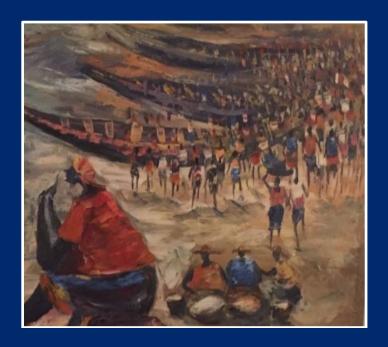


SUSTAINABLE FISHERIES MANAGEMENT PROJECT (SFMP)

Pilot of Economic Safety Net Scheme for the Marine Artisanal Fisheries Sector: Methodologies, Lessons Learned and Recommendations for Future Action



MARCH, 2021















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Cover photo: Painting by Bill Mensah entitled "Still waiting" illustrating the close contact and crowded nature of artisanal fish landings in Ghana. In the art collection of the Crawford family. **Photo credit:** Brian Crawford

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SNV <u>https://snv.org/usa</u>

ACRONYMS

CCM Center for Coastal Management

CEWEFIA Central and Western Region Fishmongers Improvement Association

CODA Coastal Development Authority

CRC Coastal Resources Center

DAA Development Action Association

F2F Fisher-to-Fisher

FAO Food and Agricultural Organization of the United Nations

FC Fisheries Commission FoN Friends of the Nation

GNCFC Ghana National Canoe Fishermen's Council

GoG Government of Ghana

HM Hen Mpoano

IP SFMP Implementing Partner

IR Intermediate Results

IUU Illegal, Unreported, and Unregulated (Fishing)LEAP Livelihood Empowerment Against Poverty

LoP Life of Project

M&E Monitoring and Evaluation

MMDAs Metropolitan and Municipal Assemblies

MOF Ministry of Finance

MOFAD Ministry of Fisheries and Aquaculture Development MOGCSP Ministry of Gender, Children and Social Protection MOLGRD Ministry of Local Government and Rural Development

NAFPTA National Fish Processors and Traders Association

NGO Non-Governmental Organization

NMFMP National Marine Fisheries Management Plan

PPME Policy Planning Monitoring and Evaluation, Ministry of Gender, Children and

Social Protection

SFMP Sustainable Fisheries Management Project

UCC University of Cape Coast
URI University of Rhode Island

USAID United States Agency for International Development

USG United State Government

VSLAs Village Savings and Loans Associations

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1. INTRODUCTION

The Coastal Resources Center at the University of Rhode Island (URI) led a consortium of local and international partners to implement the USAID/Ghana Sustainable Fisheries Management Project (SFMP). The aim of SFMP was to rebuild marine fisheries stocks and catches through adoption of responsible fishing practices. The project contributed to the Government of Ghana's fisheries development objectives and the US Government's Feed the Future Initiative. Working closely with the Ministry of Fisheries and Aquaculture Development and the Fisheries Commission, the project aimed to end overfishing of key stocks important to local food security through achievement of the following intermediate results:

- Improved legal enabling conditions for co-management, use rights, and effort-reduction strategies.
- Strengthened information systems and science-informed decision-making.
- Increased constituencies that provide political and public support needed to rebuild fish stocks
- Implementation of applied management initiatives for several targeted fisheries ecosystems.

In January 2020, the World Health Organization (WHO) declared the outbreak of a new coronavirus disease (COVID-19) a Public Health Emergency of International Concern. This virus spread to most countries in the world including Ghana. Fishing activities in Ghana continued since they are essential for food security. However, the continuous spread of the virus had potentially dire consequences for the livelihoods of approximately 300,000 households most of whom were already vulnerable to economic shocks.

In May 2020, USAID extended the Cooperative Agreement (AID-641-A-15-00001) with URI for seven months ending in April 2021, to include supplementary program activities with the objective to "prevent the spread and mitigate the economic effects of COVID-19 among vulnerable households in fishing communities in Ghana." One of four result areas envisioned to achieve this goal was, "Two thousand extremely vulnerable fisheries-dependent households avoid extreme poverty." Critical to achieving this result, was to pilot an economic safety net assistance program targeting 2000 economically vulnerable fisheries dependent households at risk of not meeting their basic food needs. As a result of the mode of infection and spread of the COVID-19 disease, the decision was made from the onset to provide the economic safety net assistance in the form of mobile money through verified mobile money accounts linked to selected beneficiaries, rather than in the form of physical cash, to limit exposure and risk to beneficiaries.

Through this pilot experience, the project has developed and validated methodologies that can be adopted by Government of Ghana and other development partners to effectively target, deliver, and monitor the implementation of economic safety net assistance in Ghana's artisanal fisheries sector. These methodologies and procedures can be considered for application to future economic shocks and serve as complements of sustainable fisheries management measures such as closed seasons and reduction of fishing capacity in Ghana's artisanal sector where vulnerable fisheries dependent households may experience economic hardship as a result of management measures. Provision of safety nets is one of the recommendations of the Assessment of the Socio-Economic, Food Security and Nutrition Impacts of the 2019 Closed Fishing Season in Ghana (Ofori-Danson et. al., 2019).

2. PURPOSE OF THIS GUIDE

The purpose of this methodological guide is to document step by step approaches, procedures and processes for the design and implementation of Economic Safety Net interventions targeting vulnerable fisheries dependent households in Ghana based on the experience of the SFMP COVID-19 response pilot Economic Safety Net Scheme.

The document also highlights the lessons learned along with the actual or recommended adjustments made to the SFMP piloted methodologies. It provides detailed guidance on the design and implementation of methodologies that:

Intended Audience

- Government of Ghana institutions.
- Fisheries Associations.
- Other fisheries stakeholders and organizations involved in policymaking, program design, implementation, and monitoring in the artisanal fisheries sector in Ghana.
- Ensure effective targeting, implementation, and monitoring of Economic Safety Net assistance to fisheries households.
- Define the roles and responsibilities of various partners and stakeholders.
- Establish a financial management framework as well as administrative procedures for the cash transfer programming.

The Guide also reflects on the potential application of Economic Safety Net Schemes as a component of sustainable fisheries management measures such as closed seasons where vulnerable fisheries dependent households may experience economic hardship as a result of management efforts to rebuild depleted fish stocks.

3. DESIGN DECISIONS

3.1 Economic Safety Net Pilot Mechanism Chosen

In 2016, the World Bank estimated that 3.9 million Ghanaians were living in extreme poverty. For the artisanal fisheries sector, declining incomes can be attributed to years of poor fisheries management. SFMP studies have shown that household hunger went up and dietary diversity went down during the 2019 fisheries closure, likely due to the severe decline in household income as fishing ceased. This was projected to happen again to fisheries dependent households if COVID restrictions had forced landing beaches to close or to be placed under significant social distancing restrictions (slowing or stopping fishing) or COVID-19 related supply chain and market disruptions had reduced demand for fish and consequently trigger reduction in fishing activities. Other external shocks from another pandemic, or significant environmental or economic dislocations could create similar conditions necessitating short term assistance or a social safety net for fisherfolks.

The target beneficiaries of the SFMP pilot economic safety net scheme were the economically vulnerable fisheries dependent households at risk of not meeting basic food needs who have not benefited from similar Government of Ghana social safety net schemes and the COVID-19 economic assistance programs, including those detailed by the President of Ghana on April 19th. The approach taken was to work closely with the Ministry of Fisheries and Aquaculture Development and its Fisheries Commission (MOFAD/FC) and fisherfolk associations to develop, validate and pilot methodologies that would:

- Identify poor and vulnerable fisheries households.
- Deliver cash transfer assistance.
- Monitor receipt, use, and impact of assistance provided, including measures to track the risk of leakage or elite capture.

The methodologies piloted were designed to build on existing SFMP partner relationships with fishing communities and the Fisheries Commission to put in place structures and processes that could be leveraged in the future to reinforce long-term systems for responsible fisheries management and fishing community coping strategies.

3.2 An Unconditional Mobile Phone-Based Cash Transfer

SFMP targeted economic assistance in the form of an unconditional mobile phonebased cash transfer because it was considered a good fit for the context compared to a voucher or in-kind food transfer. This was due to the need to deliver and monitor this temporary assistance program in a timely manner that minimized person to person contact due to COVID-19. It also helped to ensure that the beneficiary selected through a rigorous process was actually the recipient of the economic safety net assistance. The costeffectiveness, sustainability and potential for replicability by the Government of Ghana for closed seasons or other periods of economic vulnerability for artisanal fisherfolk is also likely to be greater with a

Overview of Cash Transfer Programming

Cash transfer programs are a social protection measure that a society provides for its members to protect them against economic and social distress that would be caused by the absence or a substantial reduction of income from work as a result of contingencies such as sickness, natural disasters, unemployment or invalidity.

Cash transfers can be conditional or unconditional. Conditional cash transfers are programs that transfer to poor or vulnerable households on the condition that the beneficiaries will fulfil certain obligations. Unconditional cash transfers do not require beneficiary households to fulfil any obligations or requirement. They are usually meant to reduce poverty or promote the accumulation of capital.

cash transfer in the context of a temporary (four month) program where local markets are generally functioning. When selecting cash versus food transfer approaches, research shows that the choice is often more complex than expected, gaps exist, and "...in absolute terms, cash, food, and vouchers are effective in meeting program objectives." (Gentilini, 2016). A cost-efficiency focused analysis of different types of social assistance programs from various countries by the World Bank indicated that on average, cash or near-cash programs are more effective than other types of social assistance interventions (World Bank 2016).

Mobile phone-based, rather than manual, cash transfer was considered a good fit not only because of the need for social distancing, but also because:

- 1) research on mobile money cash transfers in West Africa has shown it to be more effective than manual cash distribution for increasing household dietary diversity, and household bargaining power for women (Acker et al., 2016).
- 2) mobile money penetration in Ghana grew to 39 percent in 2017, while overall account access increased to 58 percent (<u>Gates Foundation</u>, 2016), and over 90% of fisherfolk own cellphones.
- 3) implementing cash transfers, using mobile money, will help vulnerable fishing households take part in the rapidly accelerating mobile banking system.
- 4) a mobile phone-based approach for delivery of benefits enabled the project to design use of phone-based polling tools to collect data on each beneficiary for monitoring, evaluation and follow up interventions.

3.3 Coverage: Twenty Percent of Estimated Household Consumption for Four Months

The average value of the cash transfer was \$52/household per month for four months. This was based on an average household size of 4.5 persons. This amount aims to cover at least 20 percent of estimated household consumption for households at the international extreme poverty rate of \$1.90/day which is similar to the Ghana national poverty rate. Evaluation of the Livelihood Empowerment Against Poverty (LEAP) and other programs worldwide recommend that assistance cover at least 20% of consumption.

4. METHODOLOGICAL APPROACH

4.1 Guiding Principles

The design, implementation, monitoring and evaluation elements of the SFMP economic safety net intervention were informed by analysis of Ghana's vulnerability and poverty (World Bank, 2016), and guiding principles espoused by the FAO (Social Protection Framework, FAO, 2017). The FAO guiding principles for social protection applicable to fishing communities are;

- Social inclusion.
- Gender equality.
- Sustainability.

Social Inclusion

The principle aims at designing social protection interventions to progressively ensure equitable access to basic guarantees to all, regardless of age, gender, ethnicity, disability status or geographic location. A critical element of inclusive social protection intervention is the integration of participatory accountability mechanisms to ensure that stakeholders are able to effectively participate in and influence the planning, design, implementation and monitoring of the social protection.

Gender Equality

The principle refers to women and men enjoying equal rights, opportunities and entitlements in all aspects of life. In most cases, however, the structural and societal processes fail to value the contribution of women to agricultural and fisheries production and consequently limit their bargaining power in economic transactions, allocation of household resources, and wider community decision making. The principle requires gender sensitive design and implementation of social protection schemes.

Sustainability

In addition to the requirement to design a social protection system that minimize negative coping strategies in the event of crisis such as the COVID-19 pandemic, which may generate negative environmental impacts including over exploitation of fisheries resources, there is the need for promotion and development of nationally owned and led social protection systems that are financially, technically and institutionally sustainable.

Sources of Vulnerability in Ghana

Social Protection schemes including safety nets are programmed to minimize the impact of risks resulting from several sources including economic shocks linked to global disease outbreak such as the COVID-19 pandemic and its associated impacts on income and consumption and household conditions that expose the poorest families to a number of difficulties and make them vulnerable. Household vulnerabilities are often associated with a lack of skills, assets, employment, income-generating opportunities, sociocultural risks, income insecurity in old age, and a lack of access to basic services and nutritious food. Existing vulnerabilities tend to magnify economic shocks and consequently affect household consumptions.

Analysis of Poverty by Regions in Ghana

Vast differences exist in poverty levels across various regions in Ghana and the main poverty covariates are employment status, education, ownership of assets, and access to basic services such as potable water, sanitation, and electricity (World Bank 2016b).

