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Evaluation of CARE's Humanitarian Programs from 2015 - 2020

By

Tamsin Smith

MPH

Epidemiology

Terry Hartman

Committee Chair

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By

Tamsin Smith

B.S., Cornell University, 2017

Faculty Thesis Advisor: Terry Hartman, PhD, MPH, RD

An abstract of

A thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University

in partial fulfillment of the requirements for the degree of
Master of Public Health
in Epidemiology

2021

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Methods: Data was analyzed from the Project and Program Information and Impact Reporting System (PIIRS), which collects information from all CARE projects. The analysis included 6,234 observations, each representing a unique project. Data was split by program area and analyzed with descriptive statistics. T-tests and chi-squared tests of comparison were used to compare program areas.

Results: This analysis found that over the five years of the survey, CARE had conducted 6,234 projects with a total of \$12 trillion USD in funding. Nearly half of these programs (3,060, or 49.09%) reported having an FNS component. All projects increased in numbers over time, with more humanitarian and FNS focus as time went on as well. Programs involving men had the lowest cost-to-participant ratio. There were few differences in the total budget allocated to humanitarian programs versus the rest.

Conclusion: This analysis will be reported to CARE's donors and will help the Humanitarian Team conduct analyses of future years of programming.

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Chapter I: Background/Literature Review

Section 1: Background of Humanitarian Events

A humanitarian crisis is generally defined as an event that represents a critical threat to the health, safety, security, or well-being of a large group of people (1). The causes of such events are varied: natural disasters, political upheaval, and persecution events. When an event is further classified as a complex humanitarian emergency, it is a combination of a few causes, very often involving war. The number of crises in the world are increasing. Climate change is thought to be behind some of this, as natural disasters grow in severity and instance, called mega-catastrophes (2). Food security is having physical, social, and economic access to sufficient, safe, and nutritious food to meet a person's dietary needs and to continue a healthy active life (3). It is determined by three factors: availability, access, and utilization. Humanitarian crises increase food insecurity in the affected communities.

Non-communicable diseases are demanding more attention from the humanitarian sector. Previously, more focus has been given to infectious diseases, such as measles and cholera. Such diseases were a concern because they spread between people and conditions in refugee camps enable the spread. Now, as non-communicable diseases grow in prevalence, they are overtaking rates of infectious diseases in many regions. The socioeconomic factors behind non-communicable diseases include unhealthy diets, lack of physical activity, tobacco use, and alcohol use, among others (2). Diets that lack in nutrients put a person at increased risk for non-communicable disease, as well as deficiencies previously stated. Medical standards have been adapted to address this new issue. Food aid should follow, as diet is a large determinant of a person's chronic disease risk. The nutritional makeup of food aid is a large concern and is heavily researched. Every part of a packaged meal or snack has been evaluated for nutrient completeness, factors that affect absorption, cost of ingredients, and the way it is packaged (4).

Section 2: Established Food and Nutrition Programs

In the humanitarian sector, the Sphere Association guidelines are one of the most used. The Sphere Association, or Sphere Project as it was previously known, is a humanitarian charter that establishes evidence-based minimum standards, creating a best practice in responses (5). Sphere states that effective humanitarian response must be based on a comprehensive, contextualized diagnosis in order to evaluate people's needs fully (5). To note, while Sphere guidelines are used internationally, they are voluntary standards. Sphere does have a section on food security and nutrition in its handbooks. To evaluate food security, it suggests that individuals, households, and communities are included in assessments, and the findings are published into an analytical report including clear recommendations of actions that target the most vulnerable (5). If possible, when addressing people's immediate nutritional needs, there should be a consideration of promotion of other livelihood strategies. Livelihood strategies work on the capabilities, assets, and activities used by a household for survival and well-being (5). Livelihood strategies for food and nutrition increase a person's income and employment and access to markets. For nutrition evaluations, groups with the greatest need should be prioritized, and response should be shaped by the context of the emergency (6). Sphere includes suggestions for response for different nutritional deficiencies, such as acute malnutrition and micronutrient deficiencies.

The standards for programs in food security are to have coverage, access, and acceptability; these follow the three factors of food security. One way to measure this is through program participation. To evaluate, it suggests that beneficiaries should be analyzed by numbers, disaggregated by sex and age, to determine participation in programs (5). A set of programs to use in aid programs is food transfers. This includes food aid. Factors that should be considered are supply chain strength, nutritional components, food safety and quality, and cultural appropriateness (5). An emerging alternative to food aid is cash and vouchers. Vouchers are a coupon that a person can use for a specific item, such as food. Cash is simply money given to use as a person chooses.

Sphere considers cash and vouchers to protect basic needs in a way that preserves a person's livelihood.

One issue in protecting the health of people in emergencies is the prioritization of programs and resources. The humanitarian sector does not have enough money, time, people, and capital to fully address the needs of each person affected in these events. In food and nutrition security, prioritization tends to mean that programs more likely focus on young children, usually ages 5 and below. Another common population is pregnant and breastfeeding women. There is very little on older children, men, and the elderly. This is an acknowledged problem in the field, although it does not mean that it is accepted without frustration (7). De-prioritization means that many deemed essential programs are left behind. This is a problem with carrying out programs, and later completing evaluations. It also becomes a problem when trying to create sustainable programs.

Section 3: Evaluation of Humanitarian Response

Over and over in the literature, it is stated that evaluation in humanitarian events is difficult. While there are program evaluation standards in place, the number of available evaluations is limited. The humanitarian field is less familiar with impact evaluations. This is partially explained by the methodological challenges of data collection. In crises, the target population is usually inaccessible. Communication channels are often down. Finding the people to deliver a program is difficult, let alone the follow-up needed for a mixed-methods evaluation. If an evaluation is done, the biases to consider are selection bias, information bias, and contamination bias (8). Contamination bias is somewhat unique to refugee camp work and occurs when target populations (refugees) begin to integrate into non-target populations (host communities) (9). Another important consideration is non-random attrition: those with more resources are likely to be the first to evacuate an area and those with fewest resources may die. Thus, both these populations may be

underrepresented in the target population. Ethical concerns for these populations are also a challenge. Due to prioritization, program evaluation may be left out if there are not enough funds. Even when evaluations are carried out, they may not be following established scientific protocol. The Sphere criteria largely do not meet SMART (Specific, Measurable, Achievable, Relevant, Time-bound) guidelines, and thus, cannot be used as complete measurement tools (10). This is especially true in the food and nutrition sector, with only 24 of 63 indicators meeting the SMART criteria (10).

Although there are pitfalls in carrying out evaluations, it is important to try. Sphere standards emphasize that evaluations help to inform work in the affected populations and to tailor future responses. A few chosen studies evaluate the effectiveness of these programs. Because humanitarian responses necessitate prioritization, often nutritional programs are only given to specific groups. A systematic review by sector found that programs were often focused on acute malnutrition (53% of studies) and in children ages 6 to 59 months (61% of studies) (11). Out of the 77 nutrition studies that met inclusion criteria for the review, only 25% of them were classified as high-quality (11). Despite this, they saw that study quality is on an increasing trajectory, with the vast majority of high-quality papers being published after 2000.

For cash programs specifically, Bailey and Harvey (12) looked at programs carried out in the 1990s and 2000s. They found the benefits of such transfers to be increased dignity of beneficiaries and less expensive to get to people. After that, the effectiveness of such programs depends on the context. In places where there is a market structure in place, cash can improve food access, allow households to make other necessary purchases, and to support livelihoods. When this is not the case; however, cash does little good in a humanitarian emergency. They conclude by saying that this program still has its benefits and can be pushed to a higher potential by humanitarian agencies.

Some studies are more critical of the work being done by humanitarian agencies. One application used data from people who evacuated and died following an emergency from 742 country-year observations from 2010-2016, or years from multiple countries experiencing a disaster. With this data, they found that the average efficiency estimate was about 0.5 out of 1, meaning that countries could increase their economic outputs to become more efficient (13).

Section 4: Criticisms of Humanitarian Work

A large problem with humanitarian work is that it does not adequately address the needs of the target population. Because programs are so targeted, workers tend to collapse people into specific problems to be solved, rather than attend to their needs as a whole person. There is sometimes a disconnect between how an agency labels a group of people and how they identify themselves (14). There is a constant demand for more input from the beneficiaries themselves. Some organizations are starting to do this by holding focus groups or incorporating more local hires into their projects. Humanitarian work can stand to incorporate more advancing technology. As innovations in food packaging, specialized nutrition products, supply chain organization, and cash and vouchers become available, they should become standards (15). Another criticism is the lack of sustainable solutions in the field. Often programs last only a couple days to a few months. When the programs conclude, they do not always coincide with the population returning to life as normal.

There are problems in the humanitarian sector as a whole. It is not above systemic problems such as institutional racism and paternalism that affect so many other areas of our world. It is also tied up in bureaucracy, in dealing with large non-profits to local governments. The sector approach used for deploying organizations in an emergency may not be the best way of response (16). Many of these critiques can be partially explained by the lack of resources in the sector leading to prioritization of few programs. There are people who are working to point out these flaws in the

system. Fixing these will involve the work of many, and ideally will include voices from previously marginalized populations, those who have been affected by disasters and used aid themselves.

Section 5: CARE's Work

The humanitarian field relies largely on aid to carry out programs. In 2016, 178 billion USD were invested in the sector (12). This was a combination of investment from national governments, international governing agencies, non-governmental non-profit agencies, and individual donors.

CARE, or Cooperative for Assistance and Relief Everywhere, is a major international non-governmental agency. Nutrition is one of the cornerstones of CARE's humanitarian efforts. It began as a group of people sending care packages to help Europeans during WWII. In 2020, CARE reported an impact of 92 million people (17). It carried out 1,349 projects in 104 countries in the same year. In its humanitarian response, it impacted 28.8 million people. Another 22.6 million were beneficiaries of food insecurity and climate change resilience programs. CARE also claims that 90% of their expenses go directly to their programs (18). The humanitarian team at CARE works across the sectors of health, food and water, education, climate resilience, and gender equality.

Chapter II: Manuscript

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Abstract

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Results: This analysis found that over the five years of the survey, CARE had conducted 6,234 projects with a total of \$12 trillion USD in funding. Nearly half of these programs (3,060, or 49.09%) reported having an FNS component. All projects increased in numbers over time, with more humanitarian and FNS focus as time went on as well. Programs involving men had the lowest cost-to-participant ratio. There were few differences in the total budget allocated to humanitarian programs versus the rest.

Conclusion: This analysis will be reported to CARE's donors and will help the Humanitarian Team conduct analyses of future years of programming.

