WATER AND ENERGY FOR FOOD

FINAL REPORT

WATER and ENERGY for FOOD
german cooperation DEUTSCHE ZUSAMMENARBEIT
Government of the Netherlands
Norad
Sweden Sverige
USAID FROM THE AMERICAN PEOPLE

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ACRONYMS AND TERMS

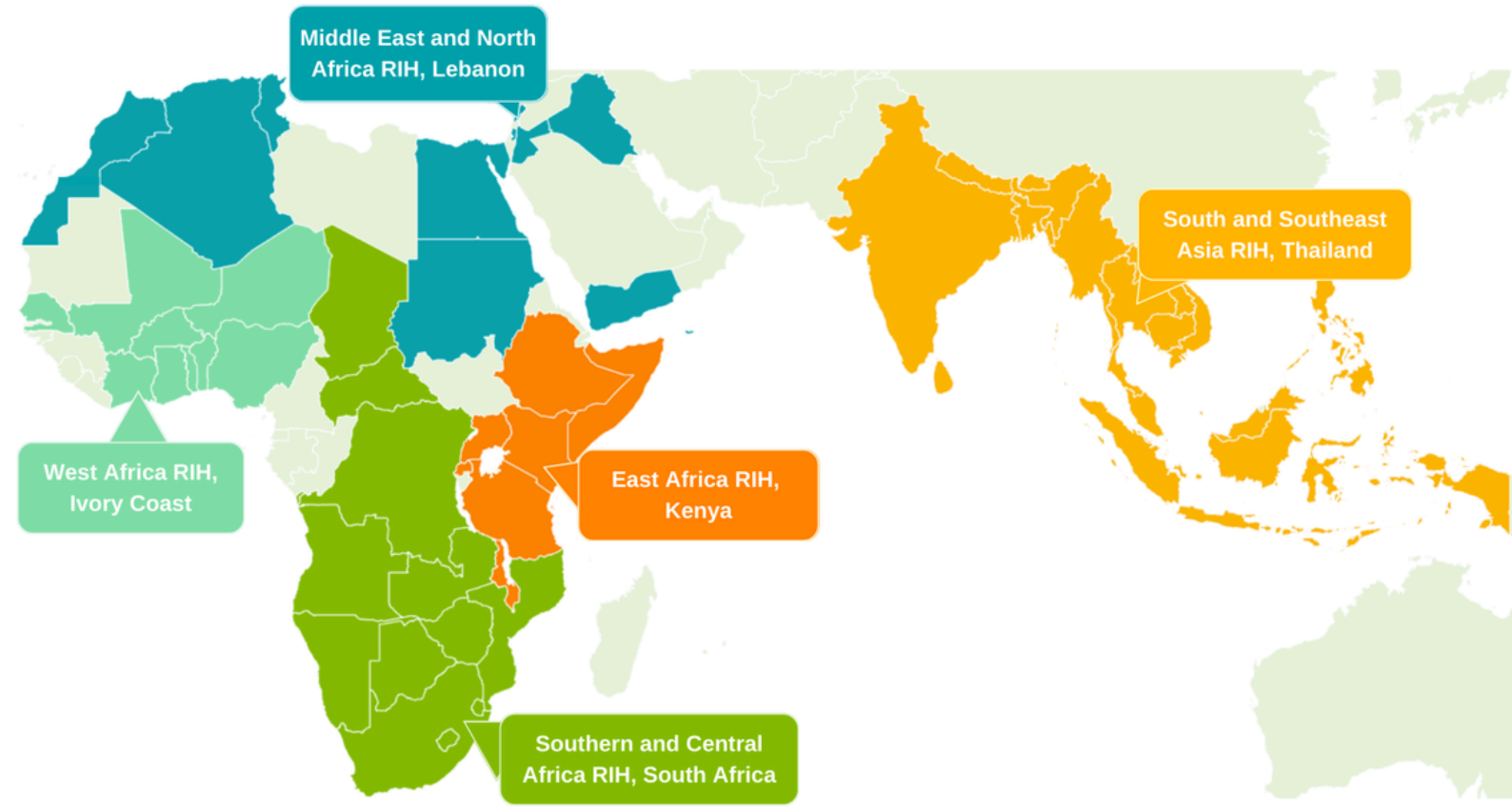
AWP	Acceleration Work Plan
BoP	Base of the pyramid
BMZ	German Federal Ministry for Economic Cooperation and Development
CFI	Call for Innovations
CO2e	Carbon dioxide emissions equivalent
COMACO	Community Markets for Conservation
DRC	Democratic Republic of the Congo
EMMP	Environmental monitoring and mitigation plan
EMMR	Environmental monitoring and mitigation report
ESG	Environmental, social, and governance
ESMS	Environmental and social management system
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IFAD	International Fund for Agricultural Development
IoT	Internet of Things
IWMI	International Water Management Institute
KPI	Key performance indicator
kWh	Kilowatt-hour
LOP	Life of Program
MENA	Middle East and North Africa
MEL	Monitoring, Evaluation, and Learning
NDF	Nordic Development Fund
NGO	Non-governmental organization
Norad	Norwegian Agency for Development Cooperation
OCFI	Open Call for Innovations
QoSS	Quality of Service Survey
RIH	Regional Innovation Hub
S/CA	Southern and Central Africa
S/SEA	South and Southeast Asia
Sida	Swedish International Development Cooperation Agency
SMEs	Small- and medium-sized enterprises
SWO	Stop Work Order
TA	Technical assistance
USAID	U.S. Agency for International Development
USD	U.S. Dollars
WE4F	Water and Energy for Food

EXECUTIVE SUMMARY

WHAT IS WATER AND ENERGY FOR FOOD?

The Water and Energy for Food (WE4F) Grand Challenge was a joint international initiative of the German Federal Ministry for Economic and Development Cooperation (BMZ), the European Union, the Ministry of Foreign Affairs of the Government of the Netherlands, the Norwegian Agency for Development Cooperation (Norad), Sweden through the Swedish International Development Cooperation Agency (Sida), and the U.S. Agency for International Development (USAID). The Regional Innovation Hubs (RIH) in the Middle East and North Africa (MENA), South and Southeast Asia (S/SEA), and Southern and Central Africa (S/CA) were implemented by USAID, while BMZ through the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH oversaw the implementation of the East Africa and West Africa RIHs. The program provided financial support, technical assistance (TA), enabling environment support, capacity building, investment facilitation, and network/partnership development to 172 water-food, energy-food, and water-energy-food innovations in 42 countries. Supported innovations helped smallholder farmers and other end-users unlock missing agricultural inputs, financing, technology, and markets. The innovations also enabled increased food production and processing while minimizing water and energy use, which in turn enhanced climate resilience and reduced emissions.

Map of Regional Innovation Hubs' Headquarter Locations and Target Countries







KEY PERFORMANCE INDICATORS AND RESULTS TO DATE

Key Performance Indicator	Life of Program Target (2020-2026)	Results to Date (2020-2026)	Status
Share of supported innovators that successfully marketed their innovations with profit	8%	33.1%	Exceeded
(USAID-Implemented Hubs) 25% of innovations are women-led and/or -owned	25% of the 8%	46%	Exceeded
Number of smallholder farmers and other end-users using WE4F innovations	5 million	6.18 million	Exceeded
(USAID-Implemented Hubs) Of the 3.2 million end-user target, 37% are women	1.18 million women end-users	1.61 million women end-users	Exceeded
(USAID-Implemented Hubs) Of the 3.2 million end-user target, 25% are base of the pyramid (BoP) end-users	1.06 million BoP end-users	2.7 million BoP end-users	Exceeded
Total mass of food produced as a result of WE4F innovations	8.5 million tons	17.8 million tons	Exceeded
Total mass of food processed as a result of WE4F innovations	275,000 tons	243,000 tons	Not Met
Total energy saved in the food value chain as a result of the use of WE4F innovations in kilowatt-hours (kWh)	1.35 billion kWh	4.6 billion kWh	Exceeded
Total volume of water consumption reduction in the food value chain as a result of WE4F innovations in liters	11 billion liters	19.9 billion liters	Exceeded
Number of smallholder farmers and other end-users that experience an increase in income	1.5 million	2.4 million	Exceeded
(USAID-Implemented Hubs) Of the 1.3 million end-user target, 33% are women	429,000 women end-users	792,000 women end-users	Exceeded
Share of innovators & other stake-holders monitoring the protection of water or biodiversity	58%	67.2%	Exceeded
Value of investment in U.S. Dollars that WE4F innovators have mobilized from external sources	$190 million USD	$216 million USD	Exceeded
Number of strategies, guidelines, or projects of organizations adopting and disseminating WE4F lessons learned	20	22	Exceeded
(USAID-Implemented Hubs) Total GHG emissions saved by WE4F innovations	1 million tons CO2e	2.9 million tons CO2e	Exceeded

Across 42 countries, 172 innovators contributed to the program's final cumulative results. The impact achieved by WE4F-supported innovators ensured that the program exceeded its final round of target updates, surpassing all Life of Program (LOP) targets.

By the beginning of 2026, WE4F innovators reached a cumulative total of 6.18 million smallholder farmers and other end-users, with 2.4 million of them experiencing an increase in income. Most of the impacted end-users originated from the S/SEA RIH (2 million end-users). It was also the region that had the largest percentage of end-users that experienced an increase in income (60% of end-users). In contrast, the East and West Africa RIHs recorded the lowest income gains, with only 11% of their combined 1.77 million end-users experiencing an increase. In terms of impacting marginalized communities, the S/CA RIH reached the largest number of women end-users (51% of their 1.66 million end-users) predominantly due to a higher percentage of women involved in the African agricultural sector, while the S/SEA RIH accounted for the largest percentage of base of the pyramid (BoP) end-users as they represented 73% of all S/SEA RIH-impacted end-users.

By using WE4F-supported innovations, end-users produced 17.8 million tons of food and processed 243,000 tons of food. The MENA RIH contributed the largest share of food, with 10.5 million tons produced by end-users, reflecting a stronger presence of large-scale farming operations. This is in contrast to other hubs where innovators predominantly worked with cooperatives and/or smallholder farmers. The S/SEA innovator's significant work with BoP end-users prevented the hub from reaching the same food production impact as their production capabilities and land under production were smaller. For the S/CA RIH, several factors impacted their food production ability, aside from the focus on BoP end-users (61% of all end-users were BoP), there was an extreme drought faced by Zambian innovators and end-users that started in late 2023 and lasted until early 2025. As Zambia was the country with the most innovators and end-users, the drought greatly hampered their food production capabilities.

In terms of food processing, innovators from S/SEA RIH had the largest result with 139,000 tons of food processed due to successful food-drying processors in India that were able to break into the concentrated food processing market. Overall, food processing impacts were lower than anticipated by the program due to differing factors in each region: the presence of large scale food processors that prevented the establishment and scaling of food-processing small- and medium-sized enterprises (SMEs); the aforementioned drought in Southern Africa that delayed food processing activities from occurring; and the USAID Stop Work Order (SWO) which prevented the collection of food processing data from the Lebanese food-processing innovator cohort that had been onboarded as part of a strategic shift from the MENA RIH to support Lebanese food-processing innovators during the Israeli-Lebanon conflict during the second half of 2024.

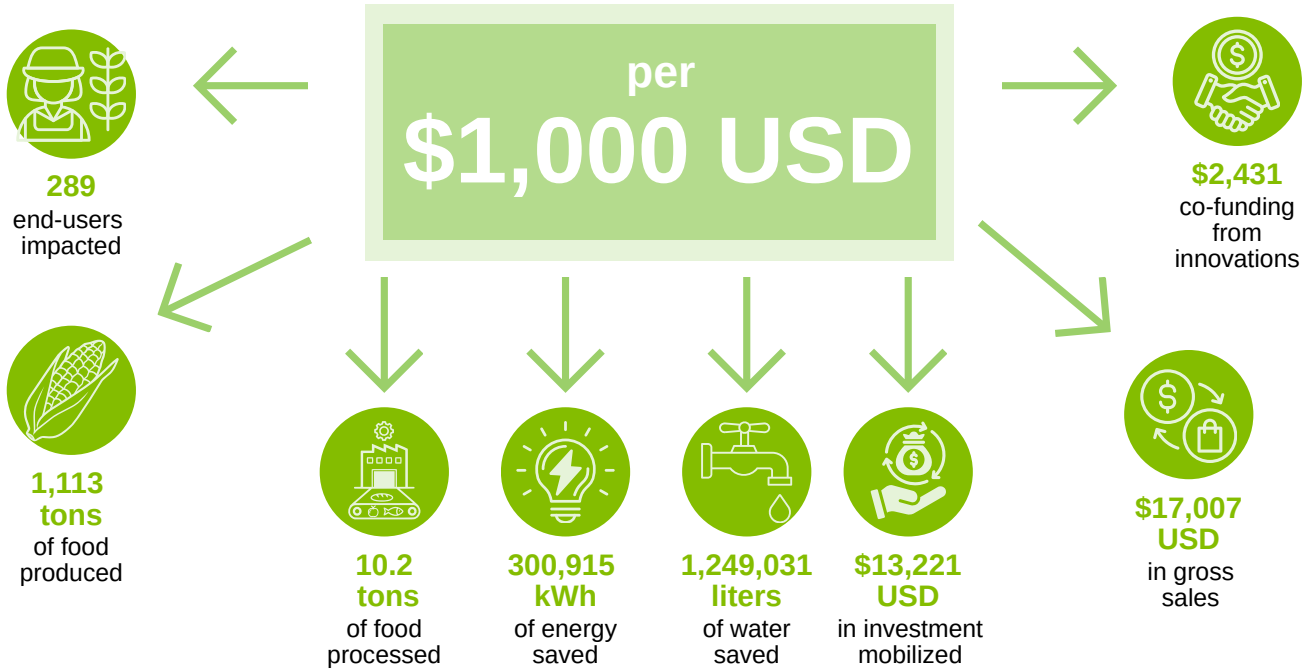
Innovators supported by the MENA RIH had the largest energy savings (3.7 billion kilowatt-hours (kWh) of energy saved) and the largest reduction in water consumption (11.7 billion liters). The MENA RIH's success in water consumption reduction was likely due to the region's being semi-arid, water-energy-food nexus stakeholders working to develop efficient water usage, and the hub's strong network within the regional water-energy-food nexus and SME ecosystem supporting the identification and onboarding of scalable innovators. Success in energy savings for MENA innovators was likely tied to the regional necessity for renewable energy and solar solutions, for instance the need to have solar energy in Lebanon due to a lack of a functioning grid.

To ensure that WE4F-supported innovations did not negatively impact water or biodiversity, the program worked with innovators to either confirm that they were already monitoring water or biodiversity, or to start monitoring them after joining the program. In 2025, the program surpassed the 58% target with 67.2% of innovators monitoring water or biodiversity. The successful push for monitoring can be attributed to the program providing customized TAs, integrating environmental monitoring and mitigation plans (EMMPs) and reports (EMMRs), and conducting capacity building activities.

A shining achievement of the program was the mobilization of $216 million U.S. Dollars (USD), with $201 million USD coming from the USAID-implemented hubs. Of the $201 million USD, 95.2% was private cash and in-kind investment. The largest investment mobilized came from the S/SEA RIH. Husk Power, a legacy innovator from Powering Agriculture: An Energy Grand Challenge, secured $113 million USD in debt and equity. What enabled the program to mobilize such large-scale investment for SMEs was each region and innovator utilizing diverse financing mechanisms that were tailored to their unique investment landscapes and ecosystem maturity levels. For the MENA RIH, a larger share of innovators raised funding, but they had smaller ticket sizes typically between $500,000 USD and $2 million USD. There was limited use of debt in the region; approximately 60% of the investments came from equity deals. This trend likely reflects the innovative and high-growth nature of their business models, which often fall outside traditional banking risk frameworks, as well as the limited availability of debt instruments suited to the stage of innovators that were supported by WE4F. With support from the S/CA RIH, nine innovators raised a total of $13 million, with 62% of all investment raised being public cash in the form of results-based financing. This was a significantly higher percentage than the MENA RIH (3.1% came from public cash and public in-kind support), and the S/SEA RIH (.22% came from public cash).

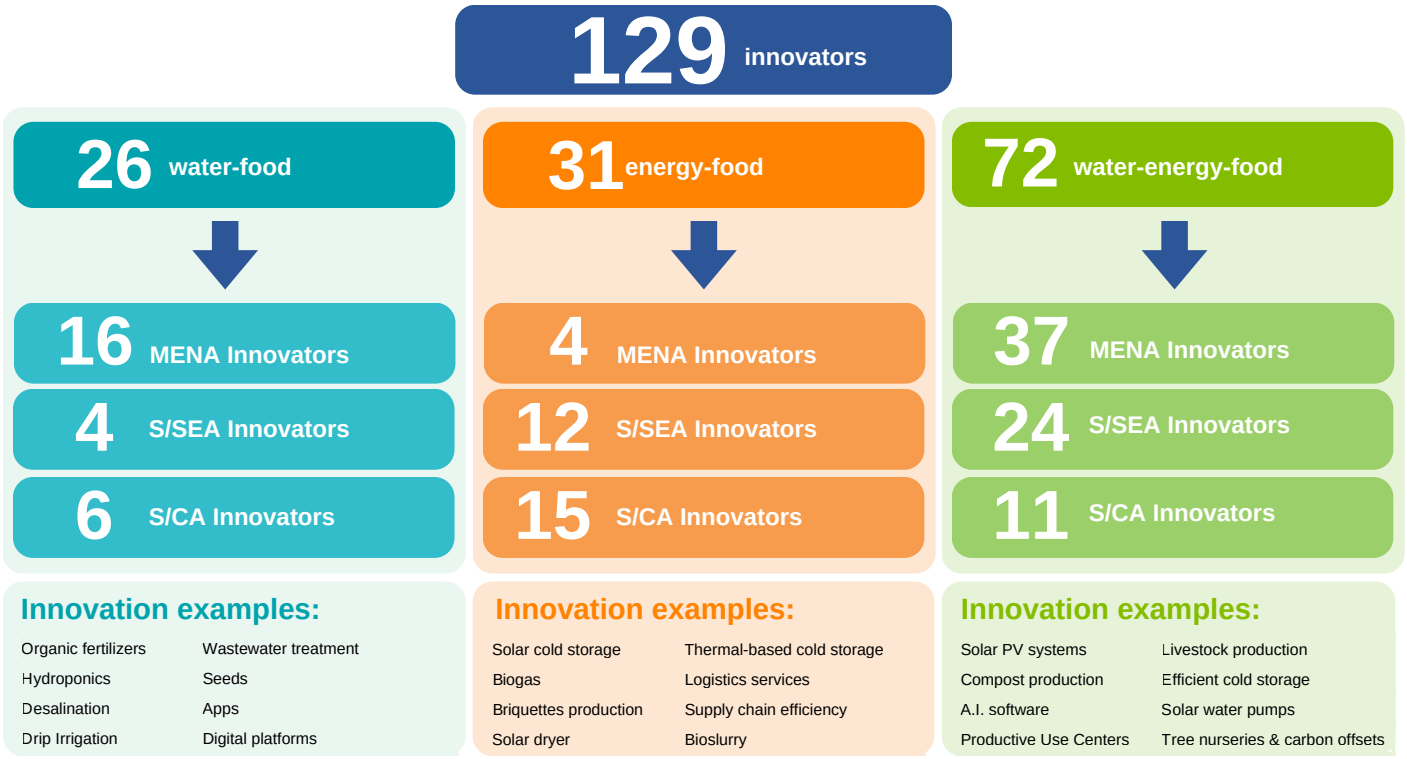
In accordance with the WE4F Final Evaluation published in June 2024, the results, the hubs' unique approaches, Secretariat's strong governance, and the diversity of supported innovations described in this report highlights the benefits of WE4F leveraging a portfolio approach that utilized the provision of holistic offerings for innovator scaling. By investing financial, technical, and social resources into WE4F, donors supported localized innovation designs that targeted country and end-users' specific food production, agricultural input access, and resource efficiency challenges while exceeding key performance indicator (KPIs) targets, unlocking financing, and fostering strategic partnerships across the private sector and donor ecosystems.

Impact of USAID-Implemented Water and Energy for Food per $1,000 U.S. Dollars Spent



INNOVATIONS SUPPORTED ACROSS THE WATER-ENERGY-FOOD NEXUS

Breakdown of Supported Innovations within the Nexus



Number and Percentage of Innovators in Each Technology Category Across the USAID-Implemented Regional Innovation Hubs

Technology Category	MENA RIH	S/CA RIH	S/SEA RIH	USAID Total
Digital Solutions	8 *14% of MENA RIH*	5 *16% of S/CA RIH*	6 *15% of S/SEA RIH*	19 *14.73%*
Aggregation and Storage	2 *4% of MENA RIH*	1 *3% of S/CA RIH*	3 *8% of S/SEA RIH*	6 *4.65%*
Agricultural Processing	5 *9% of MENA RIH*	4 *13% of S/CA RIH*	4 *10% of S/SEA RIH*	13 *10.08%*
Energy Production and Infrastructure	6 *11% of MENA RIH*	5 *16% of S/CA RIH*	7 *18% of S/SEA RIH*	18 *13.95%*
Farm Input	14 *25% of MENA RIH*	6 *19% of S/CA RIH*	7 *18% of S/SEA RIH*	27 *20.93%*
Farm Production	1 *2% of MENA RIH*	3 *9% of S/CA RIH*	2 *5% of S/SEA RIH*	6 *4.65%*
Financial Solutions	1 *2% of MENA RIH*	1 *3% of S/CA RIH*		2 *1.55%*
Other	3 *5% of MENA RIH*	2 *6% of S/CA RIH*	1 *3% of S/SEA RIH*	6 *4.65%*
Irrigation	12 *21% of MENA RIH*	5 *16% of S/CA RIH*	8 *20% of S/SEA RIH*	25 *19.38%*
Water Quality/Salinity	3 *5% of MENA RIH*			3 *2.33%*
Water Reuse	2 *4% of MENA RIH*		2 *5% of S/SEA RIH*	4 *3.10%*
Innovator Total	**57**	**32**	**40**	**129**

Within the activities of the USAID-implemented Secretariat Unit and RIHs, the program focused on the provision of grants, technical assistance (TA), investment facilitation, enabling environment support, and knowledge management and capacity building. In each of these areas of support, the program also utilized different thematic lenses through which the provided support could either be achieved, improved, or turned into a gap-bridging activity. The three thematic lenses were base of the pyramid inclusion, gender mainstreaming, and environmental sustainability, climate, and biodiversity integration.

Each innovator received a customized support package that was tailored to their needs, the situation in which they operated, and how their innovation aligned with WE4F requirements. Ranging from $25,000 USD to $250,000 USD, grants were the first potential support category that an innovator could unlock based on their stage and scale of innovation. Not every innovator received a grant, but almost all (90%) did. The purpose of the grants was to help innovators pursue their business growth objectives. Technical assistance typically followed grants as part of each innovator's Acceleration/Transformational Work Plan, a document that was developed to map their journey from joining WE4F to reaching milestones that would result in grant disbursements. The TAs provided to innovators originated from 13 different categories meant to encompass the full range of support services for innovators to continue scaling.

Across the three USAID-implemented RIHs, WE4F deployed a substantial grant portfolio to support agri-food innovators at varying stages of maturity. The MENA RIH supported 55 grantees and two TA-only innovators, with an additional 14 innovators prevented from onboarding due to the USAID Stop Work Order (SWO). Of the $8.35 million USD awarded, $6.61 million USD was disbursed or declared eligible, while $1.78 million USD was terminated or remained unspent. Following the SWO, approximately $770,000 USD in grant obligations was terminated across three cohorts – Call for Innovations (CFI) Lebanon ($149,985), OCFI ($453,550), and CFI Iraq 2 ($170,000). The S/CA RIH supported 32 innovators – 30 grantees and two TA-only – with six grantees terminated due to underperformance. Grant ceilings ranged from $250,000 USD in CFI 1 to $100,000 USD in CFI 2 and OCFI, with a mandatory one-to-one matching contribution. Four Zimbabwe biogas innovators each received equal grants of $30,000 USD. A total of $402,477 USD was recovered from terminated grants and redirected, equivalent to approximately 5 additional grantees at the average OCFI grant size of $75,000 USD.

The S/SEA RIH supported 40 innovators – 31 grantees and nine TA-only – disbursing $3,680,188 USD in total grants. As with the S/CA RIH, grant ceilings were $250,000 USD in CFI 1 and reduced to $100,000 USD in CFI 2 and OCFI due to budget optimization, matching funds requirement, and catalytic investment and TA support provided to innovators. Three additional matching capital grants totaling $160,000 USD were awarded to existing innovators to help unlock external investment.

Collectively, WE4F delivered 482 TA instances, surpassing the original collective target of 270 instances. The S/CA RIH delivered 160 instances, the S/SEA RIH delivered 126 instances, and the MENA RIH reached 196 instances. There were two tiers of TAs provided to innovators. Tier 1 TAs were provided by RIH staff and Tier 2 TAs were delivered by externally procured vendors/service providers. The Tier 1 TAs were successful at expediting the delivery of urgent TAs to innovators while Tier 2 TAs were strategically used by each hub for complex, contextual TAs that were outside the skills and scope of internal hub staff. Tier 1 TA accounted for the majority of delivery across all hubs: 94.8% in MENA RIH, 82.5% in S/CA RIH, and 62.5% in S/SEA RIH. The latter's lower rate likely reflected the more advanced and diverse needs of its innovator cohort.

Innovators, regardless of their level of maturity or technology type, were interested in mobilizing private sector investment to help them scale. Depending on their level of readiness, they were either provided with investment readiness TA to improve their ability to unlock investment in the near future, or they worked with the RIHs' Brokering Units to identify and pursue grants, debt, equity, or hybrid financing. The overall purpose was to strengthen innovators'' business model and governance structures, making them more attractive to financiers across the different regions. In addition to removing risk on the innovator's part, the program also worked to reduce the ecosystem barriers that could be viewed as causing risk for innovators.

Focused on policies that prevented innovators from reaching critical markets, regulations that limited innovators access to government schemes, and gaps in local investment ecosystems that caused innovators to look externally, the RIHs' Enabling Environment Unit leveraged a country-based approach to identify and break barriers that hampered innovators' scaling.

To build a community that could rely on each other, sharing their experiences across grants, TA, investment facilitation, and enabling environment support, the program utilized peer-to-peer learning events at the global and regional level. Spanning from one-off webinars to case studies, to in-person convenings with unconference sessions, said learning events empowered innovators to form partnerships with each other as well as pursue new TAs for continued growth.

All WE4F support offerings had the key thematic lenses of the program integrated into its execution. Base of the pyramid (BoP) integration noted the types of end-users impacted by innovations during the grant-giving process. It appeared as end-user financing TAs; influenced innovators whose services and products greatly impacted BoP end-users to pursue solutions to enabling environment woes stifled their growth. For capacity building and partnership development, it resulted in several convening sessions as well as International Day of Importance webinars and stories. From the opening of CFI applications the importance of gender mainstreaming was made known, whether through the specific focus on women end-users or the advocating for women-led and/or -owned innovators to apply. Once onboarded, gender mainstreaming appeared as a category that innovators could request for TAs as well as a lens that was applied to TA requests from other categories. Gender lens investment was a mechanism pursued by several innovators along with all innovators being educated on the 2X Investment platform during regional and annual convenings. As part of enabling environment activities, the MENA RIH launched the Women Innovate Network which focused on MENA women innovators, but could be accessed by all innovators through online webinars. Environmental sustainability, climate, and biodiversity were key elements of all grant-receiving innovators' participation in WE4F as they were required to complete environmental monitoring and mitigation plans and reports. The hubs also worked with innovators to provide TAs, one-one training, and water accounting dashboards to help innovators monitor water or biodiversity. Some innovators saw a climate lens within their investment pursuit, as they either looked for climate lens investment or to utilize carbon credits. All webinar series, convenings, and innovator storytelling had an environmental sustainability or climate lens applied, as 127 out of 129 supported innovators contributed to climate adaptation, mitigation, or both, making such a lens a critical element of all capacity building and learning activities.

KEY LESSONS LEARNED AND RECOMMENDATIONS

LESSONS LEARNED

From WE4F's five years of implementation, there are 15 key lessons learned that other challenge funds, programs, donors, governments, and business accelerators should consider when designing activities or pivoting their current plans, strategies, or projects:

1 A **portfolio-based approach positively benefits program results by serving as a de-risking mechanism that enables the program to target novel, early-stage innovations as well as tested mature organizations** leveraging unique solutions and business models. For WE4F, a portfolio-based approach was defined as a program-style in which a diverse array of innovation technologies, operational and financial sizes, geographies, and target customer segments were supported through customized goals and indicator targets. It did not require every innovation to fit the same mold of scaling, each is allowed to succeed in its own unique way via targeted support.

2 For program working on raising investment for climate focused SMEs, **setting clear, commercially-oriented selection criteria – particularly minimum end-user thresholds – significantly improves portfolio performance and investment outcomes**, the exclusion early-stage innovations can be balanced with complementary pathways (e.g., TA-only support or phased onboarding) to maintain innovation pipeline diversity.

3 The **utilization of a decentralized implementation approach of RIHs, combined with guidance and oversight from a global Secretariat Unit, ensured program effectiveness and led to smooth implementation and an ability to quickly pivot** when challenges arose. Context-specific support could be provided by local teams while regional coordination/backing and a global network provided opportunities to integrate new learnings into localized solutions.

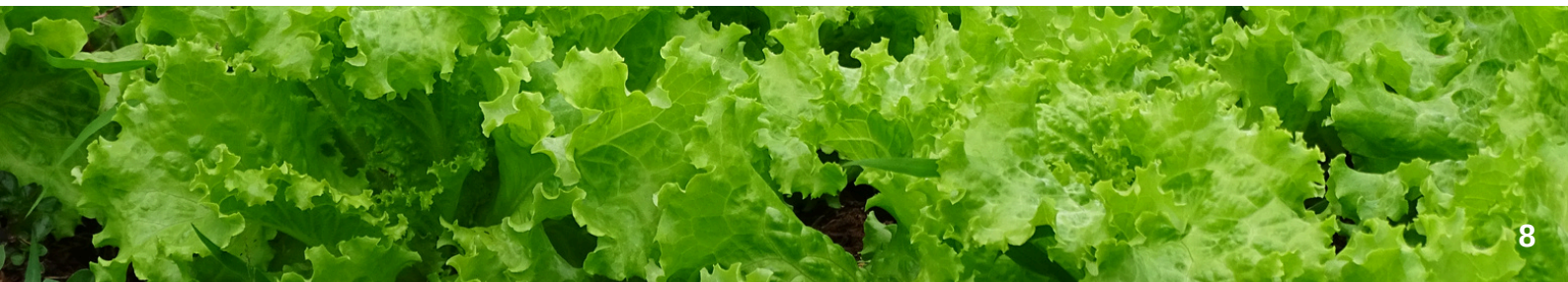
4 The **RIH model within the context of a challenge fund proved effective in attracting buy-ins from regional donor embassies and USAID Missions** across all three hubs, demonstrating that a well-positioned regional structure can meaningfully complement and expand the core challenge fund offering. It also allowed embassies and Missions to efficiently fund country- or theme-specific calls through an established platform, reducing setup and monitoring and evaluation costs.

5 In order for innovators and program staff to succeed, programs must **focus on the quality and strength of the relationship that exists between innovators, on-the-ground staff, and management units**. If one linkage is weak, it negatively affects the delivery and quality of the program. Within WE4F several methods achieved strong linkages: in-person engagements, one-on-one technical support, strengthening professional alignment with the program's mission, and provision of capacity building.

6 **Catalytic public funding can de-risk and crowd in private investment for early-stage climate innovators when designed to cater towards regions specific needs.** For S/CA innovators it was results-based financing, while S/SEA RIH innovators received matching capital grants. In the MENA RIH, the hub served as a de-risking partner and built investable SME pipelines while closing equity deals with regional investors.

A Investment facilitation is popular with almost all innovators (95% of innovators expressed interest in raising private capital), but only 36% mobilized capital and not all of it was private. It is **important to build innovators' investment readiness during the early stages of the program as this can expedite the facilitation process and deal closing timelines when the innovators are ready to engage with investors**. Deal-closing for smaller SMEs consistently took two-to-three years while patient capital instruments are often misaligned with SMEs' expectations and realities leading to wastage of time and resources for SMEs.

B **Investment facilitation teams must possess strong local market knowledge and contextual experience, with staff ideally based within the region** as proximity to both innovators and investor networks was instrumental in building trust, navigating ecosystem nuances, and accelerating deal flow.



7 **Technical assistance must be tailored to each innovator's individual scaling journey,** as a one-size-fits-all approach failed to address the diverse and evolving needs of a heterogeneous portfolio.

- **A** **Investment readiness was a critical and distinct TA need – particularly for early-to-mid stage innovators – and should be deliberately separated from investment facilitation** so that dedicated investment teams can focus solely on closing deals without being diverted by preparatory support.
- **B** Enabling environment TAs were often difficult to quantify within shorter program timelines, s**o staff must work with innovators to carefully select interventions that are tangible and capable of yielding measurable results within the program's lifespan.**
- **C** When procuring TA vendors, **innovator participation in the final stage of vendor selection significantly reduced both quality and timeliness risks.**
- **D** Gender integration was a strong driver of innovator engagement. **When gender targets were embedded into milestone-based grants, innovators demonstrated a notably higher interest in gender mainstreaming TAs.**
- **E** The **utilization of a two-tiered TA delivery model met innovators at their level of need while creating efficiencies within the program**. Tier 1 TAs had simpler scopes completed by hub staff and Tier 2 TAs had niche, context-specific scopes completed by vendors with niche and context-specific expertise that exceeded in-house capabilities.

8 Affordability and access to financing consistently emerged as the primary barriers to innovation adoption among end-users, so the **integration of end-user financing into the WE4F's support offerings enabled end-users' access to innovations, regardless of region or technology.**

9 **At every level of the program level, peer-to-peer exchanges demonstrated an ability to accelerate capacity building and market linkages**, enabling entrepreneurs to learn from real-world experiences, share best practices, and strengthen their operational and investment capabilities through direct interaction. Annual and regional learning convenings, expert roundtables, and community-of-practice platforms continuously benefited innovators throughout the program's lifecycle. The innovators' growth journey was also supported by the scaling of staff capabilities and skills to match innovators' evolving needs.

RECOMMENDATIONS FOR INNOVATION SCALING AND PROGRAM DESIGN

From WE4F's implementation emerged key recommendations that future challenge funds and programs, governments and donors, business incubators and accelerators should adopt to utilize an innovator-centric approach.

1 **The provision of support to innovators must expand and become more transparent to encompass internal and external barriers to growth encountered by SMEs as they scale.** Key support categories in which funders and implementers can invest, are catalytic financing and investment facilitation that prioritizes clear and direct engagement with innovators, end-user financing as a program activity and customized TA support, environmental, social, and governance (ESG) and gender mainstreaming as growth enablers, peer-to-peer learning as a networking and partnership mechanism, and water risk monitoring and environmental sustainability TAs as tools that can facilitate the unlocking of thematic investment opportunities.

2 **Future innovation-scaling programs would benefit from adopting a more strategic, selective, and long-term approach, anchored in clear targeting of commercially ready innovators alongside integrated support systems.** Evidence from WE4F underscores that well-defined eligibility criteria—particularly minimum end-user thresholds—are critical to building high-performing portfolios capable of attracting private capital, even if this excludes earlier-stage innovations.

3 **From program inception, investment facilitation and catalytic financing must be embedded as central pillars for innovation scaling rather than a downstream activity.** Programs should try to deploy diversified financial instruments (e.g., blended finance, guarantees, results-based financing) and adopt realistic timelines for deal closure, while implementing tiered, context-specific investment readiness support. Clear expectation-setting with innovators, strong investor alignment, and early development of investable pipelines are essential to unlocking private capital at scale for mid-to-late stage innovations.

4 **End-user financing must be systematized as a standard offering to drive adoption among BoP end-users.** Programs should establish comprehensive frameworks that combine TA and partnerships with local financial institutions that have explicit integration of gender-responsive approaches. Gender mainstreaming and ESG integration can be positioned as drivers of growth and investment access, not just compliance requirements, with dedicated resources, measurable KPIs, and early partnerships with gender-lens and impact investors to link performance with capital opportunities. Complementing this, environmental sustainability and water risk monitoring must be strengthened, with tools such as water accounting dashboards, early-stage impact assessments, and targeted TA to mitigate unintended consequences, particularly in water-scarce contexts.

5 **Enabling environment support should be a highly localized, flexible, and demand-led function that is embedded within day-to-day innovator engagement rather than treated as a separate policy workstream.** Efforts should prioritize resolving specific, business-critical barriers—such as regulatory approvals, trade constraints, standards, and market access—while avoiding resource-intensive, high-level advocacy that is unlikely to yield results within program timelines.

6 **Programs should treat peer-to-peer learning as a strategic asset, investing in structured, well-resourced learning ecosystems that foster collaboration, partnerships, and sustained communities beyond program lifecycles.** Implementers should also consider several strategic changes to enhance program effectiveness by improving localization engagements, reducing donor/funder management burdens, creating long-term sustainability of program impacts, and developing lean monitoring activities that streamline program reporting activities by leveraging third-party External Surveyors right from program launch.

7 **To ensure programs can adapt to changing local ecosystems and sociopolitical realities, it is critical that program designs value efficient internal management** through the robust program staffing by utilizing associate and intern-level staff, balancing donor/funder compliance with innovator on-the-ground realities by identifying opportunities for flexibility within program requirements (e.g., allowing certified letters from vendors for business-to-business innovators' end-user metrics), and aligning program reporting requirements not only with donor/funder timelines by innovators and end-users' sales and harvest seasons.

8 **Exit planning for an innovation program should be a core design principle from the design phase, not an end-of-program afterthought.** Programs should try to explicitly build sustainability mechanisms – including transition plans, institutional knowledge handovers to local organizations, and successor entity identification– to ensure the ecosystem built over years does not unravel when the implementation contract ends.

9 **The RIH structure is an effective design choice as it shifts program delivery closer to the innovators and ecosystems that programs seek to influence, thereby enabling a context-sensitive implementation** – from country and theme-based CFIs to locally-grounded enabling environment efforts and technically-relevant assistance. The regional model also demonstrated a strong ability to attract additional resources through buy-ins from regional donor embassies and USAID Missions. For future programs operating across diverse geographies, a regional/country based structure can be a strategic enabler of relevance, responsiveness, and institutional impact. Within the RIH structure, Country Coordinators served as the connective tissue between global strategy and ground-level impact. Future programs can benefit from anchoring delivery in strong local presence, treating country-level representatives not as supporting staff but as the most critical operational asset – with sufficient autonomy, resources, and integration to strategic feedback loops.

10 **Streamlining administrative burdens – through simplified documentation, intensive onboarding, and lighter monitoring, evaluation, and learning (MEL) systems – allows innovators to focus on business growth while sustaining meaningful compliance and program participation.** Future programs should build flexibility into operational timelines and approval processes from the outset, particularly when working with SMEs that are new to donor-funded programming.

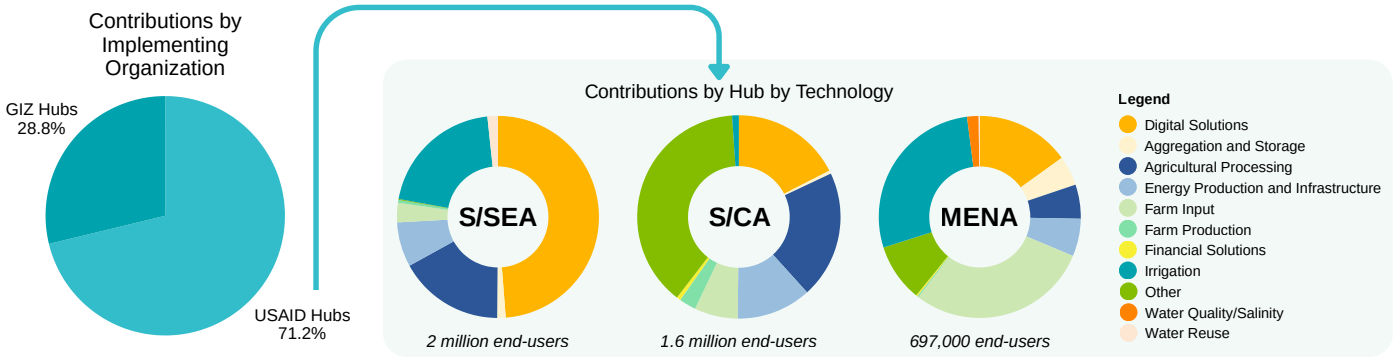
11 **A Secretariat-like global function, staffed by experienced practitioners with prior exposure to similar programs/organizational missions, can play a valuable role in driving coherence, quality assurance, and cross-hub learning.** Sufficient technical authority, structured feedback loops, and direct relationships with both donors and field staff are key to enabling honest reporting and timely course correction across a multi-regional program.

PROGRAM RESULTS

END-USERS IMPACTED

Number of End-Users Using WE4F-Supported Innovations

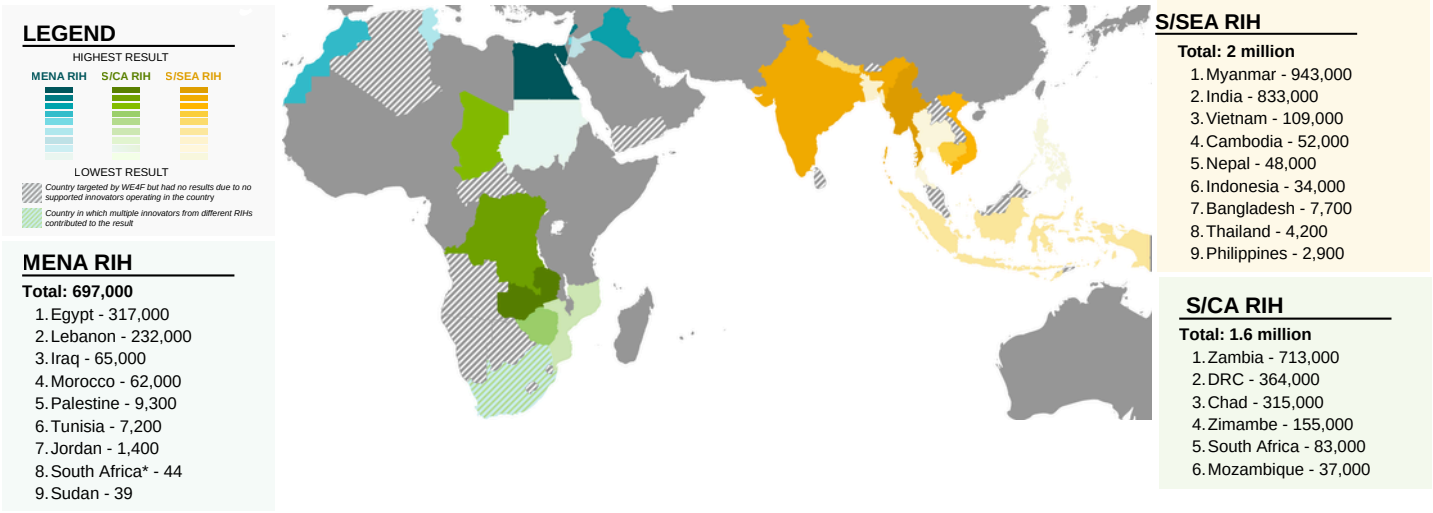
GLOBAL TARGET 5 MILLION END-USERS **RESULT** 6.18 MILLION END-USERS



Globally, WE4F surpassed its target of 5 million end-users by over 1 million, with 71.2% of the impacted end-users being reached by the MENA, S/CA, and S/SEA RIHs. This is due to several reasons: an overall longer implementation period for the USAID-led hubs; longer innovator support periods; the ability of innovators to continue receiving support as TA-only innovators after their grants concluded; and 70% of all innovators were supported by the MENA, S/CA, and S/SEA RIHs. Additionally, the USAID-led hubs utilized External Surveyors to collect data that could not be easily obtained by innovators. Those who received an external surveyor assignment reported higher end-user results afterward, mostly due to household sizes being larger than previously assumed.

When comparing the MENA, S/SEA, and S/CA RIHs, several differences – and similarities – emerge due to their unique contexts. The MENA and S/CA RIHs' innovators impacted less end-users than S/SEA innovators, but the S/CA RIH was able to surpass their Life of Program (LOP) target, reaching 167%. The MENA RIH came close to surpassing their LOP target (reached 93%), but ultimately did not, due to the USAID Stop Work Order which prevented the final rounds of data collection. There were several other factors that limited impact: an overall smaller regional population when compared to the other hubs; the prevalence of business-to-business (B2B) innovators supported by the MENA RIH; and innovators working with large-scale farmers rather than smallholder farmers. During the first half of the program, B2B innovators were unable to collect end-user data due to distributors and vendors not wanting to share their customer data. Following the identification of this data collecting barrier, the innovators and MENA RIH worked with the MEL Team to adjust reporting methodologies to accept data from vendors and distributors who submitted letters stating B2B innovators' results.

Country-Level Breakdown of End-Users Using WE4F-Supported Innovations



**The MENA-attributed end-users in South Africa came from Platfarm, who received a TA to develop a digital tool for resource monitoring. As a result, the innovator expanded to South Africa along with their continued expansion in Egypt. They then reported the South Africa results as part of the WE4F participation; without the digital platform development of the digital platform, they would have not expanded to South Africa.*

The S/SEA RIH innovators had the largest impact due to a combination of market scale, innovators' maturity, ecosystem readiness (e.g., market access programs, irrigation subsidies), and a high concentration of smallholder farmers. Several South Asian innovators entered WE4F with mature and proven business models and established distribution channels, supporting a faster transition from innovation piloting to large-scale deployment. Strong partnerships with cooperatives, microfinance institutions (MFIs), accelerators, and government/donor programs also helped innovators leverage existing farmer networks and financing mechanisms, accelerating adoption. Comparatively, in Southeast Asia, the region's fragmented geographies and markets, limited access to concessional financing and subsidies, and higher proportion of WE4F-supported early-stage innovators, resulted in slower scaling efforts. One innovator able to overcome Southeast Asia's growth-related barriers was Village Link (Myanmar), a digital innovator who had the highest number of end-users impacted within WE4F (885,000 end-users).