Table 1: Attributes of Good Safety Net Intervention and Practical Design and Implementation Considerations for Ghana's Fisheries Sector Economic Safety Net Activity

Attributes of Safety Net Intervention	Definition*	SFMP Design and Implementation Considerations
Appropriate:	The range of programs used and the balance between them and with the other elements of public policy should respond to the particular needs of the country. Each program should be customized for best fit with the circumstances	The Safety Net was only one component of the USAID intervention in response to addressing the impacts of Covid-19 pandemic in Ghana. The behavioral change component of the intervention complemented the Economic Safety Net towards addressing the impact on the poor and vulnerable.
Adequate	The safety net system overall covers the various groups in need of assistance—the chronic poor, the transient poor, those affected by reforms, and all the various subsets of these groups. Individual programs should provide full coverage and meaningful benefits to whichever subset of the population they are meant to assist.	The methodological design as provided covered all four regions of the marine fisheries sector and expected to capture the chronic poor, the transient poor and those whose activities were affected by the Covid-19 pandemic. Both fish processors and fishermen were captured.
Equitable	The safety net should treat beneficiaries in a fair and equitable way. In particular, it should aim to provide the same benefits to individuals or households that are equal in all important respects (horizontal equity) and may provide more generous benefits to the poorest beneficiaries (vertical equity).	The intervention provided \$52/household across all households ensuring horizontal equity as time and the crisis not permit SFMP to undertake more in-depth analysis to categorize beneficiary households into various poverty levels that would require provision of differential safety net packages in pursuit of vertical equity. The \$52/household/month was based on a household size of 4.5 members.
Cost-effective	Cost-effective programs channel most program resources to their intended target group. They also economize the administrative resources required to implement the program in two ways. First, at the level of the whole safety net system, they avoid fragmentation and the subsequent need to develop administrative systems without realizing economies of scale. Second, they run efficiently with the minimum resources required to achieve the desired impact, but with sufficient resources to carry out all program functions well.	The social media platform established for behavioral change communication harvested phone numbers of fisher association members across all 186 villages along the coast of Ghana. These were engaged as points of contact for administration of the safety net activity. Selection of beneficiary households was cost effective, eliminating transport cost with only minor administrative cost for data and incentive for the community members on the platform to undertake preliminary selection of beneficiary households and provide their phone details for subsequent administration of the proxy means test questionnaire, by which final beneficiaries were selected. The SFMP Implementing Partners were involved to complement the use of the social media platform to collate the contact details of potential beneficiaries.

Attributes of Safety Net Intervention	Definition*	SFMP Design and Implementation Considerations
Incentive compatible	Safety nets can change households' behavior, for better or worse. To ensure that the balance of changes is positive, the role of safety nets should be kept to the minimum consistent with adequacy:	The minimum adequacy of this safety net intervention was determined at \$52/household per month based on at least 20% percent of estimated household consumption for households at the international calibrated extreme poverty rate of \$1.90/day which is applicable to the Ghana national poverty rate.
Sustainable	Prudent safety net systems are financially sustainable, in that they are pursued in a balanced manner with other aspects of government expenditure. Individual programs should be both financially and politically sustainable, so that stop/start cycles of programs are avoided, as these result in enormous lost opportunities for efficient administration and the achievement of programs' promotional aspects. In low-income countries, programs started with donor support are gradually incorporated into the public sector.	Although this intervention was funded with donor support from USAID, the strategic coordination with all relevant government agencies especially the Livelihood Empowerment Against Poverty (LEAP) program which is already providing safety net packages to poor and vulnerable households may make it possible for the beneficiaries to be transitioned to the LEAP program after the four months implementation period, hence ensuring financial sustainability. The involvement of existing fisheries associations and the Fisheries Commission in the entire process is expected to promote institutional sustainability. Cost benefit analysis of channeling premix fuel subsidies to support the economic safety net during a closed fishing season highlights an opportunity for financial sustainability of the scheme that supports sustainable fisheries management with existing resources in the sector.
Dynamic	A good safety net system will evolve over time. The appropriate balance of programs will change as the economy grows and changes, as other elements of policy develop, or when shocks occur. The management of specific programs should also evolve as problems are solved and new standards set.	Because the implementation of this intervention is linked to the fishers, over time, it is expected that as the management of the fisheries resources progress towards profitability, more people in fishing communities will be lifted out of poverty and be graduated out of this intervention even if it is taken over by the LEAP. The results of this pilot should encourage MOFAD/FC to explore the option of rechanneling subsidies from premixed fuel into economic safety net packages during closed seasons through presentation of cost benefit analysis of such approaches.

^{*} Manual for the design and implementation of effective safety nets "For Protection and Promotion" (World Bank, 2008).

4.2 Key Elements

Selecting a Proportional Number of Beneficiary Fisheries Households in All Geographic Locations Coast wide

As part of design considerations to have a proportional number of poor and vulnerable fisheries dependent households across the entire coastal region of Ghana, the number of Landing Beaches was used as an index of the population of fishers as captured in the 2016 Ghana Canoe Frame Survey (FSSD, 2016) produced by the Fisheries Scientific Survey Division of the Fisheries Commission. The distribution of total number of planned beneficiary households per Administrative Region coast wide is indicated in Table 2.

Table 2: Distribution of target number of potential beneficiary households per region using the 2016 Ghana Canoe Frame Survey

Region	No. of Districts (MMDAs)	No. of Landing Beaches	No. of Villages	No. of Beneficiary Households per Region
Volta	3	47	28	322
Greater Accra	9	59	44	404
Central	9	97	42	664
Western	6	89	72	610
Total	27	292	186	2000

Although some regions have higher poverty rates than others, the importance of the program being piloted coast wide is linked to the potential application of the economic safety net scheme as a complement of sustainable fisheries management measures targeting all regions involving all fishing communities to mitigate economic impact of the fisheries management measures, as well as serve as an instrument to influence desired behavior change.

Engaging Female and Male Led Fisheries Associations as the Platforms for Beneficiary Selection

The design adopted a two-pronged approach for the selection of potential beneficiaries of the economic safety net cash transfer program:

- Multiple Stakeholder organizations involving predominantly networks of female fish processors. These were the National Fish Processors and traders Association (NAFPTA), The Central and Western Region Fishmongers Improvement Association (CEWEFIA), and Development Action Association (DAA)
- 2) A single stakeholder organization involving networks of predominantly male fish harvesters. This was the Ghana National Canoe Fishermen's Council (GNCFC)

These two groups were engaged independently to develop draft selection criteria. The draft criteria

Strengths of the Approach

- It recognizes that associations of fishers and processors are well placed to objectively, and transparently, develop criteria as well as identify the most vulnerable households in their communities.
- Development of selection criteria by a balanced representation of associations of male and female stakeholders themselves ensures that the inherent subjectivity of what constitutes poverty and vulnerability are addressed and the need for social specificity of the notion of poverty and vulnerability are accommodated.

developed by the two groups were combined into a single selection instrument approved by the Ad hoc Technical Committee with minor modifications. The approved selection criteria were used independently by the two groups to identify and select the full complement of target beneficiaries from the various communities. This was designed to produce twice the

total number of target beneficiary households from each community with the possibility of overlap between the two selection processes. The overlap of the two independent selection processes referred to as "set potential beneficiary households" was considered the "true" poor and vulnerable within each community. The set potential beneficiary households (the true poor and vulnerable households) might have met all the selection criteria parameters to have been identified by two selection processes, independent of each other.

The selected households which did not fall within the intersection of the two independent selection processes were labelled "supplementary potential beneficiary households" as depicted in Figure 1 below. The lists of supplementary potential beneficiary households from the two selection processes were consolidated into a single list of potential beneficiary households. The list of potential beneficiary households was subjected to a validation process using a Proxy Means Test (PMT) to select the required number of households from the potential beneficiary households to be added to the "true poor and vulnerable" represented by the intersection between the two selection processes in order to obtain the target number of poor and vulnerable households. The specific PMT instrument used to validate the poverty status of the supplementary potential beneficiary households was the Poverty Probability Index (PPI).

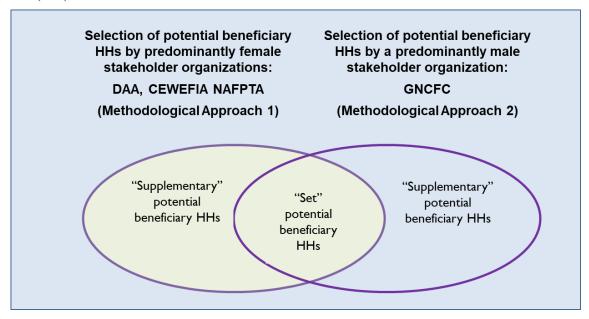
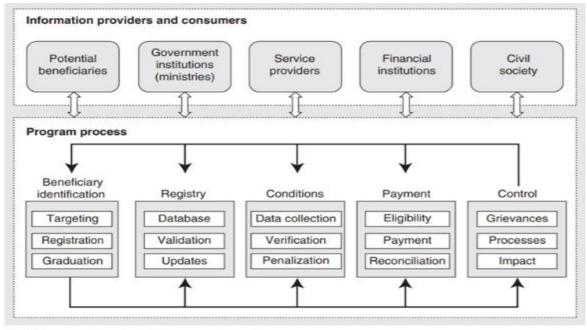


Figure 1: The two independent selection processes with possibility of overlap

The actions taken in order to arrive at the required number of target beneficiaries of the SFMP Economic Safety Net Scheme were consistent with the approach prescribed by the World Bank in the manual (book) for the design and implementation of effective safety nets, The Design and Implementation of Effective Safety Nets For Protection & Promotion (World Bank, 2008), as shown in Figure 2 below.



SOURCE: Adapted from Arribas-Baños and Baldeón 2007.

Figure 2: Program processes involved in the design and implementation of effective safety

4.3 Internalization of Features of Effective Safety Net Scheme

In order to adopt, adapt, and internalize the design and implementation features of effective Safety Nets, the SFMP Economic Safety Net Scheme outlined specific actions which were taken with active engagement of all key stakeholders along the entire process. The actions outlined are captured in Figure 3 below.

Flow Chart of Actions to be Undertaken towards Implementation of SFMP Economic Safety Net Package (COVID 2)

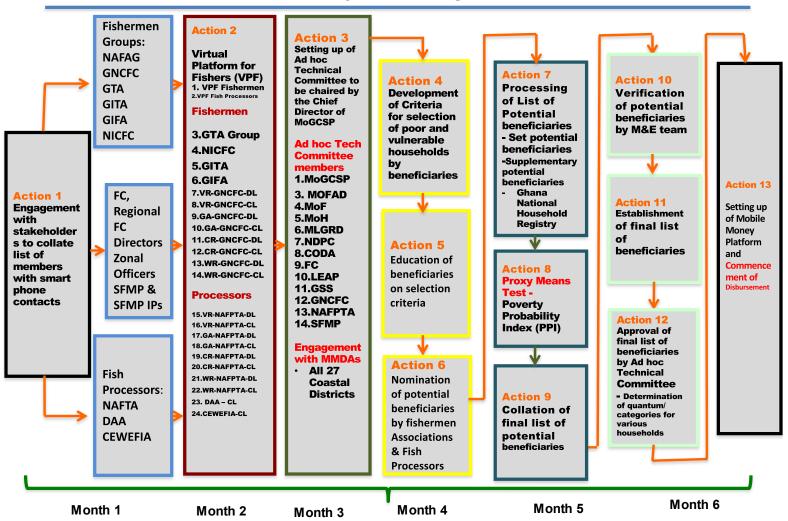


Figure 3: Actions outlined and taken to internalize features of an effective Safety Net Scheme

4.4 Description of Programed Actions

This section describes the various actions taken to operationalize key design elements of the SFMP Economic Safety Net Scheme including:

- Targeting of the poor and vulnerable fisheries dependent households
- Validation of selected potential beneficiaries
- Verification of validated potential beneficiaries
- Payment of unconditional cash benefits to verified poor and vulnerable households

Monitoring and evaluation of the SFMP Safety Net Scheme is detailed in a following section.

ACTION 1: Engagement with Stakeholders to Collate List of Members with Smart Phone Contacts

This Safety Net Scheme was designed in response to an anticipated impact of the global pandemic, COVID-19 on the marine artisanal fisheries sector in Ghana with its unique constraints of social distancing and limitation of person-to-person contacts as much as possible. The design element therefore incorporated the setting up of a Virtual Platform to facilitate the engagement of stakeholders at all key stages of the implementation process. The Virtual Platform consisted of various WhatsApp groups with members made up of community representatives of fisheries associations across the entire coastal region of Ghana linked to a decision-making unit. This first step in the entire process required the collation of smart phone contacts of local community representatives of stakeholder groups and institutions. The virtual platform consisted of regional executive members of the apex associations of the fisheries sector (The male association: GNCFC, and the female associations: NAFPTA, CEWEFIA and DAA) and the MoFAD/FC. The members on the virtual platform were tasked with various responsibilities including developing the criteria for the selection of vulnerable households. The selection criteria was then forwarded to local representatives of the fisheries associations at the lower and local community levels for the selection of beneficiaries. These apex fisheries organizations were also responsible for decision making at the national level and any decision taken at the national level was disseminated to the regional, district and local communities.

ACTION 2: Setting up of Virtual Platform for Fishers

Figure 4 shows the structure of the Virtual Platform. There were two components of the Virtual Platform representing the two methodological processes involved in the selection of potential beneficiaries. Apart from the fact that this approach is in consonance with the vision of the USAID Digital Strategy (<u>USAID Digital Strategy</u>: 2020 – 2024) of advancing progress in partner countries and communities on their journey to self-reliance through effective, efficient and responsible digital initiatives that enhance security and economic prosperity, it also made it possible for the project to circumvent the challenges of the "new normal" necessitated by the COVID-19 pandemic.