Introduction

CARE (Cooperative for Assistance and Relief Everywhere) is an international non-governmental agency dedicated to eradicating poverty. CARE achieves this primarily by empowering women. Nutritional interventions are another key part of many CARE responses. CARE works in 104 countries as of 2020 (17). Its efforts are broadly split between development and humanitarian projects. Development work is done in more stable conditions and is intended to create a sustainable change in the target community. Humanitarian work is usually done in response to sudden events or extreme conditions. The work is shorter-term, intended to address the needs of a less stable population. The goals of most humanitarian projects are to give a target population the things it needs to be able to rebuild lives.

When people think of international aid work, they most likely picture someone being delivered a package of food or hygiene supplies. This is a facet of some of CARE's programs. There is a large focus on nutrition in the agency. Nutrition is often lacking in humanitarian contexts, through some combination of macronutrient and/or micronutrient malnutrition. The nutrition programs take many forms, from emergency rations delivered to populations in high distress to agricultural interventions that add a needed nutrient into the diet. Such programs are usually called FNS, or food and nutrition security, in the sector. Due to the short-term nature and lack of infrastructure, the programs in humanitarian situations are usually different than others. This is where many of the food deliveries occur. But this is not the only (and often not the best) way to improve the health of a population. Other programs can be supplemental powders or cash and vouchers. The best program depends on the context. The objective of this project was to look at CARE's programs as a whole over the past five years to see the effects on its target populations were.

Methods

Survey Administration

CARE uses a system called PIIRS to collect data about the programs it sponsors. PIIRS is the Project and Program Information and Impact Reporting System. This is an electronic survey that is completed by each project by CARE. It contains information that can be used to identify a project and evaluate it.

At the end of a project, a PIIRS survey is submitted. The PIIRS is completed through a secure portal and the raw data is kept confidential. This survey is self-reported by one member of a CARE project. The PIIRS survey asks questions about the project logistics, goals, and outcomes. Other components include the donors and partners. Programs are asked if they contain an FNS component. The survey asks the total budget. It does not specify the budget breakdown; currently, it is not clear how much money goes to each component. The survey asks the numbers of people affected by the program. The beneficiaries are broken down by gender, humanitarian efforts, and direct versus indirect impact. The survey is a mix of qualitative and quantitative responses. There are numerical responses for budget, beneficiaries, and resilience ratings. There are categories that show the type of program and the kinds of impact groups it targets. There are also qualitative responses to state goals, give more information about the impact group, and to clarify definitions.

Data Collection

The PIIRS survey has been collecting responses since 2015. Data was pulled in March of 2021 and contains responses through 2020.

The PIIRS survey has been continuously updated since its release. For some variables, all of the data from FY 15, FY 16, and even FY 17 are missing because the questions were not asked at the time of survey completion. Questions with this missing data are type of program, urban/rural population, and completion of an evaluation, all variables that were used in this analysis. Variables that are asked throughout the length of the survey include total budget, beneficiaries, CARE leading

organizations, and donors. With this in mind, observations with missing values were dropped after descriptive analysis.

Data Analysis

Data cleaning was performed in Microsoft Excel. This was chosen to produce a dataset to enable future CARE members to perform their own analyses. Data for this analysis was de-identified of program name and project manager.

Data analysis was performed in SAS. Descriptive statistics were performed for the entire dataset, then subsets of humanitarian projects and FNS projects. A cost: benefit analysis was performed on all observations that had data for budget, direct, indirect, and humanitarian beneficiaries. T-tests were performed on all project data to compare total budget and beneficiaries of projects by program area: humanitarian compared to projects overall and FNS compared to projects overall. Chi-squared tests of comparisons were performed for categorical variables of fiscal year and program type by program area as well. All tests were evaluated at the significance level of $\alpha = 0.05$.

Descriptive statistics were organized into tables and visuals that included graphs and maps. Visual presentation was based off CARE project guidelines. The descriptive statistics were compiled into a presentation for CARE partners.

Results

The PIIRS dataset contained 6,234 unique projects with data that could be analyzed. The general summary statistics can be found in Tables 1 – 4. Tables 1 and 2 show summaries of quantitative and categorical variables, respectively, for all projects in the PIIRS system. Tables 3 and 4 show the same but are specifically for humanitarian projects. There were 1,251 projects labelled with a humanitarian focus that were included in this group. Table 1 and 3 also show the

reach of FNS programs specifically. The direct reach of FNS projects in all projects is about 18,302 persons on average compared to about 14,031 among humanitarian programs.

The mean budget of all projects is \$2,110,527 USD (Table 1). For the 5,918 projects that reported budget data, a total of approximately \$12 trillion was invested. Comparatively, the mean budget for humanitarian projects is \$2,328,400.58 (Table 2). From the 1,168 projects in this category, the total budget was \$2.7 billion.

There were not many differences in categorization of projects between the groups. For both all projects and humanitarian, there were slightly more projects for rural populations than urban. Projects that included an FNS component were 49.1% overall, and 53.7% of humanitarian projects (Table 2, Table 4). There were a few variables that addressed monitoring and evaluation outcomes (MEAL). There were about 80% of projects that used some MEAL plan (Table 2). This variable was not available for humanitarian projects.

Overall, the highest impact projects are among women beneficiaries. This is true for all projects and humanitarian projects. “Evaluation Completed” asked programs if they finished an evaluation in the fiscal year of the project. “Evaluation Planned” allows for a program to conduct an evaluation later than directly after the project close-out. There are also some projects that complete “Impact Evidence”, which is a separate process that sees if a project met any of CARE’s 25 goals for sustainability.

The statistics for direct and indirect reach for all projects were expanded because of their importance to CARE partners. The complete beneficiary breakdowns are found in Tables 5 – 7. They are split by all projects, humanitarian, and FNS. Overall, the highest impact projects are among women beneficiaries (Table 5, Table 6). This is true for all projects and the humanitarian group. Interestingly, there seems to be the smallest differences between sex in FNS programs. For direct, indirect, and humanitarian reach, they are only separated by a couple thousand participants (Table 7). Compared to projects overall, there are over twice the number of women directly impacted compared to men, 91,601 women on average compared to 40,262 men (Table 5). This is

not unexpected because of a history of prioritization of women and young children in FNS programs. Because this analysis contains thousands of projects, analyzing primarily by mean of each variable was chosen. The ranges are especially large; this is at least partially explained by the focus of some projects on men and some on women.

The cost: benefit analysis (Table 8) shows ratios in terms of dollars spent per beneficiary. The most cost-effective programs were humanitarian direct programs affecting men (0.161) and all direct programs affecting men (0.260). Estimates for indirect program participants had the least cost-effective measures (4.57, 2.31, and 2.38 for all, men, and women respectively).

T-tests of significance were performed to discern differences between program performances. The reach of FNS programs were compared to overall performance, and the same for humanitarian. Significant differences were observed in total budget by programs with and without FNS components (Table 9). The budgets of programs are significantly larger for programs with an FNS component. There are also fewer direct and indirect participants for humanitarian programs versus all programs. For all other programs compared, there were no significant differences between the budgets and participants of program types.

There are not many significant differences between programs with an FNS outcomes versus those who do not (Table 9). This could be because most programs have an FNS component. FNS programs are significantly more likely to have a budget with a higher mean (value to value) and have a wider distribution, than programs without FNS.

There is a relationship between fiscal year and FNS programs. In all years besides FY 16 and FY 20, there are a greater proportion of programs with FNS outcomes than those without (Table 10). There is also a relationship between fiscal year and humanitarian programs. In all years except FY 20, there are fewer humanitarian programs than other programs (usually development) (Table 10).

Discussion

In the period of 2015 – 2020, CARE hosted a large number of programs, and invested trillions of dollars into the humanitarian and development sectors.

It is not surprising that there are more projects that benefit women, with more investment and greater numbers of beneficiaries. CARE is committed to achieving gender equality by empowering women. When men are included in programs, they almost always share the programs with women, conversely, there are many programs that are focused on just women. It is possible that this is even more true for humanitarian projects. Humanitarian aid often has to focus resources on populations most affected by a catastrophic event. Women and children are almost always at higher risk in these situations.

The results show that when data is broken down by fiscal year, there are often differences in FY 20 (July 2019 – June 2020). FY 20 likely has differences in programs because of a diversion of resources due to the SARS Co-V-2 pandemic. CARE continued to provide global support through this time. But indeed, their program focuses changed. In 2020, CARE provided over 2 million clean water and hygiene kits and 300,000 households with cash in response to the pandemic (17). But there were also big changes in their aid. For the first time in its then 74 years, CARE provided CARE Packages to people in the United States (17).

There are some notes to interpreting any of the cost: benefit ratios. The only data available was the total budget of programs and the number of beneficiaries. There were no breakdowns of amount of money spent on program logistics (such as employees and travel). It is almost a certainty that out of a program budget, 100% of the funds are not spent directly on participants. Because of this, extrapolating the cost: benefit ratio to a cost-effectiveness analysis is not possible with the current data. The cost: benefit ratios can be used to see how the program budgets compare to the beneficiary numbers.

A strength of this analysis is the amount of data available. CARE is one of the largest international aid agencies. As such, there is information for programs given in over 100 countries, spanning a large group of people. Out of the data pulled for this analysis, there were over 6,000 individual programs with qualitative and quantitative data. In fact, the most time-consuming part of data cleaning was deciding what information to include. The large amount of information ensures that even when there are many missing fields, there are usually enough data for a statistical analysis.

Some considerations should be taken when interpreting the results of this analysis. First, the PIIRS survey changed over the course of the period of data collection. It does not appear that the wording of questions was affected. There were questions added throughout. For example, a question that asked a project to identify its aims as humanitarian or development was not added until FY 2017. Similarly, questions of urban and rural locations, certain beneficiary measures, and the country of the project had low response rates (compared to the 6,234 total responses). For some of these measures, they may not be accurate if applied to the period 2015 – 2020. To address this problem, population numbers (N) and missing responses were included wherever possible in the data tables. This may contribute to bias in the data toward responses that are collected in more recent years.

Second, there was some ambiguity in some of the measures. It was not always clear which variables in the dataset corresponded to the survey instrument. Consultations were made with CARE partners, but they were not the managers of the survey. The abridged survey instrument is included in Appendix 1 for reference.

Third, all data from these surveys is self-reported. It was submitted by a project lead. It is possible that there is reporting bias. There are no instructions to provide outside documents to verify the numbers entered. There is a possibility that program managers did not accurately report numbers, either due to lack of knowledge or deliberate misreports. In the humanitarian field in general, it is difficult to perform program evaluations. This is shown in the low number of

evaluations reported (40.3% of all projects had an evaluation). Measures should be taken to verify the numbers in the survey. Because of the volume of entries, this could be done on a smaller scale, in the individual team that carried out the project. A team head could collect reports that back up the data provided in the PIIRs survey.

This report set the stage for analysis of the PIIRS data for the Humanitarian Team. Some of these considerations can be brought to the group creating and managing the survey to create an even more effective evaluation tool. Data analysts on the Humanitarian Team could address other biases in the data analysis phase. As CARE continues to administer the PIIRS, teams will grow in their knowledge of how to analyze results. Meeting the needs of target populations means constant re-evaluation of existing programs.

