), administrative (23%), and the civil service (32%) is lower than men's (MOWA 2006 p. 7). About six currently married women of every ten and almost all currently married men age 15-49 were employed in the 12 months preceding the DHS survey. Women have more opportunities to work in microenterprises (65%) and agriculture, although much of that work is unpaid or poorly paid⁴. Three of every ten currently married employed women are not paid, compared with about one of every ten men (EDHS 2011).

In rural areas, women farmers are also at a disadvantage. They have less ownership of land and access to agricultural credit. More than double the number of rural men (29%) own a house and land on their own than rural women (12%) do (EDHS 2011). In many areas cultural norms that guide the gendered division of labor prevent women from ploughing with oxen, putting women farmers without partners dependent on hiring labor (MOWA 2006).

Recent changes in laws have increased women's participation in Woreda (district) and kebele (community) councils by mandating quotas reserved seats for representatives of women's groups and HEWs. There is greater participation of women on kebele councils than on the Woreda councils, but women on both tend to lack a voice and role in planning and decision making (Yilmaz and Venugopal 2008, MOWA 2006).

In accordance with the National Action Plan for Gender Equality, the Federal Republic of Ethiopia Ministry of Health has adopted gender mainstreaming⁵ as a principal strategy of its Health Sector Development Plan 2010/11-2014/15 to achieve gender equality by:

• Promoting gender equality & the empowerment of women

⁴ The actual statistics for laborforce participation are somewhat unclear, depending on the source the gaps in labor participation between men and women varies by about 10-15 percentage points. In rural areas the gap is slightly smaller than in urban areas, and employment rates are higher overall. Women are usually employed for few hours and at lower rates of compensation.

⁵ Gender mainstreaming is: "the process of assessing the implications of planning and actions on women and men in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of the Health Sector programs; in all political, economic and societal spheres so that women and men participate and benefit equally from all aspects of development." (MOH October 2010 p. 52)

- Enhancing equal opportunities in the participation of economic and social development including health
- Increasing the utilization of health services by women.

The expectation is that health sectoral programs will integrate attention to gender equality into their actions by addressing gender-based barriers. The MOH has conducted a rapid assessment of identified gaps which will be used to develop a gender training manual for all health staff. USAID's new Gender Policy (USAID, 2012) also stipulates that USAID funded programs are required to conduct program specific analyses and to incorporate actions to address gender disparities and gaps into project activities.

Based on the brief review of the literature presented above, the key gender-based constraints potentially affecting women's equal participation in spray operations are:

- Restrictions on mobility outside of the household and community
- Lack of literacy
- Limited work experience outside of agriculture and the household
- Limited decision making or autonomy
- Time constraints
- Low levels of participation on Kebele and Woreda Councils that select spray team candidates
- Cultural beliefs about women's and men's roles, division of labor, and stamina
- Nutritional deficits and other health problems as a consequence of unequal distribution of household resources.

2. 2012 SPRAY OPERATION

In 2012, AIRS in Ethiopia supported two different models for spray operations. The project supported 19 districts in round one of spraying and 17 more in round two with a total of 36 districts. The assessment compared two operational models for organizing the spray teams in three districts. Two districts applied the district-based model, where sprayers are deployed to target areas and camp out over night until they complete spraying in all surrounding communities. The third district was the first district to use community health extension workers as squad leaders to lead community-based spray operations.

2.1 DESCRIPTION OF THE SPRAY OPERATION MODELS AND ROLES OF KEY ACTORS

District-based Model: The district model of spray operations involves one to four teams set up in camps from which 4-5 spray squads are deployed each day to spray in different communities within the vicinity of the camps. The camps include temporary stores, a soak pit, washing area, tents, and field kitchen. At the apex of the spray organization is the Malaria Focal Person (MFP) for the District. He or she is in charge of the entire operations. Other central team members include the storekeeper and the environmental health officer. The spray team is composed of a spray team leader from the District

Health Office who coordinates 4-5 spray squad leaders, 1-2 guards, drivers, and 1-2 washers. Each spray squad is composed of 4 sprayer operators and a porter.

Each morning the squads are deployed to a community (kebele) to spray. They spray for 6-8 hours. Each spray operator is assigned a number of households in the morning. They move from one structure to another within a household compound and then move on to the next. The squad leader supervises the spray operators to make sure they are following procedures and recording the data on the structures sprayed accurately. The porters carry sachets of insecticide and replacement parts for the spray pumps. Spray team leaders check squad leaders' data from the MFP's report. After completing a day of spraying, the spray operators give their coveralls to the washer and rinse out their spray pumps. The washer stays at the camp to wash the coveralls. At the end of the day she gives each spray operator a clean set of coveralls. This process is repeated for approximately 30-35 days until all the kebeles in the district are sprayed. In big districts, 2 camps are set up.