Each hub had "Digital Solutions" within its top three technology categories. This is due to digital solutions' ease at which it reaches target audiences – smallholder farmers and other end-users only need a cell phone to be able to engage the provided services. In the S/CA-supported countries of the Democratic Republic of the Congo (DRC) and Zimbabwe, KivuGreen (DRC), an agricultural advisory and weather services platform, and FarmHut (Zimbabwe), a sales and crop transportation logistics platform, were able to rapidly expand through their efficient, virtual delivery models. They collectively contributed more than 16% of S/CA end-users – KivuGreen impacted 131,000 end-users and FarmHut impacted 141,000 end-users. Within the context of the armed conflict in the Eastern DRC, KivuGreen's solution proved resilient as the innovator retained the majority of its end-users despite abandoning field operations twice as a result of fighting in the region. From the S/SEA RIH, Village Link (Myanmar), which provides agricultural advisory and weather services, proved similarly resilient, continuing to scale after the 2021 military coup. The MENA RIH had several innovators contributing to their digital solutions' impact. Mozare3 (Egypt), a financial services provider impacted 59,000 end-users. SOWIT (Morocco), a farm monitoring, financing, and agricultural advisory services innovation reached 24,000 end-users. And Ainda (Iraq), a smart poultry systems provider, provided services to 15,000 end-users.

Beyond "Digital Solutions," the S/SEA and S/CA RIHs both had "Agricultural Processing" in their top three technological categories, reaching 345,000 end-users and 338,000 end-users respectively. While at a global level the program faced challenges in hitting the KPI for food processing, the total numbers of end-users impacted within each region highlights the need by end-users for accessible innovations. In India, S4S Technologies (252,000 end-users) provides home-based or community-based solar dryer centers empowered end-users to transform crops into dried products that could be sold within Indian and international food chains. In Chad, Zonal (315,000 end-users) supported local fishermen and women cooperatives by turning fish caught along Lake Chad into fishmeal and fish oil.

The unique standouts within the breakdown of end-users by technology are the S/CA hub's "Other" technology which consisted almost entirely of Conservation for Community Markets (COMACO) in Zambia, where they reached 641,000 end-users. Their "otherness" derived from their end-to-end agribusiness solution where they work with cooperatives involved the full crop production cycle – providing agricultural inputs, conducting educational outreach on best practices, purchasing yields, and turning agricultural waste into briquettes to fuel the processing of crops.

For the MENA RIH, the other major technology categories were "Farm Input" and "Irrigation," as the key innovations needed by end-users in the region were locally-produced fertilizers that were more affordable than imported solutions and solar-powered irrigation and pumping solutions to replace diesel-powered technologies. For "Farm Inputs," Compost Baladi (Lebanon), an innovator who turns community waste into fertilizer, reached 76,000 end-users and Chitosan Egypt (Egypt), an innovator who turns shrimp shells into organic fertilizer, reached 57,000 end-users. For "Irrigation," the main contributor was Green Eagle Tech whose rain irrigation solution impacted 127,000 end-users.

A key KPI-contributing innovator category that spanned technologies and regions was graduate innovators. These innovators successfully achieved all of their milestones, receiving their full grant and completing their program participation, but they decided to continue participating in WE4F to access TA instances by participating in MEL reporting. The program was able to see the long-lasting effect of TA on innovators' businesses as the graduate innovators reported continued growth. Across S/SEA, S/CA, and MENA RIHs, graduate innovators reached 2.8 million end-users, over 63% of all end-users.

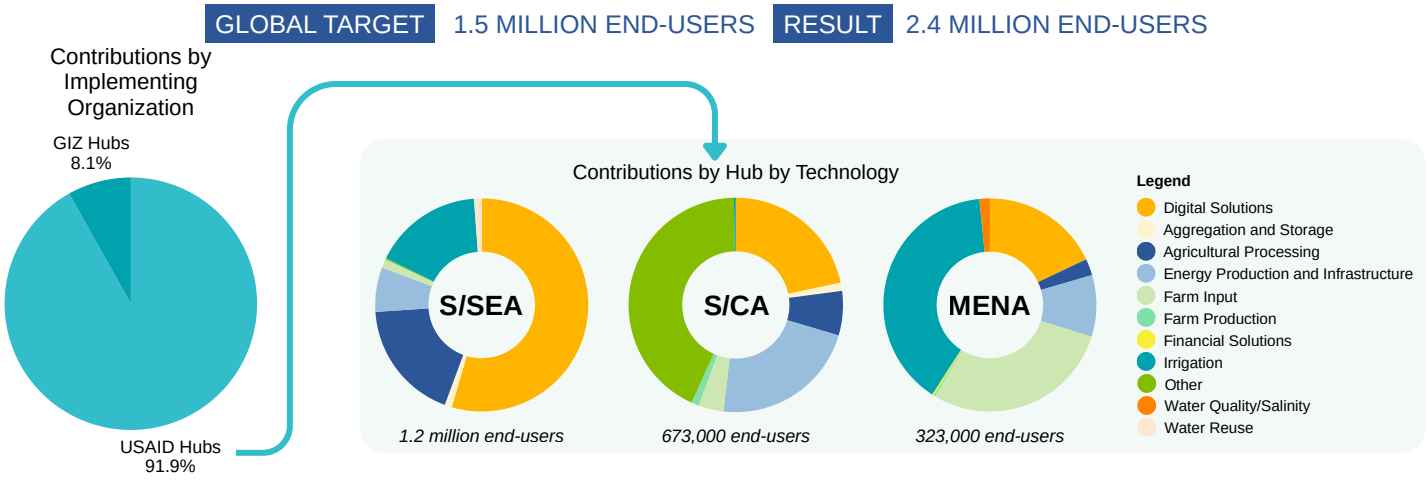
PROGRAM POINT: FROM APPLICATION TO EXPANSION

During their participation in WE4F, innovators' pursuit of growth was closely tied to their pursuit of funding. Almost all grant-receiving innovators supported by WE4F were required to hit pre-set milestones before receiving the next portion of their grant. Three exceptions existed: 1) innovators who received funding from the 2020 Asia EDGE Ag-Energy Prize; 2) legacy innovators MimosaTEK (Vietnam) and Pumpkin Plus (Bangladesh) who received emergency COVID-19 grants to help them quickly pivot their business models; and 3) those who received a matching capital grant to unlock additional funding. The program provided milestone-based grants because a structured deliverable schedule coupled with TA provided better outcomes than a simple cash award. At the beginning of innovator support, TA that was geared towards early, measurable success helped build innovators' momentum for project implementation. The format also helped innovators manage risk, maintain accountability, and systematically validate their expansion strategies.

During the (O)CFI proposal stage, it was requested that innovators prepare a grant disbursement schedule that tied WE4F grant milestones to innovators' one- to three-business plans/strategies. After innovators joined WE4F, the hubs worked with innovators to develop detailed Acceleration (or Transformational) Work Plans (AWP or TWP) tied to the same schedule. Each AWP/TWP listed key indicators to which innovators were required to report (e.g., number of end-users, kWh of energy saved, gross sales, external investment, etc.). The hubs also conducted diagnostic need assessments to identify TA, investment facilitation, and enabling environment support that would enable the innovators to complete their business and grant milestones.

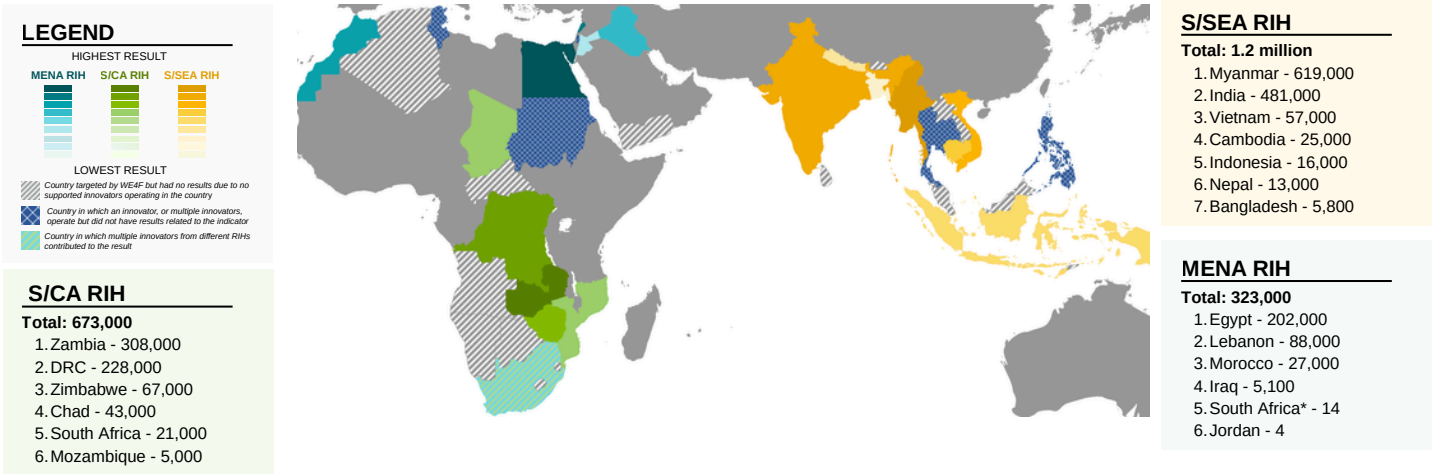
Aside from developing a plan for innovators to follow to unlock their milestone-based grants, the hubs also provided high-touch support to innovators. Regularly scheduled touchpoints (ie.g., informal quarterly check-ins, semi-annual reviews, and annual reviews), as well as Country Coordinators who were constantly available for innovators, enabled innovators' sharing of data and ensured that they were compliant with grant conditions. These touchpoints also benefitted program management, as staff were able to use the information collected during innovator engagements, coupled the Quality of Service Surveys (QoSS), innovator progress on contractual milestones, and TA progress to determine the next steps for innovators' engagement with the program (e.g., grant termination, no-cost extension to help the reach their next milestone, the release of the next grant disbursement, or graduation from WE4F).

Number of WE4F End-Users with Increased Incomes



Globally, WE4F surpassed its target of 1.5 million end-users by over 900,000 end-users. End-users' increases in income resulted from changes in their agricultural practices that increased crop yields, the switch to renewable energy sources for fueling irrigation, or new market linkages. End-users in Myanmar were the most impacted, with this result coming almost exclusively from Village Link (97.8%). The same occurred for Zambia, where the increases in income experienced by COMACO's end-users accounted for 93.7% of the result. Village Link and COMACO's impact also represented the significant impacts achieved by their respective technology categories ("Digital Solutions" and "Other") within their hubs. The MENA RIH, however, had a diversified result, with "Irrigation" and "Farm Inputs" being the major contributors. For Egypt, 40% of the results came from Green Eagle Tech, followed by Mozare3 (18.6%), Chitosan Egypt (18%), Agrisolar (8%), and Egymag (5%).

Country-Level Breakdown of WE4F End-Users with Increased Incomes



The MENA-attributed end-users with increased incomes in South Africa came from Platfarm, who received a TA to develop a digital tool for resource monitoring. As a result, the innovator expanded to South Africa along with their expansion in Egypt. They then reported these results as part of the WE4F participation because without the development of the digital platform, they would have not expanded to the country.

There were several reasons for the difference in impact. The S/CA RIH and S/SEA RIH's overall number of end-users was significantly larger (2 million and 1.6 million, respectively) than the MENA RIH's number of end-users (697,000), so the potential scale of their impact was smaller. Additionally, the S/SEA and S/CA RIHs prioritized smallholder farmers and other marginalized end-users, so changes that result in less spending or more revenue are more noticeable. Innovators supported by the MENA RIH mainly focused on large-scale farms, or provided B2B solutions, so the benefits of supported innovations are observed through other results. Said innovators did see increases in the number of end-users with increased incomes after the development of new reporting methodologies that were detailed in the above section. There could have been end-users, however, whose income increases were not documented before the development of a new reporting plan that allowed distributors and vendors to inform the innovator of the number of end-users impacted.

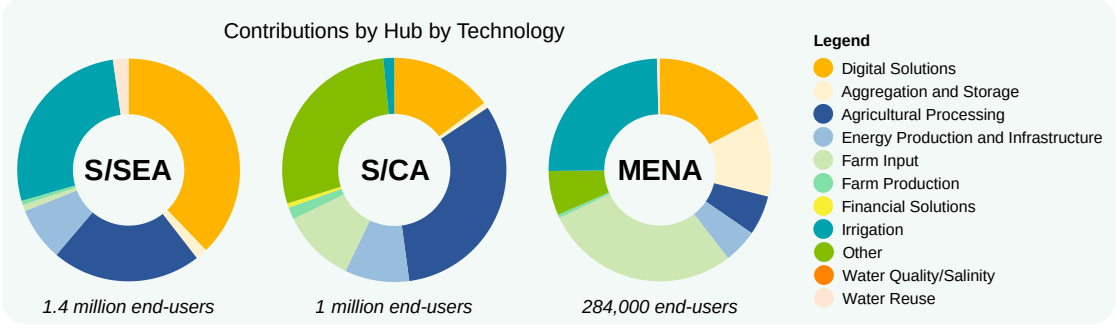
Increases in income can typically only be reported at the conclusion of an agri-cycle when an end-user has sold their crops. Additionally, end-users were sometimes unwilling to share their personal financial information with innovators. These challenges were overcome by the USAID-led Secretariat Unit and RIHs deploying External Surveyors unaffiliated with innovators to conduct site visits and directly survey end-users. External Surveyors' independent nature and approachable survey design increased end-users' willingness to share income data. The results filled significant gaps in innovators' reporting on end-user income increases while more accurately capturing BoP representation in reported end-user results. A key disclaimer for the External Surveyors is, due to the level of effort as well as timeframe of the program (each field study took two-to-three months to complete), not every innovator was assigned a surveyor. Additionally, the methodology of the External Surveyors involved collecting a sample size of end-user responses then extrapolating the innovators' full impact.

BASE OF THE PYRAMID END-USERS IMPACTED

Number of Base of the Pyramid End-Users Using WE4F-Supported Innovations

USAID TARGET 812,500 END-USERS

RESULT 2.7 MILLION END-USERS



Within the context of WE4F, BoP end-users were defined as the bottom two income quintiles within each country of implementation. Hubs implemented by USAID had a target for 25% of all end-users belonging to the BoP segment. Each RIH surpassed their target, by substantial margins. The S/SEA RIH achieved 397% of their target, the S/CA RIH achieved 406%, and the MENA RIH achieved 152%. The reason for the percentage achieved by the MENA RIH due to having a lower number of impacted end-users and MENA innovators having B2B solutions, which had difficulty reporting data from vendors and distributors until updated reporting methodologies enabled the innovators to show an increase in the number of BoP end-users.

Country-Level Breakdown of Base of the Pyramid End-Users Using WE4F-Supported Innovations

LEGEND

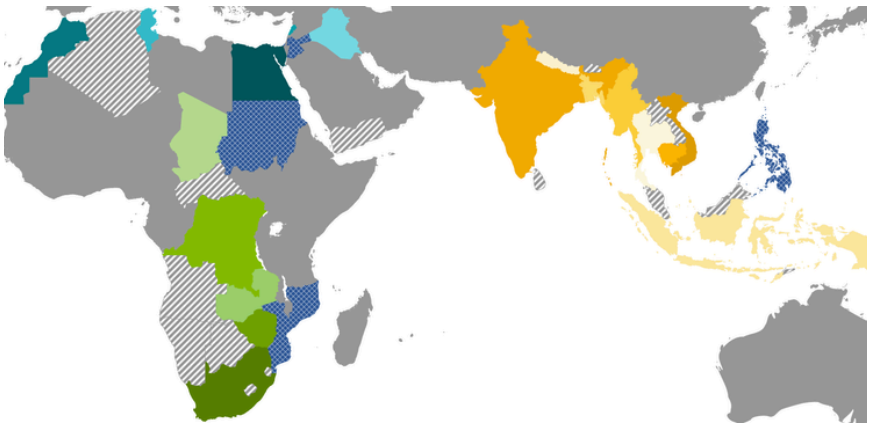
HIGHEST RESULT

MENA RIH S/CA RIH S/SEA RIH

LOWEST RESULT

Country targeted by WE4F but had no results due to no supported innovators operating in the country

Country in which an innovator, or multiple innovators, operate but did not have results related to the indicator



S/CA RIH

Total: 1 million

1. Zambia - 343,000
2. Chad - 304,000
3. DRC - 253,000
4. South Africa - 78,000
5. Zimbabwe - 23,000
6. Mozambique - 9,900

S/SEA RIH

Total: 1.4 million

1. India - 780,000
2. Myanmar - 508,000
3. Vietnam - 83,000
4. Nepal - 41,000
5. Cambodia - 35,000
6. Indonesia - 33,000
7. Bangladesh - 3,900
8. Philippines - 2,700
9. Thailand - 680

MENA RIH

Total: 284,000

1. Egypt - 126,000
2. Lebanon - 96,000
3. Morocco - 29,000
4. Iraq - 19,000
5. Palestine - 9,300
6. Tunisia - 3,700
7. Sudan - 16

Most of the TA aimed at unlocking BoP markets focused on end-user financing, customer identification, market analysis, gender integration, and leveraging relevant government schemes across different states. For India, the innovators who achieved the largest impact did leverage government subsidies as part of their end-user financing models: Claro Energy (an irrigation innovation) impacted 262,000 BoP end-users, S4S Technologies (an agricultural processing innovation) impacted 252,000 BoP end-users, and ONergy (an irrigation innovation) impacted 90,000 BoP end-users. In Myanmar, the impact was achieved through digital innovator, Village Link, who reached 93.5% of the impacted BoP end-users, or 461,000 BoP end-users. To expand its BoP end-user reach, the innovator developed strategic partnerships with development programs and private-sector actors. Reaching BoP end-users in Vietnam occurred through Egreen (61,000 BoP end-users), an energy production innovator that operates an Energy Service Company model for biodigesters, and Covestro (28,000 BoP end-users), an agricultural processing innovator that provides smallholder farmers with access to solar dryers.

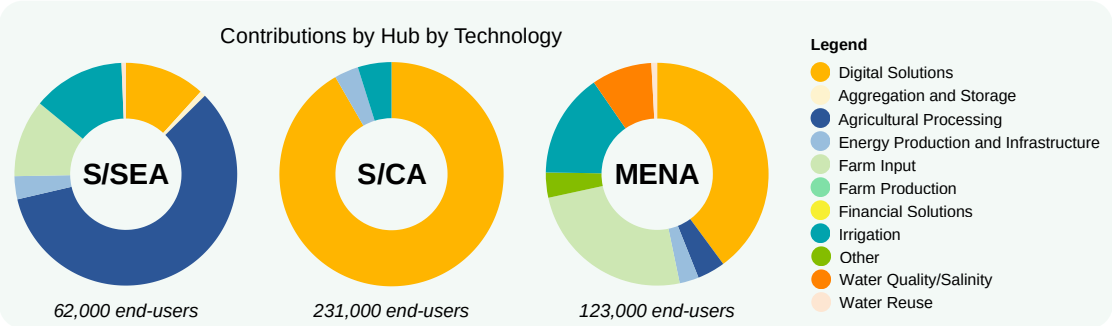
For Chad, the impact exclusively came from Zonal, an agricultural processing innovator that turns fish into fish meal and fish oil. Zonal works with cooperatives and women's organizations through 14 partnerships. One of Zonal's partnerships provides tax exemption for women traders, while another provides financing for women's projects. These partnerships lead to an increase in disposable income and the standard of living of their end-users, 97% of whom are BoP, or 304,000 end-users. In Zambia, COMACO (286,000 end-users) reaches BoP end-users through their work with local cooperatives. In the DRC, KivuGreen (124,000 BoP end-users) reached end-users through their digital weather services platform and texting service and Nabahya Food Institute (85,000 BoP end-users), produces charcoal briquettes made from agricultural and livestock waste. Both DRC innovators specifically target BoP end-users through their innovations. KivuGreen works with local leaders to educate potential end-users about their phone-based agricultural advisory and weather services, reducing misconceptions related to the technology behind the service. They also worked with the S/CA RIH to adjust communication practices, so their services accommodated end-users with low literacy levels. Nabahya Food Institute reaches BoP end-users by providing low-cost and long-lasting briquettes in a country facing extreme energy poverty and limited alternatives to traditional charcoal.

Within the MENA RIH results, there was diversity in terms of technologies that impacted BoP end-users. Egypt (126,000 BoP end-users), Lebanon (96,000 end-users), and Morocco (32,000 end-users) each had multiple innovators contributing to the result. In Egypt, Green Eagle Tech (44,000 end-users), Chitosan Egypt (25,000 end-users), and Mozare3 (23,000 end-users) targeted BoP end-users. For instance, Chitosan Egypt (an organic fertilizer producer) transitioned toward a business-to-business-to-customer model that expanded access through aggregators and retailers while providing products alongside training and marketing support. In Lebanon, Compost Baladi (37,000 end-users), Agrifresh (32,000 end-users), and GoBaladi (11,000 end-users) were the main contributors. Other Lebanese innovators were working on refining their products, services, or marketing strategies to better serve smallholders. Garbaliser and Greenco in Lebanon adjusted their marketing and sales approaches to increase outreach to smallholder farmers. Green Essence (Lebanon), Robinson Agri (Lebanon), Raptor Engineering (Egypt), Mozare3 (Egypt), Green Eagle (Egypt), Biomasr (Egypt), Agritopia (Palestine), and SOWIT (Morocco) introduced, operationalized, or expanded end-user financing mechanisms that enabled smallholder farmers to adopt solutions that might otherwise have been unaffordable.

PROVISION OF FINANCING TO END-USERS

Number of End-Users Using Financing Mechanisms Adapted or Created through WE4F Engagement

RESULT 417,000 END-USERS

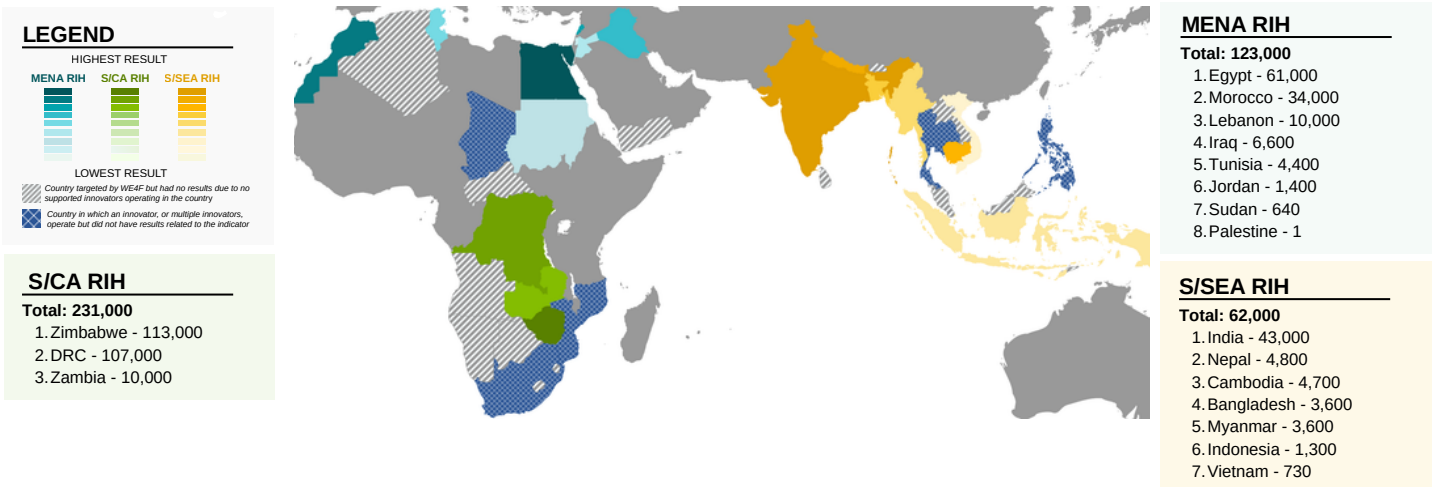


Originally end-user financing was incorporated into WE4F's program activities through the Brokering Units. By 2022, the USAID-implemented hubs recognized that innovators needed customized TA support to integrate end-user financing models that could support the scaling of their businesses. Within the S/CA RIH, staff observed persistent supply-side challenges that remained unresolved. Start-up companies faced difficulties in mobilizing sufficient capital to expand operations, reach BoP communities, and sustain long-term growth. As a result, KivuGreen (DRC) and FarmHut (Zimbabwe) developed monthly subscription models for their digital platforms. Both innovators had the largest number of end-users using end-user financing models, with 107,000 end-users in the DRC and 104,000 end-users in Zimbabwe.

For the MENA RIH, the largest contributor was Chitosan Egypt (Egypt) with 28,000 end-users, who used end-user financing to enable access to their fertilizer products. The hub also had digital innovations that were key providers of end-user financing models, however, there was a difference in usage. Digital innovators from the MENA RIH were financing solution providers, or facilitators of access, rather than innovators with end-user financing mechanisms to enable the purchasing of their products/services. Mozare3 (Egypt) combines contract farming with financing access, agronomy support, and market linkages; they reached 15,000 end-users. Meanwhile SOWIT (Morocco) evolved into an innovator that provides access to finance and market solutions due to their precision agriculture software that includes alternative risk assessment solutions; they reached 23,000 end-users.

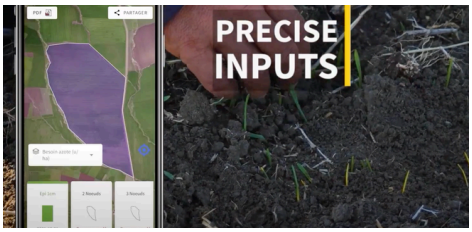
For the S/SEA RIH, most of the innovators with end-user financing mechanisms were in the "Agricultural Processing" category. New Leaf Dynamic Technologies, which provides a cold storage and drying solution through a biomass-powered unit meant for Indian smallholder farmers, reached 36,000 end-users. New Leaf's innovation, while being scaled for smallholder farmers and cooperatives, can still be out of the end-users' price range due to the size, infrastructure needs, and complexity of the technology.

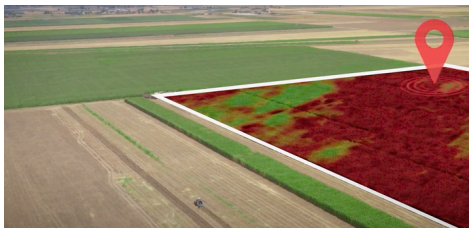
Country-Level Breakdown of End-Users Using Financing Mechanisms Adapted or Created through WE4F Engagement



INNOVATOR ILLUMINATION: DIRT TO DIRHAM

SOWIT started as a company providing satellite data and agricultural advisory services to farmers in Morocco, helping them control their water, fertilizer, and other resource inputs. They soon realized that the information they were collecting on farmers' production cycles, crop yields, and resource usage could be leveraged to unlock financing from banks and other institutions, as well as to enable access to markets (e.g., aggregators). Through the support of WE4F, the innovator was able to further pursue this idea of a financing mechanism, eventually partnering with IFC to provide Moroccan smallholder farmers with financing opportunities.





INNOVATOR ILLUMINATION: PIONEERING A "FINANCING-FIRST" MODEL

With nearly 40% of perishable produce in India being lost post-harvest, New Leaf Dynamic Technologies' smallholder farmer-sized cold storage and drying units could fulfill a costly gap in end-users' livelihoods. Even though the innovator's units are significantly smaller than others on the market, they are still too expensive for the average smallholder farmer, so the innovator transformed their financing mechanisms to increase affordability:

- De-risking the lender: Banks often view smallholder farmers as high-risk. New Leaf provides a first-loss guarantee, giving banks the confidence to lend to Farmer Producer Companies.
- Operational handholding: Most farmers lack the financial literacy to navigate complex loan applications, New Leaf's dedicated team manages the entire process – from preparing project reports to managing bank follow-ups.
- Strategic Partnerships: Through an agreement with Samunnati Financial Services, New Leaf created a pre-approved pathway for credit, bypassing the long wait times of traditional public sector undertaking banks.

Country-Level Breakdown of Utilized End-User Financing Models

Bangladesh	Cambodia	Democratic Republic of the Congo	Egypt	
• Pay-As-You-Go • Subsidies	• Carbon Credits • Post-harvest payment schemes	• Monthly subscription	• Customized products created in collaboration with other organizations • Facilitation of bank and microfinance institutions' financing (e.g., loans) • Payment facilities (e.g. lower down payments, installment plans over extended periods) • Post-harvest payment schemes	
India	**Iraq**	**Lebanon**	**Morocco**	**Myanmar**
• Facilitation of bank and microfinance institutions' financing (e.g., loans) • First-loss guarantee • Pay-As-You-Go • Pay-Per-Use • Peer-to-Peer Lending • Subsidies	• Facilitation of bank and microfinance institutions' financing (e.g., loans) • Payment facilities (e.g. lower down payments, installment plans over extended periods)	• Facilitation of bank and microfinance institutions' financing (e.g., loans) • Payment facilities (e.g. lower down payments, installment plans over extended periods)	• Customized products created in collaboration with other organizations • Facilitation of bank and microfinance institutions' financing (e.g., loans) • Payment facilities (e.g. lower down payments, installment plans over extended periods)	• Pay-Per-Use
Nepal	**Tunisia**	**Vietnam**	**Zambia**	**Zimbabwe**
• Facilitation of bank and microfinance institutions' financing (e.g., loans) • Pay-As-You-Go • Post-harvest payment schemes	• Customized products created in collaboration with other organizations • Facilitation of bank and microfinance institutions' financing (e.g., loans) • Payment facilities (e.g., lower down payments, installment plans over extended periods)	• Energy Service Company • Facilitation of bank and microfinance institutions' financing (e.g., loans) • Subsidies	• Micro-credits • Monthly subscription • Pay-As-You-Go	• Monthly subscription • Pay-As-You-Go

Some innovators entered WE4F with end-user financing models and partnerships already integrated into their innovation. For instance, Tivwane Money Solution (Zambia) provides financial solutions for farmers accessing solar water pumps. Others worked with the MENA and S/CA RIHs through hub-level partnerships, TAs, and enabling environment activities to build relationships, as well as potential collaboration opportunities, with MFIs, banks that provide loans to smallholder farmers, and other financial entities. The S/SEA RIH did not focus on building hub-level end-user financing partnerships as many of their innovators had advanced end-user financing modes, their priority was to strengthen innovators' relationships as well as exploring opportunities to enhance innovators' models.

HUB HIGHLIGHT: END-USER FINANCING IS A SYSTEM, NOT A FEATURE

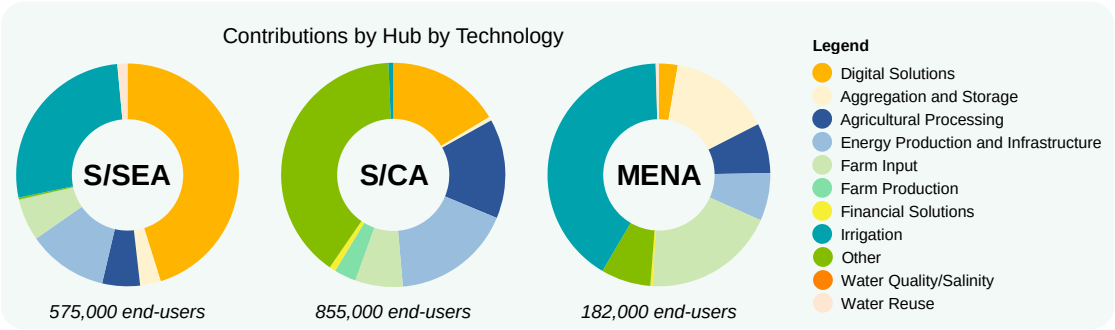
As the S/CA RIH worked with innovators on their end-user financing models, there were several factors that affected the type of end-user financing innovators pursued:

1. Credit financing was more readily achievable in capital-intensive programs, such as productive use of renewable energy projects and initiatives.
2. Pay-as-you-go models were among the most preferred financing mechanisms for both suppliers and end-users. Innovators, however, needed strong internal financial capacity to sustain such operations.
3. Microfinance institutions increasingly incorporate energy-financing products into their portfolios, but the cost of debt remains high and often beyond the affordability of many BoP customers.
4. To mitigate default risks under pay-as-you-go schemes, innovators needed to consider a cash price of their product that was lower than the pay-as-you-go price. The price differential helps cover administrative and operational costs associated with managing end-user financing models.

INTEGRATION OF WOMEN END-USERS

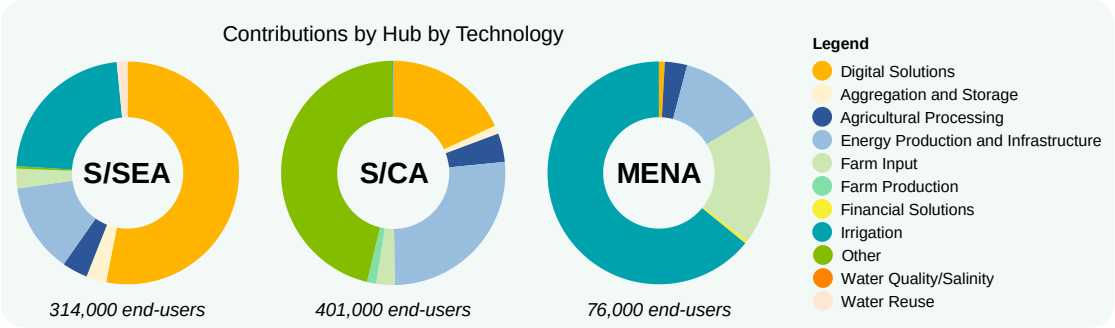
Number of Women End-Users

USAID TARGET 1,184,000 END-USERS RESULT 1.61 MILLION END-USERS



Number of Women End-Users with Increased Incomes

USAID TARGET 429,000 END-USERS RESULT 792,000 END-USERS



As highlighted in the “Base of the Pyramid” Impact section, a key difference between the USAID and GIZ implementation of WE4F, was the requirement of closely monitoring the number of BoP and women end-users at the global and regional levels. As a result, the USAID-implemented hubs had a target for 25% of all end-users being women end-users. Each RIH surpassed their target, by substantial margins. The S/SEA RIH achieved 267% of their target, the S/CA RIH achieved 133%, and the MENA RIH achieved 150%.

For the S/SEA RIH, “Digital Solutions” reached the largest number of women end-users (259,000 women end-users), mostly due to Village Link (225,000 women end-users), who also led to Myanmar having the most women end-users (238,000 women end-users). Claro Energy (112,000 women end-users) and its category of “Irrigation” innovations (154,000 women end-users) were next, followed by Egreen (38,000 women end-users) and its category of “Energy Production and Infrastructure” innovations (67,000 women end-users). These solutions led the S/SEA RIH in due to their provision of affordable payment options, as well as innovators’ usage of TA opportunities like end-user financing partnerships, gender inclusive demand assessments, and gender- inclusive marketing strategies.

Within the S/CA RIH, the key contributors were COMACO (Zambia) with 339,000 women end-users, Nabahya Food Institute (DRC) with 142,00 women end-users, and Zonal (Chad) with 106,000 women end-users. Their success directly contributed to their countries of operation having the most women end-users – Zambia had 378,000 women end-users impacted, the DRC had 243,000 women end-users, and Chad had 106,000 women end-users. As women make up to 70% of the region’s agricultural labor force and carry the primary responsibility for food production, household water management, and energy sourcing, they were particularly receptive to technologies that improved efficiency (e.g., COMACO’s agricultural practices and market linkages), reduced labor intensity (e.g., Nabahya Food Institute’s waste-based charcoal briquettes), and enhanced household well-being (e.g., Zonal’s fish drying solution and production of fish meal and fish oil).

For the MENA RIH, “Irrigation” was the largest contributor of women end-users. Green Eagle Tech (Egypt) impacted 50,000 women end-users, followed by Agrifresh (Lebanon) with 26,000 women end-users, and Compost Baladi (Lebanon) with 14,000 women end-users. Throughout the MENA RIH’s implementation, its operations encountered deeply entrenched gender barriers (e.g., women faced restricted mobility, limited access to finance, low or no landholding patterns, and exclusion from networks). Over the course of their involvement with WE4F, many innovators moved passive awareness of gender integration, to active ownership of gender-related goals. The advancements in gender integration were due to the hub mandating gender trainings, the inclusion of gender targets as part of innovators’ grant agreements, and the provision of customized gender action plans that helped innovators convert intentionality into action. A significant increase in the number of women end-users was tied to the change in the documentation requirements for reporting the number of impacted end-users of B2B innovations. Moreover, multiple gender integration TAs were implemented by MENA innovators to enhance their marketing to women end-users as well as their support of them.

Country-Level Breakdown of Women End-Users

LEGEND

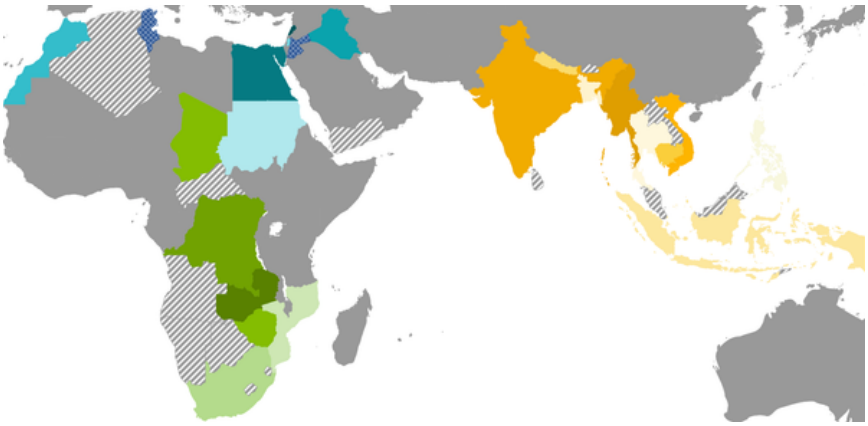
HIGHEST RESULT

MENA RIH S/CA RIH S/SEA RIH

LOWEST RESULT

Country targeted by WE4F but had no results due to no supported innovators operating in the country

Country in which an innovator, or multiple innovators, operate but did not have results related to the indicator



MENA RIH

Total: 76,000

1. Lebanon - 84,000
2. Egypt - 71,000
3. Iraq - 15,000
4. Morocco - 5,800
5. Palestine - 4,700
6. Sudan - 11

S/SEA RIH

Total: 314,000

1. Myanmar - 238,000
2. India - 214,000
3. Vietnam - 50,000
4. Cambodia - 31,000
5. Nepal - 22,000
6. Indonesia - 12,000
7. Bangladesh - 3,300
8. Thailand - 1,700
9. Philippines - 1,500

S/CA RIH

Total: 401,000

1. Zambia - 378,000
2. DRC - 243,000
3. Chad - 106,000
4. Zimbabwe - 65,000
5. South Africa - 39,000
6. Mozambique - 22,000

INNOVATOR ILLUMINATION: WOMEN IN THE WORKFORCE – AND CUSTOMER BASE

In South Asia and Southeast Asia, traditional patriarchal norms limit women's participation in the workforce through the nonexistence of women-friendly policies in businesses, gender bias in recruitment processes, and a lack of accessible networks to identify and attract qualified women professionals. These same norms also keep women confined to domestic, or home-based, roles that limit their mobility. As a result, many women complete agricultural activities close to their homes, such as food processing, cattle care for dairy products, animal husbandry, and fishery solutions. For S/SEA RIH innovators, an inability to employ women as well as the gaps in women-focused marketing and customer support activities, resulted in TA and capacity building requests to reduce barriers preventing women's access to innovations and employment opportunities. Results from the TAs provided include new women end-users, new women employees, and new gender inclusive policies.

For Khmer Green Charcoal (Cambodia), their limited gender integration was affecting internal business operations as well as external engagement of potential end-users. Internally, their company works with BoP women and men from nearby communities where there is a prevalence of gender-based violence and harassment. Externally, their customer base includes women in diverse settings – rural areas conducting farming activities, women in urban areas using charcoal for cooking. To ensure that Khmer Green Charcoal was best serving the needs of their employees and end-users, several TAs were needed.

Provided TAs:
Business model improvement through the development of an inclusive business strategy that applied gender and BoP lens.

- Audit of their marketing strategy to strengthen outcomes for women and expand the participation of women end-users within the innovator's poultry charcoal briquette business line.
- Developed gender inclusive monitoring and impact measuring by using environmental, social, and governance (ESG) indicators.

Outcomes:

- Implemented a gender inclusive marketing and sales strategy.
- Improved innovator's ability to monitor and evaluate their gender outreach results.
- The innovator was able to more effectively communicate the ESG impacts to stakeholders in the clean energy ecosystem, including funders and investors.
- Grow from 6,300 women end-users to 20,000 women end-users.
- Developed women-centric policies, including a sexual harassment policy and instituted Chief People Officers, who are equipped to identify gender-sensitive issues promptly and provide support. They also keep records of gender-based violence or sexual harassment incidents.

INNOVATOR ILLUMINATION: CREATING A WOMEN-FOCUSED CIRCULAR ECONOMY

For innovators operating in the MENA region, gender inclusion pathways required deliberate enabling mechanisms at all levels, rather than direct-to-farmer sales alone. Over the course of a year, the MENA RIH utilized active listening and topical trainings to convert innovators' intentionality into the planning and implementation of gender mainstreaming activities. As a result, the MENA RIH focused on internal organisational barriers, innovation ecosystem barriers, and market-based barriers. Hub staff advocated for innovators to hire more women at all levels of organisation; helped innovators recognize gender bias in product design; and educated male innovators on turning convening discussions on gender equality principles into the integration of gender lens investment strategies. Although there is a need to continue the promotion of integration of women in the MENA agricultural sector, the MENA RIH's gender mainstreaming activities, as well as holistic approach, laid the foundation for WE4F innovators to continue working towards gender equality and equity.

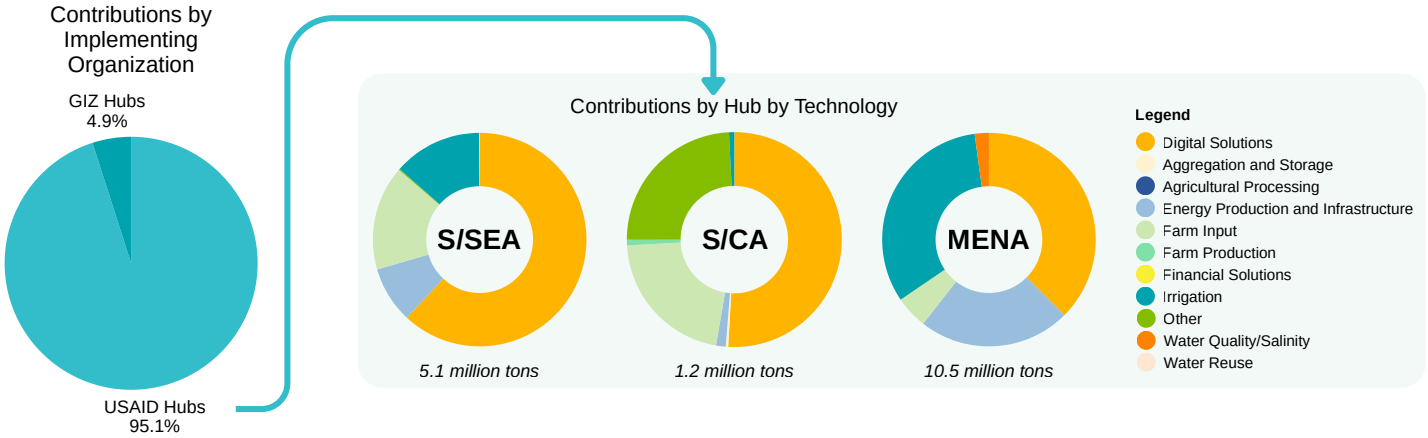
- One leading gender inclusive innovator is Egymag, who developed a women-centric model for their circular economy innovation. Their innovation involves rearing black soldier fly larvae that are fed agricultural and food waste; the larvae is used as feedstock while the by-products are an organic fertilizer. Egymag recognized that fly rearing was an activity that could be done in a domestic setting, so they developed small black soldier fly larvae rearing units for women in rural households. These units enable the recycling of household organic waste while also providing women with a source of income when the larvae are used as part of Egymag's alternative protein production. To increase the number of women, access their innovation, Egymag received a gender integration TA. Additionally, they changed their hiring approach, increasing the women employee rate to more than 50% of all staff.