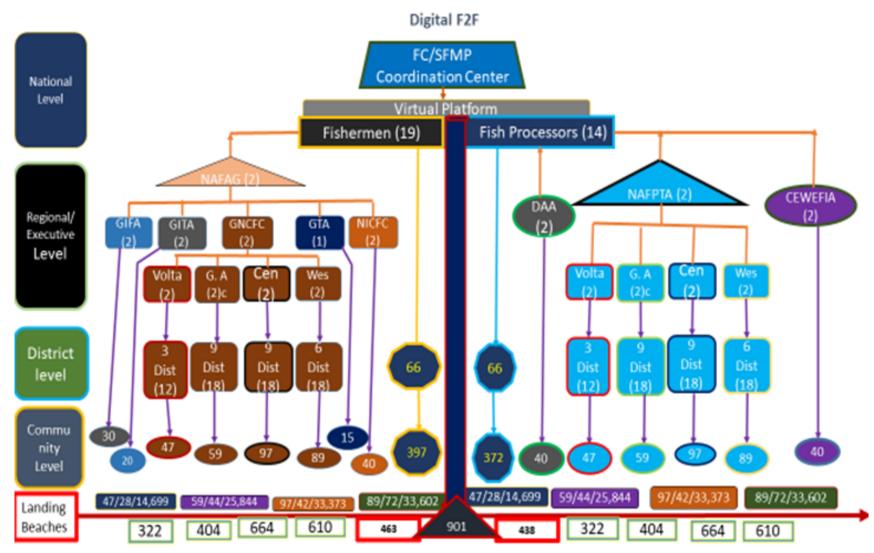


Figure 4: WhatsApp groups constituting the Virtual Platform for Fishers

ACTION 3: Setting up of an Ad hoc Technical Committee

In consonance with policy implementation and coordination arrangements for social protection programs in Ghana, a strategic ad hoc Technical Committee was established to provide advisory support, review and approve key steps in the methodological process including: approval of the selection criteria developed by representatives of beneficiaries themselves and approval of the final list of beneficiaries prior to disbursement of the safety net benefits (see Annex 4). The Ad hoc Technical Committee was chaired by the Chief Director of the MOGCSP or his/her representative. The Committee met three times during the implementation of the pilot intervention although it was considered for the Committee to meet once a month during the design stage.

ACTION 4: Development of criteria for selecting beneficiaries

The criteria for the selection of beneficiary households were developed by local community representatives of the fishers and processors themselves. In developing the criteria, representatives of beneficiaries defined a household as; "a social unit headed by an adult male or female or a couple with dependents living in a house, under a shed or fish processing center and normally share common meals". Each potential household was considered to be dependent at some level on the fisheries value chain. The selection criteria were defined around three main themes: a) Health, b) Education, and Standard of Living. The potential beneficiary household selection criteria are detailed in Annex 1. Although at the design stage it was considered to exclude households which were already beneficiaries of LEAP or any other major government social protection scheme, this was not implemented during the operational phase. The households that overlap with the LEAP were also considered based on the recommendation of the Ad hoc Technical Committee and a desire to consider opportunities for livelihood options being piloted by MOGCSP for LEAP beneficiaries.

ACTION 5: Education and Awareness Creation on the Selection Criteria

Prior to the selection of the beneficiary households, local community representatives on the Virtual Platform who were tasked to undertake selection of the poor and vulnerable fisheries dependent households from their respective communities were educated virtually on the criteria approved by the Ad hoc Technical Committee for the selection process. SFMP Implementing Partners who were tasked to coordinate with local community representatives of both GNCFC and NAFPTA in the identification and selection of the beneficiaries were also educated on the selection criteria.

ACTION 6: Nomination of Potential Beneficiary Households by Fisheries Associations

Since its inception, the SFMP has built the capacity of the DAA, CEWEFIA and within the last few years of its implementation, the capacities of GNCFC and NAFPTA, to enable these organizations play effective roles in the entire fisheries value chain as well as advocate for sustainable fisheries management in Ghana. The networks of the three female-dominated/led membership associations (NAFPTA, CEWEFIA and DAA) and the male dominated/led GNCFC permeate the entire coastal regions of Ghana. These associations have implemented a number of social protection related interventions with SFMP support. The methodological approach for the nomination of potential beneficiary households required local community representatives of fish harvesters, GNCFC, to undertake the identification and selection process completely independent of the identification and selection exercise undertaken by local representatives of fish processors (CEWEFIA, DAA and NAFPTA) although the same selection criteria was used by the two separate groups. Because there were many fish processing associations (CEWEFIA, DAA and NAFPTA), the approach of selecting potential

beneficiary households by these associations which were predominantly women was referred to as selection by Multiple stakeholder organizations, CEWEFIA, DAA, and NAFPTA.

The selection of potential beneficiary households by local community representatives of GNCFC was referred to as selection by a single stakeholder organization, GNCFC, which has predominately male members.

SFMP assigned to the two independent selection processes the responsibility of identifying 2000 potential beneficiary households from communities across the entire coastal region of Ghana. To assign the number of potential beneficiary households per region, SFMP used the number of Landing Beaches as an index of the population of fishers, as indicated in Table 3 below. The assignment of identification and selection responsibilities among SFMP Implementing Partners (IP) was based on the level of the IP's influence and strength in a given geographic area. As part of the methodological considerations, representatives of stakeholder organizations at the community level were required to select twice the required number of beneficiary households from their respective communities. The increase in the number of potential beneficiaries (twice the required number) was designed to decrease the standard error and increase the precision with which final beneficiary households could be selected.

Region	No. of Districts (MMDAs)	No. of Landing Beaches	No. of Villages	No. of Beneficiary Households per Region	Responsible Stakeholder Organization
Volta	3	47	28	322	DAA
Greater Accra	9	59	44	404	DAA/NAFPTA
Central	9	97	42	664	DAA/CEWEFIA
Western	6	89	72	610	NAFPTA
Total	27	292	186	2000	

Table 3: Allocation to DAA, CEWEFIA and NAFPTA

The second layer of the methodology for the selection of potential beneficiary households involved the GNCFC. The SFMP has also worked with the male dominated and led GNCFC to bring about reforms within the marine artisanal fisheries sector. They are the largest fisheries stakeholder organization with membership of over 200,000 including influential Chief Fishermen and canoe owners and have a very strong presence in all landing beaches across all four coastal regions of Ghana. The GNCFC has local representatives who have good knowledge of the socioeconomic condition of fishers at the village level.

The SFMP leveraged on the local knowledge and institutional structures of the GNCFC in the identification, selection and monitoring of the delivery and use of economic safety net assistance to eligible poor and vulnerable households. GNCFC was also assigned the responsibility to identify another 2000 potential beneficiary households from communities across the four coastal regions. The regional allocation of potential beneficiary households used the number of landing beaches as an index of the population of fishers is as indicated in Table 4 below.

Table 4: Allocation to GNCFC

Region	No. of Districts MMDAs)	No. of Landing Beaches		No. of Beneficiary Juseholds per Region	Responsible Stakeholder Organization
Volta	3	47	28	322	GNCFC
Greater Accra	9	59	44	404	GNCFC
Central	9	97	42	664	GNCFC
Western	6	89	72	610	GNCFC
Total	27	292	186	2000	

The two independent selection processes involving the four fisheries associations were expected to select a total of 4000 potential beneficiaries across the various fishing villages and towns. The details of planned and the resulting actual number of beneficiary households selected by the two selection processes was as provided in Table 5.

Table 5: Distribution of Planned and Actual Number of Potential Beneficiary Households Selected by Fisheries Associations

Region	Planned No. of Head of Household/ Region	No. of Head of Household Selected by NAFPTA/ DAA/ CEWEFIA	Selected by GNCFC	Total No. of Head of Households Selected	No. of Overlap between the two Selection Processes/ Region	No. of potential Overlap with LEAP Data Set/ Region	% overlap with LEAP Data Set/ Region
Volta	644	316	300	616	12	24	3.90%
Greater Accra	808	25	259	534	0	71	13.30%
Central	1328	528	512	1040	5	153	14.71%
Western	1220	579	475	1054	7	322	30.55%
Total	4000	1698	1546	3244	24	570	17.57%

ACTION 6a: Design of beneficiary data collection form

Due to the COVID-19 restrictions, the project management team of SFMP could not collect the beneficiary data in person but had to rely on the representatives of the fisheries associations in the communities. A data collection form was developed and sent electronically mainly through WhatsApp to these community representatives who completed the forms and returned them through the same means to the project team. The form was designed to include some unique identifiers that allows for the SFMP to compare the data collected with the LEAP data set to identify possible overlaps between the two data sets. A sample of the form is provided in Annex 2.

Challenges of potential beneficiary household data collection

Over a period of 10 days, and as shown in Table 5, the local representatives of the two selection processes, selected a total of 3,244 beneficiary households they considered to be poor and vulnerable per the criteria they developed and approved by the Ad hoc Technical Committee. These potential beneficiary households were identified and selected across **157** fishing communities instead of the planned 186. This development can be ascribed to the following reasons:

- Some of the fishing communities were declared inactive through a baseline survey undertaken by SFMP Implementing Partner, the University of Cape Coast, at the inception of the COVID-19 response program.
- Some community members refused to participate because of lack of awareness and understanding of the pilot intervention.
- Some community members thought it was a ploy to delete their names from the voters register.

ACTION 7: Processing of List of Potential Beneficiary Households

As shown in Table 5, the list from the two independent selection processes was crosstabulated to identify the overlap or intersection between the two selection processes. The overlap constituted the set potential beneficiaries as indicated in Figure 1 above. The entire list was processed through the database of Livelihood Empowerment Against Poverty (LEAP) to ascertain any overlap with the LEAP database in an attempt to identify potential beneficiaries who may already be benefiting from an existing social protection scheme. Because of the presence of similar names across the entire coastal region, the list of 570 households (names of heads of households which were identified to have overlapped with the LEAP data set) was labelled as "potential overlap" between the LEAP data set and the SFMP data set.

ACTION 8: Proxy Means Test (Poverty Probability Index (PPI))

In developing economies where there is the difficulty with obtaining adequate information on the welfare status of households, the proxy means test, involving administration of questionnaire on household consumption and other socioeconomic variables of the household, provides an indirect approach to measuring the welfare status of the household. The PPI (https://www.povertyindex.org/country/ghana) is an example of a Proxy Means Test, used by several organizations to measure household socioeconomic status indirectly through administration of a questionnaire to the head of household, covering household consumption and other household characteristics including asset ownership. The responses to a set of 10 questions are assigned statistically pre-determined weight and subsequently scored. The total score obtained determines the poverty level or the socioeconomic status of the household.

In the administration of the PPI questionnaire to potential household beneficiaries of the SFMP Safety Net scheme, two approaches were adopted based on whether potential beneficiaries had their own mobile phones and could be reached directly through automated phone polling or Interactive Voice Response (IVR) on a platform called Engagespark, representing the first approach. The second approach involved administration of the PPI questionnaire by enumerators via Computer Assisted Telephone Interview (CATI), which is a person-to-person phone interview, to potential beneficiaries who did not have their own mobile phones at the time of the survey and had to be reached through intermediaries, referred to as manual.

ACTION 9: Collation of Final List of Potential Beneficiary Households

The lists generated through the automated PPI administration and the manual process were combined and ranked based on PPI scores to form collated list of potential beneficiaries. Potential beneficiaries falling within the overlap between the two selection processes as shown in Figure 1 (totaling 24 households in this pilot as shown in Table 5), were considered to be truly poor and vulnerable to have been identified by the two independent selection processes from the various communities. The households falling within the intersection of the two selection processes were assigned PPI score of zero. The PPI questionnaire, therefore, was administered to 3,220 households, constituting the consolidated list of supplementary potential beneficiary households, to validate their status as being poor and vulnerable. This is because these households were only unilaterally identified by one of the two independent selection processes and as a result did not fall within the intersection of the two independent selection processes and required the PPI instrument to validate their poverty and vulnerability status. The conventional interpretation of the PPI ranking is that the lower the score, the higher the probability of the household being poor and vulnerable. This formed the basis of the ranking and the selection of the first 2000 potential beneficiary households. Trends in the frequency distribution of PPI scores within and among regions indicated that a universal cutoff score would provide a list of selected households that had a higher probability of being poor. This resulted in maintaining the principle, even if not rigorously respecting, the planned regional quotas.

ACTION 10: Verification of Potential Beneficiary households

The verification process involved control for duplicate names and assessment of whether a potential beneficiary had his/her own phone number registered with or set up as a mobile money account. Potential beneficiaries who did not set up their contact numbers as mobile money accounts were encouraged to do so and those without their own phone number were encouraged to obtain new SIM cards and set up mobile money accounts. This was done to ensure that the heads of households (beneficiaries) who were nominated by local representative of the fisheries associations were actually recipients of the Safety Net Assistance/Scheme, as one requires a photo identification card in order to set up a mobile money account in Ghana. The payment of the safety net assistance via mobile money was integrated in the methodological design to circumvent social distancing constraints necessitated by the COVID-19 pandemic. This approach has also contributed to reducing incidences of "elite capture". The biggest unintended benefit of using a mobile money platform to pay beneficiaries has been the transitioning of almost 2000 poor and vulnerable households across the four coastal regions of Ghana into the evolving digital (cashless) economy.