Community-based Model: The community model has only been implemented in one of the 36 districts with support from AIRS. Kersa District is pioneering a new approach that the government is expected to roll out more broadly in future years. In this model, each kebele has its own spray squad lead by a Health Extension Worker (HEW) instead of an employee of the District Health Office. All members of the spray squad are recruited from within the kebele. They either go home to sleep at night or sleep at relatives' house (which is also considered as a home) in the kebele to be close to the health post or operation site next morning. Each kebele has a soak pit, washing area and a store all in one place near the health post. The composition of the squad is the same as in the district model, a squad leader, 4 spray operators, a washer/guard and a porter. On average, four squad leaders are supervised by a district expert, known as the team leader, who is supervised by the MFP. There is one storekeeper at the district level, but each kebele has a mini-store and the washer/guard also serves a role of a store keeper. In Kersa, there are 31 kebeles, 21 in the malaria zone, of which 20 were sprayed. In each kebele there are two HEWS and both participated in the spray operation; in total 39 were involved. Five supervisors from the district health office oversaw the 20 kebele squads. The spraying was completed in 22 days, which is about 10 days less than in the districts following the district-based model. In the community-based model, the HEWs are the key operational players. They work closely with community leaders to ensure that all households are aware of the spraying and what they need to do to make their homes ready for the spray operation.

Their specific roles, according to the FMOH, are to:

- Select capable spray operators
- In collaboration with the district health services, train spray operators for six days on spraying techniques, communication, and safe handling of pesticides
- Consult with kebele leaders to plan the start and end dates of the spraying in the kebele
- Lead and supervise the spraying operation
- Mobilize the community to cooperate and participate in IRS operations (in both models)
- Educate communities about the benefits of IRS and what to do after their houses have been sprayed (in both models)
- Keep records of daily output of IRS operations and use of insecticides (FMOH 2012: p. 19).

Table I summarizes the differences between the District (Camp) and Community Models.

| Spray Team | District (Camp) Model | Community Model (Kersa) | | | |
|-------------------|---|---|--|--|--|
| Spray Team Leader | Lives at camp and supervises up to 5 squad team leaders, 2 guards, 2 washers, and a storekeeper. In each district there are one or two camps, each with a team leader and 4-5 spray squads. | district supervisors monitored performance of | | | |
| Squad Leaders | Up to 5 squad leaders each supervise 4 spray operators and a porter | 20 squad leaders each supervise 4 sprayers, a porter, and a washer. | | | |

TABLE I: COMPARISON OF DISTRICT AND COMMUNITY SPRAY OPERATIONS MODELS

*In each kebele, the two HEWs alternated turns as squad leader so that one could continue to attend to clients at the health post.

2.2 PARTICIPATION BY SEX

Data on men's and women's participation from the project is consistent with the qualitative findings. Roughly 25% of the spray personnel were women in year I at the district level, due to the fact that the female HEWs served as mobilizers. Otherwise, both men and women were segmented into separate labor categories.

The sex disaggregated indicator information collected by the project shows a clear pattern of segmentation by sex in the spray workforce. Social mobilization activities are principally undertaken by women, who are HEVs and undertake the work as another job related activity. Sprayers are all men, washers are all women, and the remainder of the positions on the spray squads, such as porters and guards are all men, even though most people interviewed said there was no reason more women could not be employed as porters. A few of the storekeepers were women (11%). Table 2 below shows IRS personnel by sex as it was reported in the 2012 End of Spray Report. Note that AIRS Ethiopia trained and hired the same number of people. Therefore, all data analyzed in the report is based on numbers of people trained vs. hired. In few cases that required replacement of personnel, it was a spray operator replaced with a porter. When a porter was transferred to serve as a spray operator, the Team Leader and Malaria Focal Person would identify a new porter and give him a half-a-day orientation on the insecticide handling and main responsibilities.

| TABLE 2: 2012 DISTRICT MODEL IRS IMPLEMENTERS AND SPRAY PERSONNEL TRAINED, BY |
|---|
| SEX |

| Trainings | | Participation | | | Per diem | | |
|---|---|---------------|-----|-----|----------|---------|--|
| District Level | Participants | F | % | м | % | rate | |
| Mobilization and enumeration | Health Extension and other Kebele based staff | 796 | 79% | 214 | 21% | \$11.00 | |
| Spray operation and communication (district | Squad Leaders | 9 | 3% | 286 | 97% | \$11.00 | |

| based IRS) | | | | | | |
|--|----------------------------|-----|------|------|------|---------------|
| Spray operation and communication (CB IRS) | Squad Leaders | 39 | 100% | 0 | 0% | \$11.00 |
| Spray operation and communication | Spray Operators | 0 | | 1255 | 100% | \$4.00 |
| Spray operation and communication | Porters | 0 | | 315 | 100% | \$4.00 |
| Washing and EC | Washers | 93 | 100% | 0 | 0% | \$4.00 |
| Transport Safety | Drivers | 0 | | 135 | 100% | No payment |
| Fire safety and operation site security | Guards | 0 | | 73 | 100% | \$4.00 |
| EC stock management and fire safety | Storekeepers | 4 | 11% | 32 | 89% | \$11.00 |
| EC stock management and fire safety | Storekeepers Assistants | 1 | 3% | 35 | 97% | \$4.00 |
| TOTAL | | 923 | 27% | 2723 | 73% | |

Women's participation as squad leaders differed considerably between the district and community-based spray operation models. Like spray operators, most of the key informants interviewed said, in the camp model, it was difficult to put women, especially married women, in those positions because they had to live in the camps, move around in cramped and open transport, and walk long distances. It was the general consensus of the interviewees that husbands were unlikely to allow their partners to work on the spray operations team if participation entailed being away from home over night for extended periods of time. As demonstrated by the project's training data above, only 48 (14.4%) women were trained as squad leaders and 39 of those were from Kersa, the community model district. In 2012, there were no women who participated as spray operators or porters in either model.