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Tables

Table 1: Numerical variables for all CARE projects 2015 – 2020 (n = 6,234)

| | Mean (Standard Deviation) | Median | Missing Values N (% total) |
|---|--|---------------|---|
| Total Budget (\$USD) | 2,110,527 (6,441,858) | 618,859 | 316 |
| Expected Direct Reach, women | 91,601.834(127, 0170.82) | 4,321.00 | 450 |
| Expected Direct Reach, men | 40,262.52 (352,161.641) | 2,550.00 | 521 |
| Expected Direct Reach, total | 131,545.67 (1553310.66) | 7,800.00 | 339 |
| Expected Indirect Reach, women | 580,266.62 (13,140,481.5) | 8,400.00 | 754 |
| Expected Indirect Reach, men | 499,660.41 (13,836,182.80) | 6,332.00 | 793 |
| Expected Indirect Reach, total | 1,124,635.45 (26,638,615.90) | 16,500.00 | 651 |
| Direct Reach, women | 9,070.20 (43,689.66) | 0.00 | 1,367 |
| Indirect Reach, women | 15,948.78 (158,085.06) | 0.00 | 1,504 |
| Direct Reach, men | 8,168.12 (42,341.57) | 0.00 | 1,375 |
| Indirect Reach, men | 14,930.00 (165,616.145) | 0.00 | 1,509 |
| Direct Humanitarian, total | 15,379.50 (82,107.98) | 0.00 | 610 |
| Indirect Humanitarian, total | 15,379.50 (82,107.98) | 0.00 | 610 |
| Direct Reach, total | 68,211.41 (1063592.45) | 3,312.00 | 0 |
| Direct Humanitarian Reach | 13,876.83 (78,126.60) | 0.00 | 1 |
| Indirect Humanitarian Reach | 26,752.68 (298,446.034) | 0.00 | 1,090 |

| | | | |
|---------------------------|-----------------------------|------|-----|
| FNS Direct Reach | 18,302.38 (257,071.88) | 0.00 | 0 |
| FNS Indirect Reach | 67,055.20 (1,570,065.54) | 0.00 | 890 |

Table 2: Categorical variables for all CARE projects 2015 – 2020 (n = 6,234)

| | # Yes Responses (%) | # No Responses (%) | Missing (%) |
|------------------------------|----------------------------|---------------------------|--------------------|
| Urban Population | 1,135 (18.21) | 839 (13.46) | 4,260 (68.33) |
| Rural Population | 1,706 (27.37) | 270 (4.33) | 4,258 (68.30) |
| FNS Program | 3,060 (49.09) | 3,174 (50.91) | |
| FNS Outcome Completed | 3,060 (49.09) | 353 (5.66) | 2,821 (45.25) |
| Used MEAL Plan | 1,020 (79.56) | 262 (20.44) | 5,269 |
| MEAL Plan Adapted | 701 (55.95) | 552 (44.05) | 4,981 |
| Evaluation Completed | 2,510 (40.26) | 3,485 (55.90) | 239 (3.83) |
| Impact Evidence | 1,265 (20.29) | 2,713 (43.52) | 2,256 (36.19) |
| Evaluation Planned | 2,284 (36.64) | 3,546 (56.88) | |

Table 3: Numerical variables for all CARE humanitarian projects 2015 – 2020 (n = 1,251)

| | Mean (Standard Deviation) | Median | Missing Values |
|---------------------------------------|--|---------------|---------------------------|
| Total Budget (USD) | 2,328,400.58 (6881019.24) | 611,851.00 | 83 |
| Expected Direct Reach, women | 35,367.35 (319851.94) | 5,962.00 | 54 |
| Expected Direct Reach, men | 31,168.63 (327,956.35) | 4,095.00 | 58 |
| Expected Direct Reach, total | 67,170.17 (644,492.26) | 10,836.00 | 48 |
| Expected Indirect Reach, women | 178,424.28 (2,210,444.57) | 5,000.0 | 198 |
| Expected Indirect Reach, men | 169,175.01 (2,202,301.73) | 4,073.00 | 200 |
| Expected Indirect Reach, total | 635,635.78 (6,869,081) | 11,623.00 | 167 |

| | | | |
|-------------------------------------|---------------------------|--------------|-----|
| Direct Reach, women | 16,479.19 (40,756.10) | 0.00 | 109 |
| Indirect Reach, women | 25,923.87 (117,304.73) | 1,466.00 | 246 |
| Direct Reach, men | 15,087.08 (45,786.39) | 2,246.00 | 114 |
| Indirect Reach, men | 22,618.88 (112,241.42) | 1,026.000.00 | 248 |
| Direct Humanitarian, total | 31,695.12 (84,138.85) | 5,341.00 | 90 |
| Indirect Humanitarian, total | 15,379.50 (82,107.98) | 0.00 | 610 |
| Direct Reach, total | 31,649.00 (85,416.71) | 5,400 | 0 |
| Indirect Reach, total | 60,524.40 (323,085.13) | 1,445.00 | |
| Direct Humanitarian Reach | 29,414.90 (81,466.30) | 4,195.00 | 0 |
| Indirect Humanitarian Reach | 46,350.92 (278,712.91) | 0.00 | 0 |
| FNS Direct Reach | 14,031.83 (63,087.17) | 0.00 | 0 |
| FNS Indirect Reach | 30,936.11 (211,630.02) | 0.00 | 890 |

Table 4: Categorical variables for all CARE humanitarian projects 2015-2020 (n = 1,251)

| | # Yes Responses (%) | # No Responses (%) | Missing (%) |
|------------------------------|----------------------------|---------------------------|--------------------|
| Urban Population | 454 (36.29) | 380 (30.38) | 417 (33.33) |
| Rural Population | 717 (57.31) | 116 (9.27) | 418 (33.41) |
| FNS Program | 672 (53.72) | 579 (46.28) | 0 (0) |
| FNS Outcome Completed | 672 (53.72) | 0 (0) | 579 (46.28) |
| Evaluation Completed | 428 (34.21) | 800 (63.95) | 23 (1.84) |
| Impact Evidence | 375 (29.98) | 766 (61.23) | 110 (8.79) |
| Evaluation Planned | 364 (29.10) | 851 (68.03) | 36 (2.88) |

Table 5: Descriptive statistics of CARE projects by sex, 2015 – 2020

| | N | Mean | Standard Deviation | Median | IQR | Range | |
|-------------------------------------|----------|--------------|-------------------------------|---------------|------------|------------------|-------|
| <i>Direct</i> | | | | | | | |
| <i>Women</i> | 5,784.00 | 91,601.84 | 1,270,170.82 | 4,321.00 | 17,837.00 | 41,338,740.00 | 450 |
| <i>Men</i> | 5,713.00 | 40,262.52 | 352,161.64 | 2,550.00 | 13,013.00 | 11,100,000.00 | 521 |
| <i>Total</i> | 5,895.00 | 131,545.67 | 1,553,310.66 | 7,800.00 | 31,170.00 | 45,969,379.00 | 339 |
| <i>Indirect</i> | | | | | | | |
| <i>Women</i> | 5,480.00 | 580,266.62 | 13,140,481.50 | 8,400.00 | 48,562.00 | 656,994,006.00 | 754 |
| <i>Men</i> | 5,441.00 | 499,660.41 | 13,836,182.80 | 6,332.00 | 37,554.00 | 711,743,507.00 | 793 |
| <i>Total</i> | 5,583.00 | 1,124,635.45 | 26,638,615.90 | 16,500.00 | 89,553.00 | 1,368,737,513.00 | 651 |
| <i>Humanitarian Direct</i> | | | | | | | |
| <i>Women</i> | 4,867.00 | 9,070.20 | 43,689.66 | - | 2,952.00 | 2,041,415.00 | 1,367 |
| <i>Men</i> | 4,859.00 | 8,168.12 | 42,341.57 | - | 2,167.00 | 189,904.00 | 1,375 |
| <i>Total</i> | 5,624.00 | 15,379.50 | 82,107.98 | - | 3,407.00 | 3,941,319.00 | 610 |
| <i>Humanitarian Indirect</i> | | | | | | | |
| <i>Women</i> | 4,730.00 | 15,948.78 | 158,085.06 | - | 3.00 | 5,777,508.00 | 1,504 |
| <i>Men</i> | 4,725.00 | 14,930.00 | 165,616.15 | - | - | 6,199,411.00 | 1,509 |
| <i>Reach</i> | | | | | | | |
| <i>Direct, total</i> | 6,234.00 | 68,211.41 | 1,063,592.45 | 3,312.00 | 15,742.00 | 45,969,379.00 | - |
| <i>Indirect, total</i> | 6,234.00 | 298,352.37 | 5,517,669.60 | 4,494.00 | 33,669.00 | 276,507,214.00 | - |
| <i>Direct, humanitarian</i> | 6,233.00 | 13,876.83 | 78,126.60 | - | 2,048.00 | 3,941,319.00 | 1 |
| <i>Indirect, humanitarian</i> | 5,144.00 | 26,752.68 | 298,446.04 | - | - | 11,976,919.00 | 1,090 |
| <i>Direct, FNS</i> | 6,234.00 | 18,302.39 | 257,071.88 | - | 2,638.00 | 14,400,000.00 | - |
| <i>Indirect, FNS</i> | 5,344.00 | 67,055.20 | 1,570,065.54 | - | 3,402.00 | 103,710,377.00 | 890 |