ACTION 11: Establishment of Final List of Beneficiaries

The target for SFMP Economic Safety Net Scheme was 2000 poor and vulnerable fisheries dependent households. The overlap between the two selection processes, representing the true poor and vulnerable, was 24 households. The total number of potential beneficiaries who took part in the PPI survey to determine/validate their welfare or socioeconomic status was 2,203 out of a total of 3,220. As a result of the fact that most of the potential beneficiaries nominated did not have their own phones and had to be reached through intermediaries, there were many instances where the intermediaries could not locate the potential beneficiaries nominated for the Enumerators to take them through the PPI questionnaire. There were also instances where the phone numbers of potential beneficiaries as captured in the list of potential beneficiaries were wrong, or poor mobile phone network and connectivity challenges did not make it possible for potential beneficiaries to be contacted and taken

through the PPI survey questionnaire. Because of the difficulties of getting potential beneficiaries to set up mobile money accounts, the establishment of the list of the required number of poor and vulnerable households proceeded in phases. This resulted in the processing of the first tranche of payment in batches. The final list of the SFMP Economic Safety Net Scheme therefore consisted of 10 batches of lists depending on the ease with which the mobile money account numbers of potential beneficiaries were set up and provided to SFMP. Although a total of 1987 beneficiary households were finally verified as shown in Table 6, only 1905 received the cash transfer due to additional mobile money account failures that were not resolved during the four month disbursement phase.

Table 6: Planned and Final Beneficiary Households by Region

	Summary Result of Selection and Verification Processes						
	cation & Initial Allocation Overlap & Variation of Final Beneficiaries from Initial Allocation		Variation with		Final Beneficiaries		
Region	Initial Allocation	Overlap with LEAP Data	% Overlap	Variation from Initial Allocation	% Variation	No. of Final Beneficiaries	% of Total Beneficiaries
Volta	322	14	7.91%	41	12.73%	363	18.27%
Greater Accra	404	35	19.77%	-20	-4.95%	384	19.33%
Central	664	52	29.38%	42	6.33%	706	35.53%
Western	610	76	42.94%	-76	-12.46%	534	26.87%
Total	2,000	177	100.00%	-13	-0.65%	1987	100.00%

ACTION 12: Approval of Final List of Beneficiaries by Ad hoc Technical Committee

As part of design consideration, the ad hoc Technical Committee was set up to among other things approve the final list of verified potential beneficiaries prior to commencement of payment. In practice, however, the urgency of the intervention and the batch verification of potential beneficiaries did not make it possible for a final list to be compiled and a meeting called to approve the final list prior to commencement of payment. The ad hoc Technical Committee therefore gave permission for the final list to be forwarded to the chairperson of the Committee for approval.

ACTION 13: Setting up of Mobile Money Platform

The SFMP Economic Safety was designed to be paid to beneficiaries through mobile money accounts, given COVID-19 restrictions and the need to limit the spread of the disease through handling of physical money. A technology service provider, Npontu Technologies, therefore was engaged to set a mobile money platform to facilitate the processing of the safety net package to the verified list of Beneficiaries. The Mobile Money Platform for processing of the SFMP Economic Safety Assistance required the technology service provider to generate transaction execution report on each payment processed, including in the report the number successful and failed transfers and the reason for the failure to make it possible for the project to take remedial measures. The SFMP finance team developed Terms of Reference for the engagement of the technology service provider, Npontu Technologies, as provided in Annex 3. A technology service provider was used because at the time of this pilot the project bank

did not have the capacity to deliver mobile money services to a large number of beneficiaries efficiently.

Challenges with data collection and processing

In the collection and processing of the data on potential beneficiaries, some challenges were encountered. Some of these were:

- The compressed six-month timeframe to get through the actions from selection process to payments.
- The differential presence and strength of both the GNCFC and NAFPTA across the four coastal regions.
- Initial difficulties with processing data and issuing call credits to members of GNCFC and NAFPTA at the local community levels on the virtual platforms on time to facilitate the data collection from potential beneficiaries/
- Poor coordination between GNCFC, NAFPTA and the SFMP Implementing Partners (DAA, CEWEFIA, Friends of the Nation and Hen Mpoano).
- Much lower-than-expected overlap between the two selection processes meant that a large number of potential beneficiaries had to be verified using the Proxy Means Test (PPI survey).
- A large proportion of the poor and vulnerable households did not have their own telephone numbers and had to be reached through intermediaries/
- Low response rate of the automatic phone polling for the PPI (only 142) representing 0.4%. As a result, the majority of the potential beneficiaries had to be called by enumerators and the PPI instrument administered to them.

5. KEY ROLES AND RESPONSIBILITIES

The planning, design, implementation, monitoring and evaluation were undertaken by SFMP in collaboration with the apex fisheries association (DAA, CEWEFIA, GNCFC, NAFPTA). In addition to setting up the Ad hoc Technical Committee consisting of all key government institutions and agencies as indicated in ACTION 3 above, SFMP also informed the Coordinating Units of all the 27 coastal MMDAs about the implementation of the economic safety net intervention in their communities. The responsibility of all partners with respect to the Economic Safety Net Scheme is depicted in Table 7 below and the decision making and information sharing processes involved in the implementation of the scheme is shown in Figure 5.

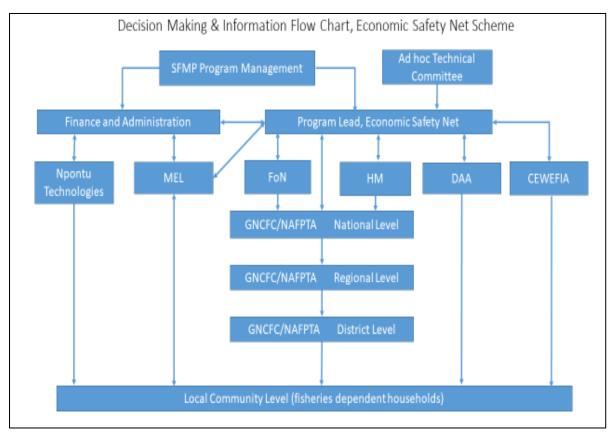


Figure 5: Decision making flow chart between the SFMP program team, the SFMP finance and administration team, the apex fisheries associations and the SFMP monitoring and evaluation team

Table 7: Assignment of responsibilities among partners

PARTNER	• RESPONSIBILITIES
SFMP Programs Unit	 Engagement of members of fisheries associations at the district/community to sensitize them on beneficiary selection Set up of selection community Coordinate with partners Analyze the accessibility of beneficiaries to financial services Determine duration and frequency of cash transfer Determine the services required from the Financial Service Provider (FSP) Overall responsibility of implementation
SFMP Implementing Partners (FoN, HM, DAA, CEWEFIA)	Support NAFPTA and GNCFC in identification of potential beneficiaries and monitoring of the cash transfer receipt and use.
MMDAs	 Provided information on the poor and vulnerable in the respective District Assemblies
GNCFC & NAFPTA	 Definition of criteria for the selection of beneficiaries Selection of 2000 vulnerable households by each of the two associations
Ministry of Gender Children and Social Protection – The LEAP Project	 Provide guidance on implementation of the intervention Match the data collected on beneficiaries with the LEAP Registry
Technical Steering Committee	 Provide guidance on appropriate methodologies for implementation Review the criteria for the selection of beneficiaries defined by the apex fisheries associations Approve final list of beneficiaries Review progress of implementation Assess impact of cash transfer on beneficiary households
SFMP MEL	 Coordination with partners and MMDAs Analysis and generation of final list of beneficiaries Validation of beneficiary households Verification of beneficiary households Monitoring of cash transfer Monitoring of recipients after cash transfer
SFMP Finance &Admin	 Selection of financial services provider Collate and reconcile monthly reports from FSP

5.1 Responsibilities of the Ad hoc Technical Committee

The ad hoc Technical Committee was considered a key element of the Economic Safety Net Scheme to provide guidance and leverage on the expertise of key stakeholder institutions related to social protection and socioeconomic development in intervention in Ghana. The Committee was chaired by the Chief Director or of the Ministry of Gender, Children and Social Protection (MOGCSP) in consonance with policy implementation and coordination arrangements for social protection programs in Ghana. The Terms of Reference of the ad hoc Technical Committee is as provided in Annex 4. The Committee consisted of one nomination each from:

- 1. The Ministry of Gender, Children and Social Protection Chairperson.
- 2. The Ministry of Gender, Children and Social Protection (MOGCSP), Department of Social Welfare.
- 3. The Ministry of Gender, Children and Social Protection (MOGCSP) Livelihood Empowerment Against Poverty (LEAP), Program Secretariat.
- 4. The Ministry of Fisheries and Aquaculture Development (MOFAD).
- 5. The Fisheries Commission.
- 6. The National Development Planning Commission (NDPC).
- 7. The Ministry of Health and the Ghana Health Service.
- 8. The Ministry of Finance.
- 9. The Ministry of Local Government and Rural Development.
- 10. The Coastal Development Authority.
- 11. The Ghana Statistical Service.
- 12. Fisheries Associations Ghana National Canoe Fishermen's Council, National Fish Processors and Traders Association.
- 13. USAID/Ghana Sustainable Fisheries Management Project –the Coordinating Unit.

5.2 Engagement of Metropolitan and Municipal Assemblies (MMDAs)

The SFMP team sent out letters to Coordinating Directors of all the 27 MMDAs along the coast. The implementing partners of the SFMP also followed up to further engage the political heads in the districts on the purpose of the project and the reason for implementing the economic safety net intervention. This engagement was necessary to avoid any misconceptions and misinformation in the communities, especially that the year of implementation of the intervention, 2020, was an election year in Ghana.

6. MONITORING OF SELECTED BENEFICIARIES AND OUTCOMES

Monitoring is essential to establish if recipients were able to receive and spend their safety net cash transfers, if they were able to secure their basic needs, how they used the cash, other impacts of the intervention, and what should be improved.

The SFMP monitoring and evaluation team monitored the receipt, use, and impact of assistance provided, including measures to track the risk of leakage that intended beneficiaries were not receiving the funds sent. Several monitoring methods were used including phone polling to assess impacts on household food insecurity and access, women's dietary diversity and how respondents used funds received. Interactive Voice Response (IVR) polling (an automated prerecorded voice poll in the language of choice of the beneficiary) – using Engage Spark, was used for polling all cash beneficiary recipients. A target sample range of a minimum of 200 and a maximum of 400 polling responses was established. The IVR response rate varied from 2-20 percent of beneficiaries called, depending on the poll made and time period of the call. Following the IVR poll, Computer Assisted Telephone Interviewing (CATI) was conducted by polling enumerators of those that did not respond to the IVR poll. If the respondent was called three times and did not respond, then they were no longer called back. The survey instruments used and analysis of results are detailed in Annex 5.

Supplementing the phone polling were in field open-ended interviews with cash beneficiaries by the SFMP monitoring and evaluation team and by staff of the implementing partners - DAA, CEWEFIA, Hen Mpoano and FoN. The monitoring team made use of cash transfer evidence from the payment services provider to ensure payment was made to the verified phone number and also did spot checks to verify that the person on the beneficiary list actually received the funds. In some instances, beneficiaries had to be shown how to retrieve money sent to their phone. There were a few cases of failed payment transfers due to problems with the telephone number registration, mobile service provider or in one instance, when a mobile number was portaged over to a new mobile service provider, the transaction would no longer go through. The importance of having a rigorous monitoring and follow-up system to deal with inevitable issues regarding failed payments and assisting beneficiaries to access those funds should not be underestimated.

Key Results of the SFMP Pilot Economic Safety Net Scheme for the Marine Artisanal Fisheries Sector

- 1905 beneficiary households received a total of \$208 each, representing \$52/month for 4 months December to March.
- 70 % of beneficiary households were female headed households.
- 46% of beneficiary households were female headed households with no adult male.
- In 66% of beneficiary households, the phone was owned by the head of household.
- The top use of funds was to buy food for the family (88%), followed by schooling of children (82%), and then investing in their business (59%). In March, more respondents used funds for food (93%) and schooling (86%), and less for investing in a business (47%), placing in a bank account, loaned money to others, or for other purposes, compared to February. This suggests that financial needs may vary over time.
- A Household Food Insecurity Access Scale (HFIAS) questionnaire indicated that the receipt of \$52/ month for 4 months may have helped decrease household hunger in beneficiary households, with a high degree of stability from February through to March 2021, compared to control groups.
- A Women's Minimum Dietary Diversity questionnaire indicated that diet quality remained stable across March and April 2021.

The testimony of an individual beneficiary and an institutional Government of Ghana partner illustrate perceived results.

"As the breadwinner of my household, it is gratifying that through this cash assistance I have been able to provide basic food needs for my family in spite of the difficulties and challenges imposed by COVID-19." Mary Ocquaye, Fish Processor

"This pilot intervention has been successful, and any replication would go a long way to help the fisheries sector and complement the work of the Livelihood Empowerment Against Poverty (LEAP) in reducing poverty in Ghana." Mr. Felix Logah, Head of Programs Coordinating Unit, MOGCSP

7. DATA PROTECTION

Data Protection is fundamental in the implementation of any social protection program as it forms an integral part of protecting the lives, integrity and dignity of beneficiaries. SFMP entreated all IPs and institutions which were involved in the collection, handling and transfer of the personal data of individuals to observe ethical standards in handling the data of the poor and vulnerable households. A Non-Disclosure Agreement was also signed with the mobile money service provider (see Annex 3). The final databases of potential and final beneficiaries of the SFMP pilot cash transfer were shared with the MOGCSP.