For spray squad staff, having the sex disaggregated information is sufficient to assess how many women and men participated, but not why there were so many more men than women. To understand whether both women and men have opportunities to participate, it is necessary to understand more about the selection process, and the different constraints that men and women may face in putting themselves forward, getting selected, and doing the job. To better understand the sex imbalances among the district health staff on the spray team, project indicators should be analyzed in relationship to the percentages of men and women who hold the positions from which different operatives on the spray team are drawn. Without that information, whether men and women are participating proportionally to their representation on the district health services workforce (apart from HEWs) cannot be determined with the existing data and is recognized as a limitation.

At the national and regional levels there were also disparities as shown in Table 3. We did not have a chance during the assessment to probe the origin of these gaps in the same way that we were able to at the district level. It is likely that these differences reflect either the distribution of personnel in the field or some disparity in who is selected to participate in training. The percentages of women professionals on the spray team are below the 32% level of women in the civil service in Ethiopia. There seemed to be fairly equal opportunity for higher level positions (e.g. team leader and environmental compliance officer), but a clear preference for men employees as squad leaders, who were drawn from among district health staff such as accountants and male nurses.

| Trainings | Participants | Spray Operation 2 | | | 2012 |
|--|--|-------------------|-----|-----|------|
| National Level | | F | % | Μ | % |
| TOT on spray pump use and maintenance | Vector control expert from regions | 1 | 5% | 21 | 95% |
| TOT on comprehensive IRS | Vector control expert from regions | 0 | | 32 | 100% |
| Pesticide poison management | Clinicians from regions | 7 | 28% | 18 | 72% |
| TOT on entomological monitoring | Entomologists from regions | 2 | 14% | 12 | 86% |
| Regional Level | | | | | |
| TOT on comprehensive IRS | MFPs, SBCC and EC supervisors | 13 | 6% | 210 | 94% |
| Data entry clerks | Data tech from project zones | 12 | 31% | 27 | 69% |
| Insecticide poison management | Clinicians from district health facilities | 34 | 36% | 61 | 64% |
| TOTAL | | 69 | 15% | 381 | 85% |

TABLE 3: IRS IMPLEMENTERS AT NATIONAL AND REGIONAL LEVELS BY SEX

3. Gender Findings and Analysis

3.1 GENDER FINDINGS

There is very little literature on gender issues in IRS. A few authors have mentioned gender in passing (Rahnman et al 1996 and Winch et al 1994), and only one examined gender differences with regard to understanding and following protective and safety measures when spraying and found no statistically significant differences (Karunamoorthi and Yirgalem 2012). There appears to be no published work on gender and labor practices on spray teams. While there is no national data on men's and women's participation on squads, there are indications that women do not commonly participate on spray teams, unless they are employed by the regional and district health services, in which case they serve as MFPs, team leaders, information education and communication (IEC) coordinators, storekeepers, and, occasionally, squad leaders. In some PMI districts, women participate as washers, occasionally as store keepers, and never as spray operators, guards or drivers. As discussed below, the initiation of the CB IRS model has signified a change in squad leadership, whereby HEWs are now squad leaders, and they are almost all women.

3.1.1 RECRUITMENT AND ROLES OF MEN AND WOMEN ON THE SPRAY TEAMS

In the CB IRS model, spray team members are recruited and chosen by the kebele leaders and the HEWs. One HEW sits on the kebele council so she is part of the kebele decision-making structure. The primary selection criteria appear to be prior experience as a spray operator. Other criteria include honesty and physical fitness. In the camp model, one of the major barriers to women's selection as part of the spray team is the need to stay overnight between spraying. Nevertheless this does not seem to present a challenge for washers. There was some indication that most washers were single (mostly widows), and thus did not have to get permission from their partners to participate. This conclusion was drawn from the interviews. Many of the district health service employees who run the spray operation said that the majority of the washers are unmarried women. They also said that married women would be unlikely to get their partner's permission to work as a washer in the camp model because it requires staying overnight in the camp for at least a month's time.

When pressed, a HEW interviewed in a community model kebele, said, "No women were considered as spray operators. The pumps are heavy; perhaps a woman could be a washer. She has to deal with her husband." Another HEW in the community-based district said that she and a school teacher decided spraying was too hard for women. She found the pumping during the training to be very challenging even though she was able to train the spray operators on how to operate the pumps.

Men spray operators concurred with the HEWs. They opined that women would find carrying the pump, walking long distances, and carrying water all to be too difficult. They agreed also that working as a porter or washer would be more appropriate for women. In a third kebele where they use the community model, the HEW said that they only hire women as washers because the topography is too challenging for women to navigate as the porter. Nevertheless, she said it was certainly possible for a woman to be a spray operator, if she so chose, as she had done the job herself. A man spray operator in the same community said that he found carrying the pump and pumping it to be the hardest part of the job, and he doubted a woman could do it.