Table 6: Descriptive statistics of CARE humanitarian projects by sex, 2015 – 2020

| | N | Mean | Standard Deviation | Median | IQR | Range | |
|-------------------------------------|----------|-------------|-------------------------------|---------------|------------|----------------|--------|
| <i>Direct</i> | | | | | | | |
| <i>Women</i> | 1,197.00 | 35,367.35 | 319,851.94 | 5,962.00 | 19,738.00 | 10,720,000.00 | 54.00 |
| <i>Men</i> | 1,193.00 | 31,168.63 | 327,956.35 | 4,095.00 | 15,354.00 | 11,100,000.00 | 58.00 |
| <i>Total</i> | 1,203.00 | 67,170.17 | 644,492.26 | 10,836.00 | 35,390.00 | 21,800,000.00 | 48.00 |
| <i>Indirect</i> | | | | | | | |
| <i>Women</i> | 1,053.00 | 178,424.28 | 2,210,444.57 | 5,000.00 | 31,045.00 | 50,600,000.00 | 198.00 |
| <i>Men</i> | 1,051.00 | 169,175.01 | 2,202,301.73 | 4,073.00 | 26,161.00 | 50,600,000.00 | 200.00 |
| <i>Total</i> | 1,084.00 | 635,635.78 | 6,869,081.46 | 11,623.00 | 60,888.00 | 122,000,000.00 | 167.00 |
| <i>Humanitarian Direct</i> | | | | | | | |
| <i>Women</i> | 1,142.00 | 16,479.19 | 40,756.10 | 3,022.50 | 12,938.00 | 473,929.00 | 109.00 |
| <i>Men</i> | 1,137.00 | 15,087.08 | 45,786.39 | 2,246.00 | 9,401.00 | 730,987.00 | 114.00 |
| <i>Total</i> | 1,161.00 | 31,695.12 | 84,138.85 | 5,341.00 | 22,549.00 | 946,625.00 | 90.00 |
| <i>Humanitarian Indirect</i> | | | | | | | |
| <i>Women</i> | 1,005.00 | 25,923.87 | 117,304.73 | 1,466.00 | 15,111.00 | 2,538,072.00 | 246.00 |
| <i>Men</i> | 1,003.00 | 22,618.88 | 112,241.42 | 1,026.00 | 12,424.00 | 2,461,928.00 | 248.00 |
| <i>Reach</i> | | | | | | | |
| <i>Direct, total</i> | 1,251.00 | 31,649.00 | 85,416.71 | 5,400.00 | 22,604.00 | 946,625.00 | - |
| <i>Indirect, total</i> | 1,251.00 | 60,524.40 | 323,085.13 | 1,445.00 | 28,090.00 | 6,500,000.00 | - |
| <i>Direct, humanitarian</i> | 1,251.00 | 29,414.90 | 81,466.31 | 4,195.00 | 20,380.00 | 946,625.00 | - |
| <i>Indirect, humanitarian</i> | 1,251.00 | 46,350.92 | 278,712.91 | - | 20,444.00 | 6,500,000.00 | - |
| <i>Direct, FNS</i> | 1,251.00 | 14,031.83 | 63,087.17 | - | 3,850.00 | 946,625.00 | - |
| <i>Indirect, FNS</i> | 1,251.00 | 30,936.11 | 211,630.02 | - | 2,295.00 | 3,988,882.00 | - |

Table 7: Descriptive statistics of CARE FNS projects by sex, 2015 – 2020

| | N | Mean | St Deviation | Median | IQR | Range | Missing |
|-----------------------------------|----------|-------------|---------------------|---------------|------------|--------------|----------------|
| <i>Direct</i> | | | | | | | |
| <i>Women</i> | 2,906 | 104,419.20 | 1494,530.05 | 4,560.00 | 19,054.00 | 41,338,740 | 154 |
| <i>Men</i> | 2,886 | 44,740.93 | 378,403.12 | 3,000.00 | 14,520.00 | 11,100,00 | 174 |
| <i>Total</i> | 2,947 | 148,987.61 | 1,789,762.62 | 8,739.00 | 34,278.00 | 45,969,379 | 113 |
| <i>Humanitarian Direct</i> | | | | | | | |
| <i>Women</i> | 2,335 | 10,102.42 | 55,570.44 | - | 2,856.00 | 2,856 | 725 |
| <i>Men</i> | 2,334 | 9,136.15 | 52,489.34 | - | 2,193.00 | 2,193 | 726 |
| <i>Total</i> | 2,744 | 17,286.75 | 104,036.15 | - | 3,198.00 | 3,198 | 316 |
| <i>Reach</i> | | | | | | | |
| <i>Direct, total</i> | 3,060 | 84,117.71 | 1,251,270.57 | 4,337.00 | 18,299.00 | 18,299 | - |
| <i>Indirect, total</i> | | | | | | | |
| <i>Direct, FNS</i> | 3,060 | 30,439.83 | 257,352.89 | 2,033.00 | 9,795.00 | 9,795 | - |
| <i>Indirect, FNS</i> | 2,496 | 136,178.63 | 2,286,535.58 | 3,264.00 | 23,415.00 | 23,415 | 564 |

Table 8: Cost – benefit analysis of all CARE projects, 2015 – 2020

| Measure | N | Mean cost per beneficiary | STD | Missing |
|------------------------------|------|---------------------------|---------|---------|
| Direct | | | | |
| Women | 1490 | 0.383 | 9.264 | 191 |
| Men | 1465 | 0.260 | 6.851 | 216 |
| Total | 1523 | 0.601 | 15.828 | 158 |
| Indirect | | | | |
| Women | 1329 | 2.376 | 50.768 | 352 |
| Men | 1317 | 2.309 | 51.804 | 364 |
| Total | 1366 | 4.568 | 100.359 | 315 |
| Humanitarian Direct | | | | |
| Women | 1082 | 0.211 | 3.226 | 599 |
| Men | 1079 | 0.161 | 3.141 | 602 |
| Total | 1100 | 0.365 | 6.198 | 581 |
| Humanitarian Indirect | | | | |
| Women | 979 | 0.488 | 6.475 | 702 |
| Men | 977 | 0.459 | 6.758 | 704 |
| Total | | | | 1681 |

Table 9: T-test outputs for all CARE projects by program, 2015 – 2020

| Variable | Group compared against all projects | Pooled T-test | DF | T-value | P-value |
|---|-------------------------------------|---------------|------|---------|----------|
| Total budget | Humanitarian | Equal | 5916 | 1.34 | 0.1799 |
| Total budget | FNS | Equal | 5916 | -8.34 | <0.001** |
| Direct Expected Participants | Humanitarian | Equal | 5893 | 1.68 | 0.0928 |
| Direct Expected Participants | FNS | Equal | 5893 | -0.86 | 0.3887 |
| Indirect Expected Participants | Humanitarian | Equal | 5581 | 1.54 | 0.1239 |
| Indirect Expected Participants | FNS | Equal | 5581 | -1.55 | 0.1212 |
| Humanitarian Direct Participants | Humanitarian | Equal | 5622 | -16.25 | <0.001** |
| Humanitarian Direct Participants | FNS | Equal | 5622 | -1.70 | 0.0891 |
| Humanitarian Indirect Participants | Humanitarian | Equal | 5503 | -6.93 | <0.001** |
| Humanitarian Indirect Participants | FNS | Equal | 5503 | -1.34 | 0.1810 |

Table 10: Chi-squared output of CARE projects by program, 2015 – 2020 (n = 6,234)

| Variable | Class | DF | Value | Probability |
|--------------------|--------------|----|----------|-------------|
| Fiscal Year | Humanitarian | 5 | 153.3282 | <0.0001 |
| Fiscal Year | FNS | 5 | 320.2660 | <0.0001 |

Figures/Figure Legends

Figure 1: World Map of All CARE projects, 2015 – 2020 (N = 2,385)

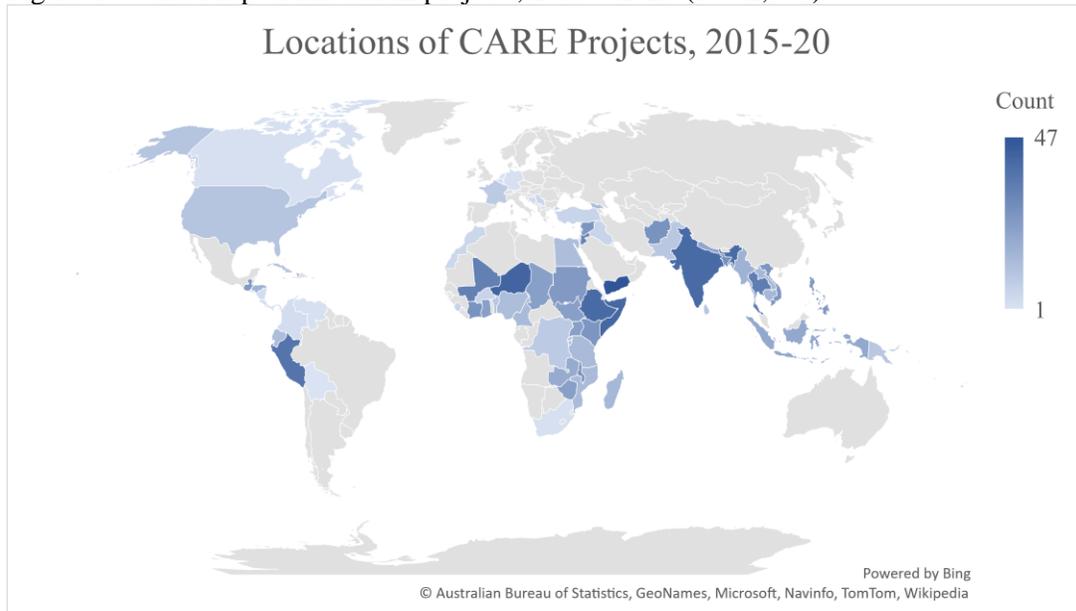
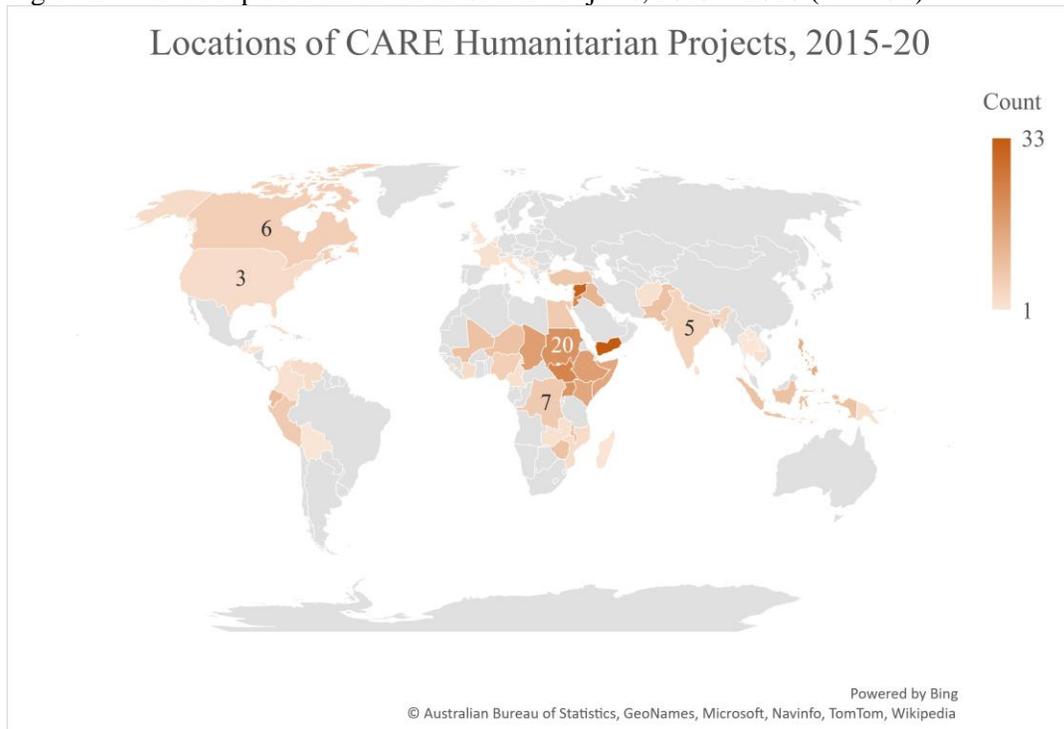


Figure 2: World Map of Humanitarian CARE Projects, 2015 – 2020 (N = 437)



Chapter III: Summary, Public Health Implications, Possible Future Directions

Summary

Humanitarian aid is given to countries around the world, potentially impacting millions each year. In disaster settings, FNS programs are often included because the target population is cut off from their traditional avenues to obtain food. CARE administers a large number of humanitarian programs each year, and has a special focus on FNS.