CONTRIBUTION TO CLIMATE ADAPTATION AND MITIGATION IN AGRICULTURE

FOOD PRODUCED AND FOOD PROCESSED

Tons of Food Produced

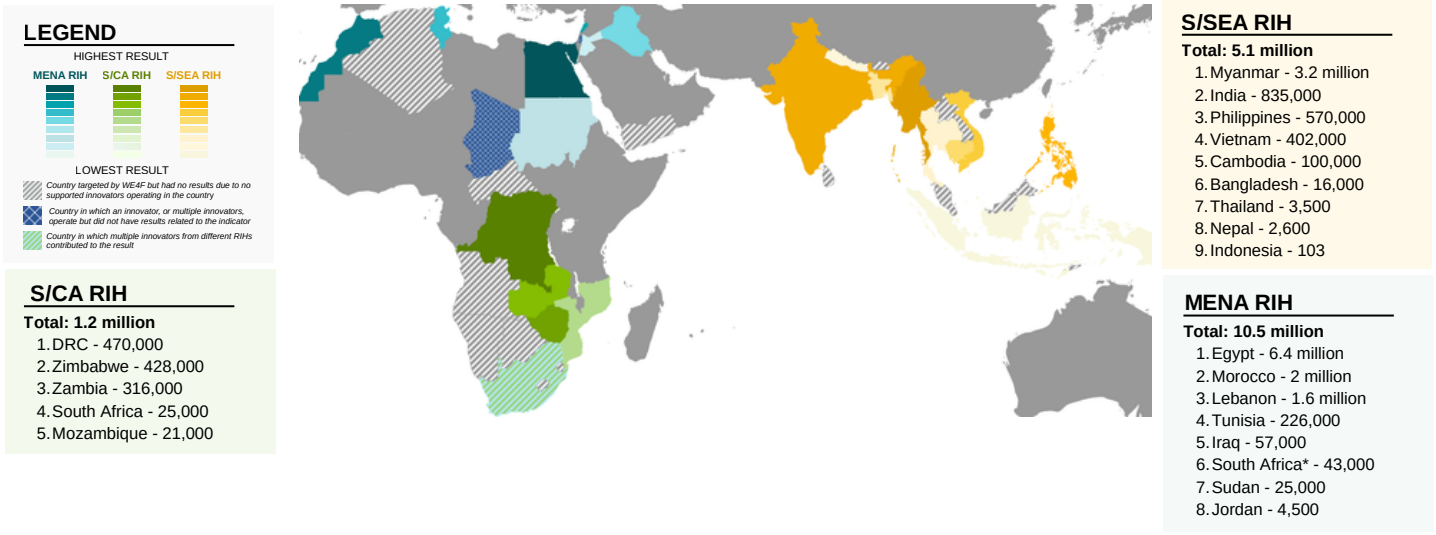
GLOBAL TARGET 8.5 MILLION TONS RESULT 17.8 MILLION TONS



Globally, WE4F produced 17.8 million tons with 95% of the results coming from the USAID-implemented hubs. Similarly to the "Number of End-Users" result, the USAID hubs and innovators' ability to work together to implement pivots in innovators' businesses through TA, investment facilitation, and enabling environment support, coupled with the longer-term support of the USAID-implemented hubs, helped innovators continue scaling while monitoring and reporting their results.

The MENA innovators accounted for more than half of all food produced (62%), growing over 10.5 million tons. Nearly half of all food produced (5 million tons) by innovators in the MENA region was through medium-to-large scale farmer end-users. In comparison, the majority of food produced by S/CA innovators and S/SEA innovators was grown by smallholder farmers (77% by S/CA smallholder farmers and 62.7% by S/SEA smallholder farmers). While the S/SEA and S/CA RIHs did not reach the same scale as the MENA RIH, they did individually surpass their LOP targets. The S/SEA innovators produced 5.1 million tons of food which was nearly triple the hub's LOP target; and S/CA innovators surpassed their LOP target of 1 million tons by producing 1.2 million tons.

Country-Level Breakdown of Tons of Food Produced



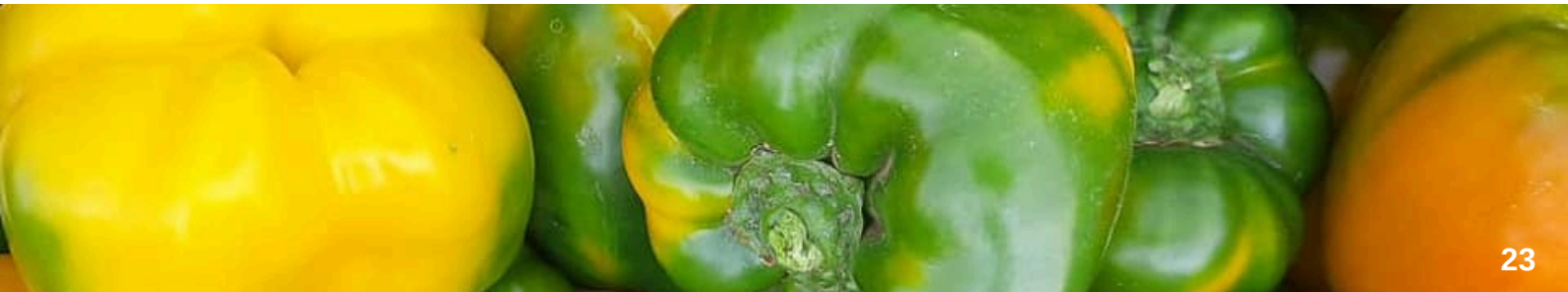
**The MENA-attributed food production in South Africa came from Platfarm, who received a TA to develop a digital tool for resource monitoring. As a result, the innovator expanded to South Africa along with their expansion in Egypt. They then reported these results as part of the WE4F participation because without the development of the digital platform, they would have not expanded to the country.*

Across all three regions, “Digital Solutions” contributed the most to food production, accounting for 46% of all food produced or nearly 8 million tons. Two digital solution innovators, Village Link (Myanmar) and SOWIT (Morocco), accounted for over 40% of all food produced – Village Link produced 3.1 million tons and SOWIT produced 2 million tons. Following the “Digital Solutions” technology category, was “Irrigation” for the MENA RIH, where Green Eagle Tech (Egypt) and Agrisolar (Egypt) enabled the production of 2.2 million tons of food and 1.4 million tons of food, respectively.

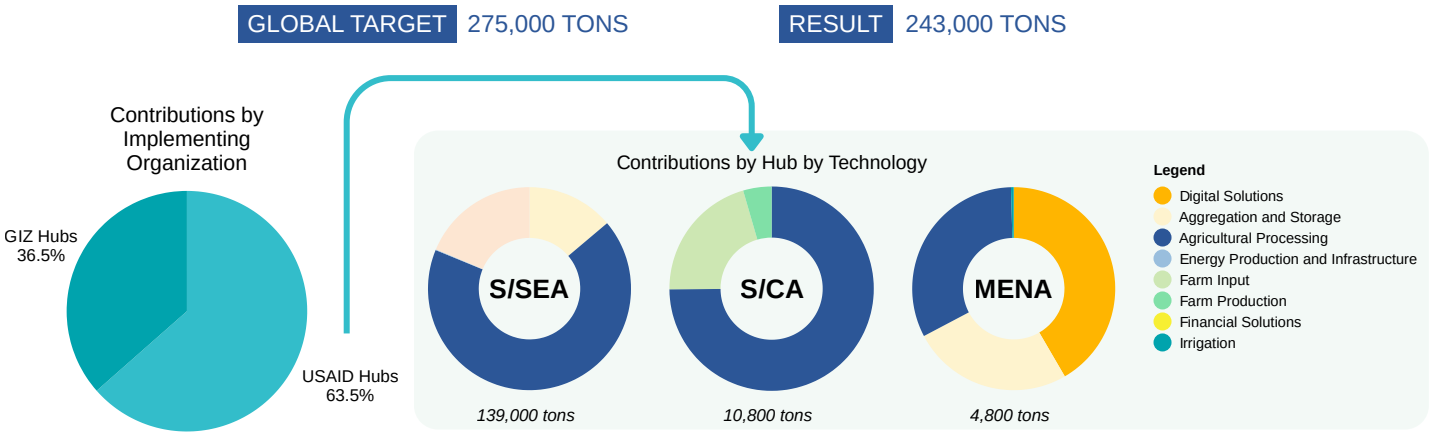
Across all regions, the country with the largest amount of food produced was Egypt, accounting for more than one-third of all program results (6.4 million tons). This result was tied to the type of innovators operating in Egypt, as most of them provided solutions for on-farm production (i.e., solar-powered water pumping, compost, biofertilizers, biogas, and efficient irrigation) which improved productivity and climate resilience. Farmers’ cultivation became more reliable and efficient across existing farms and newly reclaimed land, ultimately increasing overall food production. In MENA, most innovations that contributed to food production had limited percentages of women end-users – out of the 36 innovators who reported food production, only one-third of them had women end-user rates above 30%. This is due to several factors contributing to MENA women's lower adoption of innovations – cultural norms, illiteracy rates, access to information, and landownership issues, which also impacted access to finance.

Village Link (Myanmar) reached the most women end-users within the S/SEA RIH while also contributing the largest amount of food produced across all three regions. This indicates women end-users have great potential to contribute to food production in regions with lower barriers to farming. Digital solutions may also have great potential to improve food production through women farmers but do not fully counter-act regional influences on gender representation in farming.

Similarly to the other hubs, for the S/CA RIH, “Digital Solutions” was the most impactful technology category. FarmHut (Zimbabwe), a digital logistics platform, achieved the largest amount of food produced (404,000 tons). KivuGreen (DRC), a weather and agricultural advisory services digital platform, achieved the fourth largest amount of food produced (223,000 tons). Other key contributors were COMACO (Zambia), producing the second largest amount (305,000 tons), and PKT & Partners (DRC), an agricultural briquette and organic fertilizer manufacturer who produced 247,000 tons. Overall, S/CA innovators achieved a lower total result than the other hubs due to starting a year later, coupled with a drought that plagued Zambia as well as recurring floods in Mozambique. These climate events led to the disruption of production cycles and limited farmer engagement. The extreme weather events were further compounded by the rising cost of agricultural inputs such as drought-tolerant seeds and fertilizers, which placed significant financial pressure on end-users and pushed many to rely on retained seed that typically produces lower yields. At the same time, limited access to irrigation facilities left most farmers dependent on rain-fed systems, making them vulnerable to erratic rainfall patterns and prolonged dry spells. Negative climate effects on end-users highlighted the importance of S/CA innovators that provide localized services and products to improve smallholder farmers’ yields, as their production results demonstrated effective adaptation and mitigation solutions for the region.

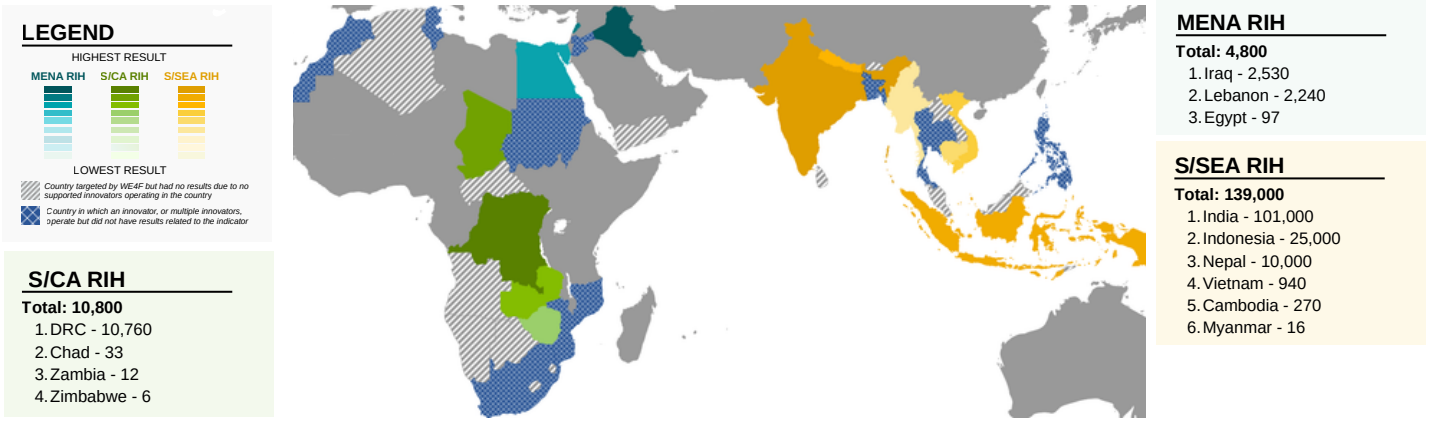


Tons of Food Processed



In terms of reaching the global program LOP target, WE4F reached 88% of the target due to a lack of eligible organizations, limited applications, and the difficulty of WE4F-supported food processing innovators in rapidly scaling. While WE4F fell short of its LOP target, the program learned valuable lessons. The most successful innovators occupy unique/under-supported gaps within end-users' livelihoods. Also, opportunities to improve food processing activities exist at many points within the value chain, but there were limited WE4F-eligible organizations as most were either micro-businesses or international enterprises.

Country-Level Breakdown of Tons of Food Processed



In the DRC, where 99.5% of the S/CA RIH's food processing results occurred, the tonnage originated from several innovators: Freejoy (8,000 tons), PKT & Partners (1,700 tons), Bing (510 tons), and Nabahya Food Institute (480 tons). Freejoy, the largest contributor (74% of the results), uses solar dryers to process fish into fish meal, fish oil, and other associated products. The three other innovators produce and sell charcoal briquettes made of agricultural waste. Alternative energy solutions are critical in the DRC, where energy poverty levels are high and reliance on traditional charcoal sources contributes to the country's deforestation rates.

Across the three hubs, the S/SEA RIH accounted for 90% of all food processed and had the largest representation of food processing innovations (13%). Most of the agricultural processing was from S4S Technologies (India) end-users (85,000 tons, or 61% of results). This innovator focused on solar dryers for processing vegetables which could be sold to restaurants, the hospitality industry, or other food product producers. Komodo Water (Indonesia) was another key food processing innovator; they had the second largest amount of food processed (25,000 tons). During fishing trips, Indonesian fishermen in Bari were unable to properly store their fish on boats due to a lack of access to ice. To prevent quality loss, Komodo Water introduced a solar-powered ice production system to the local community that made ice blocks accessible and affordable.

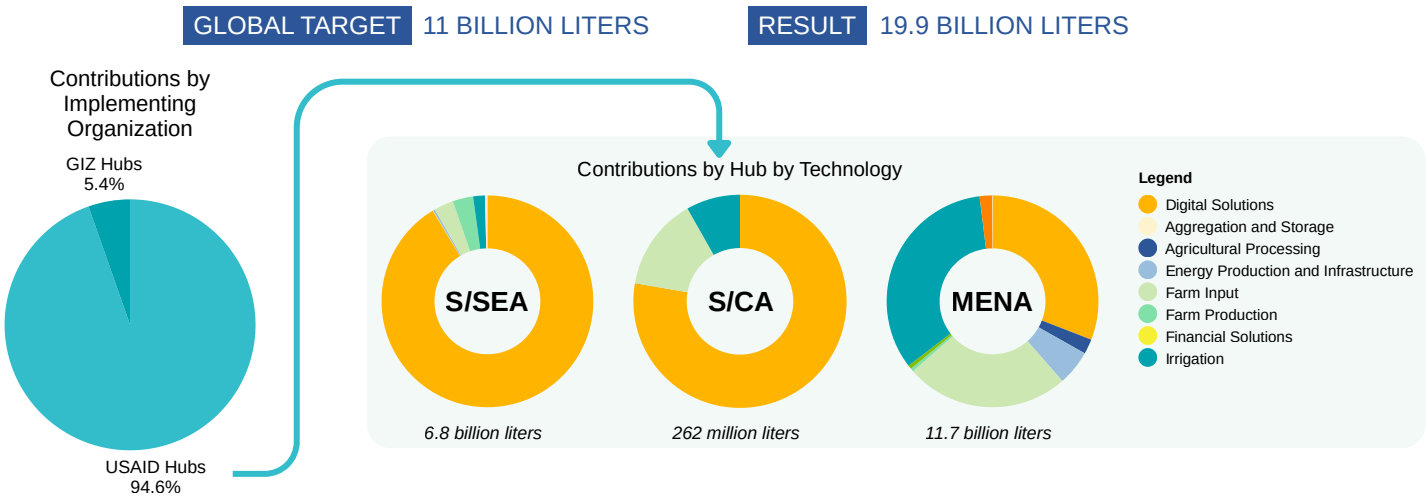
While S4S Technologies and Komodo Water were able to scale, most other food processing innovators struggled. Innovators struggled with the lengthy process of unlocking new markets, the need for more investment in food processing units and working capital for crop procurement, and the provision of training for innovator staff and potential end-users.

These challenges can be costly for innovators. For instance, for Mandala Agrifresh (Nepal), the connection between farmers and the main markets in Kathmandu can be strained, depending on where end-users are in the country, as the long, winding, mountain-climbing roads require careful navigation and slow driving to reach the capital city. To reduce food loss during transportation, the innovator introduced modified atmosphere packaging that prevents food from spoiling and becoming bruised during its journey. In order to use the packaging, however, end-users must be trained on how to pack their crops. As Mandala Agrifresh is in the early stages of implementing the packaging, which also must be purchased and imported from India, it is not a product that they sell to end-users, but rather one they must provide. Said provision cuts into their profit as they not only pay for the packaging but the cost of providing trainings.

The MENA RIH differed from the other hubs, with "Digital Solutions" having the largest result due to Ainda Agricultural Solutions (2,000 tons). Their technology helps poultry producers monitor water usage and efficiency during the chick-raising process. Iraq was the country with the most food processed due to the combination of Ainda and Kasho Factory, whose factory processes sunflowers into oil (506 tons). In Lebanon, several innovators contributed to the food processing result: Agrifresh (1,100 tons) who sells ready-to-eat vegetable solutions, Rim Mills (745 tons) who processes wheat into moghrabieh, GoBaladi (313 tons) turns goat dairy into milk and cheese, Irma & Co (21 tons) who processes red peppers into paste, and Natagri (11 tons) who helps farmers process their lower-grade produce into other products to sell to local and international markets. The difference in size of results between Ainda and all other innovators, is that Ainda supports food processors by improving their resource efficiency while all other innovators supported by the hub conduct food processing activities.

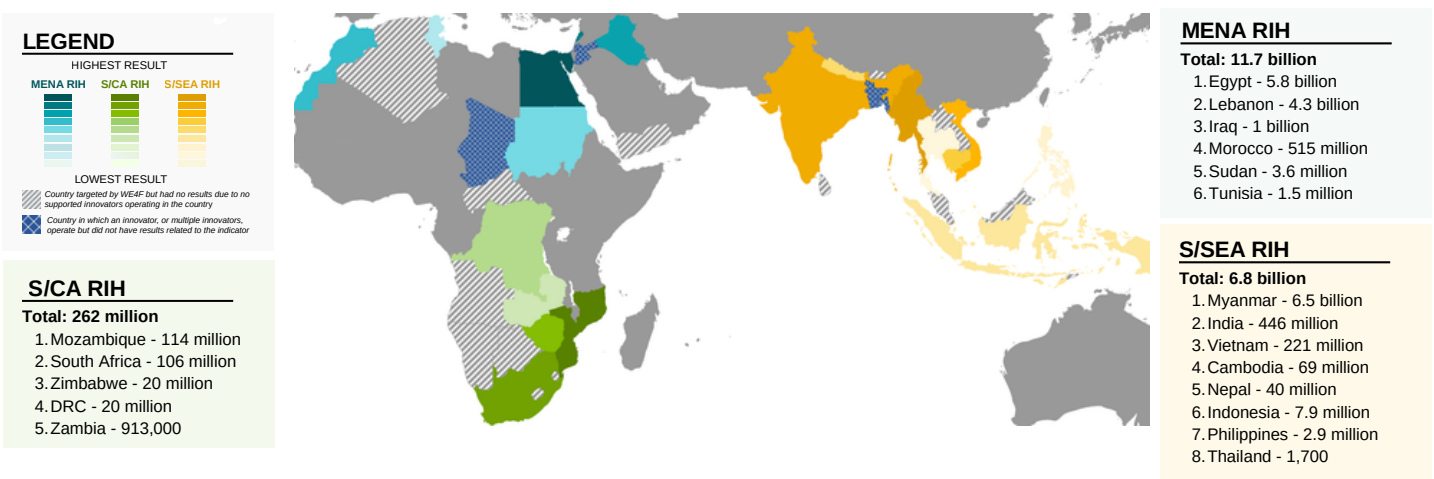
WATER SAVINGS

Total Reduction in Water Consumption in Liters



Globally, WE4F surpassed its target of 11 billion liters by 8.9 billion liters, with 94.6% of the results coming from the USAID-implemented hubs. The results for this particular indicator were due to the number of water-saving innovators supported by the USAID-implemented hubs and the External Surveyors' end-user interviews which identified several instances where innovators had under-reported their water savings. External Surveyors were also essential in detecting the few innovations that increased water consumption, contrary to their water-efficient designs.

Country-Level Breakdown of Water Consumption Reduction in Liters



The most successful water-saving hub was the MENA RIH which exceeded its LOP target by 47%. Innovators operating in the MENA region accounted for 62% of water savings across USAID-implemented hubs, the majority of which were by irrigation innovations (33% of MENA water savings) and digital solutions (31% of MENA water savings). The MENA innovators' ability to achieve such water savings was not only due to the effectiveness of their innovations, but also the types of innovations supported by the hub. More than half of all innovators contributing to water consumption reduction came from the MENA RIH. Robinson Agri (Lebanon) led the MENA RIH in water savings at 2.5 billion liters. It was the second greatest individual result achieved by WE4F innovators, coming in behind Village Link (Myanmar) and its 6.5 billion liters saved. Unlike Village Link, Robinson Agri does not provide a digital solution. The innovator leverages holistic farming solutions like greenhouses, efficient irrigation systems, hybrid seeds, and comprehensive irrigation management advisory.

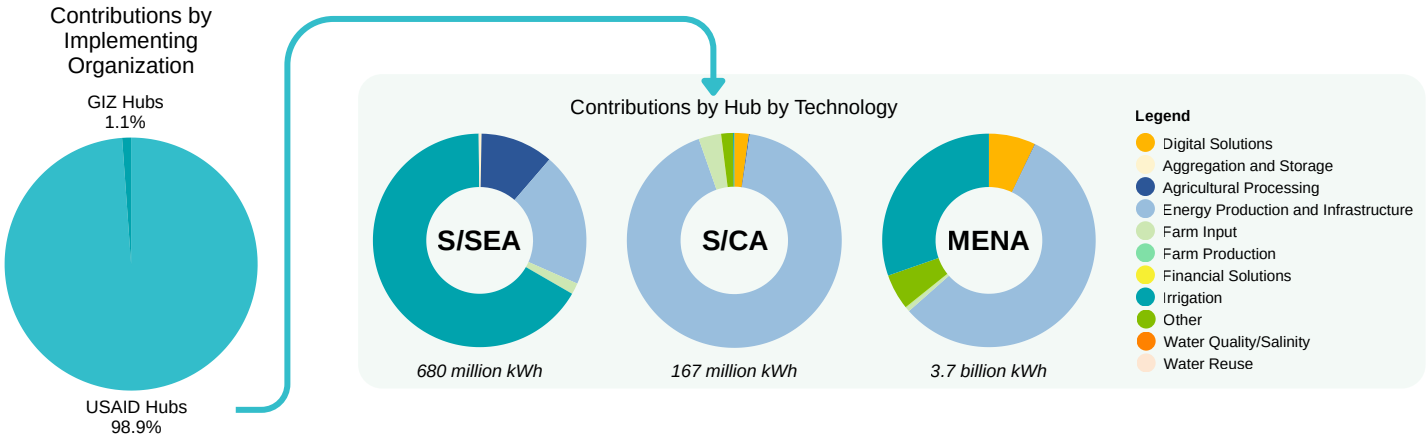
Innovators supported by the S/SEA RIH saved over 6.8 billion liters of water while also seeing the highest contributions of women-led and/or -owned innovators to water savings in the region (92%). "Digital Solutions" accounted for 91% of water savings in the S/SEA region, most of which were in Myanmar (88% of S/SEA water savings). Myanmar also had the highest water savings across all hubs. Nearly all of these water savings can be attributed to Village Link's mobile app which helped farmers monitor water usage and improve irrigation efficiency.

Across the USAID-implemented RIHs, only 12% of innovators that contributed to water savings were supported by the S/CA RIH. Despite the limited number of water-focused innovators, the S/CA RIH saved 262 million liters of water. Over 77% of the impact came from "Digital Solutions", Virtual Irrigation Academy (South Africa) saved 183 million liters and KivuGreen (DRC) saved 20 million liters. In alignment with the region's end-users, the hub's water savings were primarily from smallholder farmers (79% of all savings). While S/CA innovators greatly exceeded the region's water savings targets, the comparatively low volume of water savings against other hubs can be attributed to the smaller scale of end-user operations in combination with a lower percentage of innovators whose technologies and services targeted water savings.

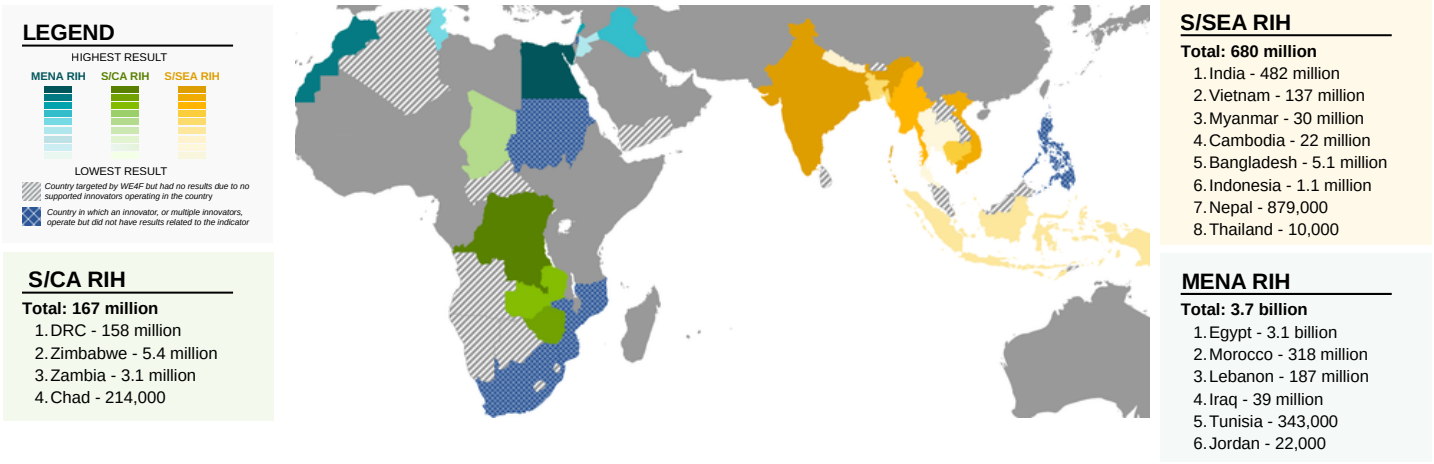
ENERGY SAVINGS

Total Amount of Energy Saved in Kilowatt-Hours (kWh)

GLOBAL TARGET 1.35 BILLION KWH RESULT 4.6 BILLION KWH



Country-Level Breakdown of Energy Saved in Kilowatt-Hours (kWh)



S/CA RIH
Total: 167 million
1. DRC - 158 million
2. Zimbabwe - 5.4 million
3. Zambia - 3.1 million
4. Chad - 214,000

S/SEA RIH
Total: 680 million
1. India - 482 million
2. Vietnam - 137 million
3. Myanmar - 30 million
4. Cambodia - 22 million
5. Bangladesh - 5.1 million
6. Indonesia - 1.1 million
7. Nepal - 879,000
8. Thailand - 10,000

MENA RIH
Total: 3.7 billion
1. Egypt - 3.1 billion
2. Morocco - 318 million
3. Lebanon - 187 million
4. Iraq - 39 million
5. Tunisia - 343,000
6. Jordan - 22,000

Globally, WE4F surpassed its target of 1.35 billion kilowatt-hours (kWh) of energy saved by over 4 billion kWh. The results can be attributed to the USAID-implemented Secretariat Unit and RIHs' usage of External Surveyors, who contributed to innovators' ability to learn from on-the-ground reflections and more accurately report their energy savings.

Most energy savings originated from the MENA RIH, where innovators saved 3.7 billion kWh – four times the hub's LOP target and 80% of all energy saved. These energy savings were largely driven by innovators providing solutions that enabled farmers to switch from diesel-powered irrigation systems to solar energy, significantly reducing energy intensity. Many innovators also deployed solar systems within their facilities or amongst new customers in remote areas or areas with weak grids, improving reliable energy access while lowering overall energy consumption from fossil fuel-based sources. The largest and second largest energy savings were by Egyptian innovators. Agrisolar (1.78 billion kWh saved) and Green Eagle Tech (1 billion kWh saved) provided energy-saving solutions to end-users that included farmers and companies with large-scale operations. Both innovators also saw substantial growth in operations and market share during their participation in WE4F. The country with the second largest amount of energy saving was Morocco, where High Atlas Foundation operates. The innovator saved 202 million kWh through their work with community partners to operate nurseries, provide a monitoring system to secure voluntary and credited carbon offsets, and provide consultancy and capacity-building workshops for value-added processing.

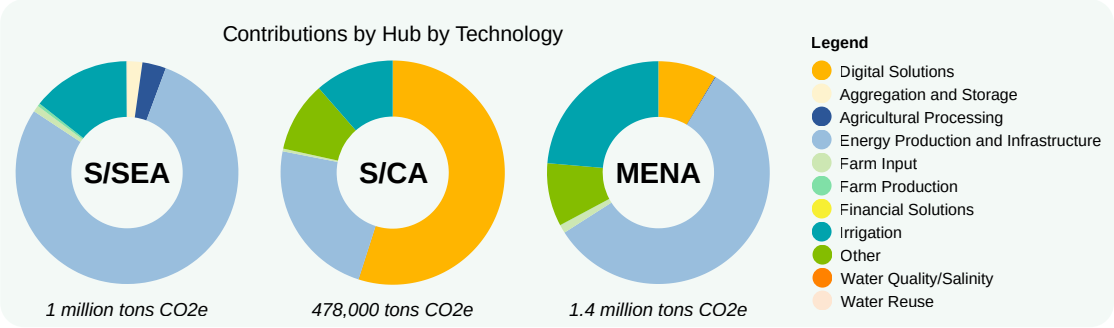
Innovators from the S/SEA RIH saved 680 million kWh, exceeding the hub's LOP target by 36%. The majority of energy saved by S/SEA innovations was through smallholders (85%). When compared to other hubs, the S/SEA RIH saw the highest proportion of energy saved by women-led and/or -owned innovators (36%). The main contributing technology to energy savings was "Irrigation." Claro Energy's (India) distributed solar irrigation systems for smallholders saved the most energy (374 million kWh). A trailing second was ONergy Solar (India), which provides integrated solar irrigation systems designs for women and vulnerable groups and saved 29 million kWh. The technology category with the second largest energy savings was "Energy Production and Infrastructure," which included Egreen (Vietnam). The innovator's biogas purifiers and digesters convert pig waste into energy for livestock farmers. Egreen saved over 137 million kWh in Vietnam, which made the country have the second largest energy savings result in the S/SEA RIH.

Innovators supported by the S/CA RIH saved 167 million kWh of energy, more than 30 times the hub's LOP target. Of the hub's result, 99% came from smallholder farmer end-users. Energy production and infrastructure innovations dominated energy savings in the S/CA RIH (92% of all hub results). Included in this technology type was the Nabahya Food Institute (DRC), who saved over 153 million kWh, or 91% of all energy saved by the S/CA RIH. They manufacture and sell briquettes made of agricultural waste. So, in demand was their innovation that TA needed to be provided to help the innovator continue scaling during periods of local conflict. Farm input innovations had the second largest energy savings in the region. Bing (DRC) saved 5.6 million kWh through their innovation which uses crop residue waste to produce briquettes and biochar-based fertilizer.

GREENHOUSE GAS EMISSIONS SAVINGS

Total Greenhouse Gas Emissions Saved by End-Users Through the Use of WE4F Innovations in Tons of Carbon Dioxide Emissions Equivalent (CO2e)

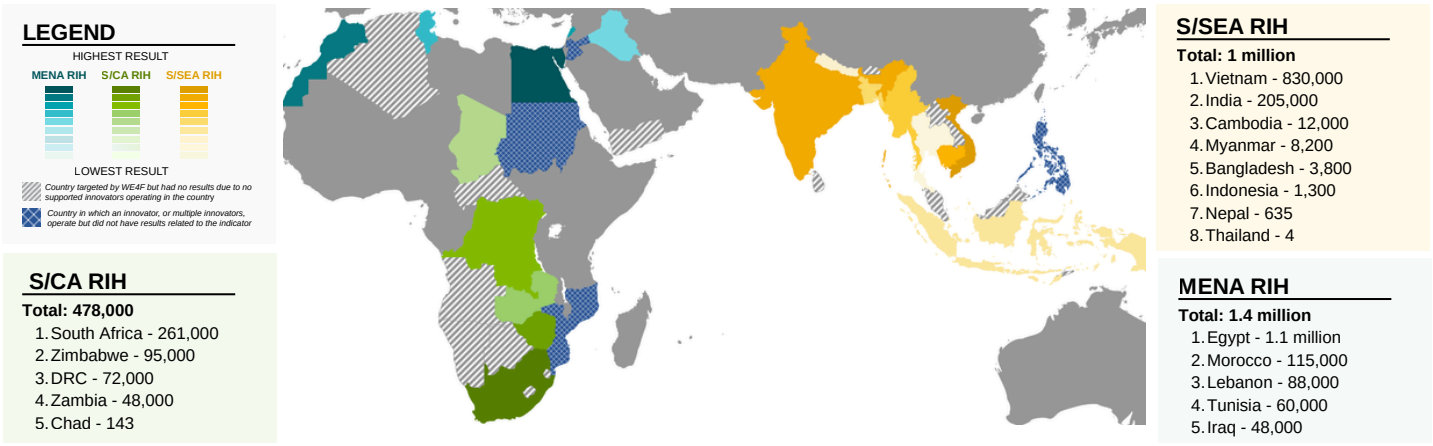
USAID TARGET 1 MILLION TONS CO2e RESULT 2.9 MILLION TONS CO2e



Similarly to the LOP targets for the number of BoP end-users and number of women end-users, USAID-implemented hubs and innovators were required to monitor for greenhouse gas emissions savings, ensuring that supported technologies contributed to climate mitigation and adaptation. Most results originated from the MENA RIH (1.4 million tons CO2e) and S/SEA RIH (1 million tons of CO2e) where "Energy Production and Infrastructure" technologies led as the main results contributors – 57% of savings for the MENA RIH and 78% of savings for the S/SEA RIH. Within the S/CA RIH, "Energy Production and Infrastructure" played a smaller role in savings at 23% of the results, while "Digital Solutions" led hub-level impact with 54.9% of the greenhouse gas emissions savings.

There were two methods through which innovators monitored their greenhouse gas emissions: 1) USAID's Clean Energy Emission Reduction (CLEER) tool, and 2) External Surveyors provided by WE4F. For innovations that did not have an existing standard emissions calculator, such as compost-based fertilizer alternatives and food waste reduction solutions, External Surveyors developed custom methodologies to quantify greenhouse gas impact, as neither self-reporting nor the CLEER Tool alone could adequately assess the impact of these unique innovation types on emissions.

Country-Level Breakdown of Greenhouse Gas Emissions Saved by End-Users Through the Use of WE4F Innovations in Tons of Carbon Dioxide Emissions Equivalent (CO2e)



Agrisolar (Egypt) led the MENA RIH's "Energy Production and Infrastructure" category, contributing 730,000 tons of CO2e, or 87.7% of the category's results. Their savings originated from helping end-users transition from diesel-fueled water pumps to solar-powered water pumps. As innovators worked mostly with medium-to-large scale end-users and served as solar-irrigation suppliers, the switch of large farms to solar power resulted in large greenhouse gas emissions reductions. Green Eagle Tech (Egypt), the innovator with the second highest savings in the MENA RIH, also led the "Irrigation" category with 320,000 tons of CO2e saved, or 93% of the category's savings. Their savings resulted from helping farmers switch from diesel to solar energy as well as the type of innovation they provide – a rain irrigation system with automatic operations. The MENA RIH's third most-notable greenhouse gas emissions-saving innovator is High Atlas Foundation (Morocco) with 93,000 tons of CO2e. In addition to growing trees in nurseries at a subsidized rate for farmers, cooperatives, associations, and education centers, the innovator maintains a tree monitoring system that secures voluntary and credited carbon offsets, integrating and maximizing the benefits from remote sensing and ground-truthing with community engagement.

The country that saw the most greenhouse gas emissions savings was Egypt (1.13 million tons of CO2e). Aside from Agrisolar and Green Eagle Tech's results, there were savings from Platfarm (a digital water monitoring solution), IRSC (solar-powered water pumps), Mozare3 (financial solutions for agri-inputs), and Baramoda (organic fertilizers). Morocco saw the second-most savings of greenhouse gases (115,000 tons of CO2e), due to the High Atlas Foundation and results from SOWIT, a digital solution that monitors end-users' water and fertilizer usage (82,000 tons of CO2e). Not all of SOWIT's results can be attributed to Morocco. The innovator operates in Tunisia, where they had a reduction in greenhouse gas emissions of 60,000 tons of CO2e, resulting in the country being the fourth most-impacted country. Lebanon was the third most-impacted country (88,000 tons of CO2e). Lebanese innovators that contributed to the result did so through the transition of farmers from diesel-fueled irrigation systems and water pumps to solar energy (Green Essence Lebanon); the turning of waste into compost solutions (Compost Baladi); working with the hub to power their food processing activities with solar energy (GoBaladi); and the utilization of organic fertilizer (Biomass).

Within the S/SEA RIH, Egreen (Vietnam) had the highest greenhouse gas emissions savings at 830,000 tons of CO2e, or 99.4% of the S/SEA RIH's "Energy Production and Infrastructure" savings and 78% of the hub's total greenhouse gas savings. The innovator reduced greenhouse gas emissions through the provision of biogas digesters and biogas purifying products applied to biogas generators, along an Energy Service Company model to reduce innovation-related expenses. Smallholder farmers, medium-to-large scale farmers, and medium-to-large scale companies all benefit from Egreen's services and technologies, leading to sector-wide applications that help pig producers mitigate the emissions by turning their pig waste into energy. Following Egreen, was Claro Energy (India), and S4S Technologies (India), who reduced greenhouse gas emissions by 104,000 tons of CO2e and 36,000 tons of CO2e, respectively. Both Indian innovators offer solar-powered solutions that switch end-users from diesel-fueled technologies, but their exact innovations differ. Claro Energy provides solar-powered irrigation systems, while S4S Technologies utilizes solar dryers to process crops.

Overall, Vietnam had the most greenhouse gas emissions savings, almost entirely due to Egreen, with 99.99% of the country's savings. India had 10 innovators contribute to its results (205,000 tons of CO2e). Although Claro Energy and S4S Technologies were the main contributors, other innovators that helped farmers switch from diesel to solar or utilize agricultural practices that minimized greenhouse gas emissions were: ONergy (a solar-powered water pump provider); Promethean Power (thermal-powered milk chilling); Dvara E-Registry (direct-seeded rice and promotion of zero/minimum tillage practices); Equilibrium (carbon finance-enabled approach that incentivizes smallholder farmers to transition from chemical-intensive practices to regenerative agriculture); RDO Trust (organic fertilizers); Oorja (solar-powered irrigation systems); and Devidayal Solar (solar-powered cold storage). The country with the third-most savings was Cambodia at 12,000 tons of CO2e, with similar innovators contributing to its result: Agrosolar (solar-powered irrigation systems); ATEC (biodigesters that utilize livestock and agricultural waste); Covestro (solar dryer domes); Husk Ventures (carbon-based fertilizers); Khmer Green Charcoal (coconut waste-based charcoal); and Pteah Baitong (solar-powered water pumps).

For the S/CA RIH, about 54% of the hub's greenhouse gas emissions savings came from Meat Naturally (South Africa), a digital solutions innovator whose business model combines training herders, supporting market access through mobile livestock auctions and slaughterhouses, rangeland stewardship, and livestock management. All of the innovator's results occurred in South Africa, making it the country with the highest greenhouse gas emissions savings. Zimbabwe had the second-highest greenhouse gas emissions savings (95,000 tons of CO2e), not through one innovator that dominated the results, but by having several innovators with differing technology solutions. Zonful Energy (solar-powered irrigation provider) saved 53,000 tons of CO2e saved, followed by Lanforce Energy (biodigesters fueled through agricultural and livestock waste) with 39,000 tons of CO2e, then FarmHut (crop transportation logistics) with 1,300 tons of CO2e, Powerlive (solar-powered water pumps) with 999 tons of CO2e, and then GreenZim Ventures who, due to the limited timeframe of their participation at a Zimbabwe Biogas OCFI innovator, reduced emissions by four tons of CO2e. The country with the third-highest savings, as well as the innovator with the second-highest result in the hub, was the DRC. As a country that faces extreme energy poverty coupled with ongoing deforestation to produce traditional charcoal, alternative energy solutions are popular. Nabahya Food Institute (DRC), which produces environmentally sustainable charcoal briquettes made of crop residues, biomass, dead leaves, rice, maize, and sorghum stalks. Their innovation both prevents the cutting of trees and prevents waste decomposition by turning it into an energy solution (70,000 tons of CO2e saved).

PROGRAM POINT: FROM SUSPICION TO APPRECIATION

In 1997, the Kyoto Protocol launched the first carbon market mechanisms, ushering in a new system and method of financing that has only grown over the following years. While the climate sector booms for some technologies, carbon credit pursuers, and climate lens investors, not all WE4F-supported innovators were interested in the potential opportunities, or the monitoring required. As WE4F monitored greenhouse gas emissions as part of its objective to develop a more sustainable water-energy-food nexus, one challenge that needed to be confronted was the innovators who were uninterested, or unable, to conduct the required greenhouse gas monitoring and reporting.

Innovators faced significant challenges in systematically calculating, tracking, and reporting these emission reductions, particularly during the early stages of implementation. These challenges stemmed from limited technical capacity, small team sizes, and the absence of standardized methodologies and tools for emissions measurement. Additionally most innovators saw greenhouse gas emissions reporting as a compliance requirement rather than a value-added activity for their own core business objectives.

To address these gaps, WE4F introduced the CLEER Tool, which provided a structured and standardized approach for calculating both energy savings and associated greenhouse gas emissions. The tool's introduction enabled innovators and hubs to move from ad hoc methodologies or proxy-based estimates toward more consistent, credible, and comparable impact reporting. Beyond calculating emissions reductions, the tool also helped innovators analyze and balance their overall energy consumption by identifying units or activities consuming more energy. The functionality allowed innovators to pinpoint operational hotspots and strategically reduce energy use in those areas, enhancing efficiency while lowering their carbon footprint. Mature innovators also increasingly recognized the value of emissions reporting for demonstratinh impact to investors and donors seeking ESG-aligned data. These innovators proactively sought TA to strengthen their capacity for ESG indicator calculation and reporting, including emissions measurement.

When the 2023 Regional Convenings began in March 2023, reporting was a topic of lively, contentious conversation. Recognizing the growing internal conversation, WE4F added relevant sessions to the S/SEA RIH and MENA RIH Regional Convenings as well as the global Annual Convening. At the hub level, Technical Assistance Units started organizing with innovators relevant TA instances that could help innovators determine the next step forward. At the S/CA RIH, the hub introduced voluntary carbon markets to innovators, with 11 innovators expressing interest. The hub engaged a service provider to conduct detailed diagnostics of interested innovators' business models. COMACO (Zambia) and Meat Naturally (South Africa) registered their carbon credit projects on the VERRA platform. For the S/SEA RIH, the growing interest in carbon credits led the hub to develop a carbon credits guidebook that proved useful for innovators and WE4F donors.