In the PMI districts using the district-based model, most of the squad leaders are recruited from among the district health office staff. The district health office also recruits the spray operators, porters, and

washers. The criteria are similar: capacity to follow IRS guidelines, in good standing in their communities, and physically fit. Leaders of the kebeles choose candidates who are then vetted by the District Health Office. Historically, most of the candidates for majority of positions have been men, although washers have mostly been women, and occasionally women have worked as porters. In PMI-supported districts, the spray process takes about 30 days in district-based areas instead of 15 days in the community model tested in Kersa district, taking about 1-2 days to spray each kebele. In Chewaka district, district-based IRS has been implemented for a number of years; they had hired 6 women spray operators a few years back for one spray campaign. The MFP said that after 15 days the women became weak and they changed them to porters.

Men spray operators under the district model echoed the opinions of the MFP and other IRS spray personnel. They said that the hardest part of the job was carrying the pumps and walking long distances, especially when it entailed crossing rivers. Another challenge, for both men and women, is that they do not eat all day when they are spraying. Spray team personnel are given per diem by the project, however, it is up to them to buy their food. Many go without breakfast before spraying for 6-8 hours during which they are not allowed to eat or drink. The squad leaders in the district-based model are clinical staff, such as nurses, and non-health specialists, such as accountants, in the District Health Office. A few HEWs also participate, but rarely. In Chewaka district, one squad leader said that women squad leaders are given the easiest areas, such as the kebeles along the road. He stated that he thought women could be spray operators, and he had even seen women do the job. The biggest restriction, he said, was if they are married, it is difficult for her to stay in the camp away from her family.

During 2012, in a third district, Diga, which employed the district-based model, all squad personnel are men. The MFP said that it would not be convenient for a woman to spray because they have to walk 10-15 kilometers per day and be around pesticides all day. As in the previous two districts, the squad leaders thought the biggest obstacles for women working as spray operators were the long distances they have to walk and the weight of the spray pump and unforeseen circumstances that occasionally strand them in unknown places or cause them to be out long after dark, waiting to be picked up after spraying. Table 4 presents summary of the barriers/reasons why women are not suited to be spray operators as reported by most people interviewed.

| Reason Women Cannot Be Spray Operators | No. of Responses |
|---|---------------------|
| Women don't like to wear overalls and other parts of the PPE | 2 |
| The pumps are too heavy for women to carry and difficult to operate | 8 |
| Spray operators have to walk long distances, and women won't be able to walk so far. | 7 |
| Women are too busy with domestic chores and childcare | I |
| Women don't imagine themselves (or see themselves) as spray operators | I |
| They don't have previous experience as spray operators | 4 |
| Under the district model, women often do not participate at all because they have to stay | 3 |

TABLE 4. SUMMARY OF BARRIERS

| overnight and their husbands don't allow that. | |
|--|---|
| Have to carry water from far away and that would be hard for women | I |
| Women don't come forward to participate because they assume that spraying is men's work. | Ι |
| Cultural and religious proscriptions against women working with men outside of home, | I |
| As spray operators cannot eat during the spraying, women who worked as sprayers previously tired out more quickly than men during the spray day. | 3 |
| Women require permission of husband to participate in spray operation | 3 |

The reasons some people said that women could do the job emphasized the fact that they had done it before, that they had the desire to do it and would be capable if they were trained. There was a sense that a CB IRS model might be more conducive to women's participation, beyond the HEWs, on the spray squads, especially as porters, as they would not have to be away from their kebeles and families for long periods of time. One reason mentioned with regard to women serving as squad leaders was that they would not be able to make men spray operators and porters follow directions. The women HEW squad leaders said, however, they had no problem with their all men spray teams.

3.1.2 WOMEN'S EXPERIENCES IN THE SPRAY OPERATIONS

The women interviewed for the assessment-- the employees of the district health team, HEWs, and washers -- stated they had not encountered any problems in doing their jobs as a consequence of being women. The washer interviewed said that she lives in the camp, along with men. She and the other women washer did not have any problems with the 30 men in the camp. She does her job without any problem. Similarly, HEWs stated that once they were trained they did not encounter any major problems doing their job as squad leaders. They said the men on the spray teams understand that they have to follow instructions or risk putting themselves or others in danger from contamination. One HEW stated that the hardest part of her job was following all 4 sprayers to provide supervision and ensure safety. She said it required constant travel and detailed recordkeeping. Another concurred, saying that she had to be vigilant so that no insecticide was stolen. The easiest parts of her job were the training of the squad and mobilizing the community. In order to train others she had to learn how to operate the equipment and to spray according to specifications given by the project. She said the training of training course had prepared her very well to train others and carry out the rest of her job as squad leader.

3.2 ANALYSIS OF FINDINGS

3.2.1 GENDER-BASED CONSTRAINTS AND OPPORTUNITIES TO EMPLOYMENT ON SPRAY TEAMS

As there are few other alternative opportunities for women to earn income,⁶ it is important that they have equal opportunity to participate in the spray operations. The community-based model provides opportunities to overcome some of the constraints to women's participation. One of the major factors is that squad leaders in the community model are women HEWs. They undergo the same training on the equipment as men, and all stated that they had no problem operating the equipment. They similarly walked long distances within the community to both inform households prior to the spray operation and during the operation to supervise the spray squad. Their presence is likely to signal to other women and men that women can serve in different capacities on the squad. The fact that the community model does not require deployment outside of the community to camps is also a factor that should support greater participation by women.