Data was taken from the CARE PIIRS survey, which collects program information at a program close-out. The analysis was performed in SAS. The deliverables were tables and figures that visualize the data. For the purposes of this thesis, a further analysis of t-tests of significance and logistic regressions were performed.

On average, programs that included an FNS component impacted 18,302 people per program. The average overall budget of projects was \$2,110,527.29. In the period of 2015 – 2020, CARE hosted over 5,918 with approximately \$12 trillion invested. In a cost-benefit analysis, the programs with the lowest (and most ideal) ratios of cost-to-beneficiary were programs involving men. When indirect impact groups were added to the analysis, they had the highest ratios, regardless of impact group.

Public Health Implications

An issue in the humanitarian field as a whole is the lack of post-program evaluations. This can be explained by the dynamic nature of the work and the short-warning, short-program length of most interventions. CARE, as a large organization with 75 years of experience does have an

amalgamation of data from their programs. This data comes from the administrative side of these programs.

The system in place for reporting on program outcomes, the PIIRS, does give vital information on the broad effects of the programs. This is important to understand for a couple of reasons. First, from a financial standpoint, CARE relies on the support of outside donors for much of their funding. Tracking the program impacts is essential to making sure that donations are spent as intended. CARE must spend at least 51% of all donations directly on program beneficiaries. As noted above, the PIIRS survey does not provide all the information necessary in order to estimate amount of money spent on beneficiaries only. Nevertheless, it is another way to track donation money and can be used to give large-scale impact data from the programs that can be shared with donors. This step is a necessary part of donations, as it keeps the donors engaged and more likely to contribute to CARE in the future, if they are satisfied with the impact their money is making.

Secondly, CARE will be able to use this information to contribute to its annual reports. Every year, CARE publishes a report from all programs. This shows the reach of the organization as a whole. It is helpful to look through to see the scope of the organization. It also shows where programs are concentrated. Looking at this data every year can also be used to compare to the global economic and social situations. For example, the SARS Co-V-2 pandemic brought many changes to programs, and is analyzed in the 2020 Annual Report, published early in 2021. The results of this data analysis specifically will go to the team that manages FNS programs in the Humanitarian Team. The team can see how FNS programs are faring. Because there is a way to sort the programs by focus (FNS, Protection, WASH, etc.) they can also compare the scope of programs in each focus area.

The data from the PIIRS survey helps to fill in the gap between humanitarian programs and their impacts. There has been critique in the past that humanitarian work has structural problems, or that it does not significantly help the groups that it is supposed to serve (14). We are constantly

learning more about how we should approach this work. Evaluations like this can show how the programs perform. Low impact numbers with large budgets show problems in how programs are carried out. Additionally, big differences in the expected versus actual program beneficiaries show a lack of forecasting that can cause problems either way. Overestimating participants could signal that the program is not accessible to the target population. Underestimating shows that there is a larger unmet need than known. Both of these are versions of inefficiencies and should be addressed.

The ultimate goal is to have successful programs. This will serve beneficiaries, as well as the donors of such programs. It is in all players' interests to impact the largest amount of people, in the best way, for the lowest amount of money. Regularly pulling program data from the PIIRS survey helps CARE to keep on top of its responsibilities to its beneficiaries and donors.

CARE is just one aid organization, but it is a large global player in the field. Because of its size and historic impact, it can be a leader for other humanitarian organizations. Keeping on track of its programs and regularly reporting is an expectation, as set by the Sphere Association and other best-practices guidelines. CARE increases their transparency by publishing public reports of their work that can be easily found on their website. This information can be seen by anyone, and thus used for examples in public health of programs in the field. The work in this PIIRS survey can be relevant to all branches of public health, from epidemiology to environmental health to policy-making.

Possible Future Directions

Now that this data has been analyzed, it will be easier to update at periodic intervals. This framework of summarization can be used for all program types, not just for projects with a humanitarian focus or an FNS component. A future analysis can extend into WASH, SRH, and shelter programs, to start. Then programs could be compared by focus type. To do this, some nuance

would have to be added in, accounting for programs that have a large monetary investment (such as shelter-building) to fairly compare to programs with fewer physical parts (like a gender education campaign).

There is also a large amount of qualitative data in the PIIRS survey. This data should be addressed in future passes as well. Because of the large volume of responses, this would be best to do in small increments, such as the programs on one year for one focus area. A consideration when doing this would be language barriers. The PIIRS is available in several languages. It would need to be translated into English (or all into another language of choice) in order to analyze all responses.

There is also a push within CARE to look further into gender dynamics. CARE is a poverty-elimination organization that achieves that goal partially by establishing gender equality. There is another survey that specifically looks at the gender impacts of a program. This is more focused on qualitative responses. It would be good for the humanitarian team to be able to compare the overall program effects of the PIIRS with gender goals. With this data, combining both surveys will hopefully be a simpler task.

Appendices

Appendix 1: CARE PIIRS Survey Instrument

*denotes questions that require an answer

This survey has been edited to show only questions used in this analysis.

Enrolling organisation unit

Country*

Lead member*

Full name of your project/initiative*

Acronym or short name of the project/initiative*

Program Type Classification: From your financial system, please indicate the predominant programmatic area in which the project/initiative concentrates its investments.

Humanitarian / Development

Total budget for the life of the project/initiative - in US dollars; do not include currency symbol (\$), commas (,) or periods (.)

Contact 1 – Name, Position, Email

Generated ID

FISCAL YEAR *

Focus

Does the project/initiative focus its actions in long-term development, humanitarian, or both types of work? Certain sections in the rest of the form will be visible/invisible depending on your selection here.

Please select the focus of your project *

Both long/term development and humanitarian

GEOGRAPHY/LOCATION(S)

Geographical scope * Please select the type of location in which the project/initiative is implemented * DESCRIBE SPECIFIC LOCATION(S)

1st level: states, cities, regions, other

2nd level: provinces, departments, districts, other

3rd level: municipalities, communes, other

Expected Participants in Life of Project/Initiative

Indicate the number of expected direct and indirect participants in the life of the project/initiative, by sex. Expected Direct participants: # women and girls

Expected Direct participants: # men and boys

Expected Direct participants: Total #

Expected Indirect participants: # women and girls

Expected Indirect participants: # men and boys

Expected Indirect participants: Total #

Provide any explanation on actual total participants across the life of the project

Actual Total Participants (for projects that have ended in this FY)

If the project/initiative ended/finalized activities during the FY, please provide the following consolidated data.

Total consolidated Direct participants in life of project: # women and girls

Total consolidated Direct participants in life of project: # men and boys

Total consolidated Direct participants in life of project: Total #

Total consolidated Indirect participants in life of project: # women and girls

Total consolidated Indirect participants in life of project: # men and boys

Total consolidated Indirect participants in life of project: Total #

Please describe who the expected direct & indirect participants are, and how they are calculated.

Thematic Areas

Please indicate the thematic area(s)/sector(s) that linked to the cash/voucher assistance work during the FY.

Food and nutrition security

Protection

Sexual, reproductive and maternal health (SRMH)

Shelter Water, sanitation and hygiene (WASH)

Other

Please provide any comments around the information provided (e.g. delivery mechanisms, conditionalities, consortium, expected outcomes)

Humanitarian Programmatic Activities

Has the project or initiative implemented any humanitarian programmatic activities in this FY? *

Yes / No

Direct and Indirect Reach

Humanitarian: Direct participants: # women and girls

Humanitarian: Direct participants: # men and boys

Humanitarian: Direct participants: Total # 0

What % of the Direct participants in your project reached in the FY are part of the poorest 40 percent of the population? (should be from 0-100)

Humanitarian: Indirect participants: # women and girls 0

Humanitarian: Indirect participants: # men and boys

Humanitarian: Indirect participants: Total #

Below, check the boxes for all the themes/sectors for which the project delivered actions or strategies in the FY. If your project implemented programmatic activities in this FY, you will also report the number of people directly and/or indirectly reached in each sector/theme.

Food and Nutrition Security

Food and nutrition security: Direct participants reached in the FY

Food and nutrition security: % of direct participants that are women (from 0-100)

Food and nutrition security: Indirect participants reached in the FY

Monitoring, Evaluation and Learning

Did the project/initiative have a MEAL plan defined in the FY?

Yes / No

To what degree did the project/initiative follow/implement its MEAL plan in the FY?

Has any evaluative process (baseline study, progress assessment, mid-term or final evaluation, AIIR analysis/tool for advocacy/influencing) taken place for this project/initiative in this FY?

Yes / No

Date of baseline/evaluation (mm/yy)

Has the project/initiative compiled and documented evidence of impact/outcomes/lasting change for any of the 25 global indicators of the CARE 2020 Program Strategy? Or any other indicator that relates to the outcomes and approach.

Yes / No

Resilience Marker Score

Resilience: Total points 0

Calculate Resilience Marker Total Points (click checkbox AFTER data entry above is complete)

* RESILIENCE MARKER SCORE Calculate Resilience Marker Score (click checkbox AFTER data entry above is complete) *

If applicable, please provide links to your marker vetting form or other supporting documentation.