8. CONCLUSIONS

Eradicating poverty in all its forms and dimensions, including extreme poverty, is among the main challenges the global community and governments face. Achieving this goal by 2030 will require governments to implement a set of policies to facilitate investment in human capital, improving labor markets, expanding social protection, and implementing targeted policies to help groups of the population experiencing specific disadvantages (Boudet, et al., 2018).

Economic Safety Nets are an example of a targeted policy that can be directed towards addressing any unintended or anticipated loss of livelihood associated with capacity and effort reduction strategies applicable to the marine artisanal fisheries sector to rebuild the dwindling fish stocks. Although Ghana has made steady growth on socioeconomic development, improvements on human development indicators, especially health, education, and eradication of hunger, the improvements are not evenly distributed across the country. Certain geographic regions in the northern parts of the country and coastal fishing communities have exhibited slow progress towards socioeconomic development. The situation of slow progress towards human development indicators in coastal fishing communities has been exacerbated by the depletion of major fish stocks upon which the livelihoods of these communities depend.

The SFMP Economic Safety Net Scheme in the form of unconditional cash transfer as piloted across the entire coastal region of Ghana can be refined and scaled up to reduce poverty by redistributing wealth and/or protecting households against income shocks, especially during fisheries closed seasons or in association with capacity reduction strategies recommended by fisheries experts to rebuild fish stocks, with focus on the small pelagic stock regarded as the people's fish. Modification to the SFMP Economic Safety Net Scheme would require changing the "unconditional cash transfer" to "conditional cash transfer", with the condition being compliance with fish stock rebuilding directives. Although this would involve further studies and analysis to establish the various beneficiary categories and the quantum of benefit per category, any approach adopted should necessarily involve the fishers, both fishermen and processors, throughout all phases of the scheme from design through implementation to monitoring to increase transparency, buy-in and compliance with the stock rebuilding measures.

The fisheries sector plays a very important role in the socio-economic development of Ghana including that the sector accounted for 1.2% of Ghana's GDP in 2017, supports livelihoods of an estimated 10% of the population, and provides 60% of animal protein consumed by Ghanaians.

The importance of the sector requires that urgent and pragmatic steps be taken to stop depletion of key fish stocks leading to near collapse of the sector and that fish stock rebuilding measures be instituted. SFMP in 2019 facilitated implementation of the first closed season in Ghana. The biological impact assessment study commissioned by SFMP on the closed season indicated that the closed season as a fisheries management measure will need to be continued on a regular basis for some years into the future and accompanied by other measures, such as cessation of IUU fishing, in order to rebuild the depleted stocks and move the sector towards sustainability and profitability. Concurrently, the socioeconomic impact assessment study indicated some adverse impacts of the closed season on income and livelihoods of fishers.

Investment in Social Protection Policies provides opportunities for addressing adverse impacts of development policies and management interventions. SFMP through this pilot

Economic Safety Net Scheme for the marine fisheries sector has provided a pragmatic approach through which a social safety net in the form of a cash benefit can be implemented and targeted at vulnerable fisheries dependent households. It could be applied to mitigate unexpected economic shocks (e.g., from a pandemic such as COVID-19, or Ebola), or ecological shocks resulting in damage to fishing gears or household structure from "tidal waves" and floods, or man-made economic disruptions (collapse from overfishing). However, the most relevant application of this pilot Economic Safety Net Scheme relates to the integration of the approach and lessons learned into implementation of closed season programs for the marine artisanal sector to rebuild the stocks through a carefully designed comprehensive strategy with the necessary government commitment and investments.

8.1 Lessons Learned

The key lessons learned from this pilot Economic Safety Net Scheme for consideration by Government and other development partners in the design, implementation, and monitoring of Economic Safety Net Schemes to suit specific target groups and contexts include the following:

- 1) The decision to adopt mobile money as the mode of payment for the SFMP Economic Safety Net Scheme was made as a result of the need to prevent the spread of COVID-19 and for cost-efficiency, but it become clear at the operational phase that **most of the beneficiaries did not have their own mobile phones**, let alone mobile money accounts. The decision on the mode of payment and expectations for beneficiary phone ownership influences, among other things, the resources including the number of people, level of effort, and time allocated and budgeted for. Flexibility is required during implementation. An unintended output was that the mode of payment precipitated the opportunity for more than 1000 poor and vulnerable households to be integrated into the digitization of Ghana's Economy in consonance with government policy.
- 2) **Engaging beneficiaries** of the Economic Safety Net Scheme in development of the criteria to be used in the selection process and extensive awareness creation and education following development of the selection criteria **helps to reduce misunderstanding** and tension related to why some households were selected and others were not.
- 3) Enhancing the coordination role of fisheries associations with support from SFMP Implementing Partners became extremely important when it was realized that the local representatives of fisheries associations (GNCFC and NAFPTA) did not have the capacity to move around to engage potential beneficiaries and capture their data required for the process. While the involvement of the SFMP Implementing Partners was important, it is equally important that the fisheries associations have the ability and capacity to coordinate their activities at the local level.
- 4) Failure to juxtapose the schedule of Economic Safety Net Scheme implementation with other important national programs can lead to implementation challenges. The processes of requesting potential beneficiaries to provide their photo identification which included voter's ID was misconstrued by some parties. In some communities some potential beneficiaries refused to take part in the identification and nomination process because they thought one of the political parties (an opposition party) was collating their details so that their data could be deleted from the national voter's register. This phenomenon played a part in the shortfall in the list of potential beneficiaries planned for some communities across the entire coastal region of Ghana, as the implementation of the Economic Safety Net Scheme coincided with the 2020 parliamentary and presidential elections in Ghana.
- 5) Provision of sufficient time for each of the distinct phases and chain of actions involving development of criteria through verification of potential beneficiaries, final

- payment, and follow-up monitoring is critical for effective implementation. At least a year is required for effective engagement with beneficiaries when a target of 2000 or more beneficiaries are required. This is because the poor and vulnerable are usually the segment of the population that is difficult to access and excluded from most social and economic activities.
- 6) In the absence of COVID-19, **sufficient in-person engagement is required** especially during the initial data collection and administration of a Proxy Means Test (PMT), which will allow staff of administrators of the Economic Safety Net Scheme or their representatives to have firsthand information about the potential beneficiaries.
- 7) For the purposes of monitoring and possible graduation from the Economic Safety Net Scheme as and when the socioeconomic conditions of beneficiaries improve, **informing the local government agency** with administrative oversight of the respective communities is necessary. In this instance, the respective District Assemblies were informed.
- 8) Setting up an Ad hoc Technical Committee was instrumental in leveraging expertise and support from all key government institutions and the Ministry of Gender, Children and Social Protection, the ministry responsible for coordinating all social protection interventions in Ghana. This is important because any future social protection intervention could benefit from the National Household Registry currently being compiled by the MOGCSP.
- 9) **Developing a comprehensive database** to capture potential beneficiaries better serves the needs of an Economic Safety Net Scheme than the Excel spreadsheets used in the SFMP pilot. With the challenges associated with processing payments in batches while taking care to avoid duplication of payments, any future planning for design, implementation and monitoring of an Economic Safety Net Scheme would benefit from using a database software to capture details of potential beneficiaries and facilitate processing of benefits as well as generation of associated reports.
- 10) **Outsourcing competencies** that are outside the scope of implementing institutions is critical. When selecting mobile money as the payment method, engaging the services of a technology service provider capable of effecting payment to beneficiaries in mass and generating transaction execution reports is a necessity.

8.2 Recommendations

- 1) If a cash transfer benefit is to be applied in the fisheries sector, **consider grafting onto the LEAP program** and where LEAP and FC can coordinate with fisherfolk associations on developing a registry of fisheries dependent vulnerable households under the auspices of the National Household Register program.
- 2) Consider cash transfer benefits using the fisherfolk registry to compensate households impacted by floods and tidal waves with the active involvement of the National Disaster Management Organization (NADMO).
- 3) A cash transfer benefit to fisheries dependent households should be considered by the Government of Ghana during annual fisheries closed seasons.
- 4) The possible impact of cash transfer benefits on **reducing incidences of fishing households trafficking their children** should be investigated further in future Economic Safety Net Schemes to fishing households. The cash transfer benefit clearly helps put food on the table for children as well as help keep them in school. The main purpose of the cash benefit was to maintain a minimum food basket for the family. The fact that 88% of respondents said the funds were used to buy food suggests this goal has been met to some degree. However, it is clear that the cash benefit serves other purposes as well, providing benefits to help keep children in school or to support household livelihoods

- were high on the list of uses. Other surveys have found that a main reason fishing households traffic their children is the lack of funds to support the children.
- 5) If cash transfer benefits are provided to fisheries dependent vulnerable households, consideration should be given to **conditional economic safety net assistance**, such as evidence that children have been to a health clinic, or vaccinated, or a member of the household enrolls in a vocational training program during the period cash benefits are provided, or compliance with fisheries regulations, including not engaging in IUU fishing activities.
- 6) **Provide a registered SIM and phone to beneficiaries**, along with basic training on use of mobile money and mobile wallets. Where possible encourage beneficiaries to join a local Village Savings and Loan Association (VSLA) or set up a savings account with a bank.

9. POTENTIAL FUTURE APPLICATIONS FOR SUSTAINABLE FISHERIES MANAGEMENT AND NEXT STEPS

Investment in Social Protection Policies provides opportunities for addressing adverse impacts of development policies and management interventions.

SFMP through this pilot Economic Safety Net Scheme for the fisheries sector demonstrates below how it might be possible to implement a fisheries closed season and simultaneously address unintended adverse socioeconomic effects associated with such stock rebuilding management measures through a carefully designed comprehensive strategy with necessary government commitment and investments.

In 2019, the SFMP facilitated implementation of the first closed season for the marine artisanal sector and commissioned a biological assessment of the impact of the closed season. The assessment indicated that the best period to implement close season and maximize recruitment of juvenile small pelagic species towards rebuilding of the fish stock is between July and September as depicted in Figure 6 below.

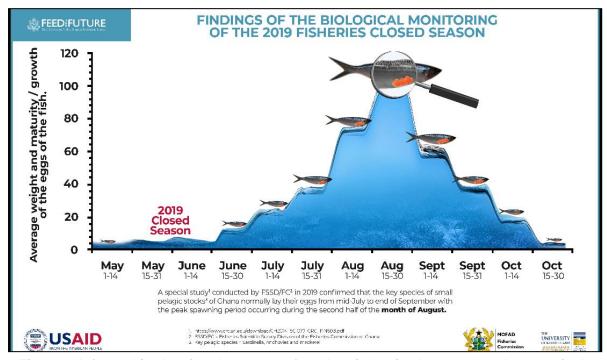


Figure 6: Infographic showing the most preferred period to implement closed season in the marine artisanal sector in Ghana in order to maximize recruitment of juvenile pelagic fish species

Based on data and information derived from implementation of the SFMP pilot Economic Safety Net Scheme, the amount of money required (without considering the administrative cost) to implement a closed season for two months involving 100,000 fisherfolk (about 22,000 households) is \$2,311,111. Four scenarios related to equitable allocation of the total funds required among fisherfolk across the four coastal regions are shown in Table 8 and Figure 7 below.

Table 8: Allocation of \$2.3m among 22,000 fisheries dependent households (100,000 fisherfolk) across the four coastal regions in Ghana for a projected two month closed season under four scenarios of equitable allocation of resources

	Volta	Greater Accra	Central	Western	Total all 4 Regions
Distribution of Poor and Vulnerable Fishers based on PPI Score (Scenario 1, Only the Poor & Vul Fishers = 300,000)	17,750.00	16,400.00	35,500.00	30,350.00	100,000.00
Distribution of Poor and Vulnerable based on Population of fishermen only (Scenario 2, All Fishermen only Poor &Vul = 300,000)	16,100.00	20,200.00	33,200.00	30,500.00	100,000.00
Distribution of Poor and Vulnerable based on proportion of fishers in final SFMP (Scenario 3, All Fishers Poor & Vul = 300,000)	18,287.15	19,294.71	35,516.37	26,901.76	100,000.00
Distribution of Fishers based on all three scenarios	17,379.05	18,631.57	34,738.79	29,250.59	100,000.00
Amount of Safety Net Required/Month based on scenario 1 (Assuming 2 month Closed Season)	\$410,222.22	\$379,022.22	\$820,444.44	\$701,422.22	\$2,311,111.11
Amount of Safety Net Required/Month based on scenario 2 (Assuming 2 month Closed Season)	\$372,088.89	\$466,844.44	\$767,288.89	\$704,888.89	\$2,311,111.11
Amount of Safety Net Required/Month based on scenario 3 (Assuming 2 month Closed Season)	\$422,636.44	\$445,922.19	\$820,822.84	\$621,729.64	\$2,311,111.11
Amount of Safety Net Required based on average of the three scenarios (Assuming 2 month Closed Season)	\$401,649.18	\$430,596.29	\$802,852.06	\$676,013.58	\$2,311,111.11

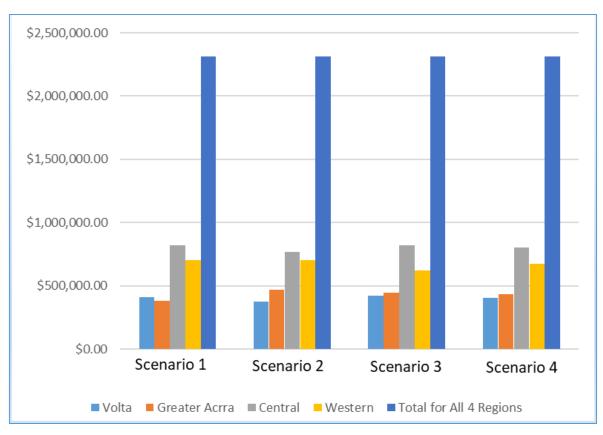


Figure 7: Allocation of \$2.3m among 22,000 fisheries dependent households (100,000 fisherfolk) across the four coastal regions in Ghana for a projected two month closed season under four scenarios of equitable allocation of resources

Implementation of the Economic Safety Net Scheme can also be demonstrated for 300,000 fisherfolk (**about 67,000 households**) and the required amount for a projected one month closed season. The cost of the cash transfer benefit in this case is **\$3,466,666** as shown in Table 9 and Figure 8 below.