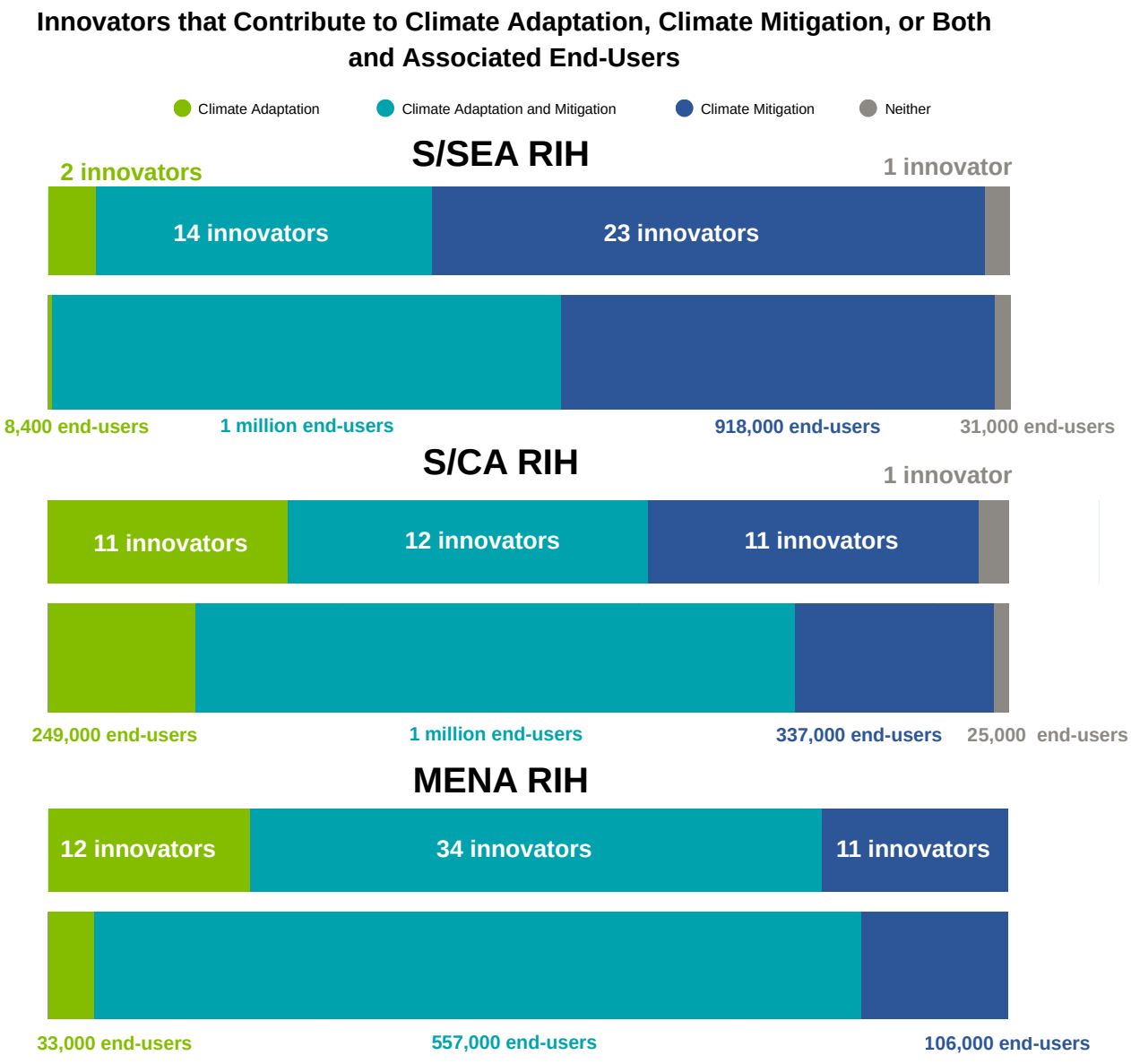
HUB HIGHLIGHT: IF A RESOURCE DOES NOT EXIST, DESIGN YOUR OWN

In July 2022, the S/SEA RIH's first instance of carbon credits TA began with S4S Technologies. This TA was followed by additional instances in 2024, as Promethean Power Systems and a flurry of other innovators who had learned about carbon credits following several introductory sessions hosted at convenings in 2023. It was clear, however, that not every innovator needed a TA to determine their interest level and capability of pursuing such mechanisms; a clear, simplified guidebook could do the trick. The program knew it was possible to develop new resources that would find an appreciative audience that would utilize the product due to the program previously developing an end-user financing guide in 2022.

During the provision of a carbon credits TA, the S/SEA RIH identified a product that could be sanitized of some of its content and adapted to cover multiple technologies. Working with the vendor, the hub developed a knowledge product on carbon credits that built awareness and enabled other innovators to explore and benefit from the approach.

Following the publishing of the carbon credits guide, there was noted success with its usefulness. One donor informed WE4F of its internal usage to developing carbon financing guidelines, while WE4F innovators viewed it as a supporting resource in determining their next step. While a positive result for the usage of the guidebook, it also served the purpose of a caution against the mechanism. S4S Technologies and Promethean, after completing their TAs and assessing that the potential revenue from carbon credits would be relatively modest compared to the time and resource investment required at their current scale, placed carbon credit monetization on hold, with plans to revisit it once their operations expand further.

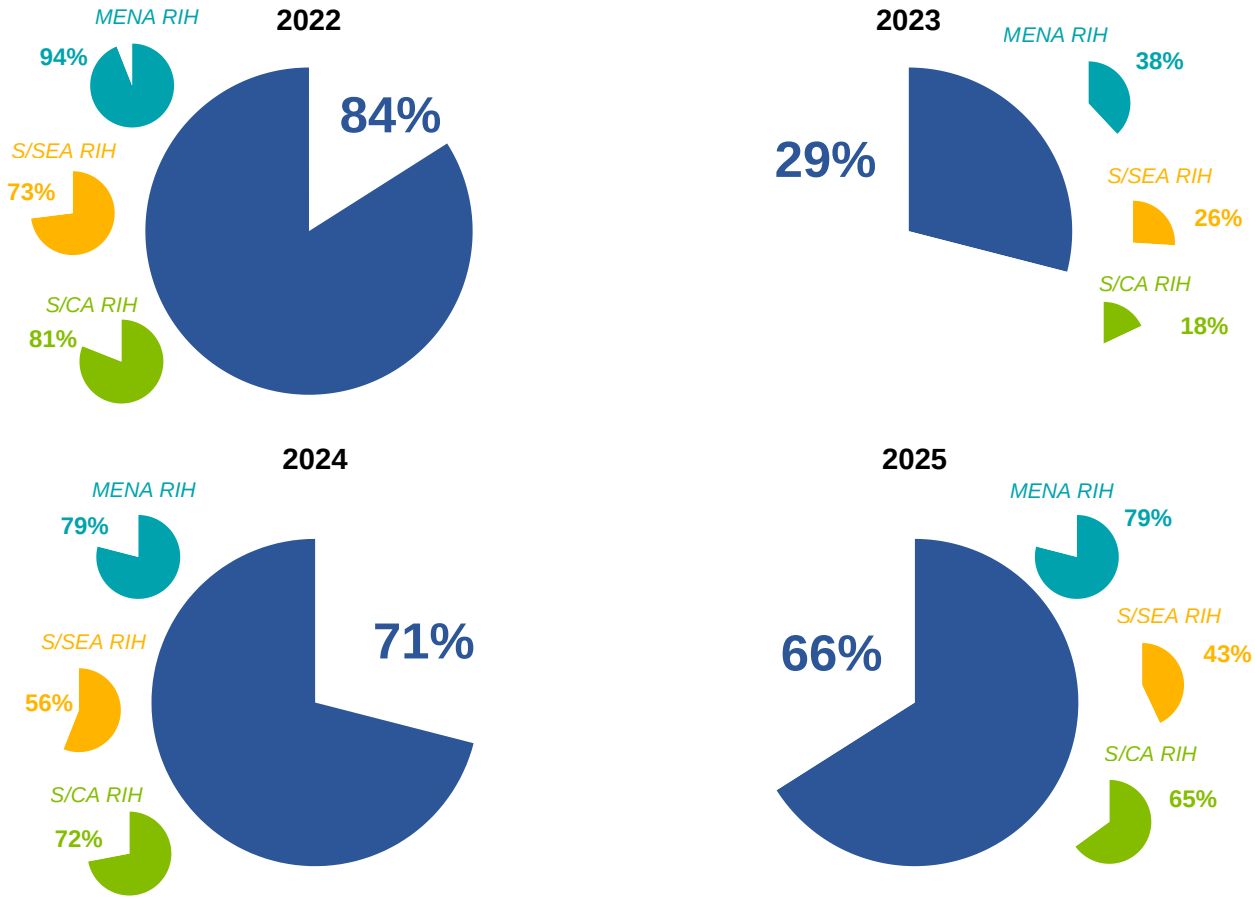
INNOVATIONS CONTRIBUTING TO CLIMATE MITIGATION AND/OR ADAPTATION



Similarly to the other aforementioned themes of gender, BoP integration, and greenhouse gas emissions, part of the USAID-implemented hubs monitoring was the type of innovations supported across climate adaptation, climate mitigation, both, or neither. By tracking what categories each innovator fell into, the program could observe how different innovation climate categories impacted end-users. Across all three USAID-implemented hubs, innovations that contributed to both climate adaptation and climate mitigation reached more end-users than innovations that exclusively contributed to climate adaptation or climate mitigation. While all MENA RIH innovators contributed to one of the climate categories, the S/SEA RIH and the S/CA RIH each had one innovator that did not contribute to a climate category. For the S/CA RIH, that innovator was Ovos De Ouro (Mozambique), a producer of chicken feed and day-old chicks in Mozambique, uses a cooling wet-wall technology in its poultry houses to regulate temperatures without relying on electricity-powered air conditioning. However, the innovator faced challenges in estimating the technology's impact on energy and water savings. Although they had planned to engage the technology manufacturer for support, this effort stalled following the SWO and could not be resumed within the short timeframe of the bridge contract. For S/SEA RIH, the innovator was Tun Yat (Myanmar) who provides an on-demand farming machinery service to connect machinery owners and potential end-users. Given that the innovator supported the use of all farming machinery, they could not contribute to climate mitigation or adaptation because they did support the usage of fossil fuel powered machinery.

INNOVATORS MONITORING WATER OR BIODIVERSITY

Percentage of Innovators that Monitored Water, Biodiversity, or Both



The "percentage of innovators that monitor water, biodiversity, or both" differs in its method of tracking than almost all other indicators within the program. The one exception is the "percentage of innovations that have successfully scaled" as it functions in a similar manner. All other indicators count up, as more and more end-users are reached, food produced or processed, water or energy saved, sales or investment gained. This indicator changes based on the number of innovators participating in the program at a given time and is tied to the activities that innovators are conducting. As a result, there is the possibility of an innovator monitoring water, then pausing its activity, then restarting. Both of the aforementioned scenarios are illustrated in the above chart.

In 2023, the 2022 Innovator Cohorts conducted their annual reporting cycle, however they were unfamiliar with all possible monitoring activities and under-reported for the 2023 cycle. For many innovators, it was the first time that they had participated in a donor program. For others, the disconnect emerged because they had a different understanding of the requirements of monitoring water or biodiversity, even after the first round of KPI monitoring and reporting trainings. To rectify the under-reporting, the hubs not only assisted the innovators with water and biodiversity reporting, but also improved awareness of how to monitor and manage water and biodiversity in innovators' daily operations. Through the

the implementation of EMMP, assisting with the development of environmental and social management systems (ESMS), providing monitoring tools, and providing capacity building, the hubs increased innovators' knowledge of the different tools and processes that could be used in daily operations. After the provision of the support, biodiversity and water savings were reported more accurately, with significant increases in monitoring across all hubs: MENA innovators' result doubled from 38% in 2023 to 79% in 2024; S/SEA's result doubled from 26% to 56%; and S/CA's quadrupled from 18% to 72%.

In December 2025, after the bridge contract launched and innovators re-joined WE4F, it became apparent during reporting that not all onboarded innovators were conducting the same activities that they had been conducting at the conclusion of 2024. Due to the USAID closure, some innovators may have felt they no longer needed to meet the requirements of the program and decided to stop monitoring. As many of the innovators went through difficult periods of operation in 2025 (e.g., layoffs, reductions in business operations, scaling back growth plans), innovators may have decided that the resources previously dedicated to monitoring would be better spent elsewhere. As not all innovators fully stopped monitoring, there is some positive outcome in realizing that a portion of innovators will continue to monitor water and biodiversity even when there is no grant contract requiring that it occurs.

Operating Location of Innovators that Monitored Water, Biodiversity, or Both at the End of Program Participation

MENA RIH

EGYPT

Water and Biodiversity
Baramoda
Biomasr
Chitosan
Egymag
Green Eagle
Platfarm
Plug'N'Grow
Raptor Solar

Water Only
AbuErdan
Agrisolar
Freshsource
Mozare3

Biodiversity Only
Mozna

IRAQ

Water and Biodiversity
Ainda
Al-Reef Mushroom
Arez Plantation
CultiVision
Lork

Water Only
Al Raka'ez Al Handasiyah
AlbuSaif
Faraday
Green Shovel
RAG

Biodiversity Only
Zhany

LEBANON

Water and Biodiversity
Biomass
Green Essence
Greenco

Water Only
Agrifresh
Garbaliser
GoBaladi
Irma & Co
Rim Mills

Biodiversity Only
Natagri

MOROCCO

Water and Biodiversity
High Atlas Foundation

Water Only
Green WaTech
SOWIT

Biodiversity Only
Lombrisol

PALESTINE

Water Only
Agritopia

SUDAN

Water and Biodiversity
Hydroponics Africa

TUNISIA

Water and Biodiversity
Ecofeed

S/CA RIH

CHAD

Water Only
Zonal

DRC

Water Only
KivuGreen
Nabahya Food Institute

MOZAMBIQUE

Water and Biodiversity
Phoenix Seeds

SOUTH AFRICA

Water and Biodiversity
Reel Gardening
Virtual Irrigation Academy

Biodiversity Only
Meat Naturally

ZAMBIA

Water and Biodiversity
COMACO
Greencare Eco
Nature's Nectar
RDG Collective
Solar Village
Zircon Energy

Water Only
Bwando Farm
Tivwane Money Solution

ZIMBABWE

Water and Biodiversity
Lanforce Energy
Palmworth Investments

Water Only
Alzanael
Energy Signatures
Onyx Earth

S/SEA RIH

CAMBODIA

Biodiversity Only
Khmer Green Charcoal

INDIA

Water and Biodiversity
Jaljeevika
S4S Technologies

Water Only
Adaptive Symbiotic Tech
Claro Energy
Equilibrium
Oorja

Biodiversity Only
Dvara E-Registry

INDONESIA

Water and Biodiversity
Komodo Water

NEPAL

Water and Biodiversity
aQysta

Water Only
Gham Power
Shreenagar Agritech

THAILAND

Water Only
FarmConnect Asia

As previously mentioned, the result for this indicator changes based on innovators' participation in WE4F, the above table details what innovators were monitoring when they exited the program. When innovators were first onboarded, their general level of water or biodiversity awareness ranged from beginner to advanced. Some innovators were already monitoring water consumption. When innovators started monitoring biodiversity and/or water, it enabled them to identify and pursue opportunities for improvement within their innovations as well as their end-users' practices. Such activities included conducting site selection assessments, pursuing organic certifications, and introducing training for end-users to improve their practices. Agriculture-focused innovators offered trainings on biofertilizer use and better crop selection/diversification, while aquaculture-focused innovators promoted protecting and preserving biodiversity as well as sustainable water management practices.

INNOVATOR ILLUMINATION: MONITORING ACROSS TECHNOLOGY TYPES AND MATURITY LEVELS

Depending on the innovators' level of engagement with the hub's ESG team, their level of environmental awareness and responsibility increased, with some becoming advanced. The built-in monitoring capabilities of each technology also largely determined whether innovators were able to track water use, biodiversity, or both. For example, solar water pumps equipped with sensors made water-use monitoring significantly easier, while conservation-focused innovations were better positioned to report on biodiversity outcomes due to their existing capacity to monitor forest and rangeland conditions.

- Natagri (Lebanon) provides tools to help in the water management as well as trainings and one-to-one coaching on the cherry's pest management and agricultural practices.
- Meat Naturally (South Africa) reports exclusively on biodiversity because its technology and operating model had no connection to water-saving outcomes. The innovator already had well-developed methodologies for estimating biodiversity impacts prior to joining the program, using the hectare under conservation as well as satellite imagery as a proxy for assessing biodiversity health and status.
- Freejoy (DRC) relies on fishing data from Lake Tanganyika, the source of its raw materials, to evaluate its biodiversity impact.

HUB HIGHLIGHT: WATER MONITORING IN THE FIELD

As highlighted in the above section, in 2023 the program encountered a monitoring setback with newly onboarded innovators not fully understanding what it meant to monitor water, biodiversity, or both. This challenge emerged across all USAID-implemented RIHs. To educate innovators on monitoring, the hubs organized trainings, workshops, and one-on-one coaching.

After the increase, during site visits conducted by the hub's environmental experts to monitor the implementation of the environmental mitigation and monitoring plans, the MENA RIH noticed a peculiar trend. The absolute majority of CFI 1, CFI 2, and Iraq CFI 1 innovators were reporting the promotion of water conservation and reduction, as well as the enhanced and protected biodiversity. Such actions included:

- Providing advice/recommendations to farmers on sustainable farming techniques (e.g., crop rotation, companion planting, green manure, soil fertility and health, working with beneficial insects, composting, and conserving biodiversity for protected lands).
- Promoting waste management activities to ensure that waste streams didn't reach nearby water bodies and maintenance plans to ensure that the waste didn't reach the soil or groundwater.
- Conducting water sample analysis to ensure that the quality of the surrounding water sources was not adversely affected by the innovator's project activities.
- Digital solutions advisory services for farmers, directly helping them improve soil health and biodiversity, and save water.
- Interventions on vegetation removal to ensure that farmers did not destroy habitats or remove trees to implement solar photovoltaic (PV) systems; and raising awareness to alter potential water overuse upon the installation of solar photovoltaic (PV) pumping solutions.

HUB HIGHLIGHT: GRANT REQUIREMENTS AS A MECHANISM FOR INTRODUCING WATER AND BIODIVERSITY MONITORING

For innovators receiving grants from USAID, a key environmental requirement was the development of EMMPs as well as EMMRs. The purpose of the plans and reports was to ensure that project-specific environmental mitigation measures were implemented, tracked, and funded to avoid or minimize environmental damage. As one of the goals of WE4F was to work with SMEs that were new to the donor programs, many were unfamiliar with the EMMPs, EMMRs, and how to implement measures into their operations. For innovators in S/SEA RIH, these challenges were related to the usage of water and energy and their impact on climate and biodiversity, the development of policies related to environmental and sustainability issues (e.g., integrated solid waste management plans, green procurement plans, water assessment templates, and occupational health and safety policy). Innovators were also unclear on how to monitor biodiversity and reduce their impact.

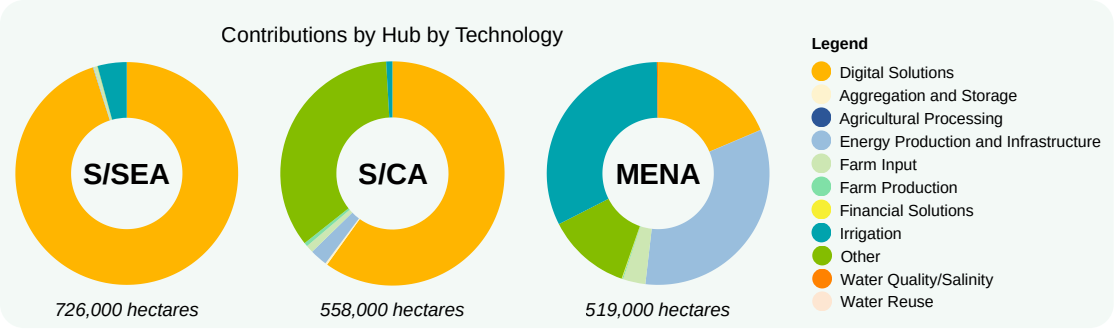
To help innovators overcome these barriers to implementation, the S/SEA RIH supported innovators with template drafting and completion and provided training sessions and webinars on development of environmental policies, environmental compliance and drafting of ESMS by business type. As certain water monitoring technologies could have been too expensive for innovators, the hub proposed use of proxy indicators like land-use change, and prohibition of habitat fragmentation to monitor the biodiversity. In addition, the hub promoted ecologically responsible practices by encouraging the use of native species and discouraging invasive species, thereby improving the quality and relevance of biodiversity monitoring and contributing to more sustainable resource management.

As a result of the hub's efforts to ease implementation burdens, several innovators emerged as strong examples of effective EMMP implementation, each translating mitigation measures into day-to-day operations – Agrosolar (Cambodia and Myanmar), Komodo Water (Indonesia), aQysta (Nepal), ONergy (India) and Oorja (India). These four innovators consistently applied site selection criteria to avoid sensitive areas, conducted groundwater or water availability assessments, and trained farmers on water-efficient practices. Komodo Water demonstrated strong uptake by integrating water resource assessments, waste management measures, and monitoring into its solar-powered water and ice systems.

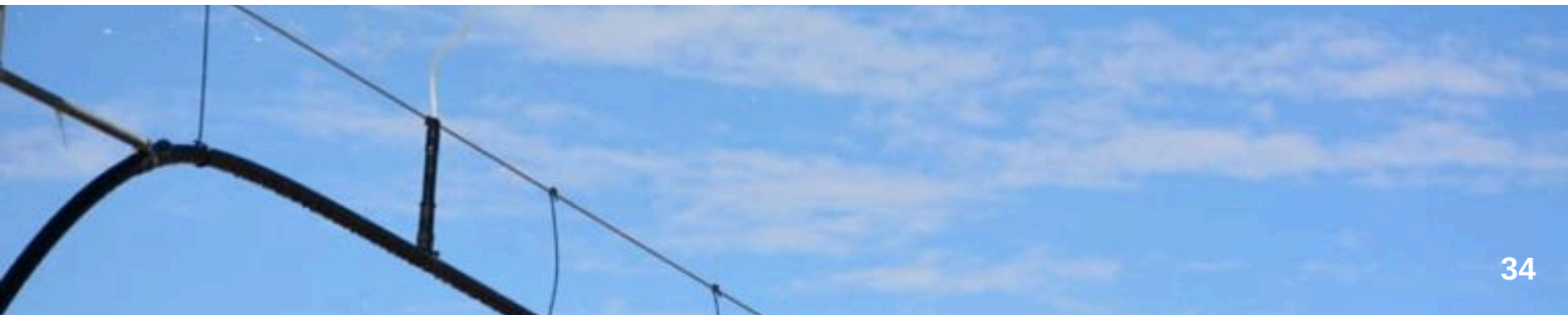
HECTARES OF LAND UNDER IMPROVED MANAGEMENT PRACTICES

Hectares of Land Under Improved Management Practices

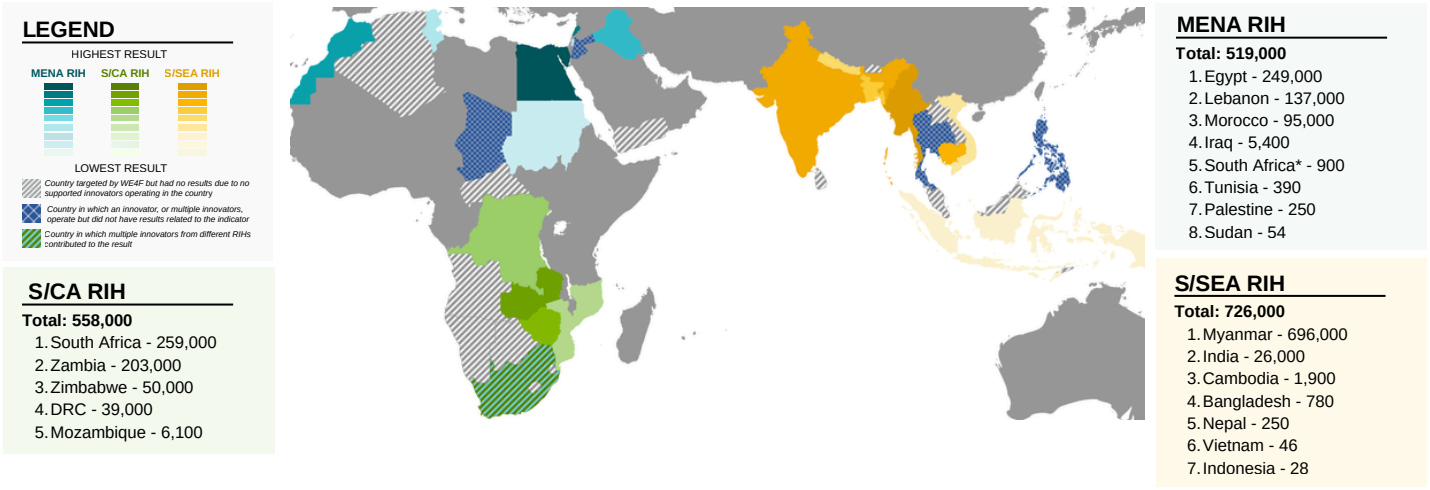
USAID RESULT 1.8 MILLION HECTARES



Across USAID-implemented hubs, WE4F innovations impacted over 1.8 million hectares of land through improved management practices, the majority of which was achieved by S/SEA innovators (40%), followed by S/CA innovators (31%), and concluded with MENA innovators (29%). External Surveyors also improved the accuracy of these results by taking precise measurements of land where innovations were applied, in contrast to innovators' previous reliance on total farm size data.



Country-Level Breakdown of Hectares of Land Under Improved Management Practices



**The MENA-attributed hectares under improved management practices in South Africa came from Platfarm, who received a TA to develop a digital tool for resource monitoring. As a result, the innovator expanded to South Africa along with their expansion in Egypt. They then reported these results as part of the WE4F participation because without the development of the digital platform, they would have not expanded to the country.*

Through the use of S/SEA-supported innovations, 726,000 hectares were improved, exceeding the hub's LOP target by almost 3 times. 96% of these hectares were in Myanmar which was also the highest country of impact across the three regions, accounting for 39% of all hectares improved. Nearly all of this land was improved by Village Link who helps farmers monitor and improve their irrigation efficiency through a weather services and agricultural advisory digital app. The scalability of their digital solution combined with the hub's high number of individual end-users served in the region, enabled the S/SEA RIH to impact immense areas of land.

Of the 558,000 hectares of land improved by S/CA innovations, most of which occurred in South Africa (47%) and Zambia (36%). Overall, the hub exceeded its LOP target by 24%. "Digital Solutions" improved the largest amount of land in the region, with Meat Naturally (South Africa) reaching 258,000 hectares. The second highest impact came from the technology category, "Other," which included the second highest impact innovator at the hub, COMACO, operating in Zambia, which impacted 194,000 hectares. Both innovators only provided their innovations to smallholders, most of whom were in the base-of-pyramid. While S/CA innovators worked predominantly with smallholders overall, the number of end-users served, and prominence of land conservation-focused innovations enabled the hub to impact more hectares of land than targeted.

In MENA, over 519,000 hectares were improved by innovations, exceeding the region's LOP target by 30%. In comparison to other regions where digital solutions have the greatest impact, these results were led by energy production and infrastructure innovations and irrigation solutions which improved over 65% of hectares reported in MENA combined. Egypt's Green Eagle Tech improved the most land in the region (over 147,000 hectares) through their solar irrigation system, followed by Lebanon's Green Essence whose microfinancing for solar energy and energy resale model improved over 118,000 hectares. While the hub's target was exceeded, MENA saw the smallest area of land improved when compared to other hubs. This is closely tied to the end-users served in the region. Though many MENA innovations were used on large-scale farms, the hub reached one-third to one-half as many end-users as other regions, leading MENA to see the lowest hectares of land improved. As noted for other KPIs, it was also a challenge to know the true number of end-users and results due to the innovators leveraging B2B models where vendors and distributors either prevented data collection during the first half of the program, or provided limited information through letters detailing number of end-users during the second half of the program.

INNOVATOR ILLUMINATION: UNIQUE TECHNIQUES TO ENCOURAGE BETTER LAND MANAGEMENT PRACTICES

The innovators of Southern Africa had a challenge on their hands. How does a business encourage end-users to engage with their innovation while also changing the traditional agricultural practices handed down from generation to generation? Two innovators, COMACO (Zambia) and Meat Naturally (South Africa), who led the hub in the number of hectares of land under improved management practices, had their own unique methods for reaching end-users.

COMACO supports agroforestry-based farming that reduces fertilizer use and improves nutrition, food supply and income opportunities. Through its product brand, "It's Wild! Products", the innovator sells smallholder farmers' products of peanut butter, rice, honey, dried mango and mushrooms, and others. To support the development of farmer cooperatives' operations and conservation efforts, COMACO provides training, performs audits in return for conservation dividend payments, and hosts weekly radio talk shows educating communities about conservation.

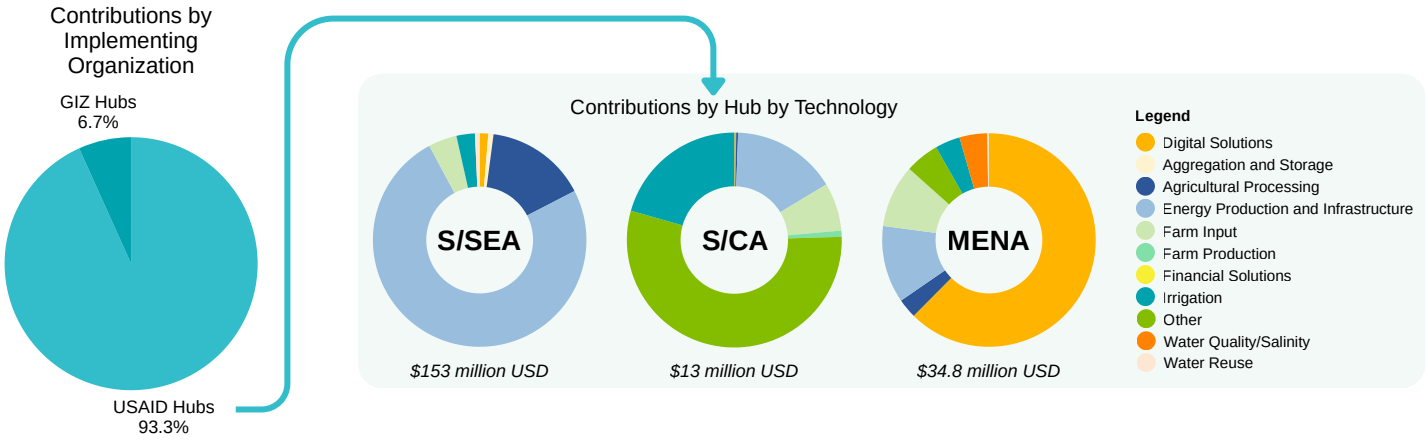
Meat Naturally provides conservation-focused communal livestock grazing systems that improved farmer market access and intentionally designed for rangeland restoration, improving management of the most hectares in the region. They use livestock auctions where communities gather to train them on rangeland management and empowers local communities to become eco-rangers upon completion of training.

INNOVATIONS SCALED

INVESTMENT MOBILIZED BY INNOVATORS

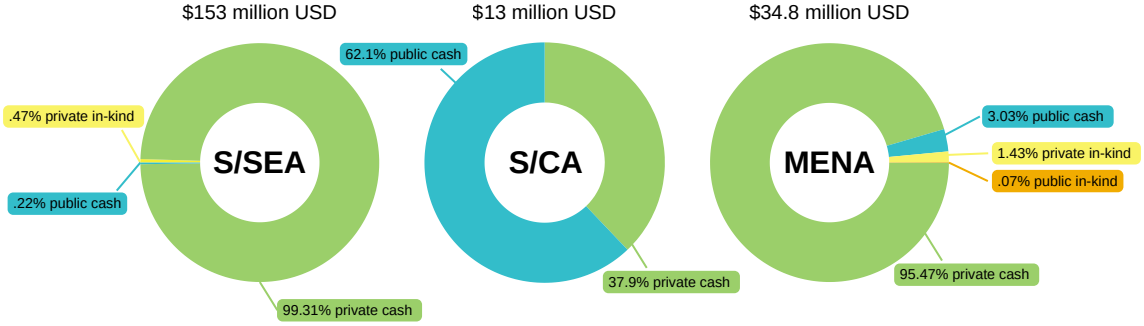
Investment Mobilized by Innovators in U.S. Dollars

GLOBAL TARGET $190 MILLION USD RESULT $216 MILLION USD



Fifty-one WE4F innovators from USAID-implemented hubs raised a total of $201 million USD. Across regions, a diverse mix of investment mechanisms/instruments were targeted by the Brokering Units in order to unlock much needed capital for the innovators. Overall successful deals skewed toward equity and quasi-equity deals for earlier-stage innovations or capital-constrained regions, while debt and blended instruments were more prevalent in mature investment ecosystems, where local financial institutions and DFIs were actively investing such as India.

Public versus Private Investment Breakdown within USAID-Implemented Regional Innovation Hubs

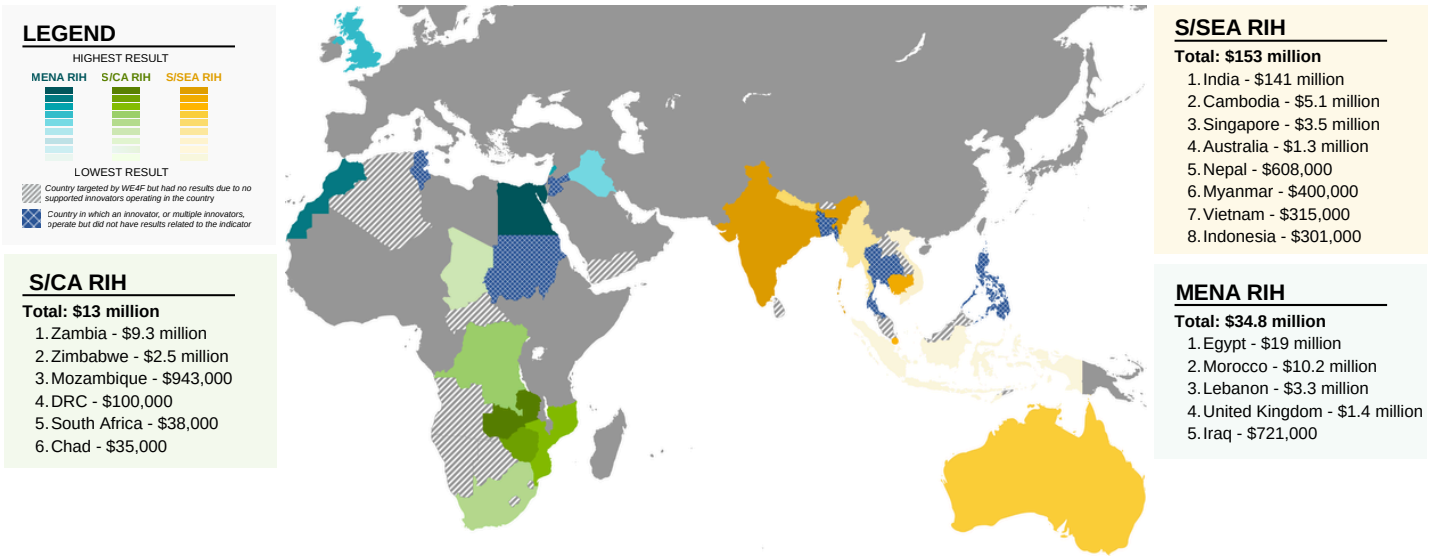


Of the $153 million raised by S/SEA RIH innovators, 92.4% was raised by innovators from India which equals 70.4% if were to include all investment raised across the three regions. Of the total LOP result, $113 million USD was contributed by a single innovator – Husk Power. A legacy innovator that became part of WE4F in 2020, Husk Power grew significantly in the time following their involvement in Powering Agriculture and had already been in the process of raising investment for several years. The S/SEA RIH supported them in due diligence and ad-hoc advisory to close deals with the United States Development Finance Corporation. This signifies the key lesson on investment raising being a time-consuming process and sometimes takes four to five years of continuous business performance to successfully close large ticket deals. It is worth noting that the S/SEA RIH did have 20 innovators that raised investment, but only four of them (Husk Power, S4S Technologies, Husk Ventures, and Agrosolar) were in the multi-millions. Of the remaining 16, four raised between $1.2 million USD and $1.6 million USD, while the remaining 12 raised under $1 million USD.

For the MENA RIH, they had a similar story to the majority of S/SEA innovators that raised investment. Twenty-two MENA innovators mobilized $34.8 million USD: five innovators had ticket sizes under $100,000 USD; five innovators raised between $100,000 USD and $500,000 USD; six innovators raised between $500,000 USD and $1 million USD; three raised between $1 million USD and $2 million USD; and the final remaining three innovators were the only ones to have ticket sizes about $2.5 million USD. Egyptian innovator Mozare3 was a shining example for the MENA RIH's Brokering Unit, raising $12.3 million USD. The MENA RIH's investment results came from four countries – Egypt, Morocco, Lebanon, and Iraq. Egypt represented 54% of the investment mobilized due to it being the country with the most innovators that were also strongest performers for the hub. Of the different financing mechanisms, 61% was raised through equity deals. Although debt was preferred by most of the innovators, the perceived risks from financing institutions and high collateral requirements were a high barrier for raising debt.

As forecasted in WE4F's investment landscape study, Southern Africa and Central Africa were the most difficult regions in which to raise private investments. External factors like political instability and persistent currency instability, along with strict exchange controls, created a profound bankability gap on the market side, while innovators' barriers related to a lack of deep understanding about the investment ecosystem and mismatched expectations. As a result of multiple internal and external feedback loops with innovators, investors, financing institutions, and other donor programs, the S/CA RIH decided early on to move away from broad investor outreach and focused on targeted, context-specific investment facilitation. Emphasis was placed on blended and catalytic finance, realistic funding pathways like results-based financing, and investors already active in comparable risk environments. Rather than encouraging unlikely large raises, innovators were supported to pursue staged and defensible financing strategies aligned with market realities. Among these challenging scenarios and through a regular "pivot-and-watch" strategy, S/CA RIH innovators were still able to raise $13 million USD, of which 62% was public cash. Although their result was smaller when compared to the MENA or S/SEA RIHs, within the context of their region, it is a huge achievement to help raise funding for nine innovators in less than three years of program operation.

Breakdown of Investment Mobilized by Innovators Based on Country of Incorporation



There are three innovators whose headquarters are outside of WE4F target countries. Their operations, however, span several countries inside of WE4F target countries: Alva Tech, headquartered in the United Kingdom, who raised $1.4 million USD and operates in Morocco, Namibia, and Kenya; ATEC, headquartered in Australia, who raised $1.3 million USD and operates in Bangladesh and Cambodia; and Agrosolar, headquartered in Singapore, who raised $3.5 million USD and operates in Myanmar and Cambodia. Investment mobilized by these innovators served the purpose of expanding operations within target countries to reach more end-users or expand to new markets.

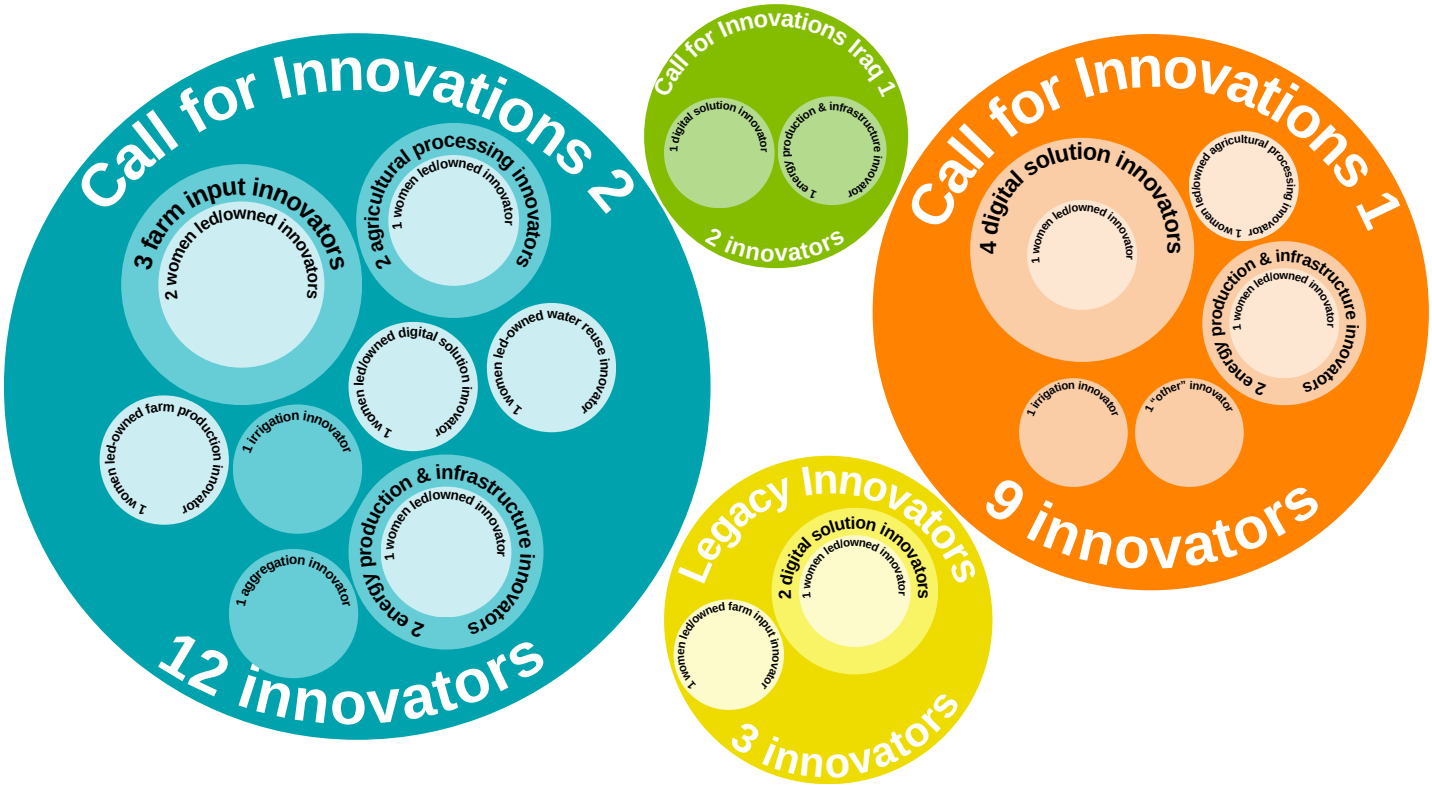
Investment Mechanisms Utilized by Innovators and Examples of Investors Who Provided the Mechanism

Middle East and North Africa Regional Innovation Hub		
Investment Mechanism	**Countries of Use**	**Example Investors**
Loans	Egypt Lebanon Morocco	IM Capital U.S. Small Business Administration
Debt	Egypt Morocco	Redacted for privacy concerns
Equity	Egypt	Redacted for privacy concerns
Shareholder loans	Lebanon	Redacted for privacy concerns
Crowdfunding	Egypt Morocco	Frankly.green Seedrs
South and Southeast Asia Regional Innovation Hub		
Investment Mechanism	**Countries of Use**	**Example Investors**
Convertible notes	Bangladesh Cambodia India	Acumen
Equity	Cambodia Myanmar India	SOGO Energy Mekong Capital Schneider Electric Energy Access Asia
Debt	India Nepal	India Renewable Energy Development Agency Samunnati Grip Investment Caspian
Blended finance	India	Axilor Ventures 1crowd Acumen Elea Artha Echoing Green 1to4 Foundation Swiss Re-Foundation
Southern and Central Africa Regional Innovation Hub		
Investment Mechanism	**Countries of Use**	**Example Investors**
Loan	Zimbabwe	Opes
Results-based financing	Zimbabwe Zambia	Social Impact Managers & Advisors Beyond the Grid Fund
Debt	Zambia	U.S. Development Finance Corporation

PERCENTAGE OF INNOVATIONS SCALED

Share of Supported Innovators that Successfully Marketed Their Innovations with Profit

GLOBAL TARGET	8%	RESULT	33.1%
USAID TARGET	OF THE 8%, 25% ARE WOMEN-LED AND/OR OWNED	RESULT	46%



Globally, WE4F surpassed its target of 8% of innovations scaled by 25 percentage points. In addition, similarly to the LOP targets for number of BoP end-users and number of women end-users, the USAID-implemented hubs were required to pursue a secondary target of 25% of the scaled innovations being women-led and/or -owned. The USAID-implemented hubs surpassed this secondary target by 21 percentage points. Hubs achieved this result by putting a deliberate and strategic emphasis on market access, partnership development, and business growth support with a focus on gender lens investing, recognizing that commercialization and scaling are critical to long-term sustainability. Within the context of all CFI 1 innovators, the “Digital Solutions” category had the highest number of successful innovations at four, and when bringing all innovators together, it was the most successful category at seven innovations successfully marketed. In terms of women-led and/or -owned businesses, it tied with the category of “Farm Inputs” at three innovators. When grouping all CFI 2 innovators, the most successful category was “Farm Inputs,” at three innovations; in total, it was the third-highest category at four innovators. The second most successful innovation category was “Energy Production and Infrastructure,” though its five innovators never led a singular CFI due to them being spread across three different cohorts (CFI 1, CFI 2, CFI Iraq 1).

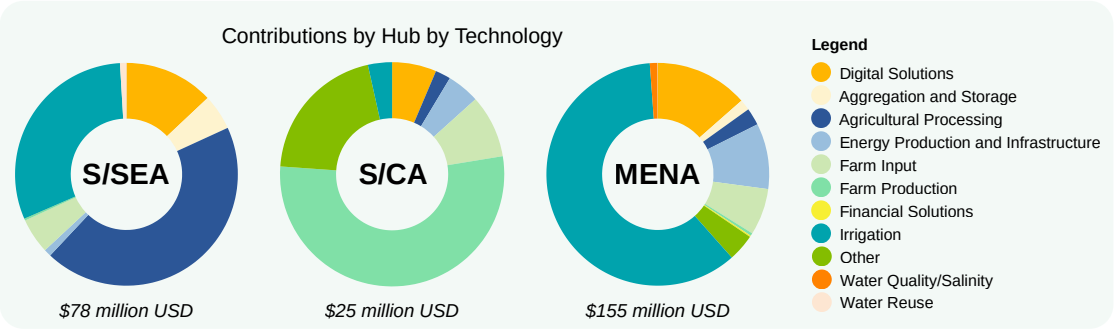
Examples of Why Innovations in Different Hubs Scaled

South and Southeast Asia Regional Innovation Hub	Southern and Central Africa Regional Innovation Hub	Middle East and North Africa Regional Innovation Hub
Egreen mitigated consumer's barrier to use the product/service through end-user financing or by keeping the costs low.	COMACO combined broad outreach (e.g., radio shows), strong distribution through cooperatives, and product diversification.	Green Shovel improved its market outreach and financial management by connecting with agricultural extension services in the Kurdistan Region of Iraq, increasing visibility among farmers in Erbil and enabling a targeted assessment of farmers' needs for smart farming solutions.
S4S Technologies enabled access to markets through solar-powered food processing that connected farmers to processors, and then to off-takers.	FarmHut and KivuGreen were driven by the low marginal cost of digital outreach, although each had to adapt their platforms to meet the needs of diverse communities.	Bahir Al Kamal received TA to strengthen its internal controls and financial management systems and streamline the procurement and on-site implementation of PV panels for solar pumps.
aQysta met an essential need of end-users – irrigation through its hydro-powered pump as well as solar-powered pumping in areas of Nepal and Indonesia with limited access to electricity.	Reel Gardening benefited from the universal and recurring demand for seed across agro-based communities in the region.	GoBaladi expanded its production facility to scale output and reach more end-users.
Oorja made gross profits by demonstrating its ability to manage costs effectively and possibilities to turn a net profit in the short to medium term (where grants could be used to accelerate).		Green Essence received TA to introduce an end-user financing that enabled greater adoption among smallholder farmers, alongside investment readiness assistance to strengthen its ability to attract financing and scale operations.
		Egymag received TA for market research and marketing to better target demand and position its products, alongside TA to develop business models and partnerships to scale its innovation among women in rural households.