CARE Program Statistics

Data adapted for CARE Humanitarian Food and Nutrition Security

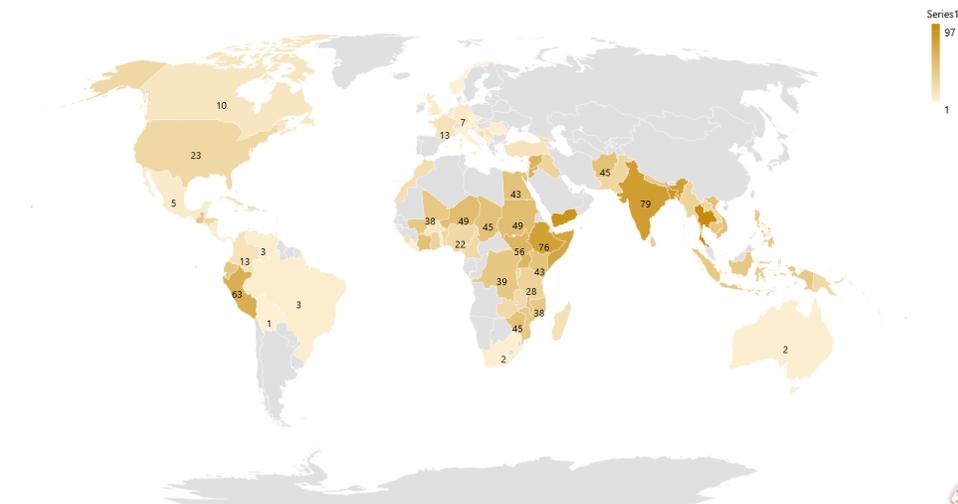


Statistics
from PIIRS
Reports,
2015-20

All Data

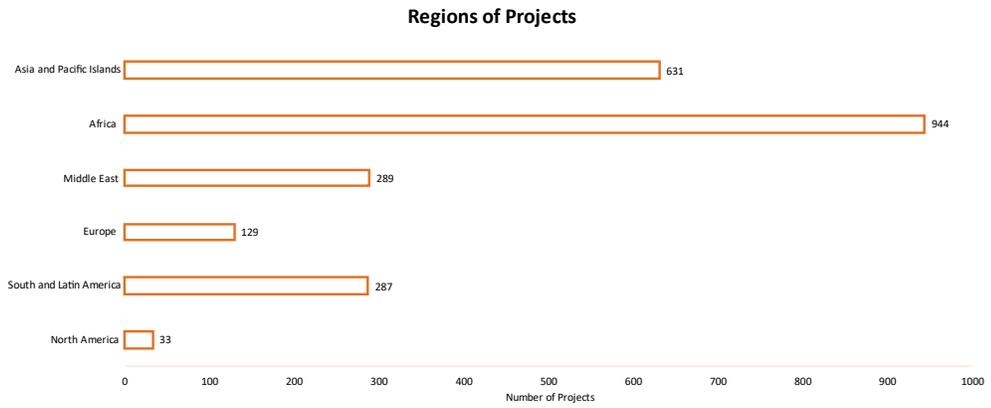


Location of CARE Projects, 2015 -20



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A Microsoft Business-to-Business, Microsoft Health, and Microsoft Research

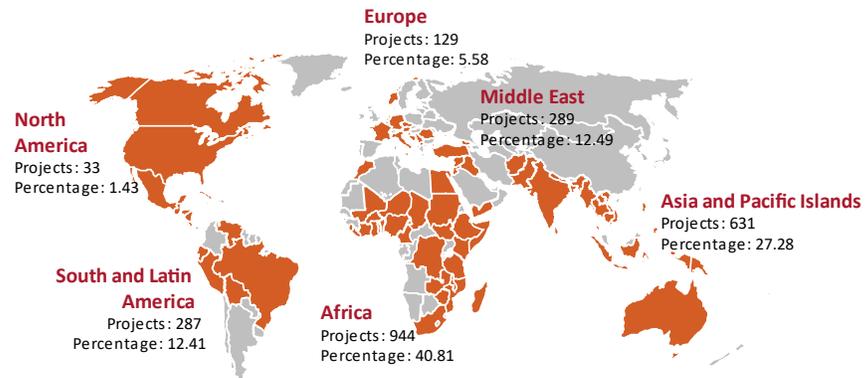
Projects by Region



5



Regional Map of Projects



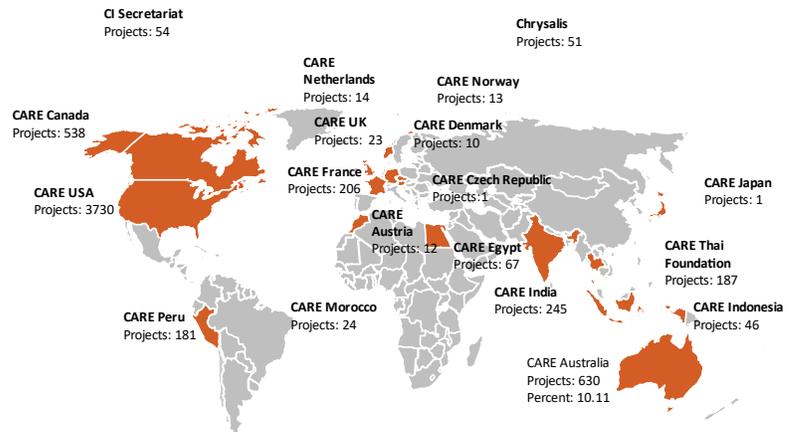
Participating Member Organizations

| Member Organization | Count | Percent |
|---------------------------|-------|---------|
| CARE Australia | 630 | 10.11 |
| CARE Austria | 2 | 0.03 |
| CARE Canada | 538 | 8.63 |
| CARE Czech Republic | 1 | 0.02 |
| CARE Denmark | 10 | 0.16 |
| CARE DeutschlandLuxemburg | 156 | 2.50 |
| CARE Egypt | 67 | 1.07 |
| CARE France | 206 | 3.30 |
| CARE Germany | 44 | 0.71 |
| CARE India | 245 | 3.93 |
| CARE Indonesia | 46 | 0.74 |
| CARE Japan | 1 | 0.02 |
| CARE Luxembourg | 1 | 0.02 |
| CARE Morocco | 24 | 0.38 |
| CARE Netherlands | 14 | 0.22 |
| CARE Norge | 12 | 0.19 |
| CARE Norway | 1 | 0.02 |
| CARE Peru | 181 | 2.90 |
| CARE UK | 23 | 0.37 |
| CARE USA | 3730 | 59.83 |
| CARE Osterreich | 10 | 0.16 |
| CI Secretariat | 54 | 0.87 |
| Chrysalis | 51 | 0.82 |
| CARE Thai Foundation | 187 | 3.00 |

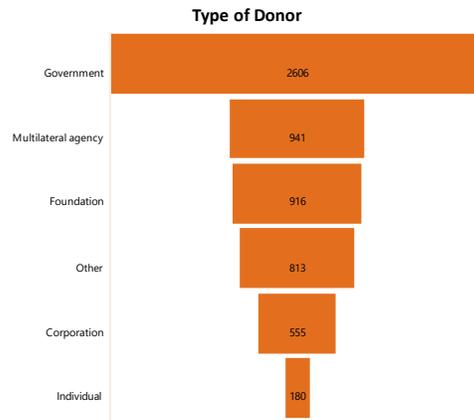
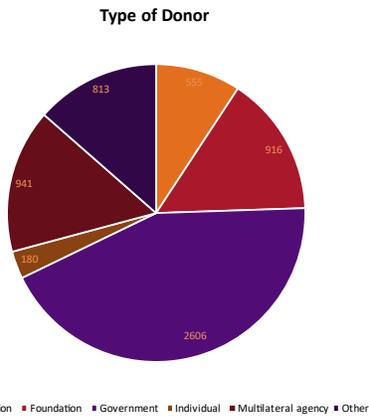
7



Locations of Member Organizations



Donors



Rural and Urban Distribution



75 YEARS

10

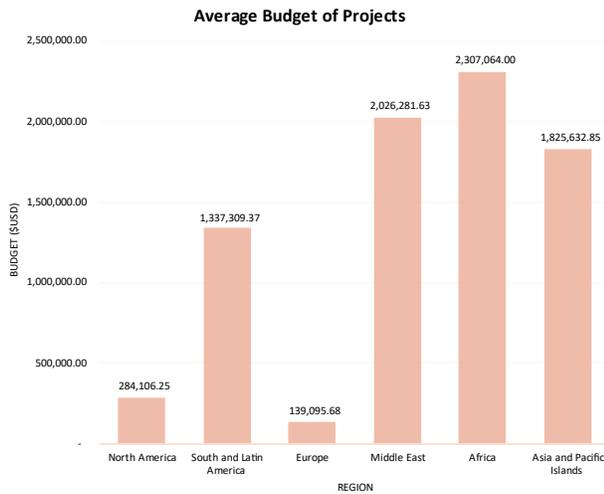
| Total Budget | \$USD (assumed) |
|--------------|-----------------|
| N | 5,918 |
| Mean | 2,110,527.29 |
| St Deviation | 6,441,857.54 |
| Median | 618,859 |
| IQR | 1,572,741 |
| Range | 129,000,000 |
| Missing | 316 |



Overall Budget Statistics

Out of approximately 6,000 reported projects, the total budget was \$12 trillion.

| | N | Mean | Standard Deviation | Median | IQR | Range | Missing |
|------------------------------|----------|--------------|--------------------|-----------|-----------|------------------|---------|
| Direct | | | | | | | |
| Women | 5,784.00 | 91,601.84 | 1,270,170.82 | 4,321.00 | 17,837.00 | 41,338,740.00 | 450 |
| Men | 5,713.00 | 40,262.52 | 352,161.64 | 2,550.00 | 13,013.00 | 11,100,000.00 | 521 |
| Total | 5,895.00 | 131,545.67 | 1,553,310.66 | 7,800.00 | 31,170.00 | 45,969,379.00 | 339 |
| Indirect | | | | | | | |
| Women | 5,480.00 | 580,266.62 | 13,140,481.50 | 8,400.00 | 48,562.00 | 656,994,006.00 | 754 |
| Men | 5,441.00 | 499,660.41 | 13,836,182.80 | 6,332.00 | 37,554.00 | 711,743,507.00 | 793 |
| Total | 5,583.00 | 1,124,635.45 | 26,638,615.90 | 16,500.00 | 89,553.00 | 1,368,737,513.00 | 651 |
| Humanitarian Direct | | | | | | | |
| Women | 4,867.00 | 9,070.20 | 43,689.66 | - | 2,952.00 | 2,041,415.00 | 1,367 |
| Men | 4,859.00 | 8,168.12 | 42,341.57 | - | 2,167.00 | 189,904.00 | 1,375 |
| Total | 5,624.00 | 15,379.50 | 82,107.98 | - | 3,407.00 | 3,941,319.00 | 610 |
| Humanitarian Indirect | | | | | | | |
| Women | 4,730.00 | 15,948.78 | 158,085.06 | - | 3.00 | 5,777,508.00 | 1,504 |
| Men | 4,725.00 | 14,930.00 | 165,616.15 | - | - | 6,199,411.00 | 1,509 |
| Reach | | | | | | | |
| Direct, total | 6,234.00 | 68,211.41 | 1,063,592.45 | 3,312.00 | 15,742.00 | 45,969,379.00 | - |
| Indirect, total | 6,234.00 | 298,352.37 | 5,517,669.60 | 4,494.00 | 33,669.00 | 276,507,214.00 | - |
| Direct, humanitarian | 6,233.00 | 13,876.83 | 78,126.60 | - | 2,048.00 | 3,941,319.00 | 1 |
| Indirect, humanitarian | 5,144.00 | 26,752.68 | 298,446.04 | - | - | 11,976,919.00 | 1,090 |
| Direct, FNS | 6,234.00 | 18,302.39 | 257,071.88 | - | 2,638.00 | 14,400,000.00 | - |
| Indirect, FNS | 5,344.00 | 67,055.20 | 1,570,065.54 | - | 3,402.00 | 103,710,377.00 | 890 |



Budget of Projects, by Region

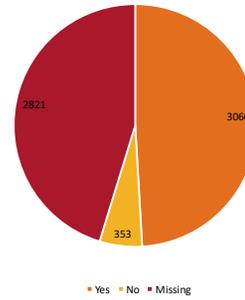
Africa had the most projects (934) with an average budget of \$2.3 million.