Table 9: Allocation of \$3.5m among 67,000 fisheries dependent households (300,000 fisherfolk) across the four coastal regions in Ghana for a projected one month closed season under four scenarios of equitable allocation of resources

	Volta	Greater Accra	Central	Western	Total all 4 Regions
Distribution of Poor and Vulnerable Fishers based on PPI Score (Scenario 1, Only the Poor & Vul Fishers = 300,000)	53,250.00	49,200.00	106,500.00	91,050.00	300,000.00
Distribution of Poor and Vulnerable based on Population of fishermen only (Scenario 2, All Fishermen only Poor &Vul = 300,000)	48,300.00	60,600.00	99,600.00	91,500.00	300,000.00
Distribution of Poor and Vulnerable based on proportion of fishers in final SFMP (Scenario 3, All Fishers Poor & Vul = 300,000)	54,861.46	57,884.13	106,549.12	80,705.29	300,000.00
Distribution of Fishers based on all three scenarios	52,137.15	55,894.71	104,216.37	87,751.76	300,000.00
Amount of Safety Net Required/Month based on scenario 1 (Assuming 1 month Closed Season)	\$615,333.33	\$568,533.33	\$1,230,666.67	\$1,052,133.33	\$3,466,666.67
Amount of Safety Net Required/Month based on scenario 2 (Assuming 1 month Closed Season)	\$558,133.33	\$700,266.67	\$1,150,933.33	\$1,057,333.33	\$3,466,666.67
Amount of Safety Net Required/Month based on scenario 3 (Assuming 1 month Closed Season)	\$633,954.66	\$668,883.29	\$1,231,234.26	\$932,594.46	\$3,466,666.67
Amount of Safety Net Required based on average of the three scenarios (Assuming 1 month Closed Season)	\$602,473.78	\$645,894.43	\$1,204,278.09	\$1,014,020.38	\$3,466,666.67

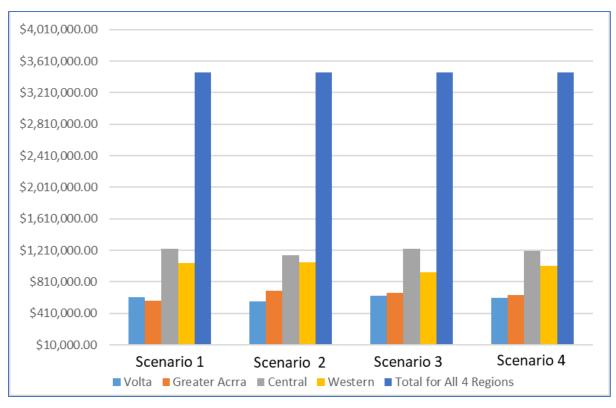


Figure 8: Allocation of \$3.5m among 67,000 fisheries dependent households (300,000 fisherfolk) across the four coastal regions in Ghana for a projected one month closed season under four scenarios of equitable allocation of resources

Based on the data and information derived from the implementation of the SFMP Economic Safety Net Scheme various scenarios can be simulated to determine the most appropriate package and number of fishers to be captured in any future implementation of a Safety Net Scheme for the fisheries Sector. A potential opportunity that relies on existing resources in the sector is the following:

- SFMP in 2016 estimated that total subsidies to the fisheries sector is about \$44 million/year (Premix and tax waivers = \$44m). This totals about \$3.6 million subsidies/month.
- During fisheries closure, where government is not required to provide premix fuel for the sector, the savings as computed above can be channeled into an Economic Safety Net Scheme for the sector.

9.1 Computation of Administrative Program Cost

The scenarios presented above did not include administrative program cost. The computation of the associated administrative program cost will require estimation of the following management and administrative cost elements:

- i) Number and caliber of people involved in the implementation of the program
- ii) The level of efforts of the people involved
- iii) The associated transport and logistic costs and
- iv) Other associated operating costs.

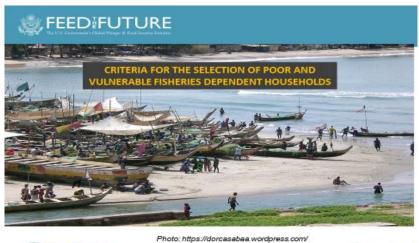
Likely administrative cost items to administer a program are provided in Table 9 below.

Table 10: Illustrative Administrative Costs Considerations at Each Action Step in Figure 3 and Section 4.4

Actions	Description	Cost Elements
Crosscutting	Management Team of at least: Program Manager, Database Manager, Admin./Fin Manager.	Compensation packages
ACTION 1: Engage Stakeholders to Collate List of Members with Smart Phones ACTION 2: Set up Virtual Platform	Virtual Platform for Fishers already established	Data bundles to cover use costs and incentives
ACTION 3: Set up Ad hoc Technical Committee	Ad Hoc Technical Committee already established	Approx. 4 meetings per year
ACTION 4: Develop Beneficiary Household Selection Criteria	Selection Criteria for Vulnerable Households already finalized with fisheries association engagement and Technical Committee Approval	No cost
ACTION 5: Education and Awareness Creation on Selection Criteria	Criteria already piloted. Virtual Platform members already familiar.	Refresher Communications
ACTION 6: Nomination of Potential Beneficiaries by Fisher & Processor Associations ACTION 7: Processing of List of Potential Beneficiaries ACTION 8: Proxy Means Test	Associations propose beneficiary households. Use Ghana Statistical Services to conduct in-person visits to collect data on each household and conduct a Proxy Means Test (e.g., PPI or Multidimensional poverty index) at the same time, establishing a database of scored fisheries households.	Tablets Data bundles GSS enumerators Transport and per diem
ACTION 9: Collate List of Final Beneficiaries		
ACTION 10: Verification of Potential Beneficiaries	SIM Card and MOMO Account verification and set up. Calling and in person interventions when fund transfers are not successful.	Travel and compensation for follow up team Data and call credits
ACTION 11: Establish Final List of Beneficiaries		
ACTION 12: Approval by Ad hoc Technical Committee	Meeting	Already noted in Action 3

ACTION 13: Set up MOMO Platform and Disburse Funds	MOMO Transfer Services	1.5% of amount transferred
Monitoring	Record IVR messages/studio costs EngageSpark Phone Polling Computer Assisted Telephone Interviews (CATI) In person monitoring	Translations and voice recording fees Set up for IVR Fee per call Personnel Tablets/headsets Travel and per diem

ANNEX 1: SELECTION CRITERIA



USAID



DEFINITION OF A HOUSEHOLD

- For the purpose of implementation of the SFMP COVID-19 Response Program and its Economic Safety Net Scheme.
- A household is defined as a social unit headed by an adult male or female or a couple, with dependents living in a house, under a shed or fish processing center and normally share common meals.
- NB: In a compound house setting, with multiple families, the defining factor/criterion of a household, is the social unit that shares a common meal.

INITIAL SCREENING CRITERIA

- The household must be dependent at some point/level on the fisheries value chain for its livelihood.
- Households who are not already a beneficiary of LEAP or any other major government social protection scheme.

NB

"Livelihoods consist of the capabilities, assets - both material and social resources and activities required for a means of living"

(The Livelihood Assessment Tool-kit, Analyzing and responding to the impact of disasters on the livelihoods of people (Food and Agriculture Organization of the United Nations (FAO), Rome and International Labor Organization (ILO), Geneva, 2009)

HEALTH RELATED CRITERIA FOR SELECTION OF POOR AND VULNERABLE **HOUSEHOLDS**

- Households with members suffering from chronic illness or living with a disability who provide labor to fishers/fish processors. A guardian will be designated for receiving cash transfers.
- Households who do not have access to health insurance including its renewal and other health facilities.

EDUCATION RELATED CRITERIA FOR SELECTION OF POOR AND VULNERABLE HOUSEHOLDS

- Households where children of school-going age do not go to school and cannot afford two square meals.
- Household where none of the children have education at the basic level.

STANDARD OF LIVING RELATED CRITERIA FOR SELECTION OF POOR AND VULNERABLE HOUSEHOLDS

- Head of household or members of household who are aged and do not engage in fishing activities anymore.
- Household that are fisheries dependent with no alternative livelihood.
- Head of household or members of household who cut firewood and assist fish processors on a contract basis.
- Head of household or members of household who mend nets for fishers.
- Head of household or members of household who carry fish for fishers/fish processors.
- Households with single parent.
- Households with more than five dependents.
- Households with members who are victims of child labor.
- Households with a history of domestic violence.
- Households with abuse alcohol.
- Households with combined monthly income less than Ghc 100.00
- Households where children suffer malnourishment in off seasons for highly seasonal fishing communities.
- Households with parents who live with all their children in a single room.
- Households with members who cannot feed themselves two times a day and who do not have access to potable water.
- Households who are unable to rent a simple mud house and who live under sheds at landing sites or fish processing sites.
- Households with members who cannot afford basic necessities like adequate clothing including slippers.
- Households where the head or adult members are unemployed or are engaged in low paying jobs.

NB:

Please note that structures housing wayward children in ghettos at fishing communities will not be included as a household. Households who own valuable assets (boat, car, electrical gadgets etc.) or live in a medium to upscale house would not be included. Name on a valid national identity card (Health Insurance Card, Voter ID, Ghana Card) from potential beneficiaries will be used in data collection. Some Mobile Money numbers are not registered with the actual names of sim card owners.

ANNEX 2: DATA COLLECTION FORM

		USAID/GHANA SUSTAII	NABLE FIS	SHERIES M	ANAGEMEN	IT PROJECT (SF	MP): DATA	COLLECTIC	ON FOR PILOT I	ECONOMIC	SAFETY N	ET SCHEME	FOR THE FISHERIE	S SECTOR	
	REGIO						NAM	OF LOCAL							
	DISTR	ICT:					REPRE	SENTATIVE	Last name						
	FISHING VILLA						SUBMI	TTING THIS	Other names						
	FISHERIES ASS							AIA SIILLI							
					Data	Fields Required	for Each He	ad of Poten	tial Beneficiary	Household					
	Name of Head	d of Household	Sex	ls househol d female headed	Language of preference (Ga,	Telephone	Phone Service provider	Phone is owned by	Date of birth of Head of	NHIS	Identif	tional ication(ID)		on where head of s not own a phone	Relationship to head of household
No.	First name	Last name (surname)	(M/F)	with no adult males (Y/N)	Ga- Dangbe, Ewe, Fanti, English)	number	(MTN, Vodafone, airtel/tigo, Glo)	Head of Household (Y/N)	Household (DD/MM/YY)	Number	Type of ID Passport, Voter's ID, or Ghana Card	ID Number	First Name	Last name	(spouse, parent, sibling, adult child, others)
1															
2															
3															
4															
5															
6															
7															
8															
9															
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ANNEX 3: ILLUSTRATIVE NON-DISCLOSURE AGREEMENT WITH MOBILE MONEY SERVICE PROVIDER

NON-DISCLOSURE AGREEMENT (NDA) BETWEEN Service Provider Company AND Client Organization

NON DISCLOSURE AGREEMENT

This Agreement is made the [date]0 **BETWEEN** [Service Provider Company], a technology company incorporated under the laws of Ghana with its registered office at [address] (hereinafter called COMPANY NAME] of the one part; and

[Client Organization], a company incorporated under the laws of Ghana maintaining its principal place of business at [address] (hereinafter called NAME) of the Second Part.

NAME and NAME are hereinafter referred to individually as a "Party" and jointly as the "Parties".

Each Party may disclose and deliver to the other Party certain information about its business, clients, prospects, plans, products, financial condition, properties, operations, intellectual property, trade secrets and/or know-how (such Party when disclosing such information being the "Disclosing Party" and such other Party when receiving such information being the "Receiving Party").

WHEREAS

- A) [Client Org] is a [type of Organization] authorized to operate in Ghana;
- **B)** [Service Provider] is a technology firm with product areas as follows, [insert product areas].
- C) [Client] is desirous of engaging [Service Provider] for the provision of technological solutions to provide relevant services to their beneficiaries which includes but is not limited to the provision of data and airtime services.
- **D)** From time to time and for their mutual benefit, the Parties will disclose to each other certain information, some of which may be confidential information for the purpose of the Proposed Transactions.