Overall the project has achieved high levels of participation of households in spraying campaigns in the districts where they provide training and technical assistance. Several key informants commented that men pay less attention to the messages, and women find it more difficult to implement them because so many of their activities take place within the structures of their compounds. The Project, nevertheless, has gotten good compliance in the districts where it works. Others have commented on poorer participation in other districts of the country, in part attributable to inadequate consideration of women's and men's roles and decision-making within the household. For instance, spraying may interrupt women's daily activities more than men's on designated spray days, and the burden of removing and replacing belongings from the house and other structures, and cleaning up after spraying may also fall more heavily on women than men. While women may be more aware of the rationale for spraying as a result of interacting more closely with social mobilizers, they may not have the decisionmaking power to put key messages into practice. Men may have less access to information, especially if they are not home when HEWs or others make house to house visits to alert household members about upcoming spray operations. Women, who do not routinely attend community meetings, may be less aware of employment opportunities on spray teams, and restrictions on their mobility may constrain their capacity to participate, even when they have a desire to do so. In addition, commonly held beliefs on the part of district health personnel and community leaders about women's physical capacity, and husbands' lack of permission, may a priori deny women opportunities to participate by not even considering them as candidates for spray operators. The project also reinforces stereotypes by using the term "spray man" in their training materials. Structural constraints in the district-based model further limit women's participation, such as lack of separate shower facilities and the long period away from home required.

3.2.2 GENDER-BASED OPPORTUNITY FOR STRENGTHENING MANAGERIAL CAPACITY OF HEWS

Recent assessments of the impact of HEWs on health outcomes in Ethiopia have been overwhelmingly positive (Bilal et al 2011 and Wakabi 2008). One of the justifications for recruiting women to be HEWs is that the formal labor market in Ethiopia is dominated by men, therefore women were thought to be

⁶ Alternative livelihood activities for making money are selling qhat and coffee. Qhat sellers make more money than IRS spray team members or coffee sellers, whose daily income is comparable to the pay of a spray team member of about \$ 4.00 per day (information based on conversations with interviewees).

more available, and would help to provide more gender balance in the labor market (Health Systems 20/20). Nevertheless, one area of concern has been the potential danger of overburdening them with too many tasks, or with tasks beyond their training and capacity. HEWs are trained to manage health posts; make home visits to disseminate health information and promote healthy practices; to provide basic health services, refer more complicated cases, and follow up on referrals; and to train and supervise community health volunteers and model families. In addition, one of the two HEWs in a kebele serves on the village council (Bilal et al 2011 and Banteyerga 2011).

This new role for HEWs represents an important increase in their management responsibilities. While supervision is provided by the District Health Office, the HEWs, during the spray operation, are in charge of coordinating and supervising the squad; ensuring that all environmental and safety procedures are followed; and collecting data on the spray operation. In addition, they are in charge, in collaboration with community leaders, of recruiting members of the spray squad, and training them. They are also responsible for leading the social mobilization and outreach to inform and register all households prior to the spray operation.

Community-based IRS increases the management responsibilities on HEWs. In addition to other duties, this puts an enormous time burden on them during one month a year. Although two HEWs can share the responsibilities in each kebele, it is still quite daunting to get to every household prior to the spraying, recruit and train the spray team, and then supervise the spray operations within a two-month window in addition to their other duties.

Another challenge is that on their house to house visits, HEWs often only encounter women, thereby missing men who are the predominant decision makers in the household. Men generally hear about the spraying through kebele meetings rather than through the social mobilization efforts. If they are away, or absent from meetings, their lack of access to information about the spraying may adversely affect the household's decisions to participate.

The model family couples⁷ are an untapped resource for disseminating information about IRS and modeling implementation of the messages. The HEWs spend 96 hours working with men and women in model families, which have the potential to reach out with key IRS messages and information to both men and women in their communities. The model households also present an opportunity to communicate about equal opportunities for men and women on the spray teams. A recent gender assessment of the USAID HPN portfolio suggested that program also could include recommendations for gender equitable behavior changes, such as, sending both boys and girls to school; recognizing husbands who help with chores; feeding boys and girls equally. Additionally, IRS has an opportunity to work with HEWs to discuss equal opportunities for men and women in the spray campaigns with model families. Summary of the key opportunities and constraints for gender-balanced IRS operations is presented in the box below.

Project's Potential Contribution to More Equitable IEC: It is also important for the project to model gender equity in their SBCC and spray team trainings. Women might be more encouraged to put themselves forward as spray team operators if the training presentations changed the use of the term "spray man" to "spray operator" and used more pictures of women in different positions on the teams. As the FMOH, transitions more districts to the community-based model, there is also the opportunity to emphasize that the spray team is no longer required to spend a month away from home in a spray camp, that as women are more knowledgeable about key messages, they can communicate more

⁷ The model family program is an Ethiopian Government program designed to promote critical health behavior and other development changes in rural communities. The HEWs train parents on health behaviors such as hygiene and sanitation, accessing services (e.g., early childhood immunization), family planning, infant feeding practices, and nutrition. The family uses these lessons to make changes to its home and health care, and then it can graduate and become a model family.

effectively to families on the day of the spraying about recommended practices, and that the spray pumps are not any heavier than agricultural produce, firewood and water that women commonly carry long distances on foot. It is also important that the project expand the message about sweeping out the house after the spraying to include the recommendation that this is a task that should not be done by pregnant women and that anyone who sweeps and buries the spray residue should wash hands thoroughly.