Food and Nutrition Security Projects



14

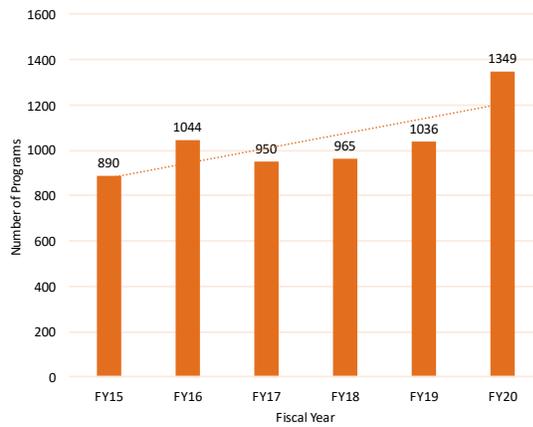
Projects with an FNS Outcome



Out of 3,413 projects with available data, 89.6% of them included an FNS component



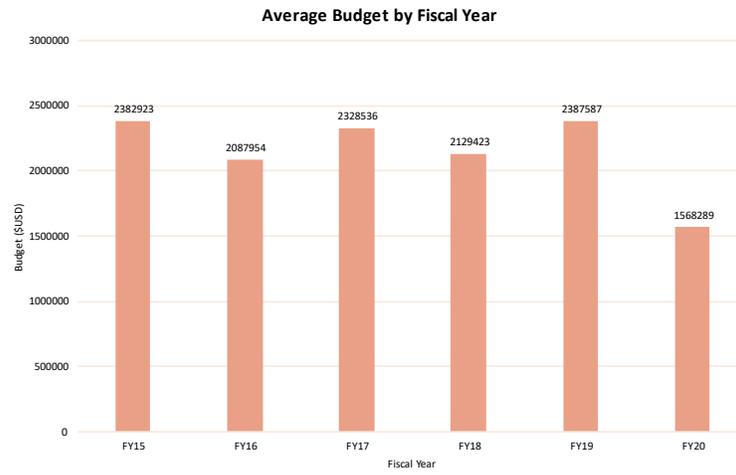
Number of Programs by Fiscal Year



Projects over Time

Number of projects increased in 2020 compared to previous years.

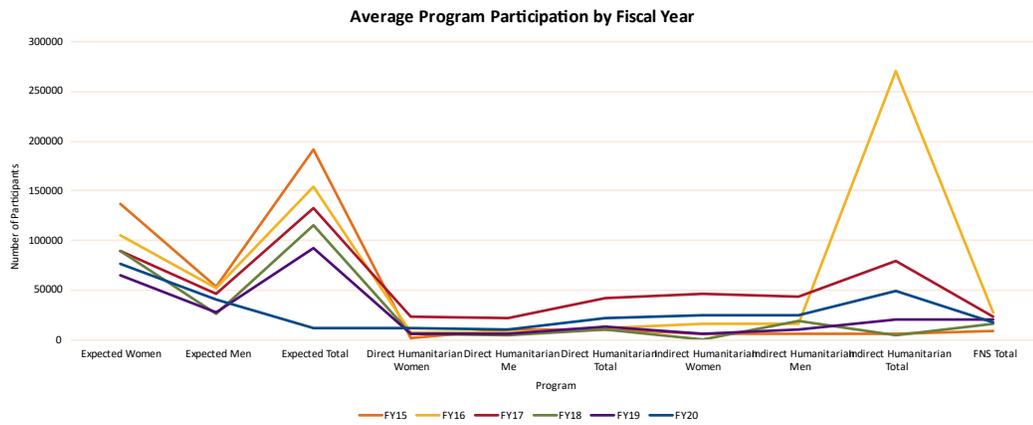
Budgets over Time



16



Expected and Actual Program Participants over Time



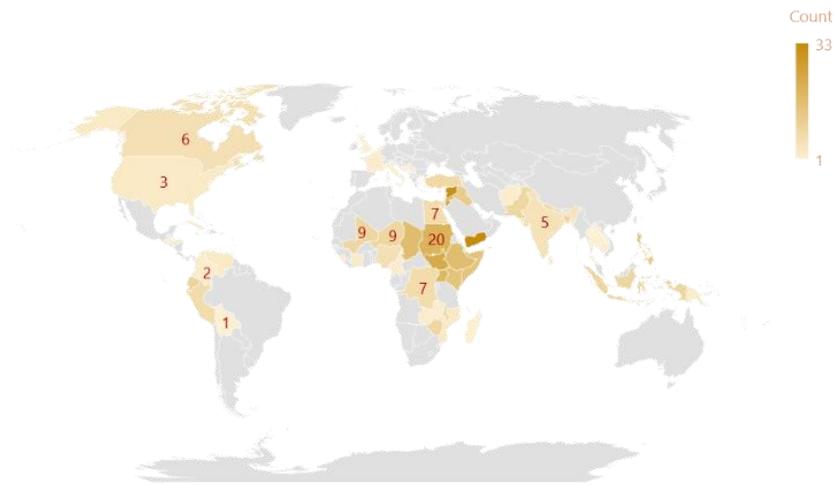
17



Humanitarian Data



Locations of CARE Humanitarian Projects, 2015-20

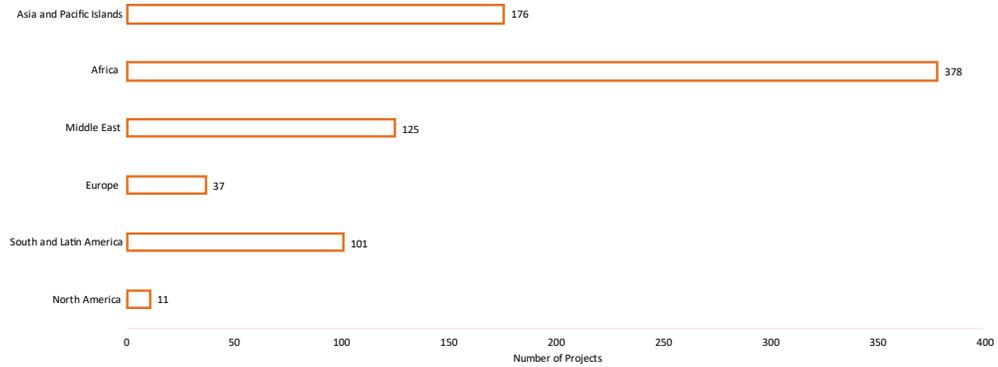


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Projects by Region

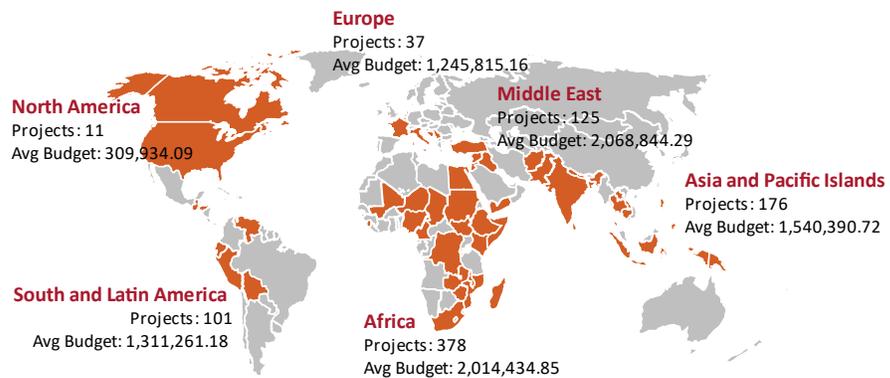
Regions of Humanitarian Projects



20



Regional Map of Humanitarian Projects



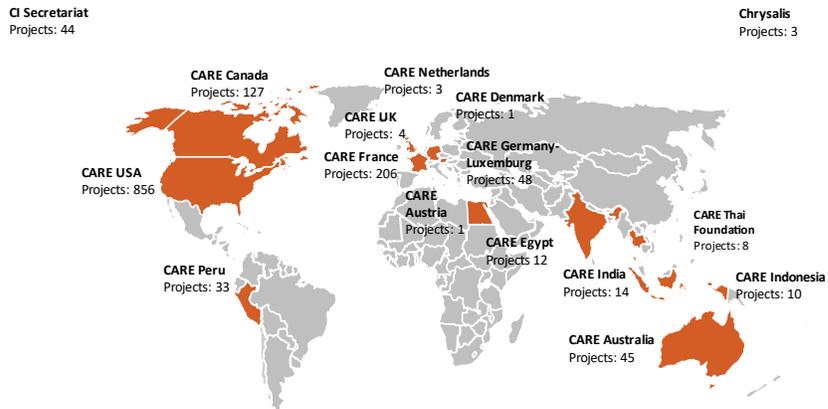
Participating Member Organizations

| Member Organization | Count | Percent |
|---------------------------|-------|---------|
| CARE Australia | 45 | 3.60 |
| CARE Canada | 127 | 10.15 |
| CARE Denmark | 1 | 0.08 |
| CARE DeutschlandLuxemburg | 48 | 3.84 |
| CARE Egypt | 12 | 0.96 |
| CARE France | 42 | 3.36 |
| CARE India | 14 | 1.12 |
| CARE Indonesia | 10 | 0.80 |
| CARE Netherlands | 3 | 0.24 |
| CARE Peru | 33 | 2.64 |
| CARE UK | 4 | 0.32 |
| CARE USA | 856 | 68.43 |
| CARE Osterreich | 1 | 0.08 |
| CI Secretariat | 44 | 3.52 |
| Chrysalis | 3 | 0.24 |
| CARE Thai Foundation | 8 | 0.64 |