NOW THEREFORE, the Parties agree as follows:

1. Non-Disclosure of Proprietary Information

All such information furnished by the Disclosing Party or its Representatives (as defined below), whether furnished before or after the date hereof, whether oral, written, or recorded/electronic, and regardless of the manner in which it is furnished, is referred to in this Agreement as "Proprietary Information." The term "Proprietary Information" shall also include all reports, summaries, compilations, analyses, notes or other information prepared by the Receiving Party or its Representatives that are based on, contain or reflect any Proprietary Information.

Proprietary Information does not include information which:

- (a) is or becomes generally available to the public other than as a result of a disclosure, directly or indirectly, by the Receiving Party or its Representatives and is further so available not in breach of this Agreement or some other legal obligation;
- (b) was available to the Receiving Party on a non confidential basis prior to its disclosure by the Disclosing Party or its Representatives;
- (c) becomes available to the Receiving Party on a non confidential basis from a person other than the Disclosing Party or its Representatives who is not otherwise bound by a confidentiality agreement or other legal obligation with the Disclosing Party or any of its

Representatives, or is otherwise not under an obligation to the Disclosing Party or any of its Representatives not to transmit the information to the Receiving Party; (d) is independently developed by the Receiving Party without use of or reference to the Proprietary Information.

As used in this Agreement, the term "Representative" means a person's affiliates and its and their directors, officers, employees, agents, advisors (including, without limitation, financial advisors, counsel and accountants) and controlling persons, and the term "person" shall be broadly interpreted to include, without limitation, any entity or individual.

Unless otherwise agreed to in writing by the Disclosing Party, the Receiving Party agrees:
(a) except as required by law, to keep all Proprietary Information confidential and not to disclose or reveal any Proprietary Information to any person other than its Representatives who are actively and directly participating in the evaluation of the Proposed Transactions or who otherwise need to know the Proprietary Information for the purpose of evaluating the Proposed Transactions: and

(b) not to use Proprietary Information for any purpose other than in connection with its evaluation of the Proposed Transactions or the consummation of the Proposed Transactions in a manner that the Disclosing Party has approved.

The Receiving Party agrees to take reasonable steps to safeguard and protect the confidentiality of the Proprietary Information. The Receiving Party will not disclose the Proprietary Information to any of its Representatives unless they have been informed by the Receiving Party of its confidential nature and they have agreed to act in accordance with the terms and conditions of this Agreement. The Receiving Party will cause its Representatives to observe the terms of this Agreement, and the Receiving Party will be responsible for any breach of the terms of this Agreement by the Receiving Party or its Representatives.

2. Use of Proprietary Information

The receiving Party agrees that it and its Representatives will not knowingly, as a result of knowledge or information obtained from the Proprietary Information or otherwise obtained in connection with the Proposed Transactions, divert or attempt to divert any business or customer of the Disclosing Party. The Receiving Party agrees that it shall not reverse-engineer, decompile or disassemble any software disclosed to it and the Receiving Party shall not remove, overprint or deface any notice of copyright, trademark, logo, legend, or other notices of ownership from any originals or copies of Proprietary Information it obtains from the Disclosing Party.

3. Notice of Disclosure

In the event that the Receiving Party is requested pursuant to, or required by, applicable law or regulation or by legal process to disclose any Proprietary Information or any other information concerning the Disclosing Party or the Proposed Transactions, the Receiving Party agrees that it will provide the Disclosing Party with prompt notice of such request or requirement in order to enable the Disclosing Party:

- (a) to seek an appropriate protective order or other remedy;
- (b) to consult with the Receiving Party with respect to the Disclosing Party taking steps to resist or narrow the scope of such request or legal process; or
- (c) to waive compliance, in whole or in part, with the terms of this Agreement. In the event that such protective order or other remedy is not obtained, or that the Disclosing Party waives compliance with the provisions hereof, the Receiving Party agrees to furnish only that portion of the Proprietary Information which the Receiving Party is advised by

counsel is legally required and to exercise best efforts to obtain assurance that confidential treatment will be accorded such Proprietary Information.

In any event, neither the Receiving Party nor any of its Representatives will oppose action by the Disclosing Party to obtain an appropriate protective order or other reliable assurance that confidential treatment will be accorded the Proprietary Information.

4. Return of Proprietary Information

If either Party hereto determines that it does not wish to proceed with the Proposed Transactions, it will promptly advise the other Party of that decision. In that case, or in the event that either Party, in its sole discretion, so requests or the Proposed Transactions is not consummated by the Parties, each Party will promptly deliver to the other Party all Proprietary Information, including all copies, reproductions, summaries, compilations, third party analyses or extracts thereof or based thereon in its possession or in the possession of any of its Representatives. Any non-written Proprietary Information is subject to the terms of this Agreement.

5. No Representations or Warranties

The Receiving Party acknowledges that neither the Disclosing Party nor any of its representatives and none of the respective officers, directors, employees, agents or controlling persons of the Disclosing Party or such Representatives makes any express or implied representation or warranty as to the accuracy or completeness of any Proprietary Information, and the Receiving Party agrees that no such person shall have any liability to the Receiving Party or any of its Representatives relating to or arising from the use of any Proprietary Information by the Receiving Party or any of its Representatives or for any errors therein or omissions therefrom. The Receiving Party also agrees that it is not entitled to rely on the accuracy or completeness of any Proprietary Information and that it shall be entitled to rely solely on such representations and warranties regarding Proprietary Information as may be made to it in any final agreement relating to the Proposed Transactions, subject to the terms and conditions of such agreement.

6. Non Solicitation of Employees

Each Party agrees that, without the prior written consent of the other party, neither it nor any of its affiliates will for a period of two (2) years from the date hereof, directly or indirectly solicit for employment or employ any person who is now employed by the other Party or any of its subsidiaries.

7. No Obligations

Each Party agrees that until final agreements regarding the Proposed Transactions have been executed by the Parties herein, neither Party nor any of their respective Representatives shall have any legal obligation or any liability to the other Party of any nature whatsoever with respect to the Proposed Transactions by virtue of this Agreement.

Each Party also acknowledges and agrees that each Party and its Representatives may conduct the process, that may or may not result in the Proposed Transactions, in such manner as it, in its sole discretion, may determine (including, without limitation, negotiating and entering into a final agreement with any third Party without notice to the other Party). Each Party retains the right, in its sole discretion, to determine whether to disclose its Proprietary Information to the other Party, and disclosure of Proprietary Information of any nature shall not obligate the disclosing Party to disclose any further Proprietary Information.

8. Property Rights in Proprietary Information

Each Party agrees that all Proprietary Information will remain the property of the Disclosing Party, notwithstanding the disclosure of such Proprietary Information to the Receiving Party under this Agreement. Unless otherwise expressly agreed in a separate license agreement, the disclosure of Proprietary Information to the Receiving Party by the Disclosing Party will not be deemed to constitute a grant, by implication or otherwise, of a right or license to the Proprietary Information or in any patents or patent applications of the Disclosing Party.

9. Equitable Relief

Without prejudice to the rights and remedies otherwise available to each of the Parties hereto, each such Party shall be entitled to equitable relief by way of injunction or otherwise if the other Party or any of its Representatives breach or threaten to breach any of the provisions of this Agreement.

10. Notice of Breach

The Receiving Party shall notify the Disclosing Party immediately upon discovery of any unauthorized use or disclosure of Proprietary Information by the Receiving Party or its Representatives, or any other breach of this Agreement by the Receiving Party or its Representatives, and will cooperate with efforts by the Disclosing Party to enable it regain possession of the Proprietary Information and prevent its further unauthorized use.

11. Severability and No Waiver

No failure or delay by either Party in exercising any right, power or privilege under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any right, power or privilege under this Agreement.

If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

12. Governing Law and Jurisdiction

This Agreement shall be construed and governed in accordance with the laws of The Republic of Ghana regardless of any conflict of laws principles of any other jurisdiction. The Parties hereby submit to the exclusive jurisdiction of the Commercial Court Division of the High Court of the Republic of Ghana in respect of any dispute that may arise in relation to this Agreement.

13. Entire Agreement and Prohibition of Assignment

This Agreement contains the entire agreement between the Parties concerning the subject matter hereof, and no modification of this Agreement or waiver of the terms and conditions hereof shall be binding upon the Parties, unless approved in writing by each of the Parties hereto. This Agreement shall not be assigned by another Party, by operation of law or otherwise, without the prior written consent of the other Party.

14. Term

The Receiving Party's duty to protect the Confidential Information shall survive expiration or termination of this Agreement for a period of five (5) years.

IN WITNESS WHEREOF the Parties hereto have hereunto by their duly authorized representatives executed this Agreement the day and year first above written.

For and on behalf of	Signed for and on behalf of
[SERVICE PROVIDER COMPANY]	[CLIENT ORGANIZATION]
	••••••
Signature	Signature
Name	Name
In the presence of:	In the presence of:
Signature	Signature
Name	Name

ANNEX 4: TERMS OF REFERENCE FOR THE AD HOC TECHNICAL COMMITTEE

TERMS OF REFERENCE

AD HOC TECHNICAL COMMITTEE TO PROVIDE GUIDANCE ON IMPLEMENTATION OF A PILOT SOCIAL PROTECTION SCHEME (ECONOMIC SAFETY NET PACKAGE) FOR THE MARINE ARTISANAL FISHERIES SECTOR

On May 28, 2020, the SFMP Cooperative Agreement with URI was modified to provide an extension through April 2021. A supplemental Program description was provided with the following result areas elaborated to achieve the goal of the SFMP COVID-19 response initiative: "To prevent the spread and mitigate the economic effects of COVID-19 among vulnerable households in fishing communities in Ghana."

- COVID 1: Fisherfolk at 300 landing sites, processing and/or fish markets sites better adhere to official COVID-19 disease prevention protocols.
- COVID 2: Two thousand extremely vulnerable fisheries-dependent households avoid extreme poverty.
- COVID 3: GoG has evidence on approaches for effective livelihood assistance to fishing communities affected by COVID-19.
- COVID 4: Cross Cutting Areas: Private Sector Engagement and Partnerships; Gender and Youth; Building for Sustainability.

In pursuit of these strategic outcomes, the SFMP COVID-19 response component will work with the 27 metropolitan, municipal, and district assemblies (MMDAs) along the entire coast of Ghana, all relevant Ministries and Government Institutions as well as fisherfolk associations that have membership and respected leaders in almost all 1866 fishing villages found along the coast.

In order to leverage the experiences of all key stakeholder institutions and in consonance with policy implementation and coordination arrangements for social protection programs in Ghana, SFMP wishes to set up an ad hoc Technical Committee with all key stakeholders and Government institutions represented, to be chaired by the Chief Director of the MoGCSP or her representative, to provide guidance on the implementation of the Social Protection Scheme. The membership of the ad hoc Technical Committee to oversee the implementation of this economic safety net, including approval of the final list of selected beneficiary households prior to disbursement of funds is as provided below;

- 1. The Ministry of Gender, Children and Social Protection (MoGCSP) Chairperson
- 2. The Ministry of Gender, Children and Social Protection (MoGCSP) One Representative
- 3. The Ministry of Gender, Children and Social Protection Livelihood Empowerment Against Poverty (LEAP) Program secretariat One Representative

- 4. The Ministry of Fisheries and Aquaculture Development (MOFAD) One Representative
- 5. The National Development Planning Commission (NDPC) One Representative
- 6. Ministry of Health and the Ghana Health Service One Representative
- 7. Ministry of Finance One Representative
- 8. The Ministry of Local Government and Rural Development One Representative
- 9. The Coastal Development Authority One Representative
- 10. The Fisheries Commission One Representative
- 11. Ghana Statistical Services One, Representative
- 12. Fisheries Associations; Ghana National Canoe Fishermen's Council (GNCFC), National Fish Processors and Traders Association (NAFPTA) One, Representative each.
- 13. USAID/Ghana Sustainable Fisheries Management Project (SFMP) One Representative and coordinating institution.

Objective

The objective of setting up this ad hoc Technical Committee is to provide strategic oversight for the development of appropriate methodologies which could be adopted by Government and Development Partners in providing assistance to poor and vulnerable fisheries dependent households to mitigate economic shocks and stresses particular to the sector, including during the implementation of future fisheries closed seasons, a strategic management measure required to rebuild Ghana's small pelagic stocks.

Scope of Assignment/Tasks to be Performed

The ad hoc Committee will apply sound technical procedures and methods involving science-based and problem-solving approaches in discharging its work. Specifically, the Committee shall be responsible for the following:

- i) Guide the SFMP in streamlining its strategies related to engaging all relevant government institutions and the various stakeholders to understand the urgency of this intervention and its relevance for the fisheries sector
- ii) Provide inputs into the definition of poor and vulnerable households
- iii) Advice on whether equal amounts should be given to all households or the economic safety net should be prorated based on the number of persons per beneficiary household
- iv) Review the criteria for selection of 2000 poor and vulnerable fisheries dependent households
- Advice on measures to avoid duplication of effort and ensure appropriate validation of targetting of beneficiary households, including the administration of the Poverty Probability Index
- vi) Approve the final list of beneficiary households.
- vii)Provide inputs into the monitoring and measures to maintain the confidentiality of beneficiaries
- viii) Advise government on the possible ways the economic safety net package can be sustained.
- ix) Provide the platform for resolving any potential conflicts emanating from the implementation of this intervention

Term of Appointment

Members of this ad hoc Technical Committee shall serve for the duration of this pilot project, not earlier than six (6) months.