Summary of Key Constraints and Opportunities

Key Constraints:

- Attitudes shared by both district health officials and community leaders about women's and men's interest, strength and endurance are based on stereotypes and prevent women from being considered for most positions on the spray operations team, and men from participating as washers.
- The process for selecting spray team members limits women's participation, especially as they are not consulted directly about their interest in participating.
- Criteria such as previous experience limit women's participation.
- Men are reluctant to allow their spouses to stay overnight in the camps, which is necessary for participation in the District Model operations
- In some communities limited mobility of women outside of their communities precludes women from participating in the District Model.
- The lack of food and drink during spray days, which are often longer than the recommended 6 hours, may affect women more than men, especially among poorly nourished women.

Key Opportunities:

- New role for HEWs in the community spray operations represents an important increase in their management skills and responsibilities.
- The model family couples are an untapped resource for disseminating information about IRS and modeling implementation of the messages, especially to men who are often absent during HEW's social mobilization visits
- To encourage more participation of women in the spray operations, in Community Model communities, there is an opportunity to inform women and men that participation in the spray operation does not require staying overnight in camps.

4. Conclusions and Recommendations

4.1 CONCLUSIONS

The project can support increased participation of women as spray operators by stating explicitly in the training modules that both men and women are eligible to perform any of the roles on the spray team, even if that means making some accommodations to the district-based model by allowing squad members to serve shorter periods of time, such as 15 instead of 30 days, providing separate facilities for men and women to shower, and making sure that women and men on the squads are treated with respect. In addition, the project team should review all training materials for any explicit discriminatory language, such as the use of the term "spray man," and include pictures or photographs of both men and women in a variety of roles on the spray team. The project should also examine how district health staff are selected for roles on the team and for participation in the TOT to ensure that men and women have equal opportunity to participate.

In the community-based model, there is even greater opportunity for encouraging HEWs and community leaders to consider men and women equally for all positions, and to make it clear that both men and women are welcome to participate. In addition, the project should consider de-emphasizing "prior experience" as the primary criteria as this is discriminatory against both women and men who have not had a previous chance to participate. If prior experience continues to be the primary selection criteria for participation on the spray squads, it is doubtful that the project will be able to significantly hire more women. Instead, a wider number of women, who express interest, can be trained. As all sprayers have to pass a post-test after training, quality control can be maintained by hiring only those who pass the test, including the practical test of spraying a test wall. Perhaps there should be a balance of criteria that weigh economic need, interest, and experience more equitably.

The managerial role of the HEWs on the spray team, who are women, is an important opportunity for empowering HEWs as leaders in their communities and as part of the district health workforce. While the AIRS Project's primary objective is to support efficient, safe, and effective implementation of the spray operation, there is also an opportunity to build more management skills training into the TOT and district level training modules.

As more districts move to the community-based model, it may be advantageous to shift social mobilization responsibilities from HEWs to community health volunteers and model families. Men and women in these positions are more likely to reach both men and women with key messages. This will reduce the time burden on HEWs and build a stronger base of knowledge and support for IRS activities.

4.2 RECOMMENDATIONS

The more that equal participation of men and women can be modeled by the district health personnel, the more likely community members will be to feel greater comfort about women's participation on the spray squads. While it may not be easy to influence who from the district health services participate on the spray teams, the project can state in their communications about training that women and men are encouraged to participate and that the project is committed to meeting the Federal Republic of Ethiopia's and USAID's gender equality goals.

1. Implement measures that will allow more women to serve as team and squad leaders, spray operators, guards, and porters.

These may include:

- Making explicit statements to district health officers and kebele leaders involved in the recruitment of the spray team actors that all positions on spray team are open to women and men.
- Recruiting spray operators from kebeles surrounding operation sites in the district-based models so they can return home to sleep at night instead of residing in the camps
- Examine the camp set up to ensure that men and women have separate sleeping and bathing quarters. The accommodations made in the camp should be communicated as part of the community outreach to recruit squad members.
- Create model squads that have two women and 2 men as sprayer operators in communitybased spray operations, starting with 30% of Kebeles in Kersa for 2014, and a similar percentage in 2015 in districts that employ the community model for the first time in 2014.

2. Conduct end of spray operations feedback sessions with spray squads to get their perspectives and recommendations on the process.

Ensure that both women's and men's views are solicited. Analyze any difficulties that may have been encountered by women that are different than those faced by men. Use findings to make adjustments in training. Engage HEWs who have served as squad leaders in the training of other HEWS and women spray operator candidates.

3. Trainings should incorporate key gender messages about equal opportunity and respect

It also would be useful to incorporate some basic management capacity development into the training of trainers and squad leaders training, especially but not exclusively, for the community-based model squad leaders. Solicit feedback from HEWs about their experiences and challenges in leading teams.

4. Monitor potential gender issues that arise during the spraying

Ask team leaders/supervisors to keep track of any difficulties that HEWs have in managing spray squads and problems encountered by women spray squad team members. Ask HEWs and team leaders/supervisors to record these incidents, so that they can be analyzed to see if any of them might be related to gender inequalities, such as:

- Men spray operators not following directions of or disrespecting HEWs
- Disparagement or harassment of women who work as spray operators
- Differences in women's and men's support from households (their own and others) in carrying out their IRS activities

5. Conduct periodic community consultations on the spray operations to solicit men's and women's perspectives on their experience with the process, recommendations for improvements, and ideas about how to solve problems.