22

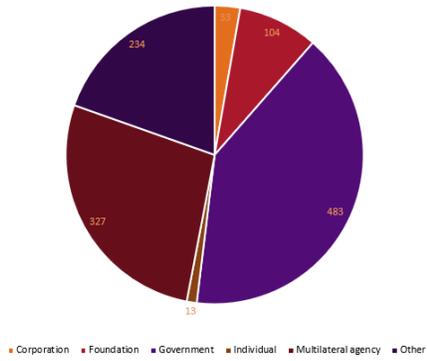


Locations of Member Organizations

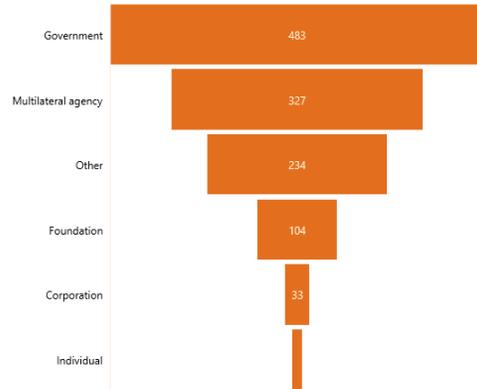


Donors

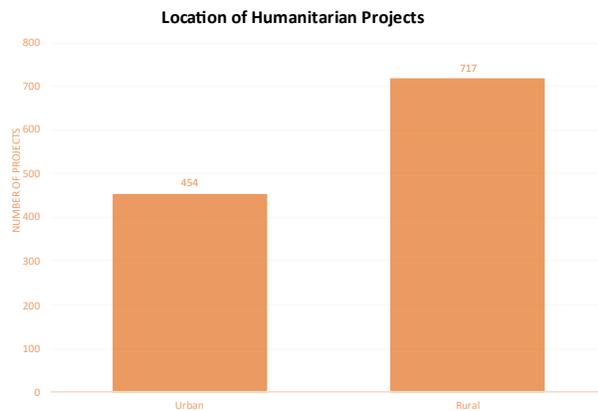
Types of Humanitarian Project Donors



Types of Humanitarian Project Donors



Rural and Urban Distribution



25



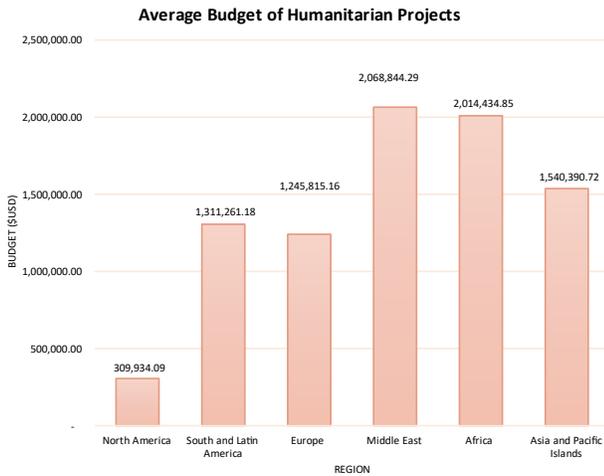
| Total Budget | \$USD (assumed) |
|---------------|-----------------|
| N | 1,168 |
| Mean | 2,328,400.58 |
| Std Deviation | 6,881,019.24 |
| Median | 611,851 |
| IQR | 1,809,785 |
| Range | 88,000,000 |
| Missing | 83 |



Humanitarian Budget Statistics

The humanitarian projects had a total budget of \$2.7 billion.

| | N | Mean | Standard Deviation | Median | IQR | Range | Missing |
|------------------------------|----------|------------|--------------------|-----------|-----------|----------------|---------|
| Direct | | | | | | | |
| Women | 1,197.00 | 35,367.35 | 319,851.94 | 5,962.00 | 19,738.00 | 10,720,000.00 | 54.00 |
| Men | 1,193.00 | 31,168.63 | 327,956.35 | 4,095.00 | 15,354.00 | 11,100,000.00 | 58.00 |
| Total | 1,203.00 | 67,170.17 | 644,492.26 | 10,836.00 | 35,390.00 | 21,800,000.00 | 48.00 |
| Indirect | | | | | | | |
| Women | 1,053.00 | 178,424.28 | 2,210,444.57 | 5,000.00 | 31,045.00 | 50,600,000.00 | 198.00 |
| Men | 1,051.00 | 169,175.01 | 2,202,301.73 | 4,073.00 | 26,161.00 | 50,600,000.00 | 200.00 |
| Total | 1,084.00 | 635,635.78 | 6,869,081.46 | 11,623.00 | 60,888.00 | 122,000,000.00 | 167.00 |
| Humanitarian Direct | | | | | | | |
| Women | 1,142.00 | 16,479.19 | 40,756.10 | 3,022.50 | 12,938.00 | 473,929.00 | 109.00 |
| Men | 1,137.00 | 15,087.08 | 45,786.39 | 2,246.00 | 9,401.00 | 730,987.00 | 114.00 |
| Total | 1,161.00 | 31,695.12 | 84,138.85 | 5,341.00 | 22,549.00 | 946,625.00 | 90.00 |
| Humanitarian Indirect | | | | | | | |
| Women | 1,005.00 | 25,923.87 | 117,304.73 | 1,466.00 | 15,111.00 | 2,538,072.00 | 246.00 |
| Men | 1,003.00 | 22,618.88 | 112,241.42 | 1,026.00 | 12,424.00 | 2,461,928.00 | 248.00 |
| Reach | | | | | | | |
| Direct, total | 1,251.00 | 31,649.00 | 85,416.71 | 5,400.00 | 22,604.00 | 946,625.00 | - |
| Indirect, total | 1,251.00 | 60,524.40 | 323,085.13 | 1,445.00 | 28,090.00 | 6,500,000.00 | - |
| Direct, humanitarian | 1,251.00 | 29,414.90 | 81,466.31 | 4,195.00 | 20,380.00 | 946,625.00 | - |
| Indirect, humanitarian | 1,251.00 | 46,350.92 | 278,712.91 | - | 20,444.00 | 6,500,000.00 | - |
| Direct, FNS | 1,251.00 | 14,031.83 | 63,087.17 | - | 3,850.00 | 946,625.00 | - |
| Indirect, FNS | 1,251.00 | 30,936.11 | 211,630.02 | - | 2,295.00 | 3,988,882.00 | - |



Budget of Projects, by Region

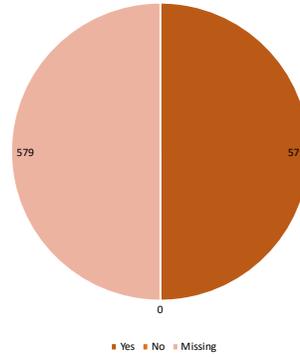
Middle East had the largest average budget, \$2 million, with 123 projects.

Food and Nutrition Security Projects



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Humanitarian Projects with FNS Outcome



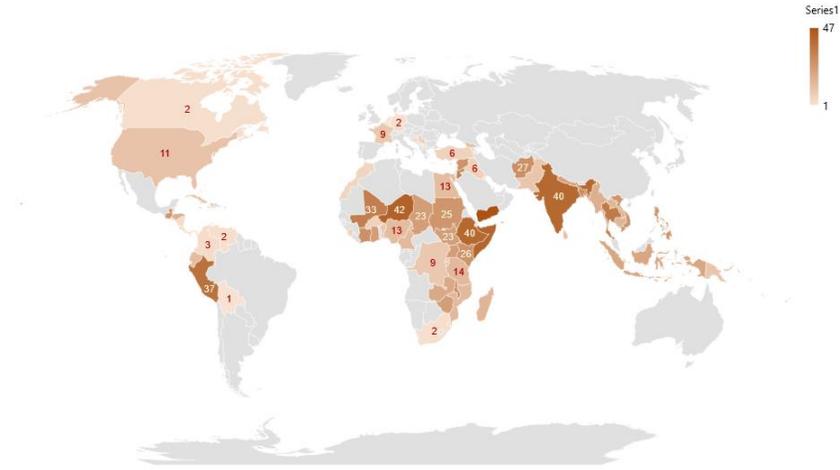
Of the humanitarian projects with data, all projects reported having an FNS component.



Food and Nutrition Security Projects



Location of FNS Projects, 2015-20

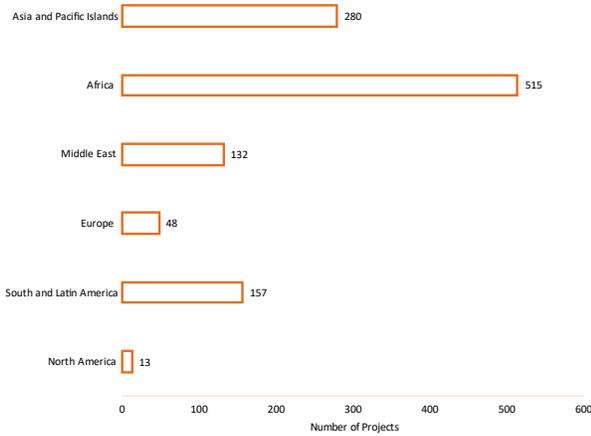


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Regions of Projects



FNS by Region

| | N | Mean | St Deviation | Median | Missing |
|----------------------------|-------|------------|--------------|----------|---------|
| Direct | | | | | |
| Women | 2,906 | 104,419.20 | ##### | 4,560.00 | 154 |
| Men | 2,886 | 44,740.93 | 378,403.12 | 3,000.00 | 174 |
| Total | 2,947 | 148,987.61 | ##### | 8,739.00 | 113 |
| Humanitarian Direct | | | | | |
| Women | 2,335 | 10,102.42 | 55,570.44 | - | 725 |
| Men | 2,334 | 9,136.15 | 52,489.34 | - | 726 |
| Total | 2,744 | 17,286.75 | 104,036.15 | - | 316 |
| Reach | | | | | |
| Direct, total | 3,060 | 84,117.71 | ##### | 4,337.00 | - |
| Indirect, total | | | | | |
| Direct, FNS | 3,060 | 30,439.83 | 257,352.89 | 2,033.00 | - |
| Indirect, FNS | 2,496 | 136,178.63 | ##### | 3,264.00 | 564 |



Cost : Benefit Analysis



Cost : Benefit Ratios, All Data

| Measure | N | Mean | STD | Missing |
|------------------------------|------|-------|---------|---------|
| Direct | | | | |
| Women | 1490 | 0.383 | 9.264 | 191 |
| Men | 1465 | 0.260 | 6.851 | 216 |
| Total | 1523 | 0.601 | 15.828 | 158 |
| Indirect | | | | |
| Women | 1329 | 2.376 | 50.768 | 352 |
| Men | 1317 | 2.309 | 51.804 | 364 |
| Total | 1366 | 4.568 | 100.359 | 315 |
| Humanitarian Direct | | | | |
| Women | 1082 | 0.211 | 3.226 | 599 |
| Men | 1079 | 0.161 | 3.141 | 602 |
| Total | 1100 | 0.365 | 6.198 | 581 |
| Humanitarian Indirect | | | | |
| Women | 979 | 0.488 | 6.475 | 702 |
| Men | 977 | 0.459 | 6.758 | 704 |
| Total | | | | 1681 |



Notes on Cost : Benefit

- Data for an analysis was available for 1,681 projects (out of a total 6,236 projects).
- Values are in \$ per person impacted in the program.
 - A lower mean ratio means that the project is impacting more people with a lower budget.
- The dataset did not include budget breakdowns. This analysis assumes that the total budget (tot_budget) was evenly divided over all participants (variable names vary).

Thank you!