GROSS SALES FOR INNOVATORS

Innovator Gross Sales in U.S. Dollars

USAID TARGET $75 MILLION USD RESULT $259 MILLION USD



In addition to tracking innovators' scaling as well as the investment they mobilized, innovators supported by USAID-implemented RIHs also monitored gross sales. By tracking gross sales, innovators and their supporting staff at the RIHs were able to observe which end-users generated the most sales, what types of innovations earned the most revenue, and gaps that existed within the innovators' sales and marketing activities.

The USAID-implemented program target was $75 million USD, with the program surpassing it by $184 million USD. Most of the results originated from the MENA RIH ($155 million USD); their result was almost double the S/SEA RIH's result ($78 million) and about six times more than the S/CA RIH's result ($25 million USD). Gross sales varied widely at the regional level and by technology type as a result of the diverse ecosystems in which innovators worked coupled with the differing end-user profiles. Comparing results based on singular parameters does not depict an accurate picture of the context in which each innovator operates.

PROGRAM DESIGN

REGIONAL INNOVATION HUB SET-UP

USAID CONTRACTING PROCESS AND HUB DESIGN

Designed in 2019 to build on the momentum of predecessor programs Securing Water for Food (SWFF) and Power Agriculture: An Energy Grand Challenge (PAEGC), WE4F addressed the identified risk that promising water-energy-food innovators would stall without continued support. To ensure the program could support innovators in reaching the next level of scaling, the program introduced enhanced offerings of investment facilitation, enabling environment work, ESG integration, and gender mainstreaming. A key lesson of Powering Agriculture was the benefit of operating locally through a hub model while global management occurred through Secretariat Units. On the USAID side of implementation, innovator support was delivered through RIHs in S/SEA, S/CA, and MENA that were selected through a competitive Request for Proposal process organized by USAID, ultimately awarding consortium-led contracts for each region.

In early 2020, the USAID Secretariat was onboarded to build the program's foundation before the RIHs were contracted. Over the course of the first six months, the unit developed WE4F's guidelines, standard operating procedures, and key technical documents. Diverse in-house expertise, spanning innovator TA support, previous SWFF management, MEL design, and B2B and public sector-to-private sector communications, enabled the unit to hit the ground running. As a result, a prize competition was conducted before the launch of the hubs, along with the first CFIs being conducted within the same calendar year. The unit also took a hands-on role during the onboarding of the first cohort of innovators in S/SEA and MENA, helping hub staff adjust to the new program style while building their capacity to run the RIHs. When the S/CA RIH launched a year later, the Secretariat Unit ran intensive knowledge transfer sessions to quickly bring it up to speed. When comparing the LOP results of the different hubs, the return on investment for the intensive training and support is clearly identifiable – the S/CA RIH's results closely match those of the other two hubs despite having one year less of operations.

Late 2020 saw the contracting of the S/SEA and MENA RIHs, with the S/CA RIH following a year later in 2021 due to fundraising delays. In retrospect, the consortium structure proved effective. The combination of diverse organizational expertise and locally embedded staff was central to managing innovators well and driving strong program results. The MENA RIH (made of Berytech with subcontractors Cewas, International Water Management Institute (IWMI), and Chemonics Egypt Consultants), the S/SEA RIH (made of Tetra Tech with subcontractors CrossBoundary and DevWorks International), and the S/CA RIH (made of Tetra Tech with subcontractors OpenCapital and IWMI) brought strong regional presence and relevant experience in innovation scaling. Berytech was operational from day one, drawing on its existing incubator infrastructure and staff, while Tetra Tech required a few months to complete hiring – a natural reflection of the different organizational setups underpinning each hub.

Each hub operated as an integrated unit led by the RIH Manager, who oversaw program operations, ensured quality and timeliness of innovator support, and served as a key point of contact with the Secretariat. Technical assistance delivery was coordinated by the Technical Assistance Facilitator in close collaboration with Country Coordinators, who worked directly with innovators to identify needs and support innovators' journey in the program. Country Coordinators played a central role in supporting innovators across grants management, MEL, TA, and business development, leveraging local knowledge and language skills to deliver context-specific support. Grants Specialists and Country Coordinators also supported PAS compliance and governance strengthening, while Environmental and Gender Specialists helped integrate these critical ESG considerations into innovators' business models.

The Enabling Environment Advisor, together with Country Coordinators, developed country profiles and addressed ecosystem challenges affecting innovators via advisory TAs and partnership identification. Investment facilitation support, managed by the Brokering Unit, helped innovators prepare investment documentation and connect with potential investors, with external service providers engaged to complement the Brokering unit as per needs. The MEL Specialists played the key role in supporting innovators through each step of data collection while liaising with Secretariat MEL Manager with critical innovator feedback that made the MEL cycles efficient in the long run. Similarly, Communications and Knowledge Management (CKM) Specialists at each hub were key in highlighting innovator stories, managing peer-peer networking, and sharing key lessons learned. Each of the hub staff portfolios was aligned with corresponding Secretariat staff, which led to simultaneous improvements and implementation of multiple activities with Secretariat overseeing the quality of implementation at each step.

Division of Responsibilities by Implementing Partner

Organizational Functions	South and Southeast Asia RIH	Southern and Central Africa RIH	Middle East and North Africa RIH
Project Management Unit	Tetra Tech	Tetra Tech	Berytech
Technical Assistance Unit	Tetra Tech	Tetra Tech	Chemonics Egypt
Brokering Unit	CrossBoundary	OpenCapital	Berytech
Enabling Environment Unit	Devworks International	IWMI	Cewas
Communications and Knowledge Management Unit	Tetra Tech	Tetra Tech	Cewas
MEL Unit	Tetra Tech	Tetra Tech	IWMI
ESG Advisor	Tetra Tech	Tetra Tech and IWMI	IWMI
Country Coordinators	Tetra Tech and Devworks	Tetra Tech	Berytech and Cewas

The RIH/Secretariat structure, combined with the program's holistic support offering, was instrumental in building WE4F's ability to attract Mission and Embassy co-funding. In total, $4.8 million USD was raised from Sida Iraq, USAID Iraq, USAID's Regional Development Mission for Asia (RDMA), and the USAID Zimbabwe Mission. Beyond direct fundraising, the structure also enabled local Missions and Embassies to engage bilaterally with WE4F hubs at the regional level, deepening country-level ownership and alignment.

PROGRAM POINT: USAID VERSUS GIZ OPERATING STRUCTURE

Within the operating structure of WE4F, there were differences in how the USAID-implemented Secretariat Unit and RIHs were funded and operated versus the GIZ-implemented Secretariat Unit and RIHs. Aside from the USAID-implemented half of the program covering more countries and regions, along with having more donors provide financial, technical, and social support, another key difference was the method in which the Secretariat Units and hubs were developed. For USAID, each hub went through a competitive procurement process that resulted in contracts which had specific outcomes/indicators for the hubs' work. The usage of contracts for the implementation of the hubs created a hierarchy that ensured USAID Team Leads were the contract leads and mechanisms could be utilized to ensure hubs followed required procedures, guidelines, and recommendations from the Secretariat Unit. Each staff member and implementing partner within the USAID-implemented activities was incentivized to continuously pursue new KPI and contractual results. Within GIZ-implemented activities, there was significantly less use of contractors to complete the program's work. Most staff within the GIZ-implemented RIHs were GIZ staff, so there was less of a hierarchy within their program. The independent nature of the GIZ-implemented hubs enabled staff to provide solar-powered irrigation system trainings, develop university partnerships, and leverage internal connections to implement program-to-program partnerships.

Poignant Moments

October 2019	December 2019	January 2020	March 2020
WE4F officially launches at Social Capital Markets (SOCAP) in San Francisco, California through the support of USAID, Sida, Ministry of Foreign Affairs of the Government of the Netherlands and German Federal Ministry for Economic and Development Cooperation (BMZ). It is based on its predecessors SWFF and PAEGC.	WE4F launches the Asia EDGE Ag-Energy Prize.	USAID Secretariat Unit staff start joining WE4F and collaborating with the GIZ Secretariat Unit to design program guidelines, strategies, policies, and standard operating procedures.	The United States, Germany, and donor partners enter lockdown as COVID-19 virus spreads. All WE4F activities shift online.

November 2021	September 2021	July 2021	March 2021	November 2020	July 2020
The S/CA RIH announces its first regional CFI.	Following the MENA RIH receiving a buy-in (funding of program activities) from USAID Iraq, the first Iraq CFI is launched.	Implementing partners for the S/CA RIH are selected – work plans, regional strategies, and onboarding activities commence.	European Union joins WE4F as a donor partner, funding the implementation of GIZ-led activities.	The MENA and S/SEA RIHs launch their first Calls for Innovations (CFI).	Implementing partners for the S/SEA and MENA RIHs are selected – work plans, regional strategies, and onboarding activities commence.

June 2022	May 2022	December 2022	February 2023
The S/CA RIH hosts its first Regional Convening in Johannesburg, South Africa.	The S/SEA RIH holds its first Regional Convening in Bangkok, Thailand and the MENA RIH holds its first Regional Convening in Pyrgos, Cyprus.	The first Global Convening is hosted by the USAID Secretariat Unit with innovators and program staff from all hubs as well as donor partners in attendance. It is hosted in Johannesburg, South Africa.	The Norwegian Development Cooperation Agency joins WE4F as a donor partner funding the implementation of USAID-led activities.

November 2024	April 2024	April 2023	December 2023	August 2023
The final global Annual Convening is held in Marrakech, Morocco.	The S/SEA, S/CA, and MENA RIHs announce the winners of the first round of the OCFI.	The MENA RIH, S/SEA RIH, and S/CA RIH launch their Open Calls for Innovations (OCFI).	Second buy-in from USAID Iraq and Sida Iraq.	The S/CA RIH received a buy-in from USAID Zimbabwe to launch the Zimbabwe Biogas OCFI.

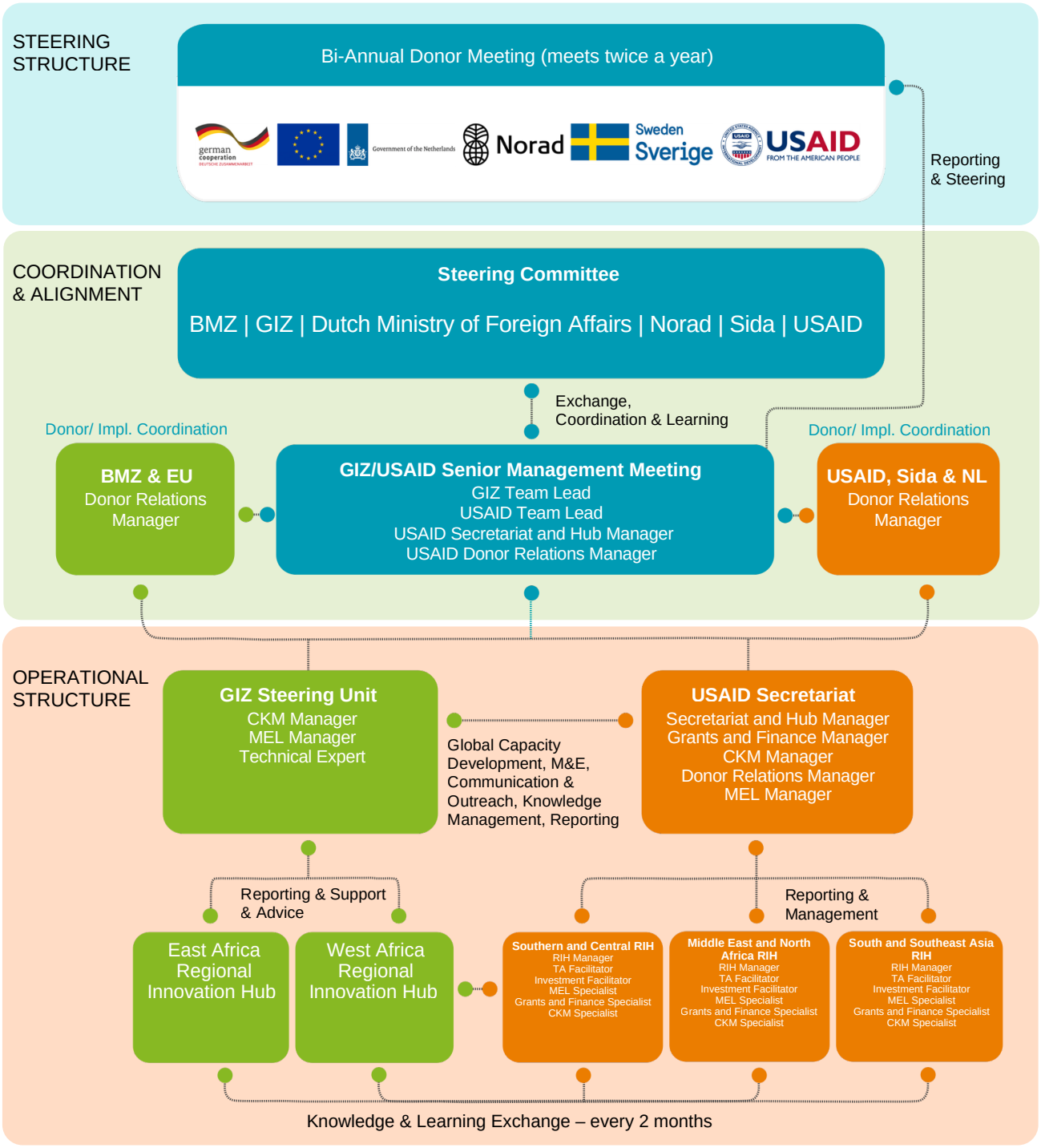
December 2024	January 2025	March 2025	September 2025	February 2026
The GIZ-led Secretariat Unit and East Africa and West Africa RIHs conclude their activities.	An Executive Order by the Trump Administration shuts down USAID and the three USAID-implemented RIHs are shut down.	The MENA RIH begins a bridge contract, funded by the Swedish Embassy in Amman to complete its lessons learned activities, audit reports, grants, and TA instances.	Through the support of Sida, the previously USAID-led Secretariat Unit, S/SEA RIH, and S/CA RIH, under the contract with International Water Management Institute (IWMI), begin a bridge contract to complete the final financial and narrative reports, provide TA instances to innovators affected by SWO, and transfer lessons learned and key recommendations to Donor partners and other interested stakeholders in the water-energy-food nexus.	Public WE4F lessons learned webinar series is hosted to disseminate knowledge on investment facilitation, gender mainstreaming, end-user financing for BoP end-users, and leveraging peer-to-peer learning for networking and capacity building. Innovator support provided through the IWMI bridge contract concludes.

LONG-TERM SUSTAINABILITY OF THE REGIONAL INNOVATION HUBS

Five years of implementing WE4F through the MENA RIH, helped the Berytech consortium design and develop cutting edge approaches and offerings for innovators. It led to them not only achieving exceptional results but also building robust processes for continuing to support the ecosystem beyond the existence of a global WE4F program. As a result, the MENA RIH is still seen as relevant to the region because its WE4F offerings were future ready. The hub will continue its operations through WE4F 2.0, which is funded by the Embassy of the Netherlands in Lebanon, the Swedish Embassy in Amman, and the Swiss Agency for Development Cooperation.

Tetra Tech faced a different set of circumstances such as reduced donor funding and a primarily consulting-based structure that made continuation without external financing difficult. The hub has since ceased operations. Nonetheless, Tetra Tech ensured meaningful continuity by transferring lessons learned and key processes to organizations and consortium partners – IWMI, OpenCapital, and CrossBoundary – who continue to deliver similar programming in the region.

ORGANIZATIONAL STRUCTURE AND STAFF POSITIONS



Over the course of WE4F's implementation, 121 individuals worked on the program. At any given time, there were 77 staff members across the various position categories of full-time positions, Cooperating Country National positions, part-time positions, and subcontractors. Many of the Secretariat and RIH staff were in the early-to-mid stage of their career, bringing high-energy, motivated attitudes to the roles, along with an openness to learning as they grew in their roles.

The hub staff were locally-based in their specific regions and were from said regions, with few exceptions of individuals who were from other regions but had lived and worked within the RIH's target countries. Long-term. At any given time during the program, 16.8% (13 out of 77) of the program staff was American. When considering from an implementation-only lens, then 7.3% were Americans (5 out of 68). Across the key positions highlighted in the above organizational chart, within the USAID-implemented Secretariat Unit and RIHs, most of the positions were held by a woman at some point during the program. The exceptions were the RIH Manager and the S/CA and MENA Investment Facilitator positions which were only held by men.

STAFF RETENTION

The key to WE4F's success was its staff. The program saw strong staff retention at both the hub and Secretariat levels. All the Secretariat Unit staff stayed with the program from inception to closure, with the exception of one change in the Grants and Finance portfolio. The hubs also maintained strong staff retention throughout the program, though the contexts and approaches differed. In all three USAID-implemented RIHs, most key personnel remained engaged for more than 80% of the program's duration, with singular changes in Grants and Finance, Hub Management, Communications and Knowledge Management, and Brokering Unit. Almost all Country Coordinators retained their positions from program launch to completion. Prior to the Stop Work Order, the high rate of staff retention was sustained through rigorous recruitment, structured onboarding, and deliberate efforts by Secretariat and RIH leadership to maintain clear roles and create a positive working environment that provided learning and growth opportunities.

Additionally regular virtual calls and in-person meetings tied to site visits or convenings enabled the program to consistently set culture and build rapport among staff at all levels. During the internal lesson learned series, most of the program staff noted that working with exciting innovators on WE4F-thematic goals benefited self-motivation. By offering competitive salaries and benefits packages, the program rewarded skills and continued staff development.

In all cases, retention was central to building and preserving institutional memory, deepening contextual understanding, and maintaining strong relationships with innovators and donors alike. When departures did occur within the program, standardized handoff processes and the Secretariat Unit's oversight and guidance ensured continuity.

This continuity proved particularly significant as it enabled a smooth re-start of the WE4F during the bridge contact, supporting an orderly program close-out while contributing directly to increased innovator impact through strategic TAs, the transferring of lessons learned to the wider ecosystem, and preparation of final program reports.

CAPACITY DEVELOPMENT AND INSTITUTIONAL KNOWLEDGE MANAGEMENT

Within the context of staff capacity development, as well as institutional knowledge management, there were several learning activities conducted: 1) cross-hub learning sessions facilitated by the Secretariat Unit on key technical topics; 2) bi-weekly or monthly portfolio meetings; 3) bi-weekly Secretariat Unit-RIH meetings; and 4) the provision of portfolio-relevant trainings either conducted in-house by Secretariat, or available through external opportunities.

In terms of capacity building these sessions enabled program staff to learn from each other, explore the RIHs' differing methods of implementation and adoption of solutions, and enabled program-wide understanding of the operationalization of key topics like gender mainstreaming, climate resilience, environmental sustainability, and base of the pyramid integration. These learnings were transferred to the Donor Partners by the Secretariat during the quarterly Steering Committee meetings. In terms of institutional knowledge management, by transferring knowledge horizontally and vertically, it enabled the program to decentralize all knowledge. No one individual exclusively held all information of results, lessons, processes, barriers, or challenges. Within the context of program reporting, it enabled the contributions of different staff members when someone was unavailable, Within the context of program implementation, it enabled greater connection and capacity building for innovators and external stakeholders who partook in WE4F convenings, webinars, and other events. Staff knew who their counterparts were in other hubs, could lean on them for support, and in conjunction with the Secretariat, communicate the gained and synthesized knowledge publicly. For instance, before the S/CA RIH's launch, the Secretariat initially facilitated learning sessions with the MENA and S/SEA hubs. Later, after the S/CA RIH implementing partners were selected, they regularly reached out to the MENA and S/SEA RIHs for their experiences launching the hubs. During the 2024 International Women's Day, the MENA RIH worked with the Secretariat Unit to host a global End-User Financing Webinar that brought together hub experts, innovators, and external partners from each RIH.

The monthly – or quarterly – portfolio calls facilitated by Secretariat staff provided context and guidance on effective integration of feedback and emergent lessons. For MEL meetings, it served as a regular forum for staff to share lessons learned and collaboratively prepare for upcoming innovator MEL cycles. Within the context of TA, Grants and Finance, and CKM, these meetings ensured program timelines stayed on track. For CKM, they also served as an opportunity to explore new tools, discuss communications strategy, and explore collaborations for new knowledge dissemination campaigns. On a weekly basis – eventually graduating to a bi-weekly basis – the Secretariat Unit met with each RIH to discuss ongoing activities and provide immediate answers to hubs' questions. These meetings resulted in increased quality of delivery as the program progressed. By the third year of operations, all the hubs were in automatic mode in relation to implementation and handling innovator expectations thereby marking the importance of regular communication and incorporating feedback loops at all levels.

Staff were also provided training opportunities to increase their skillsets in areas identified by the Secretariat Unit, RIH requests, and a survey conducted in June 2024. One notable RIH request that became a popular learning activity was the Program Staff Day at the 2023 and 2024 Annual Convenings. These sessions enabled staff who might not have regularly interacted with each other the opportunity to share their portfolio experiences and develop new knowledge connections. Through the staff survey, a strong interest in communications methods was also identified, so external training on water communications were sourced for those interested in expanding their capacity.

MONITORING, EVALUATION, AND LEARNING

Within the context of WE4F, monitoring, evaluation, and learning (MEL) supported the collection and verification of program results as well as the identification of colleagues and opportunities to improve the support provided to innovators. Additionally, by presenting MEL reporting as a valuable tool for innovator learning and business strategy, as opposed to a compliance exercise, the innovators used WE4F MEL data for decision-making, fundraising, and internal operations management.

As the innovator portfolio grew and technology types diversified, the program's MEL approach had to become increasingly flexible and technically varied, keeping documentation requirements feasible for innovators operating in vastly different contexts. Additionally, MEL documentation templates were provided in formats mirroring commonly held business records. By matching MEL documentation to existing business templates, the innovators were able to use documentation that was already needed for other activities to meet their program requirements while strengthening their overall system management as WE4F reporting occurred every six months.

When innovators were unable to conduct monitoring activities on their own, either due to limited bandwidth within their organization, lack of familiarity with the indicator being collected, or societal norms that prevents the innovator from requesting certain information from the end-users, then WE4F deployed
External Surveyors to conduct third-party field studies assessing innovators' impact. Their findings filled critical gaps in innovators' MEL capacity, identified unintended outcomes of their innovations, and corrected under-reported nexus impact. Innovators reported high satisfaction with the studies, integrating end-user feedback into their business strategies, and using the data collected to ease their MEL reporting burden. For the different hub portfolios, these External Surveyor reports were also beneficial for identifying storytelling opportunities, collecting on-the-ground feedback from end-users on how innovators' operations could improve (a benefit for the Technical Assistance Unit), and, often times, improving the innovator's documented result which could be beneficial during the pursuit of investment.

Despite these benefits, demands on managing staff were significant enough to reduce capacity for strategic MEL activities. In response to this and to improve local coordination, management of the External Surveyor Program was moved from the USAID Secretariat to the RIHs.

INNOVATOR SELECTION AND JOURNEY

INNOVATOR RECRUITMENT

The selection criteria for WE4F was developed during the inception and design phase of the program in 2019. It was based on the lessons learned from SWFF and PAEGC. Both legacy programs' mandate was to onboard innovations at the idea and pilot stage and support them to reach commercialization stage. However, at the end of the legacy programs, it was assessed that most of the legacy cohort would need continuous support before they could raise private investment as most of the innovators could only reach 1,000 to 5,000 end-users by the end. Hence, to build on the work of legacy programs and with a novel intention to exclusively focus on commercial stage innovations, the selection criteria for WE4F was devised to require innovators having reached 1,000 to 5,000 end-users depending on them being low-cost or high-cost innovations. This was a key eligibility criterion, along with other criteria focusing on onboarding women/youth led innovations as well catering to both climate mitigation and adaptation, to help onboard organizations who are either ready or could be made ready during the WE4F timeline, to raise private funding and become self-sustainable in future. Although, the criteria with number of end-users, would exclude a lot of interesting early-stage innovation; in the hindsight, it helped select a portfolio that collectively raised $201 million USD in three regions. An achievement which would not have been possible without strict eligibility criteria being put right from the start.

One of the donor mandates during the WE4F design was to transition some of the graduate innovators from SWFF and PAEGC to receive TA-only support without any monetary award. The legacy innovators were selected post drafting of the selection framework from the Secretariat to allow for unbiased selection. Secretariat had already completed the selection criteria and started engagement with legacy innovators even before the hub contracts were awarded. This allowed the hub team to start some of the TAs early and test their models of delivery as the CFI process would take months before onboarding of new innovators. It also allowed hub teams to understand the different business models of legacy innovators, who were rather mature in their operations. Some of the legacy innovators eventually applied in the call for innovations in the second round and received grants as the TAs had contributed to the improvement in certain areas of their business.

The integration of legacy innovators into WE4F was relatively smooth, as they were already familiar with the program's approach and better prepared for pre-award survey (PAS) compliance. Their inclusion enabled them to continue their business growth and achieve greater impact. Ultimately, the S/SEA RIH onboarded 5 legacy innovators (Claro Energy, Promethean Power Systems, Husk Power, MimosaTEK, and Adaptive Symbiotic Solutions) and S/CA RIH onboarded 2 innovators (Meat Naturally and Reel Gardening). Unfortunately, the MENA region was sparsely represented in legacy programs, and none of the legacy innovators fit the eligibility criteria.

With respect to onboarding new innovators in the program via regional competitive calls, the three hubs successfully administered seven CFI rounds and nine OCFI rounds onboarding a total of 129 innovators during the timeline of the program. Of the total 129 innovators onboarded, 116 were given grants and 13 were onboarded as TA-only innovators.

Under CFI1, and partly in CFI2, the hubs received the most applications from countries with a comparatively mature innovation ecosystem. The MENA RIH featured innovators from Egypt, Morocco, and Lebanon. The S/CA RIH onboarded most of their innovators from Zimbabwe and Zambia. While S/SEA RIH had most of their innovators from India, and a couple from Nepal, Vietnam, and Indonesia. One of the reasons to transition from the time-bound CFI approach to Open CFI was to allow hubs more time for focused outreach in under-represented countries. Through the OCFIs, the hubs selected a total of 39 innovators in multiple rounds of reviews between the years 2023 and 2024 with fair success in onboarding innovators from lesser represented countries and/or having niche business models. The OCFIs also brought in more adaptation-based innovation as well as women led/owned organizations. MENA selected innovators from Morocco, Jordan, Yemen, Sudan with increased applications from Algeria, however none of them could succeed at the final stage. Yhe S/SEA RIH, on the other hand, onboarded their first innovator from the Philippines after considerable outreach efforts, as well as expanding their footprints in Thailand, Cambodia, and Indonesia. The S/CA RIH's efforts paid dividends with innovators being selected from DRC, Chad, and Mozambique. In order to onboard innovators from under-represented countries, the CKM Manager worked with the hubs' respective CKM Specialists to develop materials in local languages to attract initial interest. To develop more on-the-ground connections, the MENA, S/SEA, and S/CA RIHs sent representatives to business events and conferences in the target countries, with the S/SEA RIH opting also to hire a Country Coordinator in the Philippines. Due to the rolling nature of the OCFI application process, the CKM Unit was able to take a long-term approach to the OCFI outreach materials. One country would be focused on at a time, with regional materials and analytic monitoring continuing to occur. After a set period of time (one to three months), the data would be reviewed to determine what worked well and what needed to be changed, then new materials and a new country focus would be pursued.

In relation to the type of innovation, earlier calls in 2021 and 2022 featured mature innovation types like solar-powered irrigation and value chain solutions, biomass and organic composting, automated weather forecasting services. As pivots were made to the outreach approach and the decision to take a holistic portfolio approach, almost every hub was able to select niche and innovative solutions ranging from climate-smart aquaculture, solar dome dryers, regenerative and precision agriculture solutions to black soldier fly-based composting, wastewater treatment. One of the key observations is the integration of end-user financing mechanisms in some of the innovators onboarded via CFI2 and OCFI showcasing the focus and continuous efforts of WE4F to diversify the innovation portfolio.

The selection of diverse and sustainable innovations is also attributed to the agile, flexible, and focused approach of each RIH, under the guidance of USAID Secretariat, combined with, refreshed outreach strategy, quick decision-making and pivots made based on assessment of early CFI portfolio, a pivot that led to the program over-achieve almost all of its program targets. In addition, the fact that each hub team possessed staff with a diverse set of skills and geographical experience along with having an independent Regional Advisory Body (RAB), played a key role in selection of a diverse and hugely successful WE4F portfolio. The RAB was instrumental in the selection process of the innovators, advising on their technical and financial milestones, and offering strategic recommendations that helped shape the journey of the innovators. Members of the RAB brought extensive experience in agriculture, energy, climate resilience, and gender integration.

The USAID Team Lead and Secretariat Unit guided the hubs at each level of CFI/OCFI processes with USAID Team Lead and Secretariat Manager reviewing and approving the final award decisions by taking Steering Committee feedback in consideration. This multi-level selection approach brought fairness, quality, and ensured that the application-to-contracting cycle for innovators is no longer than six months.

Legacy innovators from PAEGC and SWFF required less onboarding and hit the ground running on hub support activities, speeding up their scaling journey during WE4F. However, working with them has benefits and drawbacks of working as TA-only innovators without milestone payments tied to MEL compliance, most legacy innovators contributed little to hubs' aggregate results, with the exception of Meat Naturally who made significant contributions to S/CA RIH's total hectares. At convenings, legacy innovators were typically at a more mature business stage than other cohorts, creating opportunities to share valuable learning with other innovators.

The rolling and frequent nature of OCFIs created chaotic MEL cycle timelines, heavily increasing the burden on hub staff managing several overlapping cohorts' reporting periods. Given OCFI innovators' limited time in the program, there was limited opportunity for them to demonstrate meaningful impact especially when considering the length of growing seasons and gradual scaling process.

Innovators operating in conflict-affected regions received targeted MEL accommodations tailored to their circumstances. The CFI Iraq cohort received comprehensive technical MEL training from the USAID Secretariat MEL Manager while country coordinators provided live Kurdish translation. Key MEL guidelines and resources were also translated to Kurdish. This cohort-tailored support led CFI Iraq to become one of the highest-performing cohorts in the program. DRC innovators also received targeted MEL TA and timeline accommodations during local conflicts in late 2025. During COVID lockdowns, from 2020 to 2021, innovators across all USAID hubs were encouraged to use external studies and remote data to assess their impact and meet documentation requirements while staff strongly discouraged in-person data collection for MEL reporting purposes. The adaptive and flexible MEL approach laid the foundation of strong program-level results that WE4F achieved.

Following the selection of WE4F innovators through the CFIs and OCFIs, the key focus was on successful and efficient onboarding of innovators according to the program's legal and processual requirements. Some of the key aspects of the onboarding process were conducted simultaneously to provide for as much time for innovators for implementation activities post onboarding.

PRE-AWARD SURVEY

The PAS was a critical component of the program, designed to assess and strengthen innovators' internal control systems and position them to effectively manage donor-funded projects and adopt investor-ready policies. The analysis revealed that innovators faced structural and operational gaps largely due to their varying stages of business maturity. While some had governance policies in place, these were often inadequate or misaligned with PAS standards; others lacked formal policies altogether. In addition, operational constraints such as limited team capacity and insufficient technical know-how further hindered compliance. Key challenges included understanding PAS requirements, developing core policies (HR, administration, financial management, and procurement), strengthening leadership capacity, and improving project management systems. Importantly, a strong positive shift in innovators' perceptions of PAS impact was observed over time. For the S/SEA RIH, while only 33% of innovators reported a positive impact at the start of the program in July 2021 by December 2023, the positive impact responses increased to 100% by December 2023 and remained consistent through December 2024. For the MENA and S/CA RIHs, innovators noted the positive impact from the launch of the program, potentially due to the external benefits of improving innovators operations and by becoming compliant with WE4F requirements, it enabled the innovators to apply to other programs. For the MENA RIH, in July 2021, the positive impact responses were at 72.73% and increased to 100% by December 2023. For the S/CA RIH, the positive impact result in July 2022 was 88.89% and increased to 93% by June 2024.

INNOVATOR ILLUMINATION: PRE-AWARD SURVEYS AS A TOOL FOR INNOVATION SCALING

Egreen Technology (Vietnam) joined the Asia EDGE Ag-Energy program and received a greenhouse gas (GHG) savings recognition certification, along with a small grant to support its communications related to its biogas generator and biogas purification innovations. The company was subsequently encouraged to apply for the WE4F program. In the onboarding process, Egreen faced several institutional and operational constraints, including gaps in PAS compliance due to lack of standard policies, limited English-language capacity, insufficient project management expertise in planning, monitoring and evaluation (M&E), and reporting, as well as low internal awareness of ESG impact, corporate responsibility, and the strategic value of partnerships and networks.

Prior to WE4F, Egreen's experience with development programs had been largely limited to small grants, generic workshops, and non-tailored TA, often accompanied by extensive monitoring and reporting requirements without adequate guidance or hands-on support. Through the WE4F program, Egreen received comprehensive, tailored support, including PAS compliance guidance and templates, regular follow-up and support from the Country Coordinator, customized TA, structured MEL and impact measurement tools, and access to national, regional, and international workshops and networking events, regular coaching and mentoring from WE4F Hub staff.

As a result, Egreen significantly strengthened its business performance and rapidly scaled its operations nationwide, achieving the highest level of energy savings and the most substantial GHG emissions reductions among WE4F supported innovators. These impacts were independently verified through external surveys with field-based site visits. The external assessment confirmed that Egreen exceeded its Year 1 energy savings target of over 2 million kWh by achieving more than 19 million kWh in energy savings, driven by reduced reliance on fuelwood, grid electricity, and liquefied petroleum gas (LPG). The assessment further verified substantial environmental benefits, including the avoidance of 76,066 tCO2e of greenhouse gas emissions in Year 1 through the adoption of biogas generators and purification systems.

ACCELERATION/TRANSFORMATIONAL WORK PLAN AND TARGET SETTING

The A/TWP process was the main document used by WE4F to set and follow innovators' journeys in the program. Consisting of LOP and year-wise KPI targets, scaling strategies and activities along with an integrated gender action plan. A rigorous needs assessment exercise with each innovator in order to agree on the topic and type of TA that would be provided by the RIH. The AWP was formally reviewed every 6 months, and, in some cases, TA support was adjusted to help innovators in meeting their yearly milestones, which was a requirement for innovators to continue achieving grant installments. The RIHs, with key support from Country coordinators, informally kept track of the AWP targets on a monthly and quarterly basis showcasing "innovator first" principle adopted by WE4F at all levels from Donors to RIH staff.

In response to innovators' reported challenges with AWP target-setting, the USAID Secretariat MEL Manager created a detailed Target Calculation Guide with comprehensive instructions and considerations for setting innovator targets and developed the Innovator MEL Toolbox as a key resource for onboarding and reporting. This toolbox contained curated lists of free databases, nexus-related studies, and country-level reference data such as average household size and income quintile figures for all WE4F countries.

USAID innovators were required to calculate their energy and GHG reduction impacts using USAID's Clean Energy Emission Reduction (CLEER) Tool, with the exception of innovation types beyond the tool's scope. This free online energy savings and GHG reduction calculator was designed according to international GHG accounting standards and enabled innovators to easily calculate energy and GHG results with a limited number of data points. To further ease MEL reporting, the USAID Secretariat MEL Manager created a CLEER Tool Documentation Template for each innovation type, which automatically converted CLEER tool outputs to innovators' indicator results and clearly outlined required information. Furthermore, the template ensured consistency in calculated environmental impact across regions, improved the efficiency of MEL staff reviews, and strengthened quality assurance. The MEL Manager conducted additional CLEER Tool virtual trainings and regional convening workshops to build innovator capacity. External Surveyors also used this tool to cross-check innovators' inputs in the calculator against field interview data, eliminating any discrepancies in energy and GHG results reported.

ENVIRONMENTAL, SOCIAL, AND GOVERNANCE ASSESSMENT

During the selection and particularly at the pre-award stage, the Hub team was required to complete an ESG assessment for each innovator. The purpose of the ESG assessments was to establish a baseline standing for each innovator specific on gender integration, BoP engagement, and environmental sustainability practices. The information collected from assessments became inputs in the development of AWPs by prioritizing critical gaps and guiding the design, sequencing, and allocation of TA. The assessments were also used to assess progress, and identify remaining gaps, helping innovators envision long-term strategic growth. This included strengthening inclusive business models, gender and ESG practices, deepening BoP engagement.

ENVIRONMENTAL ASSESSMENT AND COMPLIANCE

All the three USAID-managed hubs followed the USAID environmental compliance procedure set out under USAID Regulation 216 Bureau Environmental Officer ensuring potential environmental consequences are identified and considered early in the project design. Through the Initial Environmental Examination, each innovator was screened for potential negative impact of their solution to the environment and wherever a risk was found, a mitigation plan was documented in the EMMP, and the results of corrective actions being reported by innovators via the EMMR template after 1 year. Some of common risks that were identified and mitigated across hubs were: water overuse for solar irrigation by using water metering and farmer advisory; adhering to soil health management principles for composting and farm inputs solutions, protecting biodiversity habitat in case of usage of land and natural water bodies. Overall, this assessment prepared the relatively younger organizations for future funding of green projects along with mitigating any unintended negative impact to the environment.

PROGRAM POINT: INNOVATOR-HUB AND HUB-SECRETARIAT RELATIONSHIPS AS A KEY DRIVING FORCE FOR SUCCESS

A key lesson from the legacy SWFF and PAEGC programs, was the importance of embedding an innovator-centric approach at all levels of program delivery. This lesson was carried forward organically into WE4F: the USAID Team Lead and more than half of the Secretariat staff transitioned directly from SWFF, bringing this ethos with them and establishing it as a cornerstone of team culture from the outset. When the hubs were contracted, the USAID Team Lead and Secretariat Unit played an active role in embedding this approach across all three RIHs through dedicated training sessions, structured discussions, and the transfer of innovator-centric templates and tools. During the early days, hub staff drew on their direct interactions with innovators to provide feedback to the Secretariat Unit that sharpened program processes and standard operating procedures. Some of changes were: the improvement of the needs assessment template, a change in communication strategy, the incorporation of hubs' views on target review and revision processes, and changes to field visits and Regional Convenings where the hubs led the implementation with limited Secretariat Unit involvement. The Secretariat Unit, however, could not agree to all the hubs' requests due to USAID operational guidelines.

The weekly Hub-Secretariat communications across functions – and the overall relationship based on a common objective to make the RIH successful – formed the basis of innovators' success in the program. By the third year of operations, the hubs were working with high levels of efficiency. As a result, the Secretariat Unit transferred a higher level of decision-making to the hubs, while continuing to collect feedback from the hubs on global activities. The Secretariat Unit and USAID Team Lead attended Regional Convenings and conducted site visits with innovators in all three regions, not only to keep a direct link to the innovators, but also to to understand on-the-ground realities and issues faced by farmers. The Secretariat Unit conducted a bi-annual Hub Quality of Service Survey (QoSS) so innovators could anonymously provide feedback. The feedback was taken seriously, with several important pivots made to the program after the conclusion of a QoSS cycle.

From program launch, each RIH placed a strong emphasis on building a trusting relationship with innovators. They recognized a strong relationship was a prerequisite for effective support, accurate reporting, and early problem-solving. To cultivate it, the hub implemented a structured but relationship-driven engagement model underpinned by responsiveness and consistent communication, with a focus on making each innovator successful within the program's resources. A central mechanism was the introduction of monthly update calls that involved all hub staff. These calls gave innovators a regular touchpoint during which they could report on grant utilization, activity implementation, and operational challenges. These sessions allowed the hub to identify emerging gaps or red flags and intervene proactively – safeguarding both grant resources and innovators from avoidable compliance lapses. Complementing the calls, the Country Coordinators served as a primary day-to-day support system for each innovator. They conducted weekly check-in calls and on-site visits, as needed. Close, consistent engagement built confidence among innovators, fostering a sense of partnership rather than oversight. It also made them far more willing to share real-time data and sensitive business insights.

Crucially, by building relationships across innovator teams rather than with single focal points, the hub ensured that staff transitions on the innovator side did not disrupt reporting or implementation. Hub staff often worked as extended team members of the innovators. They also functioned in a capacity similar to a mentor, which became evident as innovators continued to seek guidance from the hub after the end of their grants. Regional and Annual Convenings rounded out the engagement approach, bringing innovators and program staff together for peer-to-peer learning, collaboration, and community building.

The cumulative effect of these strategies was tangible: innovator responsiveness improved throughout the years, with innovators providing more accurate, timely data, and proactively communicating challenges. Overall, contributing directly to higher-quality evidence generation and stronger program outcomes.

IMPLEMENTATION

SUPPORT CATEGORIES PROVIDED TO INNOVATORS

GRANT MANAGEMENT

The MENA RIH supported 55 grantees alongside two TA-only innovators. There were 14 additional grantee innovators that were supposed to be onboarded and supported through the Lebanon Call for Food Processing Innovators (CFI Lebanon), but had their funding and support prevented by the USAID SWO. In aggregate, the MENA RIH awarded $8.35 million USD, of which $6.61 million USD was disbursed/declared eligible. Due to milestone non-achievement or SWO issuance, $1.78 million USD was terminated or remained unspent. Following the USAID SWO, the hub executed an orderly financial close-out for the cohorts still under implementation (CFI Lebanon, OCFI, and CFI Iraq 2), terminating approximately $770,000 USD in remaining grant obligations (CFI Lebanon was $149,985 USD; OCFI was $453,550 USD; and CFI Iraq 2 was $170,000 USD). For CFI Iraq 2 innovators, the hub applied a pro-rata validation methodology to determine eligible milestone amounts during closure, declaring $298,023 USD as eligible against the planned $430,000 USD milestone 2 amount, while canceling remaining final milestone amounts. One innovator was terminated based on failure to meet milestone requirements. Additionally, a pro-rata calculation was applied for one OCFI 2 innovator declaring $25,593.50 USD as eligible from the total milestone amount of $45,500 USD.

Across its portfolio of 32 innovators, the S/CA RIH supported 30 grantees and two TA-only innovators. The two TA-only innovators were selected because, although their initial market traction was limited and they were not grant-ready, they demonstrated strong potential to grow and scale with dedicated TA. Of the 30 grantees, six were terminated due to persistent under-performance or non-compliance with grant requirements. All but one of the grant-terminated innovators remained engaged in the program as TA-only participants, strengthening their business models even without active grant funding. Funds recovered from terminated grants were utilized to onboard additional innovators, maximizing the program's reach and ensuring efficient use of resources. A total of $402, 477 USD was recovered and redirected towards new OCFI grants. Given the average OCFI grant amount was $75, 000 USD, the recovery and recycling of funding represented about five more grantees.

Grant sizes varied across the different CFIs. During CFI1, the hub awarded larger grants up to $250,000 USD. In CFI2 and the OCFI, grant ceilings were reduced to $100,000 USD. During the OCFI, WE4F required a one-to-one matching contribution, which innovators could provide as cash or in-kind resources. The requirement ensured shared ownership of results and enhanced the sustainability of interventions. With the exception of the Zimbabwe biogas cohort, the actual grant amount awarded to each innovator was determined by several criteria, including the projected number of impacted end-users, demonstrated market traction, and proof of matching funds, among other key considerations. Under the Zimbabwe Biogas OCFI, all four selected innovators received equal grants of $30,000 USD, tailored to the specific scope and scale of biogas interventions.

The S/SEA RIH supported 40 innovators, of which 31 were grantee innovators and nine were TA-only innovators. Throughout the course of the program, the hub provided $3,680,188 USD in grants. Grant sizes varied across the different CFIs, and OCFIs. During CFI1, the hub awarded larger grants up to $250,000 USD, reflecting the higher maturity levels and stronger scaling readiness of that cohort. In CFI 2 and the OCFI, grant ceilings were reduced to $100,000 USD to align with the earlier-stage nature of applicants and the evolving maturity of the regional innovation pipeline. After learning that several innovators could unlock external investment through additional grant support, three matching capital grants totaling $160,000 USD were awarded to existing hub innovators. The amount of grant approved was a factor of the business model requirement, the innovators' stage of maturity, their impact, and the shortlisting criteria of mandatory minimum. Women-led and/or -owned innovators were offered their requested grant amounts (subject to CFI thresholds) to enable them to scale despite market and social barriers.