Discussion with gender experts at World Learning and Pathfinder suggested that the Project could do more outreach in the communities through local NGOs working on gender issues and through discussions with women's groups, the detailed contact information of which they can provide upon request. While the AIRS Project does not have year round presence in the communities and districts they work in, many other organizations do through their health work. The Project could

enlist these organizations as allies to further sensitize leaders and community members about the opportunities for both men and women in the spray operations.

The Project can work through local non-government organizations supporting gender equality, as well as with HEWs, who can work with the women's groups (including the Women's Development Army when and where permitted) to promote more equitable opportunities on spray teams. The Women's Development Army provides a forum where men and women meet together to discuss issues regarding gender equality (Greene et al 2012). IRS team participation is a topic to introduce in these discussions. The project could develop a discussion guide for recruitment of spray team members.

ANNEX A: PEOPLE CONTACTED

AIRS Staff

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Oromia Regional Health Bureau

Mrs. Million Olijira, Malaria and NTD Health Expert

Oromia State Bureau of Women's and Children's Affairs

Rabia Issa, Director

Kersa District Health Offices

Wondussa Medhin, Team Leader and Professional Pharmacist Mekonnen Dessu, Vice Manager of Woreda Health Office Hawa Mohammed, Storekeeper Sofia Getiye, Environmental Health Officer Abreham Kidane, Malaria Focal Person

Tikur Balto Kebele, Kersa Woreda

Biya Aloli, Spray Operator Butu Aljihad, Heatlh Extension Worker and Squad Leader

Kitinble Kebele, Kersa Woreda Kersa

Tamri Biya, HEW and Squad Leader Seifu Albor, Spray Operator

Merewa Kebele, Woreda Kersa

Hikima Tassewa, HEW Yohan Gemechu, Spray Operator

Chewaka District Health Office

Ina Abdu, Malaria Focal Person Alkiw Shewarega, Team Leader and Vice Head of Office Jolbase Tescina, Storekeeper Munir Shesedin, Guard Girta Addisu, Squad Leader and Clinical Nurse Kasech Temesgen, Washer

Diga District Health Office

Mohammed Abdissa, Malaria Focal Person Gobeno Guta, Mobilization Team Leader and Expert in Maternal and Child Health Asfawu Etara, Squad Leader (Spray manager) and accountant in Woreda Health Office Wakjira Wakwaya, Squad Leader and accountant in Woreda Health Office

World Learning

Yeshehasad Worku, Gender Advisor and Grants Manager

Pathfinder Integrated Family Health Project

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ANNEX C: DATA COLLECTION INSTRUMENTS

INTERVIEW GUIDE FOR HEALTH EXTENSION WORKERS

Introduction: I am working with the AIRS Project to better understand the roles of women and men on the spray operations team. This information will only be used by the project. Are you willing to speak to me about your role and the role of others in the last operation?

If she says yes, then use the following questions to guide the discussion.

- I. Pleased describe your role in the recent spray operation.
- 2. What was the hardest part of your job? Why was ______ difficult?
- 3. What was the easiest part of your job? Why was ______ easy?
- 4. (If she was a squad leader) What parts of your role as squad leader did the training workshop prepare you for?
- 5. How did you recruit spray operators, porters, and washers?
- 6. How many women and how many men served as spray operators on your squad? Was the porter a man or a woman? Was the washer a man or a woman?
- 7. What reasons do you think cause women to participate less than men on the spray squads?
- 8. What are some ways to encourage women to participate more as spray operators and porters?
- 9. How are interested are women in participating on the spray squads?
- 10. Aside from the spray teams, what other temporary employment opportunities exist for women to earn money in your Kebele? And for men?
- 11. Can you describe any problems or challenges that women or men spray operators, washers, and porters have had with clothing, equipment, or instructions?

Now I would like to ask you about IRS messages.

- 12. How do household members hear about the spray operations?
- 13. What are the most important messages that people have to hear about prior to the spraying?
- 14. Which messages are hardest to understand?
- 15. Which messages are hardest to put into practice?
- 16. Do women or men have greater difficulty understanding and putting the messages into practices? Why?
- 17. Do you have suggestions about how to improve knowledge, understanding, and compliance with key messages by women, and by men?
- 18. Who in the household makes the decision to replaster the walls? Who does the replastering?

INTERVIEW GUIDE FOR DISTRICT HEALTH PERSONNEL

- I. What was your role during the last spray campaign?
- 2. How are the participants chosen from the District Health Office staff to participate in the training of trainers?
- 3. In the district you work in what is the proportion of men and women who serve as team leaders? Malaria focal persons? Environmental compliance officers? Storekeepers? Data collectors?
- 4. How do you recruit people to be spray operators? Washers? Porters? Assistant storekeepers? Community mobilitizers?
- 5. What proportion are men and what proportion are women?
- 6. Why do you think men participate more than women?
- 7. If given the opportunity, do you think more women would want to participate? Why or why not?
- 8. What is the biggest challenge you face in doing your job in the spray operation?

9. How well does the training prepare you to deal with the challenges?

Now I would like to ask you about IRS messages.