Meetings

The ad hoc Committee shall convene both in person and virtual meetings in the discharge its duties. The SFMP working with a focal person appointed by the chairperson shall serve as the secretariat of the Committee to facilitate the organization of meetings convened by the chairperson. The exigencies of the implementation of this activity may necessitate scheduling of meetings once every month especially at the initial phase.

Qualification of ad hoc Committee Members

Members of the ad hoc Technical Committee shall be appointed by their respective institutions identified above and the representatives appointed shall comprise people with skills, knowledge, and experience in the fisheries sector and implementation of social protection schemes. Appointments will also take into consideration the need for members to have appropriate and sufficient knowledge in fisheries and/or marine biology, ecology, socioeconomics, statistics, development planning and/ or experience in fishing, fish processing and trading. They should be representative of their respective institutions without attention to political or other affiliations.

ANNEX 5: MONITORING AND OUTCOME QUESTIONNAIRES AND ANALYSES

Percentage of targeted cash beneficiary households with steady or decreasing hunger and steady or increasing diet. (Project indicator 8b)

NOTE: The original target was percent of household beneficiaries showing stable or improving scores on these two food security indicators. However, we could not measure improvement as originally envisioned in this definition following each household over time in a panel type study as not every beneficiary household answered the poll at each time they were polled. We can measure changes in the mean scores of all the households surveyed and compare across time periods, and therefore redefine the indicators somewhat, not as a percent but as changes in mean scores over time. For the HFIAS the differences in the scores between the time periods is compared statistically as to whether they are stable or increasing over these time periods. Due to delays in obtaining final lists of beneficiaries, a baseline of beneficiaries was not able to be conducted prior to initial funds being disbursed. However, a baseline from a control group of SFMP activity participants was conducted in Oct. While not exactly comparable as this control group was not necessarily poor households, it does provide some usefulness in comparison in the absence of a pre survey of cash beneficiaries prior to distribution of funds. For the MMD-W, the mean scores were compared across time periods and the percent obtaining "adequate dietary diversity" (score ≥5) were also compared across time periods. No baseline was obtained for this indicator.

HFIAS DEFINITION

The HFIAS score is a continuous measure of the degree of food insecurity (access) in the household in the past four weeks (30 days). It is a globally recognized indicator used by nutrition and donor programs in many parts of the world.

SURVEY QUESTIONS

Respondents are asked the following questions. For Questions Q1 - Q9, if they answer YES, then the "How Often did this happen?" question is asked (rarely, sometimes, often).

- Q1. In the past 4 weeks (30 days), did you worry that your household would not have enough food?
- Q1.1 How often did this happen?
- Q2. In the past 4 weeks (30 days), were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?
- Q2.1 How often did this happen?
- Q3. In the past 4 weeks (30 days), did you or any household member have to eat a limited variety of foods due to a lack of resources?
- Q3.1 How often did this happen?
- Q4. In the past 4 weeks (30 days), did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?
- Q4.1 How often did this happen?
- Q5. In the past 4 weeks (30 days), did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?
- O5.1 How often did this happen?
- Q6. In the past 4 weeks (30 days), did you or any household member have to eat fewer meals in a day because there was not enough food?
- Q6.1 How often did this happen?

- Q7. In the past 4 weeks (30 days), was there ever no food to eat of any kind in your house because of lack of resources to get food?
- Q7.1 How often did this happen?
- Q8. In the past 4 weeks (30 days), did you or any household member go to sleep at night hungry because there was not enough food?
- Q8.1 How often did this happen?
- Q9. In the past 4 weeks (30 days), did you or any household member go a whole day and night without eating anything because there was not enough food?
- Q9.1 How often did this happen?

SCORING

First, a HFIAS score variable is calculated for each household by summing the codes for each frequency-of-occurrence question. Before summing the frequency-of-occurrence codes, code frequency-of-occurrence as 0 for all cases where the answer to the corresponding occurrence question was "no" (i.e., if Q1=0 then Q1.1=0, if Q2=0 then Q2.1=0, etc.). The maximum score for a household is 27 (the household response to all nine frequency-of-occurrence questions was "often", coded with response code of 3); the minimum score is 0 (the household responded "no" to all occurrence questions, frequency-of-occurrence questions were skipped by the interviewer, and subsequently coded as 0 by the data analyst.) The higher the score, the more food insecurity (access) the household experienced. The lower the score, the less food insecurity (access) a household experienced.

For Questions Q1 - Q9 they are assigned a score for the YES – NO response as shown below. If YES to any of the Q1-Q9 questions, they are then asked the "How Often" question. For the Q1.1 - Q9.1 questions, they receive a score as shown below for one of the three choices selected – rarely, sometimes, often.

Score	Q1- Q9
0	No
1	Yes
Score	Q1.1 – Q9.1
0	No response $(Q1 - Q9 = 0)$
1	Rarely (1–2 times)
2	Sometimes (3–10 times)
3	Often (more than 10 times)

RESULTS

Mean HFIAS Scores of household head cash beneficiary survey respondents are provided below for the months of February and March of 2021. Mean scores for a control group of SFMP training and F2F participants conducted in October 2020 are also provided. There is no statistically significant difference for scores in February and March, but February and March scores are statistically significantly different than the scores of the control group in October. A higher mean score means greater household hunger compared to a lower score. The data suggests that the \$52/ month for 4 months cash benefit may have helped decrease household hunger in beneficiary households compared to control groups, and it was relatively stable through February and March.

HFIAS Score						
	N	Mean				
Oct (Control group)	64	15.97				
Feb (beneficiaries)	264	11.61				
March	236	11.41				
(beneficiaries)						
Total	564	12.02				

ANOVA							
HFIAS Score							
	Sum of Squares	df	Mean Square	F	Sig.		
Between Groups	1129.041	2	564.520	11.283	.000		
Within Groups	28067.660	561	50.031				
Total	29196.700	563					

Independent-Samples Kruskal-Wallis Test (Oct-Feb-March)					
Total N	564				
Test Statistic	21.996				
Degree of Freedom	2				
Asymptotic Sig.(2-sided	.000				
test)					

Pairwise Comparisons of time numeric								
Sample 1-Sample 2	Test	Std.	Std. Test		Adj.			
Sample 1-Sample 2	Statistic	Error	Statistic	Sig.	Sig.a			
March-Feb	6.310	14.582	.433	.665	1.000			
March-Oct	104.253	22.941	4.544	.000	.000			
Feb-Oct	97.942	22.680	4.318	.000	.000			

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is .05.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

Independent-Samples Mann-Whitney U Test (Feb-March				
Total N	500			
Mann-Whitney U	30350.500			
Standard Error	1610.913			
Standardized Test Statistic	498			
Asymptotic Sig.(2-sided test)	.619			

52

Group Statistics								
	time			Std.				
	numeric	N	Mean	Deviation	Std. Error Mean			
HFIAS	Feb	264	11.61	6.737	.415			
Score	March	236	11.41	7.293	.475			

Independent Samples Test								
		Levene's Test for						
		Equality of						
		Variances		t-test for Equality of Means				
						Sig.		
						(2-		
		F Sig.		t	df	tailed)		
HFIAS	Equal	.935	.334	.323	498	.747		
Score	variances							
	assumed							

Indicator 8b: Minimum Dietary Diversity Score – Women (MDD-W) DEFINITION

The MDD-W is a proxy indictor used to describe one important dimension of women's diet quality (micronutrient adequacy). MDD-W is a dichotomous indicator of whether or not women 15–49 years of age have consumed at least five out of ten defined food groups the previous day or night. The proportion of women 15–49 years of age who reach this minimum in a population can be used as a proxy indicator for higher micronutrient adequacy, one important dimension of diet quality.

For our survey we sampled only adult women of reproductive age 18-49 yrs. old. Another difference with the standard means of collecting information from a respondent is that we are using a phone poll – interactive voice response - which directly asks if they consumed any of the 10 food groups mentioned in the questions below. Normally for this score, an enumerator will ask a respondent what they have eaten in last 24 hours, starting with what did you eat when you woke, late morning, afternoon, etc. and fills in the food group category as a yes or no response each time they mention a food eaten. This is not possible with an automated phone poll survey. Therefore, our MDD-W score may not be directly comparable to others and likely will be a bit less precise compared to the typical methodology.

SURVEY QUESTIONS

For each of the following food categories, tell me which you have eaten in the last day and night - over the last 24 hours. YES or NO.

Grains such as rice or corn, noodles, biscuits cassava, yams or other white roots and tubers, and plantains, potatoes or sweet potatoes

Beans, peas and lentils

Nuts and seeds, including groundnut

Dairy such as cheese, yogurt, milk or other milk products

Poultry, meat or fish

Eggs

Dark green leafy vegetables such as cassava leaves, taro, pepper leaves, kontommire

Mangoes or papaya, including palm oil

Other vegetables

Other fruits

SCORING

The MDD-W is a summation of the values assigned for YES – NO responses on the 10 questions above. (Yes = 1 No=0). Range of the score is continuous, from 0-10. Each woman is then coded "yes" or "no" for scoring ≥ 5 (achieved minimum dietary diversity), followed by a calculation of the proportion of women who score from 5 to 10. The interpretation of the indicator is: "X% of women achieved minimum dietary diversity, and they are more likely to have higher (more adequate) micronutrient intakes than the X% of women who did not."

RESULTS

The median score of respondents for the Women's Minimum Dietary Diversity Score (W-MDDS) was 5.0, with a mean of 4.89. The percent of respondents that achieved a minimum score of ≥5 (achieved minimum dietary diversity) combining the two time periods was 55.5 percent. There was no statistically significant difference when comparing between the two sampling periods of March and April, hence the respondents who Achieved Minimum Dietary Diversity was stable across these time periods.

Statistics							
WMDDS							
N	Valid	667					
	Missing	0					
Mean	1	4.89					
Medi	an	5.00					
Mode	2	4					
Std. I	Deviation	2.167					

Achieved Minimum Dietary Diversity							
		tir	Total				
			March2				
		Feb21	1				
yes	Count	225	145	370			
	% within time	58.6%	51.2%	55.5%			

no	Count	159	138	297
	% within time	41.4%	48.8%	44.5%
Total	Count	384	283	667
	% within time	100.0%	100.0%	100.0%

Chi-Square Test								
			Asymptotic Significance					
	Value	df	(2-sided)					
Pearson Chi-Square	3.570	1	.059					
Continuity Correction ^b	3.279	1	.070					
N of Valid Cases 667								
b. Computed only for a 2x2 table								

Expenditure Survey of SFMP COVID Response Cash Beneficiaries

A simple and quick survey instrument was designed to try to assess how SFMP cash beneficiaries were using the cash benefit provided. Six questions were asked of each respondent of what the funds were used for with a "Yes" or "No" choice of response. For those who choose "yes - used for other purposes" there was no data collected on what those other uses were. The poll results are shown in the table below. Data was collected in February and March 2021 using interactive voice response (IVR) automated phone polling using Engagespark, and person to person computer assisted telephone interviews (CATI) using a Kobotoolbox online form. Calls were made to a database of approximately 1905 male and female household heads who received a cash benefit via mobile money transfer from SFMP a total of \$208 in four tranches between December 2020 and March 2021. Most received their first payment in late December and their last in March but approximately 200 may have had some monthly payments doubled up due to problems with phone numbers and unsuccessful transfers in prior months There were 196 respondents in February and 241 respondents in March who answered the poll. As the same list was used to poll in both months, some of the respondents may have completed the poll in both months. Respondents answered all six questions. The differences between time periods is statistically significant (Chi-square test with p<0.05).

Table 11 What Respondents Used Cash Benefit Funds For

Purpose		February 2021			March 2021			Total		
		%	%	N	%	%	N	%	%	
	N	Yes	No	14	Yes	No	14	Yes	No	
Funds for food for my family	196	81.1	18.9	241	93.8	6.2	437	88.1	11.9	
Funds for schooling of children	196	77.6	22.4	241	85.9	14.1	437	82.2	17.8	
Funds for investing in business	196	73.5	26.5	241	46.9	53.1	437	58.8	41.2	
Funds placed in a bank account	196	47.4	52.6	241	17.8	82.2	437	31.1	68.9	
Loaned money to others	196	33.2	66.8	241	5.0	95.0	437	17.6	82.4	
Used for other purposes	196	49.5	50.5	241	34.9	65.1	437	41.4	58.6	

The top use of funds was to buy food for the family, followed by schooling of children, and then investing in their business. While the percentages answering each of these questions "yes" was different in the two time periods, the ranking in terms of highest to lowest percent for all questions except "used for other purposes" was the same. In March, more respondents used funds for food and schooling, and less for investing in a business, placing in a bank

account, loaned money to others, or for other purposes, compared to February. This suggests that financial needs may vary over time.

The main purpose of the cash benefit was to maintain a minimum food basket for the family. The fact that 88% of respondents said the funds were used to buy food suggests this goal has been met to some degree. However, it is clear that the cash benefit serves other purposes as well, providing benefits to help keep children in school or to support household livelihoods for example high on the list of uses. While we have no data from this poll to support this, these overall benefits could possibly reduce incidences of fishing households trafficking their children as other surveys have found that a main reason fishing households traffic their children is the lack of funds to support the children. The cash benefit clearly helps put food on the table for children as well as help keep them in school. This possible impact should be investigated further in future cash transfer initiatives to fishing households.

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