TECHNICAL ASSISTANCE

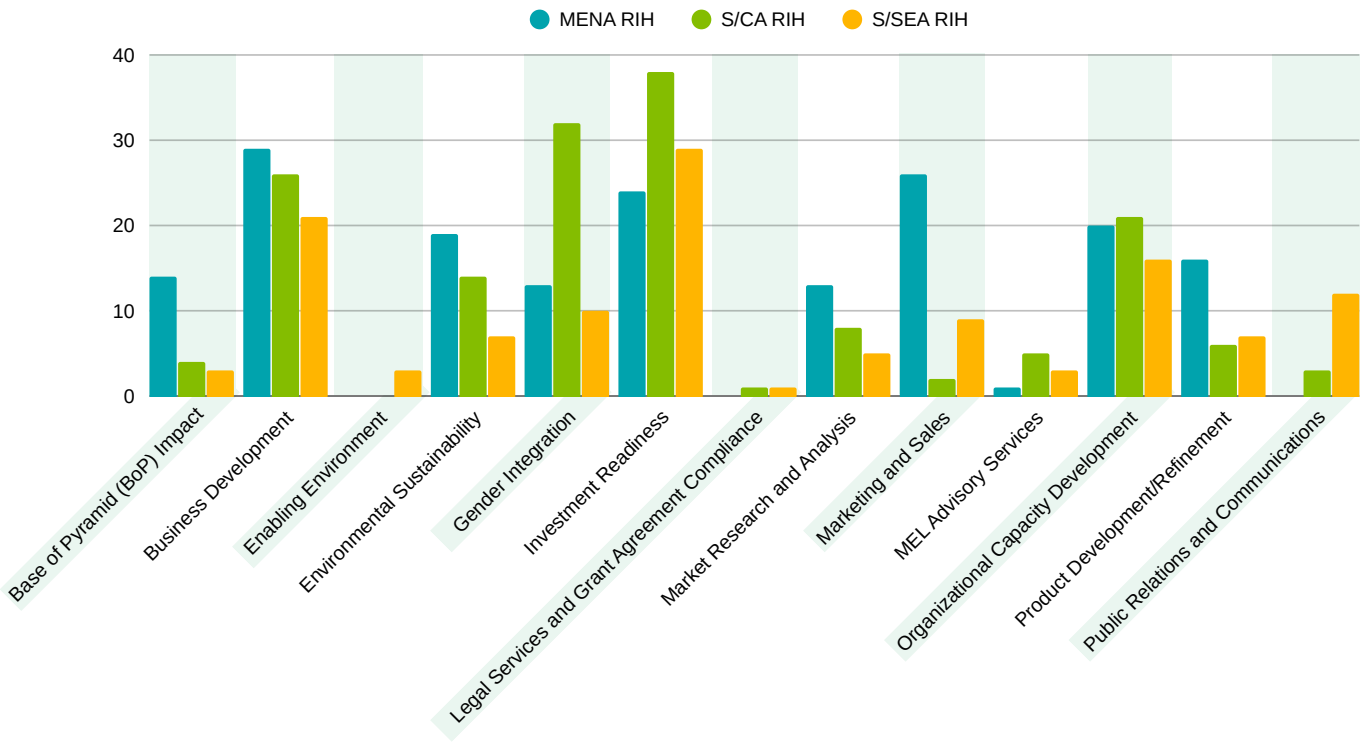
Technical assistance was provided through two distinct delivery routes. Tier 1 TA was delivered directly by Hub staff and focused primarily on core business development, ESG integration, and market readiness support. Tier 2 TA was delivered by external service providers competitively onboarded by the hubs through an open call established to select a pool of pre-vetted service providers, from which service providers were invited to tender for specific assignments. If a suitable provider was not available, a Request for Proposals was issued. Tier 2 service providers often addressed more specialized and technical needs that required country-specific or sector-specific expertise, or advanced technical knowledge.

Overall, the S/CA RIH delivered a total of 160 TA instances surpassing its goal of 90 instances. The S/SEA RIH delivered 126 instances surpassing its goal of 90 instances. For the MENA RIH, during the time of main program activities, they did not surpass their goal of 200 instances due to the USAID SWO which prevented the completion of their remaining TA instances. Their original target was 90 TA instance, due to the ability of the hub to provide and complete quality TA instances, the target was doubled. During the MENA RIH's bridge contract, they completed an additional 21 instances of

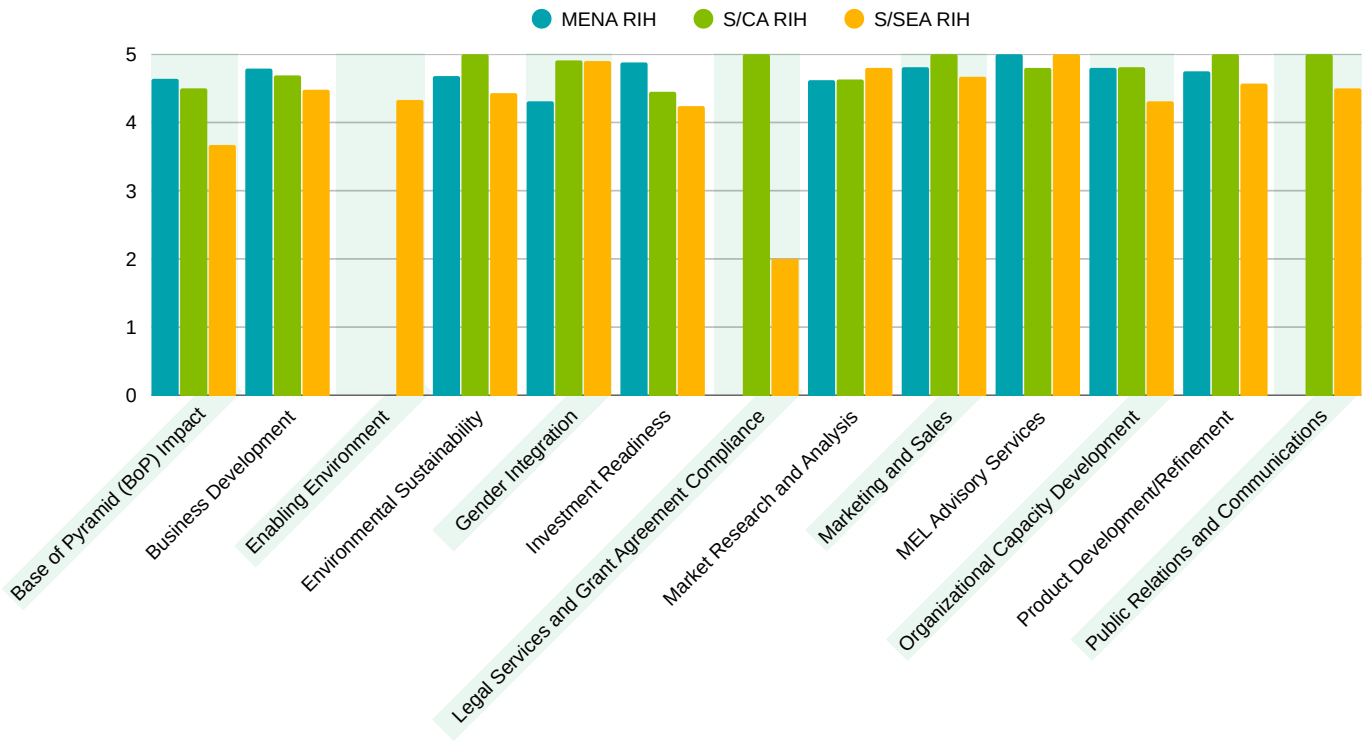
TA, reaching a final total of 196 instances. Of the 175 instances completed by the MENA RIH, 94.8% were Tier 1 TAs with Berytech completing 41 of the instances, cewas completing 38, Chemonics Egypt competing 66, and IWMI completing 21. For the S/CA RIH, 82.5% were Tier 1 TAs with Tetra Tech completing 119 instances and OpenCapital completing 13. For the S/SEA RIH, 62.5% were Tier 1 TAs, with Tetra Tech completing 63 and CrossBoundary completing 16. The S/SEA RIH had a significantly lower Tier 1 TA rate than the other hubs, this could potentially be due to the more advanced nature of the innovators coupled with the diversity of innovators' needs that exceeded hub capabilities.

To ensure high standards of service delivery and foster continuous improvement, post completion of each TA assignment at hub level, innovators were asked to complete a Technical Assistance QoSS. The QoSS was an example of another successful learning transferred from the legacy SWFF program. The survey captured innovators' feedback on the relevance, effectiveness, and overall quality of the TA received by the innovator. Insights from the QoSS feedback process formed a critical component of the Hub's continuous improvement strategy, enabling the team to identify strengths, address emerging gaps, and refine TA delivery approaches over successive engagements, ensuring that TA remained responsive to innovator needs. This deliberate focus on quality and accountability yielded strong satisfaction results among innovators across categories.

Number of Technical Assistance Instances Across All Categories and Hubs



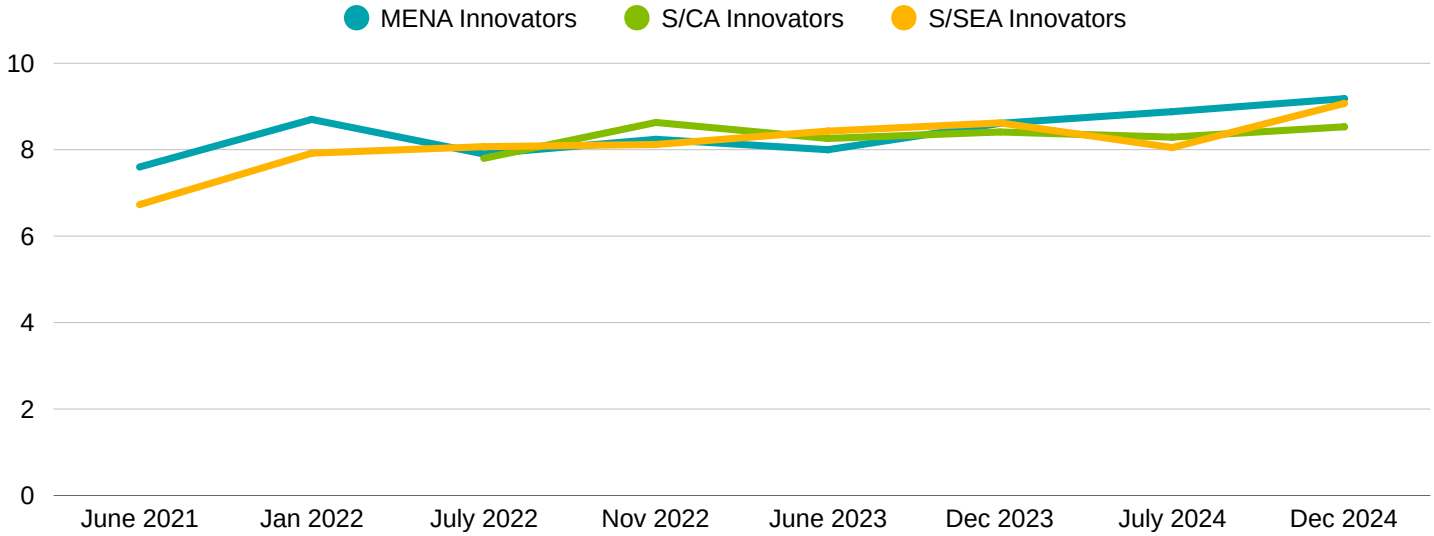
Average Quality of Service Survey Score (1 Being Poor and 5 Being Excellent) Across All Technical Assistance Categories and Hubs



Across the hubs, Investment facilitation/readiness, gender integration, business development, and organizational capacity development were the most requested TA categories by the innovators with a few instances of niche TAs being provided by the hubs as and when requested. Gender integration TA being in the top 4 categories across the hubs can be attributed to the strategy devised by Secretariat at the inception phase to assess ESG understanding and intent from the innovator during selection, an improvement from the legacy SWFF program. However, the key role was played by the Hubs to build innovators' understanding on the importance of gender and other ESG issues and the strong willingness of innovators to adopt and integrate these practices into their operations. Each hub, having its own Gender and an Environmental advisor, also went a long way in integrating ESG issues consistently and so successfully innovators businesses as this was another lesson learned integrated from legacy programs.

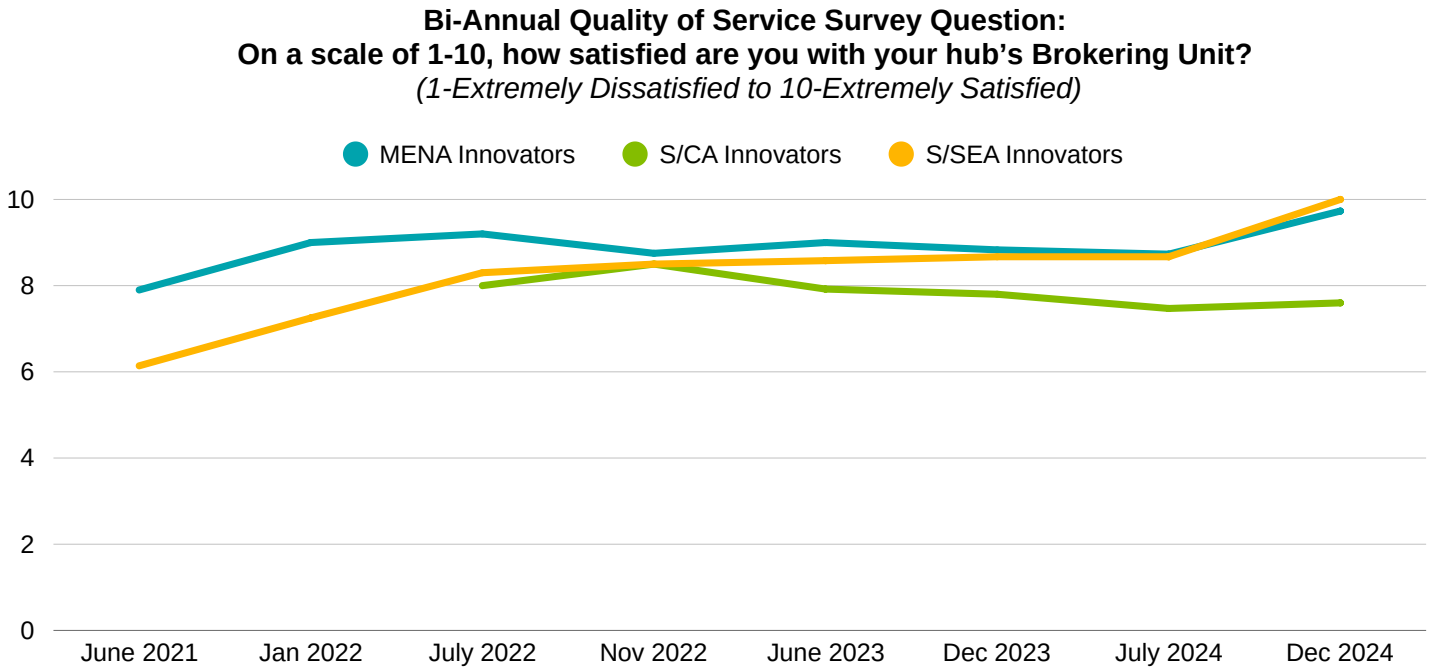
Despite strong overall performance, hubs highlighted some challenges emerging in the use of external service providers. For the S/CA RIH, contextual understanding varied across service providers, and complex assignments often required longer timelines. These risks were mitigated through active hub oversight and guidance by the Secretariat Unit on a regular basis. For the S/SEA and MENA RIHs, delivering in-person TAs in conflict areas like Myanmar and Sudan was impossible due to closure of innovator businesses or the decision to pursue growth in stable countries.

Bi-Annual Quality of Service Survey Question: On a scale of 1-10, how satisfied are you with your hub's Technical Assistance Unit?
(1-Extremely Dissatisfied to 10-Extremely Satisfied)



The bi-annual Hub QoSS results for the Technical Assistance Unit from June 2021 to December 2024 show improvement in innovator satisfaction level. Each of the hubs started in the range of 6-7.5 out of 10 and then went on to achieve more than 9 out of 10 by the end of 2024. The S/CA RIH was an exception since they started operations a year later than other two hubs and benefitted from the lessons transferred to them by the other two hubs. In general, it can be assessed that the QoSS scores improved as the hub refined its understanding of innovator needs and more delivered targeted strategic TAs with long term benefits to the innovators as TAs with clear, high-impact outcomes tended to receive higher scores, while those with longer implementation timelines showed lower satisfaction ratings.

INVESTMENT FACILITATION



Investment facilitation and readiness formed a key part of WE4F's overall offering. It was introduced as a key strategic offering right from the design phase, when investment landscape studies were performed to identify key investment trends for each of the three regions. Based on the design study, each hub included a Brokering Unit, that worked specifically on investment readiness and facilitation. The importance of the Brokering Unit was almost instantly validated during the first Hub QoSS, when almost 95% of onboarded innovators across three hubs, indicated their interest in raising private investment, irrespective of their stage, readiness levels, geography, or business model.

Despite almost all innovators wanting to raise investment, only about 51 innovators, or 36% of innovators supported by the MENA, S/SEA, and S/CA RIHs succeeded in their endeavor. As highlighted in the "Investment Mobilized" section, there were several barriers that prevented innovators from achieving successful investment raises. It is important to note, that before the launch of the hubs investment landscape maps were conducted in each region, so the variation in results among the hubs – and the barriers encountered by innovators – was expected. The S/SEA region boasts of a comparatively more mature investment ecosystem than MENA and S/CA regions, with the S/CA region being seen as the most risk averse from the investors' perspective. The MENA RIH battled constant instability in their region as well. Each hub adapted their investment facilitation strategies to reflect local investor ecosystems, regulatory environments, and innovator maturity levels, rather than applying a uniform model across countries within their region.

One key partnership facilitated by Sida and managed by the Secretariat was with UNCDF and Bamboo capital for the BUILD/BRIDGE guarantee instruments. It instantly generated interests among innovators due to low interest rate and patient style of investing. However, from the more than 40 innovator profiles shared with BRIDGE or BUILD fund collectively, only one from MENA region – Green Eagle, went to the deal structuring phase with an intention to invest by Bamboo Capital. However, post multiple due diligence rounds and document sharing, the deal could not be closed for almost 1.5 years and the innovator decided to raise investment from other sources even if it comes with a higher cost as time of implementation was critical.

It can also be seen through the portfolio analysis, that early-stage innovators were not ready to pitch to the investors, hence each hub focused on establishing foundational investment readiness across a diverse pool of innovators which included diversifying business models and revenue drivers, improving financial projections and data quality, strengthening legal and governance frameworks, and introducing innovators to different categories of investors and capital instruments. On the other hand, every hub had a few handful innovators that had previously raised experience

and were much further along their investment journeys. For these innovators, the facilitation was more selective and targeted with a focus on identifying specific investment pathways aligned with thematic priorities customized to each innovator's fundraising strategy. The focus was on aligning innovators with investors whose mandates matched their stage and impact profile.

Another key parameter under overall investment facilitation support was to prepare the innovators to unlock niche and thematic funding approaches like gender-lens investing, Climate-lens/green funding with also a key focus on integrating carbon credit models for innovators with relevant and eligible business models. The S/SEA and S/CA RIHs started the use of Equillo's 2X assessment tool and very quickly it was transitioned to MENA hub as its usage resulted in positive feedback from the innovators. Carbon credit and gender-lens investing featured consistently in the Regional and Annual Convenings as key topics for lessons sharing. Even though there was no direct investment by the 2X mechanism, the program believes it may have helped some innovators, like S4S Technologies in India, raise optimum investment due to the additional value.

The S/SEA RIH used matching capital grants as additional capital for already-onboarded innovators who were in direct contact with investors over a deal and needed some small capital to ensure confidence in the investors. The matching capital grant was given to aQysta, Oorja where with an amount of $50,000 and $150,000 they were able to leverage 8-10 times the grant amount – $400,000 and $900,000, respectively. Matching capital grants can be described as a "simulated" blended finance solution because, while it functions as a risk-mitigation tool akin to investment capital, it is legally structured as grant funding.

For the MENA RIH, the ability to work with and raise investment for more innovators, stood out and achieving this in an unstable environment makes it more important to highlight. At MENA hub, the structure differed from Tetra Tech-contracted S/SEA and S/CA RIHs. Berytech, the prime contractor, led the Brokering Unit while within Tetra Tech-led hubs, the Brokering Unit was sub-contracted to transaction advisory firms. In the MENA RIH's case, the foresight and decision to demarcate investment facilitation and readiness activities right at the start of the hub operations proved to be a game changer. It prevented confusion and ensured a steady pipeline of onboarded innovators flowing through to the Brokering Unit.

HUB HIGHLIGHT: RESULTS-BASED FINANCING TO MITIGATE LOCAL RISK

GreenZim Ventures received substantial technical and strategic support from the hub to mobilize investment and successfully raised approximately USD 2 million from two separate funders. However, as a condition for disbursement, both funders required the provision of co-financing. Securing this co-financing proved challenging due to the highly volatile economic environment in Zimbabwe, where the innovator operates.

In response, the hub facilitated engagements between GreenZim Ventures and a local commercial bank to structure the required co-financing as a results-based funding mechanism. The bank initially expressed significant risk concerns, given the operating context. To mitigate these risks, the hub supported the innovator in developing a tailored negotiation framework that proposed an alternative financing approach. Rather than lending directly to the innovator, the bank would finance individual milk collection centers. Funding would be disbursed to these centers based on verified milk volumes and associated revenues, with loan recovery tied directly to milk sales.

This structure significantly reduced the bank's exposure to risks associated with technology deployment and equipment transfer, while ensuring performance-linked disbursement and repayment. The bank is currently in the final stages of internal approvals to formalize the financing instrument and initiate project implementation.

ENABLING ENVIRONMENT SUPPORT

Enabling environment support formed a critical pillar of the program's approach to scaling innovation, recognizing that even the most technically sound and commercially viable innovations can be constrained by the policy, regulatory, and institutional contexts in which they operate. This was correctly anticipated by donor partners during the design phase of the program and as a result each RIH was established with a dedicated Enabling Environment Unit to identify and address these structural barriers for innovators.

Early into program implementation, during 2021 and 2022, WE4F explored broad, high-level policy advocacy as a potential mechanism for driving systemic change. This approach was informed by the country profiles developed at program outset for all countries where innovators were onboarded under the first CFI1 – profiles that mapped policy frameworks, regulatory dynamics, and sector-specific risks and opportunities. This approach, however, proved ill-suited

to an innovation scaling program operating across diverse and complex regulatory landscapes. National policy processes are slow-moving, politically sensitive, and rarely responsive to the timelines of individual businesses. Attempting to influence policy at a structural level – without a direct and demonstrable link to specific innovator needs – yielded limited traction and diverted resources from more immediate priorities. To validate this understanding, WE4F facilitated dedicated innovator sessions at the 2022 Regional Convenings, using structured brainstorming sessions to identify and prioritize the most pressing enabling environment challenges. The sessions provided valuable ground-level insight into the barriers encountered by innovators at the micro-policy level. The need to work at micro level policy issues affecting innovators was a common phenomenon at all RIHs and hence required a program level pivot.

In the following years, what proved far more effective was a problem-first, innovator-led approach– a shift that was largely driven by the Secretariat Unit's cross-regional oversight role. Sitting above the three hubs, the Secretariat was uniquely positioned to identify patterns across regions, recognize where high-level advocacy was failing to gain traction, and facilitate evidence-informed course corrections. The Secretariat Unit re-oriented the hubs' enabling environment efforts along three clear principles: 1) concentrating support on individual innovator-level challenges rather than systemic issues beyond the program's direct influence; 2) stepping back from broad, high-level policy advocacy efforts that operated on timelines incompatible with those of scaling businesses; and 3) empowering Country Coordinators – as the most contextually informed members of each hub –to lead enabling environment efforts on the ground. This shift from broad advocacy to precision problem-solving, anchored in local knowledge and trust-based relationships, allowed the Enabling Environment Units to forge tangible partnerships with measurable outcomes within program timelines, while in several cases generating policy changes whose benefits extended well beyond the individual innovator to the wider cohort and ecosystem.

The nature of enabling environmental work varied considerably across the three regions, reflecting differences in regulatory maturity, political context, and the types of innovations supported. In South and Southeast Asia, the Enabling Environment Unit grounded its work in comprehensive country-level assessments shared with innovators through country profiles. Over time, the hub evolved from an individual innovator approach to a multi-innovator model, using Regional Convenings to identify shared challenges and design interventions with broader cohort-level impact. Country Coordinators became increasingly central to this work – progressing from general support roles to leading stakeholder engagement and facilitating ministry-level discussions. The hub complemented this with strong ecosystem connectivity, signing Memorandums of Understanding with RAIN, Women on Wings, and Acumen, engaging platforms such as ANDE, New Energy Nexus, and Grow Asia, and facilitating innovator participation in global events, including World Water Week in Bali 2024.

In the S/CA RIH, the Enabling Environment Unit addressed trade barriers, customs classification, and national standards – achieving notable breakthroughs such as resolving a bilateral honey trade impasse between Zambia and South Africa and updating Zimbabwe's national biogas standard to recognize mobile biodigester systems. Country Coordinators were instrumental throughout, participating in national forums, policy dialogues, and multi-stakeholder working groups to ensure innovator perspectives were represented in national decision-making spaces. To address systemic barriers that could not be resolved in isolation, the Enabling Environment Unit facilitated five MoUs with financial institutions, accelerators, and sector associations – expanding end-user financing options, integrating innovators into wider ecosystem networks, and channeling private-sector voices into national policy platforms. These collaborations delivered direct results: GreenZim Ventures (Zimbabwe) accessed new financial instruments, while Lanforce Energy (Zimbabwe) participated in the technical working group that shaped Zimbabwe's revised biogas standard.

Within the MENA RIH, enabling environment work was shaped by a particularly complex regulatory landscape: innovators frequently encountered non-existent or inconsistent regulatory frameworks, export bans in Gulf Cooperation Council countries, limited access to financing, particularly in Lebanon and Iraq, lack of access to critical information and infrastructure (i.e. certifications, laboratories, etc.) and political and security instability. Innovators were further hampered by regulatory challenges, competition with illegal practices, and aggressive tax policies. The MENA RIH Enabling Environment Unit responded by focusing on practical, high-visibility interventions including value chain traceability support, climate lens exposure for impact investors, and capacity building through partnerships with partners like the Middle East Institute and Res4Africa. Country Coordinators and the TA team embedded enabling environment support into day-to-day innovator engagement, facilitating connections with authorities, providing market intelligence, and brokering partnerships across the value chain. The MENA RIH also supported innovators in better understanding and accessing information that would help them navigate current regulations like one enabling environment TA on the biofertilizer industry in Egypt, which involved peer-to-peer exchange with innovators in the same industry and through the support of the Country Coordinators. In Iraq, the Enabling Environment Unit facilitated cooperation between agricultural extension services and innovators to strengthen extension centers' capacity on climate-smart farming while improving innovators' access to farmer networks and markets.

Across all three regions, Country Coordinators served as the Enabling Environment Unit's local presence that provided contextual knowledge and built trust-based relationships that were decisive factors in turning enabling environment interventions into real outcomes for innovators.

Number of External Partnerships Formed by Innovators During Their Participation in Water and Energy for Food

Partner Category	MENA RIH	S/CA RIH	S/SEA RIH
Donor Partner	6	N/A	6
Higher Education/ Research Institution	13	N/A	15
Government	14	N/A	8
Commercial Entity	75	12	125
Non-governmental Organization	21	20	26
Technical Assistance Firm	5	N/A	11
Public-Private Partnership Partner	3	N/A	N/A
Multilateral Institution	1	2	7
Private Philanthropy or Foundation	N/A	2	7
Other Development Actor	20	45	6

HUB HIGHLIGHT: THE BUZZ AROUND HONEY IMPORT POLICY FOR SOUTH AFRICA

After the hubs pivoted to a country-based approach, the S/CA RIH and Zambian innovators, Nature's Nectar and COMACO, quickly identified an issue on which the S/CA RIH's Enabling Environment could work. Since 2019, South Africa's Department of Agriculture, Land Reform, and Rural Development (DALRRD) has had ongoing ban on raw honey imports from Zambia. The ban was initially enacted due to concerns over American Foulbrood (AFB) disease in Zambian honey and, over the last five years, has been a contentious issue, impacting key stakeholders in both nations.

Nature's Nectar and COMACO faced considerable challenges due to the ban. As conservation-centric social enterprises, they are pivotal in sustaining Zambia's organic honey production, a critical component of the region's biodiversity. The country has about 30,000 smallholder beekeepers and produces an estimated 2,000 tons of honey per year. If they are able to export organic raw honey to South Africa, the access could drive even more production and ultimately more income for Zambian farmers. However, following the detection of AFB disease in samples of the honey product, South Africa instituted a policy of irradiating imported Zambian honey. This practice, which renders the honey inorganic, sparked debates on trade and environmental sustainability.

In 2022, the S/CA RIH Enabling Environment Unit initiated dialogues between the innovators and the DALRRD. These dialogues were seen by the hub as entry points to support innovators whose businesses were directly affected by the honey ban. Despite initial setbacks, these discussions culminated in a joint field surveillance mission to Zambia in late 2023, with honey samples being tested in Zambia, Germany, and South Africa to assess the AFB concerns. The collaborative effort involved independent draft reports for validation by all parties, signifying a positive shift toward resolving the ban. It not only addressed the immediate trade dispute but also set a precedent for how innovative solutions can bridge gaps in regulatory and environmental challenges.

As of early 2024, a new draft Trade Protocol for the Export of Honey to South Africa was being finalized. Zambian honey entering South Africa will not be subjected to testing and irradiation. However, every consignment will be required to have been tested before shipment and have the results attached to the documentation without the stringent requirements.

HUB HIGHLIGHT: STRENGTHENING EGYPT'S BIOFERTILIZER ECOSYSTEM

Egypt's emerging biofertilizer sector faces structural constraints related to testing, certification, and quality infrastructure. Producers of bio-fertilizers and compost often encounter lengthy testing and product registration procedures that slow the commercialization of new products and can discourage innovative firms from entering the market. At the same time accredited laboratories are also concentrated mainly in Egypt's major urban centers, particularly Cairo, increasing logistical and financial burdens for producers operating elsewhere. In addition, only a limited number of laboratories provide the full range of tests required for product registration under the Organic Agriculture Law (2020), forcing companies to work with multiple facilities. Many producers also have limited awareness of the registration and testing requirements. Together, these factors create a gap between the available laboratory services and the quality infrastructure needed to support the growth of Egypt's bio-based fertilizer industry.

To address these challenges, WE4F partnered with UNIDO's Inclusive Green Growth in Egypt (IGGE) project to conduct a targeted TA initiative focused on mapping laboratories relevant to the bio-based fertilizer sector. The work aimed to provide practical insights for innovators and other ecosystem actors by identifying, assessing, and disseminating information on available testing infrastructure. The implementing team conducted both primary and secondary research to identify laboratories across Egypt and selected ten laboratories for detailed assessment. Information was collected on certification status, testing methodologies, qualifications, and services provided. In parallel, the team mapped the key stakeholders involved in the testing and product registration process and identified the minimum testing requirements for companies seeking to register bio-based fertilizer products in line with Egypt's Organic Agriculture Law (2020). Consultations were conducted with eight stakeholders, including WE4F innovators, to validate findings and better understand sector challenges.

The TA generated a structured overview of Egypt's laboratory landscape for bio-based fertilizers and compost producers. By identifying available services, testing capacities, and accreditation status across selected laboratories, the initiative provides innovators with clearer guidance on where and how to access the testing required for product registration. The work also highlights critical gaps in laboratory infrastructure and quality systems, helping stakeholders, including laboratories, innovators, and development partners, prioritize areas for capacity building and accreditation support. More broadly, the initiative lays the groundwork for improved collaboration among innovators, laboratories, and sector stakeholders while supporting efforts to strengthen Egypt's quality infrastructure.

NETWORK BUILDING, CAPACITY DEVELOPMENT, KNOWLEDGE DISSEMINATION AND PARTNERSHIPS

Network development, capacity building, knowledge dissemination, and partnership management are all key requirements of a program looking to scale SME innovations. It is not possible for an organization to grow without similarly-minded partners, mentors, advisors, and colleagues. To unlock these critical relationships requires organizations to be vulnerable with those stakeholders, explore uncomfortable questions, share their failures, and seek advice. Within the context of WE4F, program staff aimed to create a culture and community that encouraged innovators to highlight the cracks in their operations without fear of the information being used to further hamper their business. Additionally, at the hub level, convenings, workshops, and webinars were positioned as a mechanism to connect innovators with peers, ecosystem actors, and partners whose roles were directly relevant to their stage of growth. These engagements focused on addressing practical constraints faced by innovators, including access to finance, market linkages, operational partnerships, and policy navigation.

Key Steps to Developing a Successful Knowledge and Challenge-Sharing Culture

1	2	3	4
Develop strong relationships between innovators of different technologies, cohorts, regions, and priorities	Provide a variety of engagement methods that enable different personalities to participate and share	Encourage a communal culture of respect, learning, sharing, communicating for innovators and staff	Build upon past activities and experiences to ensure innovators continue to see value in each other and learning events
Networking that builds from country --> region --> global technology category	Create diverse innovator-led panels that showcase themes from multiple points of view	Conduct pre-event trainings to educate staff and innovators on roles during different sessions	Do not repeat the same topics during knowledge events without expanding it to a new level
Engaging icebreakers that enable people to interact with each other in a memorable and community-building manner	Organize workshops that heavily feature group discussions broken up by different technology, innovation sizes, goals, services	Put coffee breaks or lunch right after discussion-based sessions so innovators can keep discussing topics without cutting them off	Do not use the same innovators as speakers/topic leaders each year - change to engage new innovators
Conduct pre-event webinars that enable audiences to get to know each other and become comfortable in the program setting	Host "Unconferences" - loosely-moderated group discussions where innovators can pose questions and attendees provide advice/recommendations	Strongly communicate pre-event, during the event, and afterwards that any sensitive information shared during the event will not be disseminated publicly	Conduct pre-event and post-event surveys to solicit innovator and staff feedback and implement such feedback
Ensure staff culture that promotes high-touch support and engages innovators by reducing maturity and skill barriers	Offer matchmaking sessions customized to innovators exact needs and tailored based on feedback	Ensure staff know attendees' businesses inside and out by collaborating with staff from MEL, Brokering Unit, TA, and Country Coordinators	Enhance staff learning by tracking event successes, failures, potential pivots, and internal and external training opportunities
This may mean offering language translation services in multiple languages	Some sessions – like the matchmaking – make take years to build to, as innovators must get comfortable with each other and develop their own regard for reputation and ability.		Pause and reflect sessions post-event are also valuable

CAPACITY BUILDING AND NETWORK/PARTNERSHIP DEVELOPMENT THROUGH INTERNAL LEARNING ACTIVITIES

Program Utilization of Webinars and Workshops

Webinars were primarily utilized to disseminate knowledge efficiently across large groups, particularly where challenges were shared across cohorts or countries with topics including investment readiness, business model refinement, and operational resilience. Workshops, by contrast, were applied where hands-on engagement was required. These sessions often supported innovators in translating high-level guidance into actionable plans and were frequently linked to milestone requirements or follow-up TA. Differences in usage across hubs reflected regional conditions, internet accessibility, and the maturity of innovator portfolios.

Annual and Regional Convenings

When WE4F launched, global Annual Convenings and Regional Convenings were imagined as opportunities to facilitate relationships and knowledge exchange across countries and continents. Each served distinct but complementary purposes within the program, specifically for network building, capacity development, knowledge dissemination and partnerships. Annual Convenings provided a platform for cross-regional exchange, allowing innovators and ecosystem actors to compare approaches, challenges, and solutions across different contexts. These events were particularly effective for sharing lessons learned, highlighting scalable models, and enabling cross-hub learning among implementers. On the other hand, Regional Convenings were more operational in nature and focused on context-specific challenges. By bringing together innovators operating within similar regulatory, climatic, and market environments, Regional Convenings enabled deeper discussions on issues such as certification requirements, last-mile distribution, and access to local finance. Outcomes from these convenings included strengthened peer networks, follow-on TA requests, and the identification of regionally relevant partnership opportunities. Additionally, the program utilized pre-event and post-event surveys to better plan and respond to the effectiveness of initiatives. Pre-event surveys were used to inform the design of

convenings and learning activities by identifying priority challenges and capacity gaps among innovators. Survey findings influenced agenda setting, session formats, and the selection of speakers or facilitators, helping ensure relevance and alignment with innovator needs. Post-event surveys served as a feedback mechanism to assess the effectiveness of activities and identify areas requiring further support. Results were used to adjust future programming and, in some cases, to trigger targeted follow-up actions such as additional TA or curated introductions. This approach strengthened the program's adaptive management and reinforced accountability to innovators. With each iteration, the program learned – and quickly improved – its convening strategy and session development phase.

Key Lessons and Changes Made to Convenings (2021-2024)

Key Lesson	Where It Was Learned	Program Pivot	Pivot Implementation
Webinars can be beneficial for bringing innovators up to the same level of understanding on a topic	2021 Digital Global Convening, December 2021 Asa EDGE Ag-Energy Prize Bootcamp, May 2020	MENA RIH implemented a pre-convening webinar series for newly onboarded innovators	Occurred in April 2022, before the first regional convening
New innovators feel awkward around each other and ice must be broken to ensure open sharing and encourage relationship building	2022 MENA Regional Convening, May 2022	Increased the amount of ice breakers to quickly build community	2022 S/SEA Regional Convening, May 2022 2022 S/CA Regional Convening, June 2022
Document unconference sessions that did not feature slide decks so innovators could reflect on discussions or learn about sessions they did not attend	2022 Regional Convenings, May. and June 2022	Secretariat Unit implemented a new notetaking role to collect non-sensitive information	2022 Annual Convening, December 2022
Days should be shortened to ensure innovators can communicate with their staff at home and more networking sessions are needed for free-flowing discussions	2022 Annual Convening, December 2022	Days were shortened from a full eight hours to five-to-six hours, depending on the topics of the day New networking sessions organized by technology, geograpjy, and theme interest.	2023 Regional Conveningss, March-May 2023 2023 Annual Convening, August 2023
Interest in climate resilience and financing (e.g., carbon credits) were of continuously increasing interest by innovators	2023 Regional Conveningss, March-May 2023	Organized relevant expert-driven sessions	2023 Regional Conveningss, March-May 2023 2023 Annual Convening, August 2023
Innovators were maturing and the program was reaching its conclusion - needed to ensure that sessions moved innovators forward as a community and on their indivudal journies	2023 Annual Convening, August 2023	S/CA RIH's Regional Convening implemented a pitch competition to sharpen innovators' skills for other investment opportunities S/SEA designed a matchmaking session to connect innovators with each other MENA RIH leveraged their cafe-style session to increase discussion between CFI 1 and OCFI innovators	2024 Regional Convenings, March-May 2024
S/CA RIH's pitch competition was popular with all innovators, even those who did not participate, but needed division between scale of investment asks S/SEA RIH's innovator-to-innovator matchmaking is good in theory, but rather than trying to conduct it during coffee breaks or down time, it needs its own separate slot	2024 S/CA Regional Convening, March 2024 2024 S/SEA Regional Convening, May 2024	Design a three pitch tracks that are sized for innovators pursuing small, medium, and large-scale investments and design each team of judges to feature investment experts, external, third-party participants, and donor staff Hand-pick two rounds of matches for 120 innovators utilizing the Annual Convening survey questionnaire to identify innovators' barriers to growth and potential partners/advisors to overcome those issues	2024 Annual Convening, November 2024
Hosting a convening anywhere in the MENA region, aside from Cyprus is almost impossible due to visa restrictions for African countries, but Morocco is feasible if you have a local partner	Reflections of the 2022, 2023, and 2024 MENA Regional Convenings	Partner with a local organization that does innovation scaling in Morocco so they provide letters of support for innovators and the Moroccan innovators have a chance to form connections with other innovators and participate in learning opportunities	2024 Annual Convening, November 2024

Network Building and Partnership Development

From the Annual and Regional Convenings emerged partnerships that were largely function driven. Innovators leveraged hub-facilitated introductions to explore distribution partnerships, technical collaborations, and co-financing opportunities. In several cases, these connections supported geographic expansion into neighboring towns, provinces, or countries. Events also enabled innovators to test partnerships before committing resources. The hub's role remained facilitative, with responsibility for partnership uptake and sustainability resting with the innovators with continued consultation with the hub.

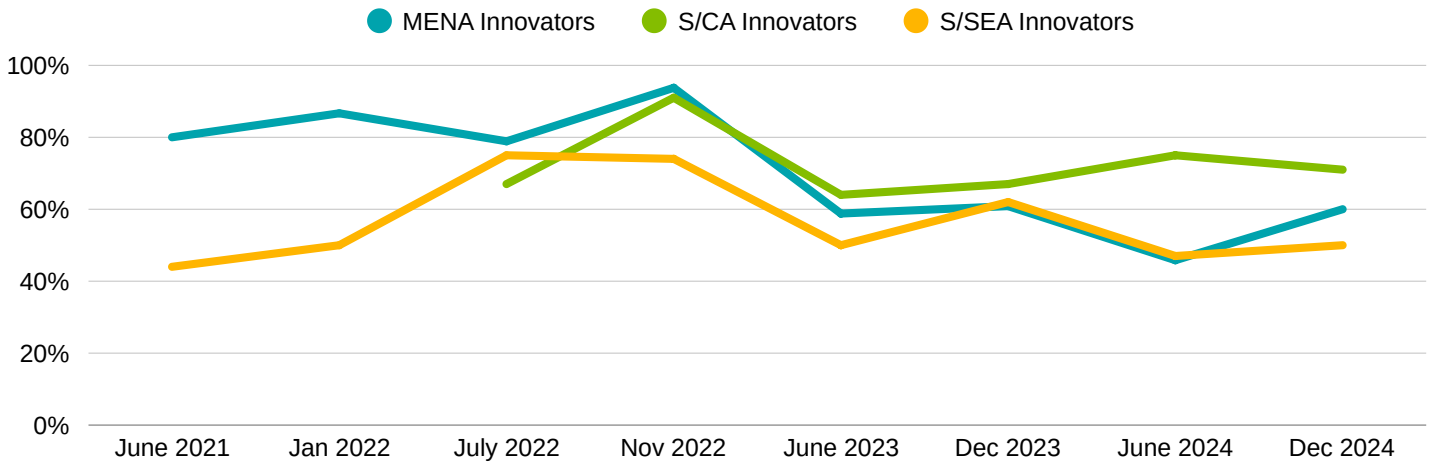
KNOWLEDGE DISSEMINATION THROUGH NATIONAL, REGIONAL, AND GLOBAL EVENTS

To ensure that WE4F's lessons were integrated into other organizations and programs, as well as included into programmatic and policy recommendations and guidelines, as part of the program's communications and knowledge management strategies was a requirement to regularly engage the broader water-energy-food nexus through lessons-based storytelling and event participation. Originally, WE4F concentrated on securing its own sessions at different conferences and summits (e.g., United Nations Food Systems Pre-Summit, 27th session of the Conference of the Parties to the UNFCCC (COP27), United Nations 2023 Water Conference). Leading into COP28 and reflecting on the numerous obligations the program had in the latter half of 2023 (including the MENA RIH's significant involvement in the 2023 Arab SME Summit), the CKM Manager advised pursuing a speaker-based strategy rather than a session-based strategy. Adopting the new strategy doubled the number of sessions that the MENA RIH participated in COP28 (six sessions) when compared to COP27 (three sessions). With the joining of a new USAID Team Lead in June 2023, the CKM Manager was able to further pursue moving more external engagements to the hub level, freeing up capacity and time at the Secretariat level to advocate for WE4F's inclusion in conferences, identify knowledge dissemination opportunities, and organizing webinars and convenings. As a result, WE4F had two S/SEA RIH staff participate in the ICT4Ag conference, organized four sessions at the 2024 World Water Week, and pushed for a gender end-user financing webinar to become the program's keystone event on International Women's Day in 2024.

THEMATIC PILLARS GUIDING WE4F OPERATIONS

BASE OF THE PYRAMID INCLUSION

Bi-Annual Quality of Service Survey Question:
Has the engagement with WE4F led to an increase in knowledge about the Base of the Pyramid (BoP)?
Percent that Responded "Yes"



Positive BoP impact was a core cross-cutting objective of WE4F, integrated from the design phase and consistently reinforced throughout implementation. A key donor mandate was to onboard innovators whose solutions were accessible and affordable to smallholder farmers, and each hub's portfolio was carefully selected with this in mind, subject to Secretariat approval. This deliberate portfolio strategy paid off: almost all WE4F innovators worked with rural smallholder farmers or urban low-income populations, with the three hubs collectively reaching 63% of total end-users from BoP populations – S/SEA RIH contributed the highest number, followed by S/CA RIH and MENA RIH with 61% and 41% respectively.

Despite this strong portfolio orientation, structural constraints – including limited market intelligence, affordability barriers, and inadequate financing mechanisms – hindered effective reach in practice. Lack of access to finance emerged as the single most significant barrier to adoption of climate-focused innovations among smallholder farmers.

Drawing on feedback from CFI1 innovators and hub staff, the Secretariat identified a critical gap: very few innovators had integrated end-user financing into their business models. In response, the Secretariat Unit developed an End-User financing Guidebook in 2022, detailing globally proven end-user financing models and providing practical implementation guidance tailored to early- and mid-stage SMEs. The Secretariat led an initial knowledge transfer across all hubs, subsequently transitioning into an advisory role to support continued progress.

The hubs reinforced this pivot through targeted BoP-focused TA on market research, marketing strategies, and end-user financing, with particular attention to women's access and affordability. Innovator interest in end-user financing grew

considerably as many recognized its potential to strengthen customer acquisition. In total, 15 TAs on end-user financing were delivered – four by the S/SEA RIH, one by the S/CA RIH, and 10 by the MENA RIH. To build stronger regional connections with financial institutions provided end-user financing, the MENA and S/CA RIHs developed several relationships with such institutions.