- 10. How do household members hear about the spray operations?
- II. What are the most important messages that people have to hear about prior to the spraying?
- 12. Which messages are hardest to understand?
- 13. Which messages are hardest to put into practice?
- 14. Do women or men have greater difficulty understanding and putting the messages into practices? Why?
- 15. Do you have suggestions about how to improve knowledge, understanding, and compliance with key messages by women, and by men?
- 16. Who in the household makes the decision to replaster the walls? Who does the replastering?

QUESTIONS FOR SPRAY OPERATORS, WASHERS, PORTERS, GUARDS, AND MEN AND WOMEN IN IRS COMMUNITIES

- I. How did you hear about the spray operation?
- 2. How did you become a spray operator? A washer? A porter? A guard?
- 3. What were you told about the spraying?
- 4. How did you become a spray operator? Porter? Washer?
- 5. Can a woman do the job of a spray operator? Porter? Washer? Guard?
- 6. Can a man do the job of washer?
- 7. What was the hardest part of your job? Why?

- 8. What was the easiest part of your job? Why?
- 9. How well does the training prepare you to deal with the challenges?
- 10. What changes should be made in the spray operations to allow women to participate more as spray operators and porters?

Now I would like to ask you about IRS messages.

- 11. How do household members hear about the spray operations?
- 12. What are the most important messages that people have to hear about prior to the spraying?
- 13. Which messages are hardest to understand?
- 14. Which messages are hardest to put into practice?
- 15. Do women or men have greater difficulty understanding and putting the messages into practices? Why?
- 16. Do you have suggestions about how to improve knowledge, understanding, and compliance with key messages by women, and by men?
- 17. Who in the household makes the decision to replaster the walls? Who does the replastering?

ANNEX D: SCOPE OF WORK

SCOPE OF WORK

SOW for Gender Assessment and Integration of Recommendations into 2013 Workplan and PMP

Background

The Abt-led IRS Project carries out spraying to reduce the incidence and prevalence of malaria in 14 African countries. Cultural Practice will provide the analysis and operational strategies for carrying out Abt's commitment to providing equal opportunities for women to participate on IRS programs at all levels. The role and responsibility of Cultural Practice is to ensure the project supports equitable opportunities for both women and men in conducting IRS activities, as well as protecting the safety, privacy, and dignity of all participants during the IRS campaigns. Cultural Practice will provide technical assistance to assess women's and men's participation in the country programs, identifying gender-specific barriers toward their participation within the different country contexts, and providing recommendations to increase the role of women at all levels, where they are under-represented. Cultural Practice consultants will assist in identifying and developing partnerships with local women's and other community groups, in addition to representatives of local and regional government to remove barriers to equitable participation, remuneration, and decision making. Each country visit will be conducted by one consultant, and will be 15 days long, including travel. The primary contact in each country will be the Country Operations Manager.

Purpose

The purpose of the Gender Assessment is to assist AIRS Project in Ethiopia to:

- I. Identify key gender-based constraints and opportunities with regard to spray operations.
- 2. Provide recommendations for developing appropriate interventions to offset existing gender-based differences and/or disparities
- 3. Set overall and intermediary annual benchmarks for women's employment in labor categories in which they are underrepresented.

This scope of work calls for recommendations on interventions and specific measurable targets for reducing gender differences and disparities in employment, remuneration, planning, and decision making. The assessment will also recommend gender-sensitive indicators to monitor performance and inform activities.

Specific Tasks in Ethiopia

Cultural Practice will visit Ethiopia in December 2012. Before traveling to Ethiopia, Cultural Practice will develop interview guides for different stakeholders, a data analysis framework, and a standard outline for gender assessment reports.8 CP will review the data from last year's campaign to identify differences in the number of women and men in different occupational categories and differences in remuneration for similar and comparable work. Questions will focus on issues such as hiring practices;

⁸ As Ethiopia and Senegal are the first countries to be visited, both SOWs include LOE to develop and translate interview guides, analytical frameworks, and a standard report outline which will provide a common set of tools for all subsequent assessments. Prior to travel to other countries, the relevant guides (i.e. in English or French) will be adapted to the specific country context.

perceptions and beliefs about men's and women's roles and division of labor; relative accessibility of training and recruitment to men and women; and structural and policy barriers.

Based on the results of the 2012 campaign, a CP gender expert will conduct a post-spraying gender assessment in Ethiopia that will include:

- 1. A desk review of AIRS employment policies, procedures, employment data from 2012, and any additional background documentation on the country program (the review will be begun in the U.S. and finished in Ethiopia).
- 2. Interviews with AIRS and counterpart MOH staff in Addis
- 3. Key stakeholder interviews with field staff including, district supervisors, team leaders, and former spray operators, washers, store managers, and district government and health officials in two districts.
- 4. Group and individual interviews with women and men in communities from which the project draws its spray operators, team leaders, store managers, and washers in two districts.
- 5. Meet with gender experts and groups in country to identify policy or other national constraints and opportunities, and comparative employment data for comparable sectors.
- 6. Analysis and write up of findings and recommendations

The assessment will cover two districts for purposes of comparison. In Ethiopia, in addition to comparing two areas, the assessment will compare two operational models for organizing the spray teams. One district will be in an area applying the camp model, where sprayers deploy to target areas and camp out over night until they complete spraying in all surrounding communities. The other district will be in an area where community health extension workers serve as team leaders for teams of spray operators.

DELIVERABLES

- 1. Trip Report, due 14 days after end of visit.
- 2. Country Gender Assessment Report due 30 days after the end of the visit.