In the S/SEA RIH, a combination of deliberate selection criteria and targeted end-user financing support to innovators including Gham Power (Nepal), Covestro (Vietnam), and Promethean (India) resulted in BoP end-users comprising more than 70% of total users. In the S/CA RIH, two factors drove innovator progression from beginner to intermediate and advanced BoP engagement levels: hub support in facilitating end-user financing – enabling innovators such as Zonful Energy (Zimbabwe), Powerlive (Zimbabwe), Lanforce Energy (Zimbabwe), and Solar Village (Zambia) to successfully implement Pay-As-You-Go models in Zambia and Zimbabwe – and the formation of strategic partnerships opening access to new markets with significant BoP populations. Both outcomes reflect the S/CA RIH's intentional, long-term capacity-building approach, designed to extend well beyond the program lifecycle.

In the MENA RIH, where the portfolio was predominantly composed of solar-based climate solutions and other high-cost innovations, end-user financing TA was a particularly central offering. For most innovators, hub staff adopted a long-term handholding approach – in many cases working for over a year to establish self-financed end-user financing models. Innovators including Raptor Engineering in Egypt, Green Essence and Robinson Agri in Lebanon, all recorded increased adoption of their solutions following end-user financing integration. In parallel, the MENA RIH's efforts to forge partnerships with financing institutions proved equally impactful for innovators lacking the internal resources or cash flow to provide end-user financing independently – with partnerships with microfinance institutions Al Majmoua in Lebanon and a microfinance institution in Morocco to deliver measurable results for innovators, Green Essence and Biodome Maroc. In Egypt, sub-contractor Chemonics Egypt facilitated multiple stakeholder workshops engaging actors from government ministries to banks such as the National Bank of Egypt, advocating for more accessible small- and medium-sized enterprise financing terms, while also connecting farmers to digital financing through fintech providers such as Halan.

Regional Innovation Hubs and Their End-User Financing Partnerships

S/CA RIH	**Equity BCDC (DRC)**	Access to various financial instruments for innovators and end-users and financial literacy training for end-users. Through this partnership the hub submitted profiles of the following innovators to the Bank for funding consideration.
	FBC Bank (Zimbabwe)	Access to climate finance instruments for innovators. Through this partnership, the Hub worked with the bank to provide match funding to Powerlive and GreenZim Ventures. The two innovators received grant funding from the Energy and Environment Partnership Trust Fund (EEP Africa) and Modern Cooking Facility for Africa (MCFA). These grants have a match funding requirement for them to be released. Negotiations are ongoing and at an advanced stage.
	Zambuko Trust (Zimbabwe)	This collaboration aimed to facilitate end-user financing designed specifically for BoP populations, enabling them to access essential water and energy products through the hub's innovators. Zambuko Trust also provided loans to innovators, helping them fund the installation of biodigester systems across Zimbabwe. The Trust committed to providing small loans to end-users that are looking to buy biodigester systems from Zimbabwe-based WE4F innovators, but face affordability challenges.
MENA RIH	**Al Majmoua**	Al Majmoua dedicated resources to design and pilot an on-shelf standardized financial product that will ease access to solar-powered irrigation technology for farmers. The MENA RIH has provided Al Majmoua with technical assistance on alternative risk assessments and the design features of the financial product as well as introducing them to two vetted technology providers in Lebanon to pilot with.
	Moroccan MFI	Launched a call to work with solar irrigation and biogas solution providers to offer specialized loans for smallholder farmers and livestock breeders. The MFI aimed to reduce farmers' initial investment burden by providing flexible loan options for solar photovoltaic (PV) and biogas systems, piloting this financing program with select companies that would also act as service providers.
	CIB Egypt	Developed a Memorandum of Understanding with CIB Egypt to help scale the reach of concessional agriculture financing to smallholder farmers seeking to adopt various water-energy-food solutions to improve their productivity and climate resilience.

HUB HIGHLIGHT: REFLECTING ON A DIFFERENT ROAD TAKEN

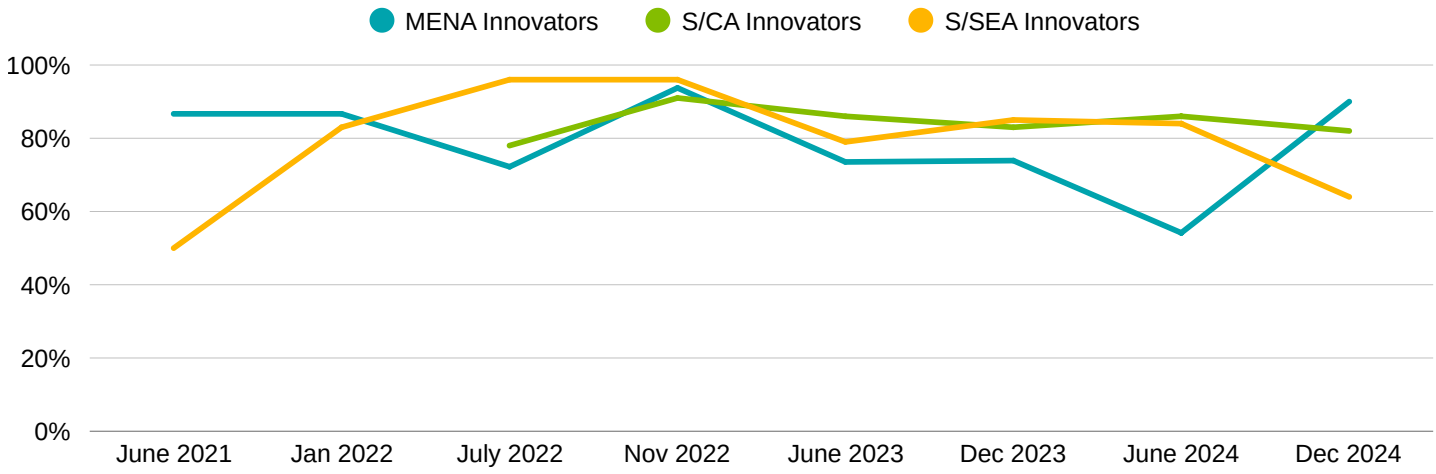
Many of the S/SEA innovators joined the program with a more advanced understanding of end-user financing as well as their own models. Rather than break working systems, the S/SEA RIH opted to provide TAs that could identify partnerships, unlock collaborations, and improve existing systems.

Reflecting on the hub's support of innovators as well as its own activities, the S/SEA RIH had several recommendations for organizations and programs looking to offer their own end-user financing support:

1. At the program level, the hub recommends prioritizing institutions backed or funded by donor organizations, leveraging their subsidized capital and risk-sharing models to enable affordable small-ticket loans for farmers. In most South Asian and Southeast Asian countries, unlocking bank financing for smallholder farmers remains challenging. Providing a guarantee fund and developing partnerships with global and/or regional banks operating in the targeted countries can help lower perceived risk, unlock bank financing, and reduce interest rates for smallholder farmers.
2. If working ambitious innovators that are interested in developing their own in-house models, the provision of grants, support for developing pilots, and the offering technical support to donors/governments would make the innovators' activities less risky while building the capacity of the stakeholders unfamiliar with different end-user financing models.

GENDER MAINSTREAMING

Bi-Annual Quality of Service Survey Question:
Has the engagement with WE4F led to an increase in knowledge about gender integration?
Percent that Responded "Yes"



Gender integration and mainstreaming were a core strategic pillar of WE4F. Gender's role as a main pillar of WE4F was a lesson learned from SWFF and PAEGC, where it was hard to achieve gender integration objectives for the first two-to-three years of implementation because there was no mandatory requirement and innovators lacked awareness of gender integration and mainstreaming.

Within the WE4F donor agreement and mandate, there were two steps that helped the program during its design phase: 1) it was mandated that, in order for innovators to join WE4F, they should, at a minimum, show an intention to integrate gender; and 2) in the RIH structure, the design mandated that all hub contracts were required to have a Gender Advisor as a key role.

Based on the donors' vision and mandates, the Secretariat Unit drafted guidelines on gender mainstreaming, as part of the ESG guidelines document and training hubs on the process and places to assess for gender integration. In addition to drafting detailed guidelines, the Secretariat Unit drafted the CFI application to include mandatory questions on gender integration to assess innovator's commitment to gender mainstreaming and related activities. Lastly, at strategic level, an ESG assessment process was introduced by the Secretariat that fitted just after a CFI cohort was selected for pre-award and before the award signing. Each hub's Gender Specialist would assess the level of gender integration in potential awardee's business. The Secretariat Unit measured innovators' progress on a yearly basis, with the result being featured in the WE4F Annual Report, could have been one of the key motivations for innovators to take gender mainstreaming seriously.

As a result of clear guidelines prepared even before implementation began, all the hub staff bought into the vision and the same message trickled down for innovators as and when they were onboarded. In addition, each hub actively promoted and supported innovators to integrate a gender lens across programming, with a strong focus on improving women's participation across value chain, access to financing and leadership. The hubs supported innovators in strengthening their gender strategies by developing gender action plans, collecting sex-disaggregated data, and designing products and services that better respond to the needs of women end-users. Following the Secretariat Unit providing the hubs with clear guidelines, the RIH staff implemented the guidelines and kept making improvements at their level based on innovator feedback. Hub-level Gender Advisors played the most important role as they worked with innovators on a regular basis and helped avoid the situations where innovators take focus away from gender as a topic. Each convening, TA deliverable, monthly meeting, site visit included discussion on relevant gender based topics both at an individual innovator level as well as group/cohort level.

In terms of women end-users, the S/SEA and S/CA RIHs reached a combined 88% of women end-users. A key factor was also the understanding and commitment from almost all the innovators to work on improving gender related activities in their organizations and larger value chain highlighting the need for gender mainstreaming to be mandatory and a strategic priority throughout the program timeline. Whereas MENA RIH struggled to make significant progress with innovators post the Gender assessment and Gender action plan preparation. The cultural norms around women's role played a huge role in the lack of significant movement. With support and trust from Secretariat and the Donors, however, the MENA RIH and its Gender Advisor continued to make inroads with innovators making a lot of innovators to agree on the importance of gender related activities based on multiple gender workshops conducted with the cohort highlighting the importance and Donor mandate on the topic. The hub also implemented dedicated TAs on gender integration. Eventually, MENA RIH reached 182,000 women end-users (26% of the total RIH achieved).

In addition to the women end-user result, over the course of the program, the RIHs onboarded more women-led and/or -owned innovations. By program end, 50% of MENA innovators were women-led and/or -owned, with S/SEA RIH close behind at 47.5% of innovators being women-led and/or -owned. The S/CA RIH had the most success at onboarding and supporting women-led and/or -owned innovations, with 68.7% of innovations falling into the category.

Innovators also started hiring more women staff due to their increased maturity in gender mainstreaming. For MENA RIH innovators, of the 846 jobs created, 17.2% (146) were filled by women. At the S/SEA RIH, innovators created 1,251 jobs and 16.2% (203) were held by women. The S/CA RIH innovators had the largest percentage of new jobs held by women, with 66.4% (625) of the new 940 jobs belonging to women.

Although innovators across the hubs demonstrated increasing willingness to integrate women as end-users, employees, and partners, the translation of this intent into practice was constrained by persistent social and cultural barriers such as women's limited mobility, lack of access to bank accounts and financial tools, legal barriers preventing ownership of land, limited access to agricultural knowledge, restricted interaction with external male counterparts, and an exclusionary attitude towards women entrenched in cultural and institutional norms. At innovator level, varying levels of organizational maturity and limited internal capacity to operationalize gender integration added to the ecosystem level barriers. To overcome these gaps, innovators required structured and targeted support from the hubs. Accordingly, the hubs provided a range of tailored supports, including market studies to strengthen women's impact in sectors such as poultry, development of gender action and integration plans covering team structure and operations, gender sensitization training for male managers, and context-specific strategies for engaging women farmers across value-chain activities. In addition, innovators were supported in aligning with gender-lens investment expectations through facilitation of 2X Certification, enabling stronger alignment with government, donor, and investor priorities on gender inclusion.

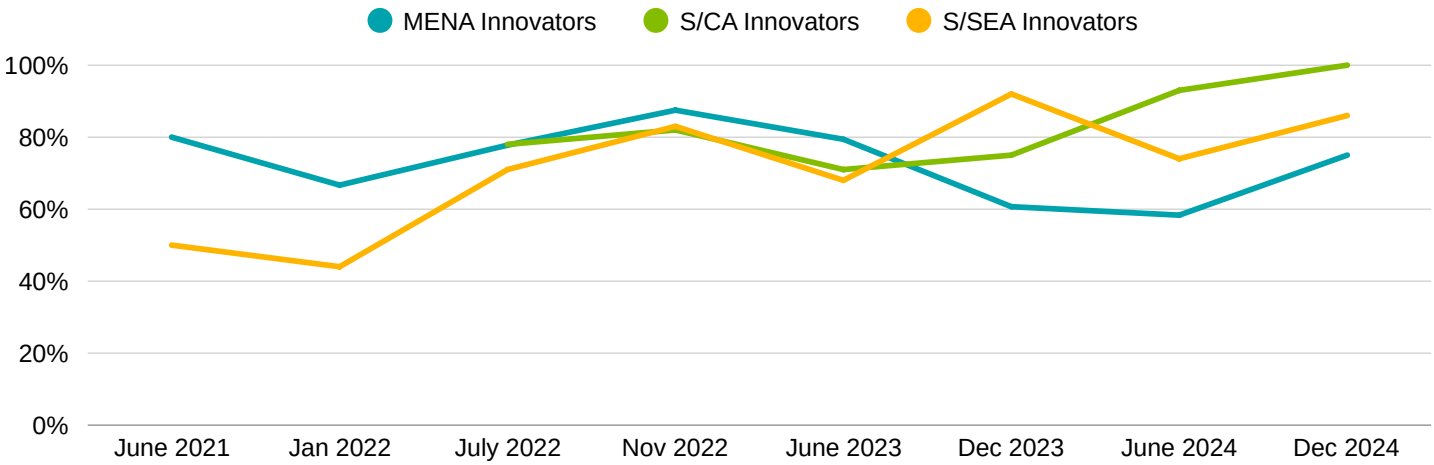
For events and convenings, at a global level, the program emulated Gold Standard practices, which were identified through participation in World Water Week by the Swedish International Water Institute. For all internal and external, webinars, convenings, conferences, and other speaking engagements, the program aimed to have at least 40% women speakers as well as at least one speaker under the age of 35. Ensuring women speakers was relatively easy, as the program at the staff-level was women-dominated, with women stationed across every portfolio, with the exception of the Hub Managers. Additionally, many women-led and/or -owned innovators were key examples of success in the program, so they were regularly recommended speakers. Beyond numeric representation, deliberate facilitation techniques were used to encourage meaningful participation, ensuring that women participants actively contributed their perspectives during group-based discussions and activities.

For all communications products, WE4F systematically applied a gender lens, proactively highlighting women-led and/or -owned innovators and showcasing women's contributions through case studies, blogs, newsletters, and external communications, thereby strengthening the visibility of women's leadership and reinforcing gender-inclusive narratives within the program. The applied gender lens, for events and communications, also externally strengthened women innovators and staff's position as experts in their respective fields. They spoke at United Nations events, were featured in media articles, and participated in high-profile conferences.

In the three instances in which women's voices, or presence, were diminished: 1) a woman innovator being given less speaking time during a roundtable discussion; 2) an innovator preferring to send a man instead of a woman for a speaking engagement, and 3) an innovator was disrespectful to women WE4F staff) the program took immediate corrective action. Those involved were identified, separate conversations about the event were held, appropriate actions were taken to ensure those involved understood where the program stood. In the instance of the woman innovator being given less speaking time, the facilitator was removed from consideration for future facilitation opportunities. In the second instance, the program explained that either a woman speaker participated or the opportunity would be given to another innovator. In the third instance, the behavior was a contributing factor to the innovator's removal from WE4F. Additionally, new trainings and policies were instituted that would prevent a similar instance from occurring.

ENVIRONMENTAL SUSTAINABILITY, CLIMATE, AND BIODIVERSITY INTEGRATION

Bi-Annual Quality of Service Survey Question:
Has the engagement with WE4F led to an increase in knowledge about environmental sustainability, including climate resilience and biodiversity?
Percent that Responded "Yes"



Environmental sustainability was embedded in WE4F as a foundational requirement across the program, governed by USAID's Regulation 216 (22 CFR 216), which mandates environmental review and compliance for all USAID-funded activities. As lessons integrated during the design phase, each RIH hired qualified Environmental Advisor(s), to ensure that all supported innovations met USAID's environmental safeguarding standards. This began with the completion of Initial Environmental Examinations for each grantee, classifying activities by their potential environmental impact and prescribing corresponding mitigation measures, wherever necessary. Each grantee was required to develop EMMPs outlining how they would identify, manage, and report on environmental risks throughout implementation. For a climate focused program, this was particularly significant. Innovations operating across the inter-connected water-energy-food nexus – whether solar-powered irrigation systems, biodigesters, agri-processing technologies, or water purification solutions – carried inherent risks related to water use, soil health, energy emissions, waste management, and biodiversity disruption. Through multiple alignment meetings, individual advisory sessions and focused TAs, innovators were supported to move beyond mere compliance, embedding environmental considerations into their core business operations and using the process as an opportunity to strengthen their broader ESG credentials and investor readiness.

Critically, the discipline of environmental monitoring and impact measurement instilled through the USAID Regulation 216 compliance proved to have significant value beyond the program itself. By establishing robust systems for tracking environmental inputs, outputs, and mitigation measures, innovators built the data infrastructure and institutional practices increasingly required by green financing instruments, impact investors, and development finance institutions. For innovations in renewable energy, biogas, and sustainable agriculture – sectors where carbon sequestration and emissions reduction are quantifiable and commercially valuable – this foundation positioned several innovators to explore carbon credit certification and results-based climate financing mechanisms. Through USAID mandate and by consistent efforts of Hub's Environmental advisors, what began as a compliance requirement evolved into a strategic asset, equipping innovators with the environmental credibility and evidence base needed to access the next generation of climate-focused capital.

The nature and complexity of environmental compliance varied across the three regions. In South and Southeast Asia, the diversity of innovation types and operating environments – from densely populated agricultural lowlands to ecologically sensitive upland areas – meant that environmental assessments required close coordination between innovators, Environmental Sustainability Advisors, and Country Coordinators. An early challenge was that many

innovators lacked the tools and skills to consistently quantify water, energy, and carbon savings. The hub responded by developing standardized measurement tools for water, energy, and emissions tracking, delivering targeted webinars on environmental compliance, ESMS, occupational health and safety, waste management, and site selection criteria, and training innovators to use MEL data beyond mere donor compliance. Biodiversity monitoring, largely absent at program launch, was progressively strengthened through the introduction of EMMPs and EMMRs, which helped innovators identify relevant biodiversity indicators and adopt systematic monitoring practices – including a focus on native species protection.

As innovator awareness of ESG improved, the demand for more advanced support increased. By the IWMI-implemented bridge contract, three S/SEA innovators – Egreen (Vietnam), Komodo Water (Indonesia), and Husk Ventures (Cambodia) – requested TA to prepare investor-grade ESG reports extending well beyond donor compliance requirements. The S/SEA hub also addressed a clear knowledge gap around carbon credits. While innovator interest in monetizing carbon outcomes was high, many lacked clarity on eligible methodologies, monitoring, reporting, and verification requirements, and transaction costs. Through focused sessions at Regional Convenings and a dedicated knowledge product covering the full carbon credit landscape, innovators were able to make informed decisions on feasibility and revenue potential.

In Southern and Central Africa, innovators were introduced to mandatory program requirements including Initial Environmental Examinations, ESMSs, and EMMRs. While some innovators (e.g., Nature's Nectar (Zambia) and Meat Naturally (Zambia) arrived with established ESG systems, others required significant support. The results were substantial. Zonal (Chad) progressed from developing a carbon emissions savings template to conducting an environmental study on fish stock pressures in Lake Lere, training supplier fishermen on sustainable fishing practices, and partnering with the Government of Chad on human-wildlife conflict mitigation. Through the adoption of an ESMS, COMACO (Zambia) strengthened compliance, improved donor reporting, and enhanced investor attractiveness. Environmental compliance within the S/CA RIH also intersected with enabling environment efforts. The alignment between EMMP requirements and national standards work – such as Zimbabwe's updated biogas standards – creating coherence between regulatory compliance and market development.

In the MENA RIH, where the portfolio was mainly made up of solar energy and high-cost climate technologies, environmental compliance was generally more straightforward in terms of direct ecological impact, but the region's acute water scarcity context meant that water-related considerations – particularly for agri-tech and irrigation innovations – required careful, context-sensitive treatment. Similar to S/SEA and S/CA RIHs, MENA RIH's environmental compliance work extended well beyond documentation and reporting, with the hub driving practical, on-the-ground environmental action across the innovator cohort. Biodôme (Morocco) co-financed pilot environmental education projects for underserved youth and scaled its pedagogical tools through partnerships with local associations. Greenco (Lebanon) participated in a carbon credit assessment to explore future environmental market opportunities while also completing resource efficiency TA to reduce water and energy use. Mozna (Egypt) was recognized with the 2024 Environmental Sustainability Award at Egypt's Entrepreneur Awards. The hub also built cohort-wide innovator capacity on integrated waste management to reduce environmental risk across operations.

Across all three regions, the program's consistent approach was to treat environmental sustainability and compliance not as a bureaucratic obligation but as a platform for building environmentally responsible, investment-ready businesses capable of sustaining their impact well beyond the program lifecycle. Integral to this was the active involvement of the USAID Bureau Environmental Officer (BEO) and their team, who played a significant role in building the capacity of hub Environmental Advisors and Country Coordinators – equipping them with effective and cost-efficient methodologies for tracking and reporting environmental impacts. The BEO team's close engagement with the Secretariat and hubs also proved critical in establishing a structured feedback loop during the preparation of EMMRs, ensuring that mitigation actions taken by innovators in line with their EMMPs were accurately captured, reviewed, and validated. This three-way collaboration between the BEO, Secretariat, and hubs strengthened the overall quality and credibility of the program's environmental compliance framework.

LEARNING FROM FAILURE AND CREATING PROGRAM PIVOTS

As a complex, global program that operated on national, regional, and international levels, there were many different moments for reflection. To ensure that the program could see its mistakes, learn from failures and complicated successes, and implement meaningful changes, WE4F utilized several methods to collect feedback: Mid-Term and Final Evaluations, the Technical Assistance and Hub QoSSes, pause-and-reflect sessions, Annual Reports, and hub-to-hub exchanges. To not complete one type of reflection is to limit the program's ability to pivot and overcome barriers to innovator support. Following on the identification of the needed pivots, the key aspect of WE4F's ability to adjust activity implementation was the donors' trust in the program staff as well as overall program management. Decisions could be made by the USAID Team Lead without daily consultation with all donors, which enabled the program to quickly adjust when solutions presented themselves as quickly as problems did

KEY FAILURES

While WE4F delivered strong results overall, several limitations provided important lessons for future programming:

1. **The program faced constraints in mobilizing concessional finance through mechanisms** such as BUILD/Bridge even after prolonged partnership and strong intention leading to innovator frustration and missed opportunity.
2. **The initial enabling environment strategy – centered on high-level policy advocacy – proved largely ineffective**, as it was misaligned with program timelines and innovator needs, resulting in limited systemic policy change beyond isolated successes and requiring a significant mid-course correction towards a much more local and country coordinator driven approach.
3. **Structurally, although Country Coordinators were critical to program success, their visibility and strategic positioning were at times constrained** by hub-level hierarchies and design inefficiencies, limiting their full potential as ecosystem actors.
4. **The program also experienced uneven regional and country representation**, particularly in early cohorts, requiring later pivots (e.g., OCFIs) to improve inclusion of underrepresented geographies.
5. **While the program had high gender integration ambitions, all RIH Managers were men.** Despite a strong emphasis on gender and a highly balanced gender ratio at all levels of the program, leadership diversity within hub structures did not fully reflect program ambitions. All Secretariat Unit positions were held by women at some point in the program, along with the USAID Team Lead position first being held by a man and then by a woman. For the RIH contracts, the contract lead for MENA RIH was a man, while the S/SEA and S/CA RIH contract leads were women.

PROGRAM PIVOTS BASED ON INTERNALLY IDENTIFIED CHALLENGES

SWITCHING FROM A CENTRALIZED DONOR ENGAGEMENT APPROACH TO A REGIONAL DONOR ENGAGEMENT APPROACH

Originally, all donor engagements were routed through the USAID and GIZ Secretariat Units, limiting RIHs' ability to build direct relationships with Missions and Embassies. While this donor-driven approach helped streamline communication and allowed the Secretariat to support or shield hubs—such as managing sensitive communication requests for Iraqi innovators—it also slowed coordination for site visits, events, and country-level activities.

Shifting to a hub-driven model, with the Secretariat acting as advisor, improved the speed and quality of local engagement. Hub teams were better able to connect with in-country donors and private sector actors, unlocking opportunities such as USAID Zimbabwe funding for the Zimbabwe Biogas OCFI under the S/CA RIH, and additional buy-ins in Iraq for the MENA RIH from Sida and USAID following an initial successful engagement.

EDUCATING INNOVATORS ON THE INVESTMENT-RAISING PROCESS

As noted in earlier sections, while many innovators sought investment, only 39% successfully secured it, largely due to gaps in investment readiness and limited understanding of market dynamics. Initial dissatisfaction stemmed from perceived gaps in support and slow investment timelines. In response, the RIHs adapted their approach by improving transparency around investment processes, timelines, and innovator readiness levels. Brokering Units worked more closely with Technical Assistance teams to deliver targeted investment readiness support, enabling less mature innovators to progress. This shift in communication and support improved innovator satisfaction and helped build a stronger pipeline of investment-ready enterprises.

ADJUSTING THE PROVISION OF TECHNICAL ASSISTANCE TO MATCH SCALING INNOVATORS' NEEDS

When many innovators joined WE4F, they were at the early stages of their scaling journey so the types of TA they needed, as well as the level of complexity, were lower. As a result, the TAs were able to be conducted in-house by the RIH thematic experts across environmental sustainability, gender inclusion, base of the pyramid integration, business development, marketing, and other TA categories. As innovators' operations grew, however, so did their TA needs. Innovators were no longer looking to improve operational and financial structuring, but instead were seeking strategic decisions, revenue streams, and partnerships that required the usage of niche technical experts. In response to the changing innovator needs, the hubs utilized external vendors for conducting these TAs. To minimize costs associated with the contracting and usage of an external vendor, the hubs worked to group innovators requesting similar TAs (e.g., carbon credits) and turn relevant products into internally, or externally-available knowledge products, thereby increasing their cost effectiveness.

LEVERAGING A COUNTRY-DRIVEN ENABLING ENVIRONMENT STRATEGY

At the start of WE4F, the RIHs' Enabling Environment Units leveraged an overall regional-based approach for reducing innovators' barriers to scale. These issues took many forms, from outdated technology policy to complex

importation/exportation regulations. While leveraging the regional approach, the Enabling Environment Unit, as well as innovators, saw limited success in helping innovators achieve new market linkages, scale their product's visibility, and unlock participation in government support schemes. In 2022, upon reflection by the different Enabling Environment Units, a decision was made at the global level to improve the utilization of Country Coordinators and the Enabling Environment Unit by implementing a country-based and innovator-driven enabling environment strategy that focused on specific policy and regulation barriers that affected several innovators rather than just one innovator. The change in practice saw immediate results, as the hubs now had specific policies, practices, or gaps within the enabling environment that they could target. By focusing on what innovators were saying were their on–the-ground challenges, rather than completing a full analysis of a country and trying to change the complete enabling environment, the hubs were able to develop paths forward that could benefit even non-WE4F SMEs.

IDENTIFYING WATER OVERUSE AND AMBIGUOUS RESULTS

Field studies by External Surveyors identified several instances where innovations led to unintended increases in water consumption (one irrigation innovation), or the innovators lacked evidence of positive impact on water efficiency (one digital innovation), requiring further investigation and safeguards against risks to local water resources. External surveyors found that some innovations directly enabled increased water consumption by removing cost barriers for end-users, particularly through solar pumping. This unintended usage typically stemmed from the technology itself facilitating farm expansion alongside coinciding factors such as shifts to water-intensive crops by end-users or a lack of flow meters which left them unaware of their true water consumption.

To develop its own risk identification tools and safeguards against water overuse, WE4F took two critical steps. At the global level, in conjunction with the RIHs, WE4F developed and launched water accounting dashboards for five river basins in which WE4F-supported innovators operate – the Zambezi River Basin, the Nile River Basin, the Litani River Basin, the Ganges River Basin, and the Red River Basin. At the hub level, when end-users' behavioral changes negated an innovator's water-efficient design, the hubs provided environmental sustainability and product design TAs. These TAs helped innovators launch complementary farmer advisory services or install flow rate meters, ensuring that innovations were used correctly and had a positive impact on water efficiency as intended. In one instance where an innovator operating in a water-scarce region was believed to pose a high risk of harm to local water resources, the innovator's grant was terminated. For innovators with ambiguous or negative External Surveyor findings, their water consumption was carefully reassessed during every annual grantee review, and they were provided environmental sustainability support to strengthen water efficiency.

DEVELOPING METHOD FOR THE REPORTING OF END-USERS FOR BUSINESS-TO-BUSINESS INNOVATORS

As highlighted in the 2023 Annual Report, given the nature of countries and organizations in the MENA region, it was extremely difficult to meet documentation requirements related to traceable identifiers for every end-user. For innovators who operate a B2B model, it was uniquely challenging as they needed to acquire such information from their retailers/distributors who would possibly not be tracking such data. In 2024, the amended documentation requirements began, allowing innovators to submit signed letters from their retailers/distributors sharing and confirming the number of B2B end-users impacted by the innovator. Additionally, external surveyor data was instrumental in enabling B2B innovators to report gender and income level data for new end-users by extrapolating from field study data, avoiding the need for detailed data requests that distributors and retailers were often unwilling to fulfill due to customer data privacy concerns.

Unintended Outcomes and Methods for Replication/Avoidance Based on WE4F Pivots

Positive Outcomes	How to Replicate
Matching capital grants as an effective strategy designed to connect impact and economic sustainability.	Rather than waiting for innovators to present a need for such a mechanism, programs could include such financing opportunities in the design or as part of the potential customized innovator support package.
Peer-to-peer support networks among innovators emerged organically, with innovators continuing to share information, contacts, and lessons outside formal program activities. These informal networks contributed to sustained learning and problem-solving beyond direct hub intervention.	Start the process with in-person learning events where innovators form natural connections with each other. Provide a platform for engagement through WhatsApp, LinkedIn Group, or another communication method where innovators can interact with each other as they desire without program involvement (aside from general group management).
Negative Outcomes	**How to Avoid**
Rapid engagement with multiple partners or stakeholders due to increased exposure occasionally stretched innovators' operational resources and highlighted gaps in internal systems.	Sequence networking opportunities with readiness support and inform of subsequent adjustments in program delivery to prevent innovators from being overwhelmed.
Innovators also became hyper-aware of their institutional capacities, which consequently resulted in increased requests for technical assistance to close those institutional inadequacies.	Ensure innovators are aware, ahead of engagement with other more mature innovators, of the differences in in innovator maturity as well as reminders of being on different growth paths and operating in different markets.

PROGRAM PIVOTS BASED ON MID-TERM EVALUATION FINDINGS

Water and Energy for Food conducted a Mid-Term Evaluation (2022) and Final Evaluation (2024); USAID and GIZ procured separate evaluation teams to assess their respective implementing regions due to the agencies' incompatible procurement requirements. Though two sets of evaluations were conducted, the USAID and GIZ Secretariat units aligned evaluators' approach by jointly writing the Terms of Reference and evaluation questions, which enabled cohesive assessments of the program with comparable findings at the global level. USAID contracted Dexis Consulting Group for evaluations of the S/CA, S/SEA, and MENA hubs while GIZ contracted Syspons to assess their West Africa and East Africa hubs. Both evaluations used OECD DAC criteria as their framework and collected data through key informant interviews, innovator surveys, and end-user surveys, with findings shared across secretariat teams and Donor Partners to inform program steering and learning. Dexis also drew heavily on the comprehensive primary data collected by External Surveyors during their mid-term and final evaluations of the program, illustrating how the External Surveyor Program served needs across the full program, from end-users and innovators to hubs and external evaluators.

Mid-Term Evaluation Report Findings and Documented Pivots

Report Finding	WE4F Pivot
High women's participation across regions except for MENA still lagging.	The MENA RIH launched the MENA Women Innovate Network to facilitate networking amongst women-led and/or -owned innovators along with the provision of capacity building related to key optics like digital marketing and women-inclusive end-user financing.
Potential for certain water innovations to result in overuse, affecting river basins and future water availability	The program developed water accounting tools for the Zambezi River Basin, Litani River Basin, Nile River Basin, Red River Basin, and Ganges River Basin
Innovators want more standardized/automated MEL tools and reporting could be easier	Right after MTR publication, USAID Secretariat MEL Manager created KPI2 MEL Documentation Template & CLEER Tool Documentation Templates. Both required use unless an exception was granted. The KPI2 template automated disaggregation of results and clearly organized all EU data required by WE4F MEL. See CLEER Tool Template above.
Good quality enabling environment support, but remaining barriers reported by innovators	The program changed its enabling environment approach to focus not on general policy and regulatory issues, but specifically target achievable outcomes that delivered results for either a couple specific innovators or a category of innovators (e.g., enabling the exportation of Zambian honey into South Africa, laboratories in Egypt becoming internationally certified for use by organic fertilizer innovators)

FINANCIAL SUMMARY

The USAID-led implementation of WE4F was a multi-donor, multi-region program. Its financial architecture reflected that complexity, with contributions pooled from four donors– Ministry of Foreign Affairs of the Government of the Netherlands, Norwegian Agency for Development Cooperation (Norad), Swedish International Development Cooperation Agency (Sida), and the U.S. Agency for International Development (USAID) for the three Regional Innovation Hubs (RIH) and a Secretariat Unit. Funds were directed towards a deliberately broad set of activities: direct grants, TA, and operational support through multiple contracts and subcontracts. A financial summary presented in this section provides a transparent account of how program resources were mobilized, allocated, and deployed over the five-year implementation period. The first table details total donor contributions to the program, illustrating the collective commitment of the donor partnership and the relative share of each contributor. The second table disaggregates allocations across the MENA, S/SEA, and S/CA RIHs and Secretariat Unit, including the WE4F Bridge Contract managed by the International Water Management Institute (IWMI). It was critical in restarting program operations following the USAID Stop Work Order by showing how funds were distributed across implementing structures and the division of donor support.

The third table presents a functional breakdown of hub expenditure across grants, personnel, implementation, and indirect costs. It offers insight into how resources were ultimately directed and the proportion that directly reached innovators. Personnel costs include direct labor, fringe benefits, key and non-key experts, consultants, travel, transportation, and per diem, with Secretariat Unit costs independently accounted for, and not attributed to the hubs. Implementation costs encompass equipment and supplies, subcontractor fees, and other direct costs such as rent, taxes, and bank charges. The S/SEA RIH recorded the highest implementation costs due to subcontractors DevWorks, CrossBoundary, and local contractors. The MENA RIH ranks second due to partnership arrangements with Cewas, Chemonics Egypt Consultants, and IWMI. Indirect costs differ between the two prime contractors reflecting separate USAID contracting negotiations. Berytech's indirect costs are calculated as 51% of direct labor and fringe benefits, whereas Tetra Tech's broader cost structure encompasses full and field overhead, fringe benefits, general and administrative costs, and a fixed fee. It is a structural difference that reflects contracting norms rather than differences in operational efficiency or value delivered, and should be kept in mind when comparing hub-level cost compositions.

Altogether, the below tables tell the financial story of a program that sought to – and fairly succeeded in – maximizing impact at the innovator level while managing the operational demands of a globally distributed, contractor-led delivery model.

Funds in U.S. Dollars Provided by Donor, Amount Used by Program, and Amount Remaining at the United States Department of State

WE4F Funds Provided	Amount in U.S. Dollars
Sida	$28,987,890
Sida for Bridge Contract	$1,549,928
Dutch Ministry of Foreign Affairs	$10,129,867
Norad	$8,340,045
USAID	$10,883,558
Total Donor Funds Provided	**$59,891,287**
Used Funds	**Amount in U.S. Dollars**
MENA RIH – Berytech	$15,871,498
S/SEA RIH – Tetra Tech	$15,954,353
S/CA RIH – Tetra Tech	$9,771,809
Other Support Costs: Various Contractors *Dexis Consulting Group, PM Consulting Group (now doing business as Vistant), DAI, Encompass*	$6,427,882
Bridge Contract – IWMI	$1,549,928
Total Used Funds	**$49,575,470**
Remaining Funds	**Amount in U.S. Dollars**
At USAID/Department of State (includes USAID funds)	$10,315,818

Funds in U.S. Dollars Provided by Donors to the Secretariat Unit and Hubs

Budget Status 2020-2025

RIH	USAID	Sida	NL Ministry of Foreign Affairs	Norad	Securing Water for Food (from NL)
MENA RIH	$3,100,000	$6,282,470	$9,801,980		$162,822
S/SEA RIH	$1,000,000	$16,610,175			
S/CA RIH	$449,558	$4,712,587		$4,876,679	
Dexis		$500,000			
Secretariat Unit	$3,375,000	$882,649	$165,065	$3,463,366	
Secretariat Bridge Contract		$1,549,928			
Other Support (S/SEA & S/CA)	$2,959,000				
Total = $59,891,287	**$10,883,558**	**$30,537,817**	**$9,967,045**	**$8,340,045**	**$162,822**

Used Funds in U.S. Dollars by Hub and by Category (2020-2026)

RIH	Total	Grants	TA	Personnel	Implementation	Indirect Costs
MENA RIH	$15,871,498	$6,616,630.50	$1,899,095.62	$1,966,218	$4,466,310	$923,244
S/SEA RIH	$14,895,354	$3,542,443	$617,849	$2,885,237	$5,058,401	$2,791,424
S/CA RIH	$8,505,443	$2,339,855	$219,675	$1,908,466	$1,761,656	$2,275,791
Dexis	$499,955				$499,955	
Secretariat	$5,615,356			$2,807,656	$2,246,124	$561,576
Secretariat Bridge Contract	$1,549,928			$378,284	$1,051,616	$120,028
Other Support (S/SEA & S/CA)	$2,637,937				$2,637,937	
Total	**$49,575,471**	**$15,235,548**		**$9,945,860**	**$17,721,999**	**$6,672,063**
Percentage		**31%**		**20%**	**36%**	**13%**

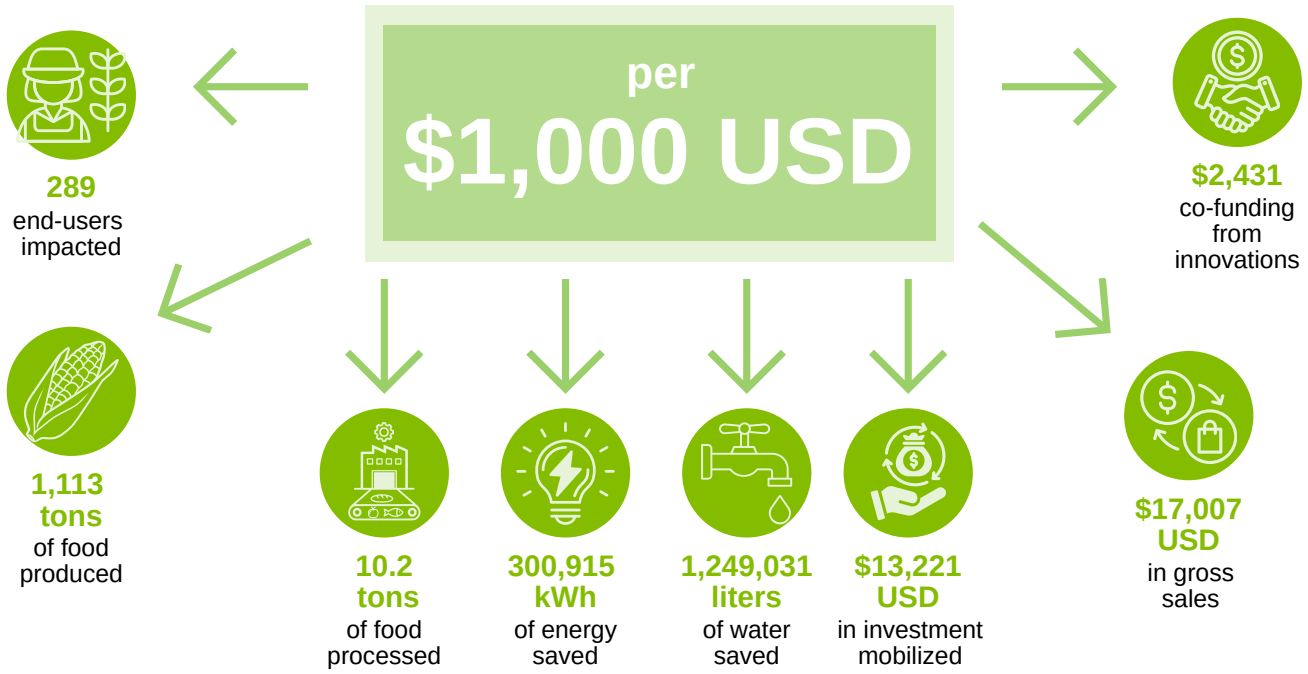
Implementation funds in WE4F cover several categories: equipment and supplies, subcontractors, and other direct costs like phone calls, rents, taxes, bank fees, and innovator bank fees. Personnel costs were the direct labor, Cooperating Country Nationals which is an employment type, independent consultants, travel, transportation and per-diem.

The higher indirect costs at the S/SEA RIH and S/CA RIH are due to the disparity in the contractual negotiations and terms, which differ substantially. TetraTech, who implemented the S/SEA RIH and S/CA RIH, is a U.S. based contractor there were additional percentage markups applied to cover headquarters staff along with the administration of personnel in Africa and Asia. The hub personnel were managed from the U.S. headquarters and, in some instances, through subcontractors. For the MENA RIH, Berytech was based in the MENA region, so only a general administrative overhead percentage was applied, and the factors affecting the majority of the staff were of a local nature.

When considering implementation costs, there are several factors to consider. The primary factor explaining the difference is the total value of used funds of each contract. The hub with the largest value of funds used was the MENA

RIH, even though the contractual values for S/SEA RIH and MENA RIH were identical from their inception. Conversely, the S/CA RIH contract was, from the beginning, designed with a value approximately 50% lower than that of the other two. Additionally, TetraTech (S/CA RIH and S/SEA RIH) has significantly higher indirect costs than Berytech (MENA RIH) – a difference that left the MENA RIH with more funds to allocate toward grants and TA. Ultimately, had indirect costs been lower, the S/SEA RIH and the S/CA RIH could have engaged a greater number of innovators and achieved even more results. While these results are not comparable to those of the MENA RIH, one point is clear: due to the structure of its contracts, TetraTech engaged fewer innovators and provided less TA. When compared against themselves, these regions should have achieved better results and had lower their costs.

Impact of USAID-Implemented Water and Energy for Food per $1,000 U.S. Dollars



CATALYTIC INVESTMENT OF WATER AND ENERGY FOR FOOD

The total program cost over the five-year implementation period amounted to $49,575,470 USD, of which $7,977,810 USD was attributable to Secretariat and $41,597,660 USD towards the three RIH contracts. For the purposes of this cost-benefit analysis, WE4F "direct innovator investment" is defined as the combination of total RIH grants plus TA. It is a deliberate and conservative definition that focuses the return calculation exclusively on funds directly deployed to innovators, and against which impact can be most credibly attributed. Secretariat and hub operational costs, while essential to program delivery, are excluded from this definition to avoid overstating the cost denominator relative to directly measurable innovator-level outcomes. The "WE4F total investment" is used for scenarios where the total program cost is considered, including all direct implementation, and indirect costs.

Leverage Ratio

$$\frac{\left(\text{external investment mobilized} + \text{innovator co-funding}\right)}{\text{WE4F total investment } \textbf{OR} \text{ WE4F direct innovator investment}}$$

Efficiency Multiplier

$$\frac{\text{WE4F total investment } \textbf{OR} \text{ WE4F direct innovator investment}}{\left(\text{external investment mobilized} + \text{innovator co-funding}\right)}$$

Catalytic Cost per End-User

$$\frac{\text{WE4F total investment } \textbf{OR} \text{ WE4F direct innovator investment}}{\text{total number of end-users}}$$

LEVERAGE RATIO

For every $1 USD of WE4F innovator grants and TA funding, $15.60 was mobilized from external sources, including private investment and innovator co-funding. If the leverage ratio were calculated considering WE4F total investment, for every $1 of WE4F investment, $5.60 was mobilized from external sources for the overall economic, social, and environmental impact created by WE4F. The mobilized external investment of WE4F innovators far exceeded the program's innovator funding. Leveraged private sector leveraged funds offset program costs and augmented total impact, demonstrating the program's effectiveness in attracting resources for its innovators that were well beyond its direct contributions. These findings were echoed by WE4F Final Evaluation, where third-party evaluators found that WE4F was "effective in improving innovator capacity to mobilize investment well beyond program targets".

CATALYTIC COST PER END-USER

At the end-user level, market financing shaped both the cost and reach of impact per end-user in ways that demonstrated WE4F's catalytic role of amplifying scale and reach. Of the $57.31 USD invested per end-user across WE4F-supported innovators, only $3.46 USD originated from WE4F direct innovator investment (grants and TA funding), with the majority ($53.85 USD) being contributed by markets. This reflects the efficiency of WE4F's program design – using targeted program investment to mobilize private capital while reducing donors' financial exposure and creating greater impact. The private sector contributed to 94% of total investment. In other words, combinations of WE4F grants and TA funding covered 6% of the true impact cost, while enabling 100% of the program's impact.

LESSONS LEARNED AND RECOMMENDATIONS

LESSONS LEARNED

REGIONAL AND COUNTRY-BASED APPROACHES FOR PRIVATE SECTOR DEVELOPMENT

A defining feature of WE4F was the Regional Innovation Hub structure, which placed program delivery closer to innovators and ecosystems than legacy global programs. This structure generated important lessons about the right balance between regional coordination and country-level presence.

REGIONAL EXPERIENCES

Within the S/SEA RIH, Country Coordinators managing individual innovator relationships were central to the delivery of need-based support. The hub found that embedding partnership development within technical assistance (TA) deliverables – rather than treating it as a separate activity – produced more tangible outcomes. Access to regional and local financing ecosystems, through advisors with genuine contextual understanding, was particularly important for early-stage companies. In the S/CA RIH, enabling environment support proved most effective when it operated in close collaboration with Country Coordinators, who served as the pulse of in-country private sector development. In the MENA RIH, the hub demonstrated that regional integration combined with nationally tailored interventions ensures both contextual relevance and scalability – regional frameworks can be adapted to each country's policy, financial, and market realities while maintaining a coherent impact narrative. A key lesson was that regional level staff found it difficult to influence policy decisions and as well as create tangible partnership due to lack of access to local networks in all operating countries. This was the key pivot from originally planned regional level enabling environment strategy where WE4F changed its approach and made country coordinators be the focal lead for enabling environment activities leading to numerous successful partnerships for individual innovators.

GLOBAL INSIGHTS

Compared to the legacy SWFF program, WE4F's regional Calls for Innovations (CFIs) led to increased outreach and participation from target countries. Country-based and theme-based calls – such as the Iraq Call for Innovations, Zimbabwe Biogas Open Call, and Lebanon Call for Food Processing Innovations – generated higher application volumes and stronger cohorts than broader regional calls. Providing application materials in local languages further encouraged participation from under-represented countries. Technical audits and field visits by the Secretariat were essential for keeping global management connected to on-the-ground realities. A pivotal mid-program learning was that enabling environment efforts are nearly impossible to implement effectively at a global level – once the program shifted to a country-level enabling environment approach, results were immediate and significant. Local presence and networks proved indispensable for programs addressing the regulatory and policy barriers
facing agricultural small- and medium-sized enterprises (SMEs). The regional structure complemented the challenge fund offering in leveraging funds from regional Donor Embassies and USAID Missions as was evident from the buy-ins from in all three regions.

MOBILIZING PRIVATE CAPITAL IN DYNAMIC AND DIVERSE CONTEXTS

One of the program's most significant contributions was demonstrating how catalytic public funding can de-risk and crowd in private investment for early-stage climate innovators – a challenge that manifests differently across regions and requires differentiated approaches.

REGIONAL EXPERIENCES

Within the S/SEA RIH, matching capital grants proved effective in attracting private capital participation by reducing investment risk, with innovators such as aQysta, Oorja, and Claro Energy as examples. The hub also found that enabling innovators to meet ESG compliance standards and green investment benchmarks significantly improved access to impact investment and sustainable finance. In the S/CA RIH, the region's perception as a high-risk investment environment made match funding grants particularly critical for catalyzing private capital – grants functioned not just as financial support but as a confidence signal to private investors. The MENA RIH operated in a fragmented financing ecosystem characterized by limited domestic venture capital/private equity activity, shallow capital markets, heavy collateral requirements, and chronic underfinancing of early-stage climate SMEs. The MENA RIH responded by acting as a catalytic de-risking partner – deploying blended finance instruments including grants, TA, and advisory support– and building investable SME pipelines while connecting innovators directly with regional financiers.

GLOBAL INSIGHTS

At the global level, each hub developed its own investment facilitation strategy, and the Secretariat Unit ensured quality and consistency across each approach. A significant departure from convention was the deliberate move beyond standard debt and equity transactions. The RIHs explored guarantees, results-based financing, and investment-matching grants, tailored to the maturity and context of each SME. The dominant investment mechanism varied meaningfully by region – results-based financing in Africa, equity in MENA, and debt in Asia – underscoring the importance of context-sensitive design. The program also demonstrated that investment readiness cannot be assumed. Not every innovator was investor-ready at program onboarding. Over the course of the program, building their capacity became a core

function of each hub. The deal-closing process for smaller SMEs was often longer and more resource-intensive than anticipated – sometimes spanning two-to-three years – making sustained, hands-on accompaniment essential. Water and Energy for Food leaves behind a more robust investment pipeline, creating a significant opportunity for successor programs focused on investment mobilization.

Overall, investment facilitation and readiness was validated as a critical program offering almost immediately – with 95% of onboarded innovators expressing interest in raising private investment from the outset, irrespective of their stage or geography. Yet only 36% ultimately succeeded, reflecting a gap the program spent considerable effort addressing. A central lesson was that investment readiness must be actively built as early/mid -stage innovators required foundational support – strengthening business models, financial projections, and legal frameworks – before meaningful facilitation could occur, while more advanced innovators benefited from targeted pathway identification aligned with specific investor mandates. Managing innovator expectations around timelines proved equally important – early transparency about realistic timelines and readiness gaps significantly improved satisfaction and pipeline quality. Regional ecosystems varied considerably. South Asia and Southeast Asia offered the most mature environment, while Southern Africa and Central Africa were perceived as being the highest risk. The Middle East and North Africa faced political and economic instability.

To overcome regional challenges, the hubs adopted unique approaches. Within the MENA RIH, the hub separated investment facilitation (completed by the Brokering Unit) from investment readiness (completed by the Technical Assistance Unit) as it enabled the investment staff to focus on securing deals rather than increasing innovators' maturity. The separation resulted in a well-managed pipeline and an approach that was adopted by all three hubs. For the S/SEA RIH, thematic instruments including gender-lens investing, the 2X assessment tool, and matching capital grants added meaningful value. aQysta (Nepal) and Oorja (India) received matching capital grants ranging from $50,000 and $150,000, which resulted in private investment equal to eight to ten times the grant value. The BUILD/BRIDGE guarantee partnership with the United Nations Capital Development Fund and Bamboo Capital, however, produced only one deal that reached the structuring stage before ultimately falling through after 1.5 years. A lack of success from the guarantee partnership underscores the mismatch between patient capital instruments and operational timelines of innovators.

STRATEGIES AND APPROACHES FOR ESG INTEGRATION, WITH A FOCUS ON GENDER MAINSTREAMING

Gender mainstreaming, and broader ESG integration, were embedded as cross-cutting requirements from program design, not added as afterthoughts. The integration of both generated lessons on what worked from a technical lens and what drove innovator buy-in.

REGIONAL EXPERIENCES

The S/SEA RIH found that the most effective approach begins with integrated, cohort-level conceptual learning on ESG and gender mainstreaming, followed by individual TA for innovator-specific implementation. Continued support through partnerships and team capacity building proved essential to translating training into sustained practice. At the S/CA RIH, a critical insight was that innovators engaged more meaningfully with ESG and gender mainstreaming support when it is framed in the context of raising gender lens or ESG-focused investment – connecting compliance to commercial opportunity rather than presenting it as a compliance requirement in isolation. Within the MENA RIH, embedded ESG integration across every stage of the innovator journey – from selection and monitoring through TA delivery and investment facilitation. A gender lens was operationalized through inclusive KPIs, incentives for women-led enterprises, and TA for gender-smart operations, demonstrating the tangible business value of gender diversity to innovators.

GLOBAL INSIGHTS

A multi-pronged approach was required to achieve genuine innovator buy-in for gender mainstreaming – combining push mechanisms such as grant conditionalities and compliance requirements with pull mechanisms such as investment incentives and 2X certification for gender lens investing. Building capacity across entire innovator teams – including men in positions of influence – was more effective than working with single focal points. Sex-disaggregated data proved valuable for tracking progress at both program and innovator levels. End-user financing with a deliberate gender lens was particularly critical for unlocking adoption and ownership of solutions among women. Looking ahead, gender considerations must be integrated not just into TA but across enabling environment work and investment facilitation, with dedicated implementation budgets incorporated into program design from the outset.

ENABLING ENVIRONMENT APPROACHES LOCALIZED TO INNOVATORS' PROBLEMS

REGIONAL EXPERIENCES

At the regional level, the most effective enabling environment support emerged from a shift to highly localized, problem-driven interventions led by Country Coordinators. Initial efforts to pursue broad policy advocacy proved impractical, whereas focusing on specific regulatory, trade, and market access barriers faced by innovators delivered tangible results within program timelines. For example, in Southern and Central Africa, targeted engagement helped resolve a bilateral honey trade barrier between Zambia and South Africa and contributed to updating Zimbabwe's national biogas standards

to recognize mobile biodigesters—both directly unlocking market access for innovators. Similarly, in the MENA region, where regulatory fragmentation was a major constraint, the program supported biofertilizer innovators in Egypt through peer-to-peer technical exchanges and regulatory navigation, and in Iraq facilitated linkages between innovators and agricultural extension services, improving both market access and farmer outreach. In South and Southeast Asia, the shift toward cohort-level interventions and ecosystem partnerships enabled broader engagement with ministries and platforms, amplifying impact beyond individual firms. Across all regions, Country Coordinators were central to these successes, leveraging local knowledge and relationships to translate complex barriers into actionable solutions and, where possible, generating spillover benefits for the wider ecosystem.

GLOBAL INSIGHTS

Across all three regions, a consistent lesson was that broad, top-down policy advocacy is not well-suited to multi-country innovation scaling programs operating within limited timelines. The shared challenge was the misalignment between slow, complex national policy processes and the immediate, practical needs of scaling businesses. The program-wide pivot—guided by the Secretariat—demonstrated that a demand-driven, micro-level approach anchored in local execution is far more effective across diverse contexts. Empowering country-level teams to identify and address real-time barriers led to stronger, more measurable outcomes, while still enabling selective ecosystem-level influence when opportunities arose. This cross-regional experience highlights that enabling environment support should prioritize targeted, innovator-led problem solving over systemic policy reform, ensuring relevance, efficiency, and impact in complex operating environments.

END-USER FINANCING AS A KEY DRIVER OF INNOVATION ADOPTION AT THE BASE OF THE PYRAMID

Affordability and access to finance consistently emerged as the primary barriers to technology adoption among BoP end-users, particularly smallholder farmers. Integrating end-user financing into the program's support offering was one of the most impactful pivots made during implementation.

REGIONAL EXPERIENCES

In the S/SEA RIH, the type of end-user financing mechanism had to be matched to product type and price point. Micro-credit and pay-as-you-go models worked well for lower-cost solutions, while more expensive technologies were better suited to bank loans or farmer cooperative ownership models. A strong business case for the product was consistently important for accessing any form of end-user financing. Financing support for income-generating assets – such as cattle loan facilitation by Promethean – proved particularly effective in ensuring sustainability and scale-up. Within the S/CA RIH, hub support in facilitating end-user financing enabled innovators, including Zonful Energy (Zimbabwe), Powerlive (Zimbabwe), Lanforce Energy (Zimbabwe), and Solar Village (Zambia), to implement successful pay-as-you-go models in Zambia and Zimbabwe. The hub also found that effective end-user financing strategies must address both the demand and supply ends of innovation delivery simultaneously. In the MENA RIH, where the portfolio was weighted towards solar-based and high-cost innovations, the hub took a long-term handholding approach – often working with individual innovators for over a year to set up self-financed end-user financing models. Partnerships with MFIs, such as Al Majmoua in Lebanon, unlocked end-user financing for innovators who lacked the internal resources to provide it independently.

GLOBAL INSIGHTS

Based on feedback from the first cohorts of innovators, the Secretariat Unit identified the end-user financing gap and responded by developing a globally minded End-User Financing Guidebook in 2022, compiling internationally proven end-user financing models with practical guidance for early-stage SMEs. This was accompanied by a structured knowledge transfer to all hubs, with the Secretariat transitioning into an ongoing advisory role. End-user financing integration should be considered standard practice in any program working to scale private sector SMEs, given its direct impact on sales and adoption. Building partnerships with local banks, microfinance institutions, and investors is a key pathway for delivering end-user financing support at scale. Gender-focused end-user financing design is a particularly powerful tool for integrating women into SME value chains and expanding the reach of innovations to women end-users.

INNOVATOR PEER-TO-PEER LEARNING AS A KEY TOOL FOR CAPACITY BUILDING AND NEW BUSINESS PARTNERSHIPS

REGIONAL EXPERIENCES

At every level of the program level, peer-to-peer exchanges demonstrated an ability to accelerate capacity building and market linkages, enabling entrepreneurs to learn from real-world experiences, share best practices, and strengthen their operational and investment capabilities through direct interaction. Some of the most useful formats for innovators include annual and regional learning events, expert roundtables, and community-of-practice platforms for their ability to serve as lightning rods, synthesizing bolts of inspiration and ideas into actionable next steps. Targeted webinars (e.g., carbon credit, gender lens investing, investment readiness, talent management and regenerative agriculture) allowed innovators to engage with topic experts through in-depth discussions. Empowering innovators to share their challenges and seek solutions from program colleagues required hubs to develop safe learning spaces where innovators felt connected to

each other as people. Within the context of the hub-to-innovator connection, that was achieved through the Country Coordinator-innovator relationship. Building the innovator-to-innovator relationship, especially in regions that were more geographically, or linguistically, separated required the provision of translators to enable full innovator participation, a convening agenda mixture of 30% networking and icebreakers to 70% capacity building.

GLOBAL INSIGHTS

Within the Secretariat Unit's role as the knowledge management strategy lead, an advisor on RIH learning development, and as the organizer of the global Annual Convening, the most critical lesson was how to continue pushing for the capacity building of innovators as well as program staff. With each step forward that an innovator takes, there should be a corresponding step within the program staff capacity. Sometimes this is within a topic itself (e.g., innovators' need for end-user financing or carbon credits resulting in guidebooks that can be used as educational tools for staff as well), sometimes it is within technical skill (e.g., trainings to develop facilitation skills), and sometimes it is within the design of the activity to encourage innovator engagement (e.g., learning new session formats and crafting them to suite innovators' maturity). For each milestone asked of innovators, particularly within the space of developing partnerships and capacity building through peer-to-peer learning, there must be a supporting structure provided by the program to enable such usage. Global program management can develop an ever-improving support structure by creating frameworks that promote program engagement, prioritize learning cultures, and implement regular reflection and innovator feedback collection.

FUTURE FUND AND PROGRAM RECOMMENDATIONS

NEW, OR ENHANCED, INNOVATOR AND END-USER OFFERINGS TO EXPAND MARKET REACH

DEPLOY CATALYTIC FINANCING AND INVESTMENT FACILITATION FROM PROGRAM LAUNCH

Unlocking investment requires stronger market risk analysis, improved investor–innovator alignment, and a shift in risk appetite among financiers. Targeted TA in financial structuring, governance, ESG readiness, and blended finance mechanisms are critical to mobilizing catalytic capital.

Future programs can embed investment facilitation as a core pillar – not an add-on – from the program design phase. This means allocating dedicated resources and staff capacity for investment readiness support, building relationships with transaction advisory firms that have local and regional offices, and designing a portfolio of investment mechanisms – beyond standard debt and equity – that are appropriate for different innovation stages and regional contexts. Results-based financing, guarantees, and investment-matching grants all have a role to play and can be made available within a program's toolkit from the outset to expedite innovators' scaling journeys.

Future programs should aim to plan realistically for deal timelines. Closing investments for smaller SMEs often takes two-to-three years and requires sustained hands-on support throughout the process. Building this timeline into program design – and ensuring implementing staff are equipped and incentivized to provide this level of accompaniment – is essential. Where possible, successor programs should leverage the investable pipelines that WE4F leaves behind, prioritizing innovators who are close to investment readiness and building continuity into the support model.

PROVIDE SMARTER INVESTMENT FACILITATION BY MANAGING EXPECTATIONS AND MATCHING CAPITAL TO CONTEXT

Future programs should embed investment facilitation as a structured, tiered function from program design – with dedicated Brokering Units clearly demarcated from other program functions to ensure a consistent innovator pipeline. Investment landscape assessments conducted prior to hub launch should calibrate realistic regional expectations, with hub strategies deliberately differentiated to reflect local investor ecosystems. Programs should invest in upfront, honest communication with innovators about timelines and readiness gaps, framing investment facilitation as a multi-year journey. A tiered support model – foundational readiness building for early-stage innovators, targeted pathway facilitation for more advanced ones – should be formalized as standard practice. Matching capital grants and simulated blended finance instruments should be available within the program toolkit, given their demonstrated ability to catalyze disproportionate private capital at low cost. Thematic funding readiness – including gender-lens investing, climate finance, and carbon credit models – should be integrated from the outset, as these instruments increasingly shape investor mandates. Finally, when designing guarantee or patient capital partnerships, programs should carefully assess the alignment between fund timelines and innovator operational realities, as well-designed instruments can nonetheless fail if due diligence processes outpace the speed at which early-stage businesses need to move.

SYSTEMATIZE END-USER FINANCE AS A CORE PROGRAM OFFERING

Programs working to scale climate innovations for BoP markets should treat end-user financing as a standard program function, not an optional add-on. The WE4F experience demonstrates that without accessible, affordable financing mechanisms for end-users, even technically sound and commercially viable innovations struggle to achieve meaningful adoption among smallholder farmers and low-income households.

Future programs should develop a comprehensive end-user financing support framework at the design stage, drawing on the WE4F End-User Financing Guidebook, and the diverse models tested across all three hubs. This framework should include cohort-level knowledge dissemination, TA for end-user financing model design and implementation, and a dedicated partnership-building function to forge relationships with local microfinance institutions, banks, cooperatives, and digital lenders. End-user financing strategies should be explicitly gendered – designing mechanisms that actively lower barriers for women to adopt and own innovations. Programs should also develop innovators' understanding of carbon credit opportunities as an emerging complement to end-user financing, given the growing interest among innovators and the need for clear guidance on feasibility, methodology, and transaction costs. The future program teams can add value to innovators' businesses by acting as a facilitating bridge between the innovators and financing institutions/investors. And mainstream popular models like pay-as-you-go, monthly subscriptions, leveraging government subsidies, post-harvest payment schemes, and the facilitation of bank loans through first-loss guarantees.

TREAT ESG AND GENDER MAINSTREAMING AS GROWTH ENABLERS, NOT COMPLIANCE REQUIREMENTS

Within the context of the global investment sector, there is continued interest in impact investing whether it's through gender lens investment, sustainability-based funding, or climate lens financing. A constant and consistent effort is often required to educate innovators on the importance of ESG, specifically gender mainstreaming as well as highlight the long-term benefits of this approach. Future programs can benefit greatly from positioning ESG and gender integration explicitly as pathways to investment and commercial growth, not merely as donor conditions. The evidence from WE4F is clear, innovators who integrated gender-smart practices and met ESG standards most often gained access to a wider range of investors, attracted higher-quality capital, and demonstrated stronger business sustainability. This framing – consistently communicated through staff, TAs, cohort learning mechanisms, and investment facilitation – was the most effective driver of innovator buy-in. Practically, this means building ESG integration into innovator selection criteria, embedding gender-focused KPIs into monitoring frameworks, ensuring dedicated Gender and Environmental Advisors within each hub, and creating direct linkages between ESG performance and investment facilitation support. Program-level partnerships with gender lens investors and platforms offering 2X certification should be established early, providing innovators with a tangible pathway from compliance to capital. Dedicated team and exclusive budgets for Gender-TAs and ESG activities must be incorporated into program design as underfunded mandates consistently fail to translate into meaningful change.

RETHINK ENABLING ENVIRONMENT SUPPORT FOR INNOVATION SCALING

Future programs should position enabling environment support as a highly localized, flexible, and demand-led function, embedded within day-to-day innovator engagement rather than treated as a separate policy workstream. Efforts should prioritize resolving specific, business-critical barriers – such as regulatory approvals, trade constraints, standards, and market access – while avoiding resource-intensive, high-level advocacy that is unlikely to yield results within program timelines. Country-level staff should be empowered and resourced as primary actors in this work, given their contextual understanding and ability to build relationships with key stakeholders. Programs should also encourage cohort-level interventions where common challenges emerge, enabling scalable solutions and broader ecosystem impact. Finally, strategic partnerships with ecosystem actors (e.g., financial institutions, industry associations, and knowledge platforms) should be integrated into program design to expand influence and sustain outcomes beyond individual innovators.

INVEST IN A PEER-TO-PEER LEARNING FRAMEWORK AS A STRATEGIC ASSET

The peer-to-peer learning framework of WE4F, which included Regional Convenings, Annual Convenings, targeted webinars, storytelling, and unconference sessions, generated expected results (e.g., increases in capacity and knowledge, requests for related TAs) as well as unintended positive outcomes (i.e., partnerships between innovators, an active WE4F community that lasted past program closure, unlocking donor funding). To create a culture of openness and problem-sharing, the program focused on building a framework that prioritized internal learning reflections to constantly improve events, developed guidelines that required staff to maintain the confidentiality of innovator discussions, and balanced best event practices (e.g., Gold Standard) with innovator priorities. The program's learning framework did not exclusively focus on innovators, it also incorporated program staff and partners by enabling cross-hub learning through quarterly sessions, the identification of external learning opportunities for hub staff, pre-event trainings for staff, and the development of a program staff learning day at the Annual Convening. Pre-event trainings are one of the most critical learning engagements for program staff, as it is the time at which to train staff on how to facilitate sessions, incentivize community buy-in, strengthen internal culture, and reinforce staff participation expectations.

Future programs should view their peer-to-peer learning not only as a program activity for capacity building, but also as a tool through which programs can engage existing and potential partners, aid new donors in understanding a program's vision and end-user benefits, and build a sustainable community of innovators. To build a framework that creates positive intended and unintended outcomes, and operationalize it, programs must invest significant financial, professional, and learning resources in framework. High-quality convenings are best achieved through the use of an event committee dedicated to ensuring agenda content matches program goals. It is also critical to seek feedback and build off attendee reflections, this can be achieved through the provision of pre-convening and post-convening surveys, in-person informal discussions, and the usage of "Run of Show" pivot documents to track changes as they occur in real time. To ensure event themes and topics mature with program participants, the WE4F event committees worked with local RIH staff across the investment, TA, gender, enabling environment, and ESG portfolios to select speakers and topics that would resonate with the evolving innovators. Aside from rotating speakers and topic deep-dives, programs should utilize

different session formats to encourage discussion between innovators operating across different regions, technologies, revenue sizes, and end-users. Customized matchmaking is most useful for building one-on-one connections in specific situations (e.g., two innovators looking to expand operations in one country, an innovator looking to integrate a new technology that another provides), while unconference sessions are most useful for free-flowing discussions where a facilitator ensures equal ability to speak. Innovator panels are best utilized for comparing and contrasting views on themes where no one strategy best fits any technology (e.g., end-user financing, carbon credits), while expert-led panels are best suited for discussing how innovators may tap into existing opportunities (e.g., climate lens investment, organic agricultural markets). If building towards a specific goal, then programs should reflect on what activities innovators will be engaging in post-program and incorporate such engagements into the agenda design (e.g., post-WE4F innovators would still be looking to raise investment, so a pitching competition was included in the final Annual Convening).

INTEGRATE OF WATER RISK MONITORING TOOLS AND ENVIRONMENTAL SUSTAINABILITY TECHNICAL ASSISTANCE

Water accounting dashboards should be used in future programs' calls for innovation to carefully consider any unintended outcomes of scaling water-related innovations, especially in already water-scarce regions. By using and promoting the WE4F-developed tools for their future programs, then the duplicity of resources could be avoided. It's especially important to closely vet and regularly monitor technologies that increase water accessibility or availability, reduce barriers to irrigation, are used to cultivate water-intensive crops, or are scaling in regions with existing water scarcity. Solar irrigation and water-related digital solutions, in particular, should be required to provide strong farmer advisory services in combination with innovations sold. For innovators who enter programs yet are determined to unclear water impacts or increase consumption, environmental sustainability TAs, and product development TAs focused on efficiency should be provided to decrease usage and ensure proper water monitoring. External surveyor studies should also be conducted to ensure that innovators' water-efficient designs align with reality.

KEY STRATEGIC CONSIDERATIONS DURING PROGRAM DESIGN

ANCHOR PROGRAM DELIVERY IN LOCAL PRESENCE

The most consistent finding across all three hubs is that local presence is not a nice-to-have but a prerequisite for effective program delivery. Country Coordinators were the single most important operational asset in each hub – serving simultaneously as relationship managers, enabling environment actors, MEL intelligence sources, and ecosystem connectors. Future programs would benefit from investing heavily in the recruitment, onboarding, and retention of high-quality Country representatives, and should design their roles with sufficient autonomy and resources so that they can act on local opportunities and challenges in real time without regional or global bureaucratic hurdles posed by program design.

Regional/local program structures should be designed to complement – not substitute for – country-level engagement. Under WE4F, country- and theme-based Calls for Innovations generated more relevant and diverse applicant pools than broad regional calls got from the same country and going forward thematic and country level calls can become an important feature of program design. Application processes should be available in local languages, with adequate support for innovators from under-represented countries. Technical audits and field visits by central or global teams should be systematically built into program management to maintain connection between global oversight and ground-level realities. Donor partners will also benefit from engaging directly with country-level staff to close the loop between strategic vision and operational impact of future programs.

BUILD A GLOBAL SECRETARIAT WITH CROSS-REGIONAL INTELLIGENCE AND ADAPTIVE MANAGEMENT AUTHORITY

The Secretariat Unit's function as a facilitator of cross-regional learning, provider of quality assurance, and advisor to regional activities was one of the program's key structural innovations due to the unit's ability to identify patterns across hubs, develop pivots during implementation, ensure deliverables met donor expectations, and transfer lessons internally and externally.A central part of program coherence and quality, future programs would benefit from retaining and strengthening a Secretariat-like global function. To further improve the unit structure, programs should increase technical authority, independent quality assurance, sufficient staffing of expert and coordinators, and adequate budget to play an active adaptive management role.

This means building regular knowledge transfer mechanisms between hubs, systematic documentation of lessons and pivots, structured feedback loops between implementers and global management, and a culture in which course correction is valued over rigid adherence to original plans and hierarchy. Recruiting staff with prior experience from similar programs is a significant advantage in operationalizing any new program – as can be seen from successful transitioning of Securing Water for Food and Powering Agriculture staff to WE4F – functioning quickly and efficiently. It is also key for the Secretariat-like global team to maintain a direct relationship with donors as well as the field level staff to provide honest, evidence-based reporting and feedback on what is working and what is not and recommend program adjustments with confidence.

DESIGN FOR PROGRAM EXIT FROM THE ONBOARDING PHASE

Future programs should treat exit planning not as an end-of-program activity but as a design principle embedded from the onboarding phase. Innovators should understand from the outset what graduation and exit look like – including the criteria, timelines, and milestones that define a successful transition to independence. This clarity sets expectations early, reduces dependency, and focuses on innovator energy on building genuinely sustainable business models rather than optimizing continued program support. A structural risk inherent to contractor-led programs is the abruptness of closure. When the contract ends, operations cease, staff disperse, relationships dissolve, and the ecosystem built over years can unravel rapidly. Future programs should explicitly design against this risk by building sustainability mechanisms that outlast the contract itself – including transition plans for key functions, structured handover of institutional knowledge to local organizations and ecosystem partners, and wherever possible, the identification and cultivation of successor entities capable of continuing core support activities. Donors can choose to require evidence of exit planning as a contractual deliverable, not a last-minute addendum, and should assess contractor proposals on the credibility of their sustainability and transition strategies alongside their delivery plans.

PLAN FOR LONG-TERM INNOVATOR ENGAGEMENTS

Seven innovators who transitioned from legacy programs – Securing Water for Food and Powering Agriculture – into WE4F demonstrated that sustained, multi-program engagement produces meaningfully stronger results. While continuity with the same organizations may not always be feasible or desirable, their performance within WE4F makes a compelling case for longer engagement cycles. This is further evidenced by the difference in outcomes between GIZ and USAID innovators, and between CFI1 and CFI2 cohorts compared to those onboarded through the Open Call for Innovations – where shorter engagement windows consistently correlated with shallower results. Future programs should therefore design two- to three-year innovator engagement cycles as a baseline, rather than defaulting to shorter one-year models. Longer engagements build the trust necessary for innovators to bring their most complex challenges to the program, unlock deeper and more impactful TA, and allow hub staff to make meaningful connections between innovators based on genuine knowledge of their businesses and trajectories.

PLAN MID-TERM AND FINAL EVALUATION REPORTS FROM PROGRAM LAUNCH

Future programming should mandate that all implementing partners' legal teams coordinate prior to selection to ensure a single, joint evaluation. During initial program design, this review of partners' procurement processes and regulations should be completed before committing to implementation partners in general. Working with multiple organizations that can't commit to a unified evaluation process should be avoided. Additionally, evaluation work plans must budget for a higher level of effort during the final report creation phase to prevent resource shortages and allow flexibility to integrate all donor comments on final deliverables. Finally, when reviewing initial proposals and prospective evaluation teams, confirm whether contracted evaluation team members consist of dedicated staff or part-time consultants shared with other clients to ensure sufficient focus and availability.

INTEGRATE OF EXTERNAL SURVEYOR ACTIVITIES FROM INNOVATOR ONBOARDING

Future programming would benefit a similar External Surveyor Program, though these studies should commence early in the first year of innovator activities and completed before innovators' first annual grantee review to leverage findings for portfolio decisions. Studies should be prioritized for innovations with no existing environmental impact calculators, innovations with business models focused on B2B operations, innovations that increase water availability for end-users, and any water-related innovations operating in water-scarce regions. Given the coordination demands of these field studies, management should sit with a dedicated external firm rather than program MEL staff.

INTERNAL CHANGES FOR BETTER PROGRAM MANAGEMENT

ALIGN PROGRAM RESOURCES WITH INNOVATOR OUTCOMES AND STAFF RESOURCING

Global programs of WE4F's scale and complexity require budget structures that reflect the work being done and are based on agility towards changing scenarios and pivots. A consistent lesson from implementation is that resourcing decisions have a direct bearing on innovator outcomes, and future programs should design budgets with this link explicitly in mind. At the Secretariat level, greater investment in associate-level staff would have meaningfully improved the program's capacity to support innovators and respond to evolving priorities – rather than keeping all levels of staff perpetually absorbed in operational delivery. The value of coordination staff who can contribute across portfolios during high-activity periods was demonstrated clearly across all three hubs. Future programs should think of replicating this model for the global level teams as a matter of design, not afterthought.

At the hub level, greater investment in field visits and on-the-ground engagement would have strengthened both program oversight and innovator support. One example from the S/CA RIH illustrates the cost of under-investment in direct engagement. A late-stage applicant who appeared promising was found – only after an expensive in-person visit to a remote and under-represented country – to have fabricated documentation to match program requirements. If field presence had been more routinely resourced, this risk could have been identified sooner and at a lower cost. Proactive, budgeted investment in direct innovator engagement is not a discretionary line item. It is a risk management tool and a driver of program quality. More broadly, donors and program designers would benefit if they scrutinized the proportion of budgets directed towards direct innovator benefit – grants, TA, field engagement, and capacity building – relative to indirect and administrative costs and treat this balance as an explicit design principle against which contractor proposals are assessed.

BALANCE COMPLIANCE WITH PROGRAM FLEXIBILITY

When innovation-scaling programs pursue the support and engagement of SMEs that have not previously worked with donor-funded programs, there is a learning curve to the contractual requirements of such programs. For supported innovations that are just beginning their investor and funder journeys, there is a need to provide regular guidance and assistance to complete documentation and reporting. Future programs should similarly build flexibility into operations around timelines and approval processes from the outset, as WE4F found this approach kept service delivery moving and sustained SME participation. Maintaining this balance between accountability and adaptability is essential when working with innovators new to donor-funded programming. Streamlining administrative burdens while maintaining accountability allows SMEs to focus on business growth rather than excessive paperwork. This can be achieved through intensive onboarding programs where multiple portfolios work with innovators to complete all paperwork quickly and efficiently, in-person engagements by Country Coordinators to host reporting support sessions, simplifying onboarding documentation to reduce repetition, utilizing of External Surveyor programs to reduce innovator reporting requirements, and creating less complex MEL systems.

ALIGN MONITORING, EVALUATION, AND LEARNING REPORTING CYCLES WITH END-USER AND BUSINESS BUSY SEASONS

For SMEs new to donor funding, the reporting periods seemed complex. High-touch support through reporting cycles impacted efficiency and timelines of hub staff and innovators. For MEL reporting cycles, it would be beneficial to align with farming seasons, as many innovators found that reporting deadlines frequently coincided with peak agricultural activity, when they were still collecting data. Additionally, a reduction in KPIs reported by each innovator could improve data quality and reduce administrative burden on innovators, particularly those operating with small teams who must balance reporting requirements with core operational demands. In addition to removing the first semi-annual reporting period entirely as recommended in the MEL Section, future programs should implement a scaled-down semi-annual reporting cycle limited to a core subset of KPIs after the first annual cycle is established, with reporting windows scheduled around end-user and innovator busy seasons to maximize data quality and minimize operational disruption.

ANNEXES

ANNEX I: IWMI BRIDGE CONTRACT UPDATE

Due to the USAID Stop Work Order (SWO), Water and Energy for Food was an unfinished program in February 2025, with technical assistance (TA) instances, the final narrative report, the final financial report, and audits remaining. To complete an orderly closeout of the program, as well as provide final rounds of previously planned TA, two WE4F bridge programs were funded by Sida through the Embassy of Sweden in Amman with advisory support from the Ministry of Foreign Affairs of the Government of the Netherlands and Norad. The first WE4F bridge program was implemented by Berytech for the Middle East and North Africa Regional Innovation Hub (MENA RIH) and the second was implemented by the International Water Management Institute (IWMI) with Tetra Tech as a subcontractor. In addition to the TAs, the bridge contracts also documented lessons learned through internal and external webinars, developed the required reporting documents, conducted audits, and completed a final round of monitoring, evaluation, and learning (MEL) reporting. This annex reports on the activities of the bridge contract implemented by IWMI. For information on the MENA RIH bridge contract, interested parties should review the MENA RIH Bridge Contract Final Report.

Results Reporting During the Bridge Contracts for S/CA and S/SEA Innovators

Indicator	Result Reported
End-users	143,000
Women end-users	68,000
Base of the Pyramid end-users	55,000
Food Produced	1.97 million tons
Food Processed	16,000 tons
Energy Saved	76.7 million kilowatt-hours
Reduction in Water Consumption	70.9 million liters
Investment Mobilized	$4.9 million USD
Greenhouse Gas Emissions Savings	410,000 tons of carbon dioxide equivalent (CO2e)
Gross Sales	$12 million USD

INNOVATOR RE-ONBOARDING

Upon start of the bridge program, the South and Southeast Asia Regional Innovation Hub (S/SEA RIH) and Southern and Central Africa Regional Innovation Hub (S/CA RIH) revised innovators' pre-SWO Acceleration Work Plans (AWPs) into mini-AWPs that captured only the key performance indicators (KPIs) that would be reported by innovators who rejoined the program. From the S/CA RIH, 13 innovators rejoined the program, while the S/SEA RIH had 15 innovators rejoin for the bridge contract. Of the 13 S/CA innovators, only Sustainable Builders did not receive TA due to challenges associated with maintaining a working relationship with their TA service provider. The service provider had been engaged by the innovator during the SWO period, and the bridge program looked to maintain continuity by retaining them. The vendor and innovator's strained relationship was beyond the control of the hub, ultimately leading to Sustainable Builders not participating in the bridge contract.

PROVISION OF TECHNICAL ASSISTANCE

After the approval of the mini-AWPs, the S/CA and S/SEA RIHs started delivering TAs to the innovators. The S/CA RIH completed 30 TAs, with eight of them being advanced TAs that required external vendors to execute the assignments due to their technical complexity. These higher-level TAs covered accreditation and compliance with adaptation funding institutions; organic certification of fertilizer products; financial management strengthening; human resources and contracts; and marketing, branding, and visibility enhancement. The S/SEA RIH completed 20 TAs, of which 14 required external vendors and six were completed in-house by hub staff. Instances of TA organized for S/SEA innovators included those that were already in the process of being completed when the SWO was issued; and new instances for OCFI innovators who had been unable to benefit from TA during their short participation in the WE4F before the SWO.

Technical Assistance Instances Provided through the Bridge Contract

SICARIH

Innovator	TA Type	Provider
Bing	Investment Readiness	Tetra Tech
	Investment Readiness	OpenCapital
	MEL Advisory Services	Tetra Tech
Bwando Farms	Investment Readiness	OpenCapital
	Market Research and Analysis	MJB Consulting
	Organizational Capacity Development	Tetra Tech
Freejoy	Investment Readiness	OpenCapital
	Market Research and Analysis	YOUPENDI Group
Greencare Eco Solutions	Business Development	Ecocert
	Investment Readiness	OpenCapital
	Organizational Capacity Development	Tetra Tech
GreenZim Ventures	Business Development	Tutwa Consulting Group
	Investment Readiness	Tetra Tech
	Investment Readiness	OpenCapital
	Organizational Capacity Development	Tetra Tech
KivuGreen	Investment Readiness	OpenCapital
	Market Research and Analysis	YOUPENDI Group
Nabahya Food Institute	Market Research and Analysis	YOUPENDI Group
	MEL Advisory Services	Tetra Tech
Onyx Earth	Business Development	Paddington and Associates
	Investment Readiness	OpenCapital
Ovos De Ouro	Marketing and Sales	Bigger Than Me
PKT & Partners	Investment Readiness	Tetra Tech
	Investment Readiness	OpenCapital
Tivwane Money Solution	Investment Readiness	Tetra Tech
	Investment Readiness	OpenCapital
	Organizational Capacity Development	Tetra Tech
Zonal	Investment Readiness	OpenCapital
	Investment Readiness	OpenCapital

Technical Assistance Instances Provided through the Bridge Contract

S/SEA RIH	Claro Energy	Investment Readiness	Tetra Tech
		Product Development/Refinement	Grip Technologies
	Climeverse	Investment Readiness	Vericap
	CoolCrop	Business Development	Bhartiya Samruddhi Investments and Consulting
	Devidayal Solar Solutions	Business Development	KPMG
	Dvara E-Registry	Investment Readiness	Tetra Tech
		Gender Integration	Equillo
		Product Development/Refinement	RJ Actuaries and Consultants
	Egreen	Environmental Sustainability	Tetra Tech
	FarmConnect Asia	Product Development/Refinement	Beehive Company
	First Consolidated Cooperative Along Tanon Seaboards (FCCT)	Marketing and Sales	Luntiang Republika Ecofarms Corporation
	Human Ventures	Investment Readiness	Tetra Tech
		Investment Readiness	Cfosme Corporate Services
	Husk Ventures	Environmental Sustainability	Tetra Tech
		Gender Integration	Equillo
	Komodo Water	Environmental Sustainability	Tetra Tech
		Investment Readiness	Sevea Co.
	Mandala Agrifresh	Investment Readiness	Tetra Tech
	Oorja	Gender Integration	Equillo
	Promethean	Environmental Sustainability	Sculpt Partners
	RDO Trust	Gender Integration	Sakhi Unique Rural Enterprise
	Shreenagar	Organizational Capacity Development	Shree Kisan Innovation Hub
	Village Link	Product Development/Refinement	Viet Rural Enterprise Development Center

CAPACITY BUILDING EVENTS

To support innovators' continued growth journeys, both hubs organized internal capacity building webinars focused on the topics that were of great interest to innovators looking to scale and unlock funding. For the S/CA RIH, this resulted in a three-part environmental, social, and governance (ESG) finance webinar series to help innovators align their business models and operations with the International Finance Corporation (IFC) Standards. The S/SEA RIH organized two webinars. The first webinar covered utilizing artificial intelligence (AI) to support customer engagement. It featured Claro

Energy who shared their experience integrating an AI chatbot into their website. The second webinar was an introduction to ESG reporting frameworks, indicators, and measurements. For both webinars, the S/SEA RIH invited active innovators as well as alumni to ensure all interested innovators benefited from the sessions.

DISSEMINATION OF WE4F LESSONS LEARNED

To disseminate lessons learned from the program's five years of implementation, the Secretariat Unit organized four external webinars and two internal webinars. External sessions focused on investment facilitation, gender integration, base of the pyramid end-users' access to innovations through end-user financing, and leveraging peer-to-peer learning and networking to build innovator-to-innovator partnerships. These sessions featured innovators, Secretariat Unit members, and RIH staff to provide differing points of view on program activities, innovator outcomes, and key takeaways. Internal sessions focused on hub staff's view of program management and on-the-ground opportunities for improvement, while the Secretariat Unit session focused on strategic team management and coordination, operational timelines, and portfolio lessons learned and recommendations for future programs.

WE4F Lessons Learned Webinar Series

Mobilization of Private Capital in a Dynamic and Diverse Context	**78 attendees**

Globally, WE4F-supported innovators mobilized $211 million USD in five years. From Lebanon to South Africa, Nigeria to Vietnam, the mobilization of private capital helped innovators expand their operations, reaching more smallholder farmers while reducing water consumption and increasing clean energy use in agriculture. In a field known for more for longer timelines and intensive due diligence requirements, how were program staff and innovators able to work together to unlock capital that has been historically difficult to access in some of program-supported countries and for a sector that many investors find to be high risk?

Moderator:	**Hub Speakers:**	**Innovator Speakers:**
Jatin Yadav, Secretariat Unit	Pamela Saber, MENA RIH Mashiri Zvarimwa, S/CA RIH Kahembi Mukuwa, S/CA RIH Kunto Binawan, S/SEA RIH Sasmita Patnaik, S/SEA RIH Raj Kumar, S/SEA RIH	Luke Makarichi, GreenZim Ventures Gaurav Kumar, Claro Energy Hamis Elgabry, Mozare 3

Best Practices on Gender Integration within Challenge Funds	**99 attendees**

A key mandate of Water and Energy for Food was the integration of gender mainstreaming in hub and innovators' business activities to support women smallholder farmers and other end-users, women employees, and women-led and/or -owned innovations. What technical assistance instances and capacity building activities helped innovators improve their collaboration with women? How did hub experts customize offerings to meet the unique needs of women-led and/or -owned innovations in different cultural environments?

Moderator:	**Hub Speakers:**	**Innovator Speakers:**
Jatin Yadav, Secretariat Unit	Sasmita Patnaik, S/SEA RIH Menna Sabry, MENA RIH Batanayi Colletta, S/CA RIH	Dr. Ahmed Rady, Egymag Rumbidzai Machoni, OnyxEarth Biogas Quyen McGrath, Village Link

End-User Financing as a Key Driver for Innovation Adoption for Base of the Pyramid End-Users	**86 attendees**

Smallholder farmers and other end-users at the base of the pyramid are the most affected by climate change, with lives, livelihoods, and food security at risk. Innovative water-energy-food solutions, whether technologies, access to agri-inputs, or advisory services, have the potential to help smallholder farmers mitigate the effects of climate change by unlocking productivity, increasing clean energy use, and developing efficient water management practices. The cost of aforementioned innovations prevents many end-users from adopting the innovations, but through the use of end-user financing, affordability barriers could disappear.

Moderator:	**Speakers:**
Jatin Yadav, Secretariat Unit	Kunto Binawan, S/SEA RIH Lais Lona, S/CA RIH Irene Boghdadi, MENA RIH

Innovator Peer-to-Peer Learning as a Key Tool for Capacity Building and New Business Partnerships	**59 attendees**

When innovators exchange knowledge and ideas at capacity building events, they form relationships that can turn into partnerships for new business opportunities. How do organizations, as well as programs, build a framework and culture that enables peer-to-peer learning to produce positive knowledge and partnership outcomes?

Moderator:	**Speakers:**
Kathryn Bailey, Secretariat Unit	Talar Kokjian, MENA RIH Nawa Luywa, S/CA RIH Sasmita Patnaik, S/SEA RIH

In addition to the WE4F-hosted internal and external learning series, the Communications and Knowledge Management Manager also secured two speaking opportunities at the 2026 Africa Green Economy Summit to highlight WE4F's work throughout the African continent. One session focused on scaling renewable energy solutions for food security; the second session focused on risks and opportunities within financing for water innovations. At the hub-level, the S/CA RIH organized internal lessons-learned webinars to gather feedback, insights, and recommendations from innovators for the design of future programs. These insights were incorporated into the "Lessons Learned and Program Recommendations" section of this report.

MONITORING, EVALUATION, AND LEARNING ACTIVITIES

No annual target revisions were conducted during the bridge contract. Innovators reported against their existing KPIs as a condition of receiving TA. To ensure each innovator could report in the shortened timeframe of the bridge contract, each innovator received support from their Country Coordinator. The S/CA RIH also provided small stipends to innovators who needed to conduct specific field data collection; those who already had complete datasets in their internal systems did not require the stipend.

ANNEX II: INDICATOR CALCULATION AND VERIFICATION

Water and Energy for Food (WE4F) conducted a thorough collection, verification, and reporting process as part of its monitoring, evaluation, and learning activities. It was a multiple step process that began with trainings provided to innovators during their onboarding activities and continued during each round of data submission, with the hubs providing support to the innovators to ensure their data was correct, reviews completed by the hub-level MEL Specialists, and confirmation of results at the Secretariat Unit MEL Manager. In situations where the program felt the data needed to be additional verification, the program provided External Surveyors who would conduct in-field data collections and reviews. Additionally, the program had third-party evaluators conduct a review and analysis of WE4F through the Mid-Term Evaluation and the Final Evaluation.

DATA SUBMISSION AND VERIFICATION PROCESS

STEP 1: INNOVATOR AND HUB STAFF TRAINING

At the beginning of WE4F, the MEL Manager developed the two WE4F Performance Indicator Reference Sheets, one of which detailed the 10 key performance indicators while the other detailed the 45 additional indicators monitored by WE4F. Each sheet shared indicator definitions, units of measure, and reporting stipulations. In order to ensure that program staff could support innovators' submission of results, the MEL Manager provided trainings to the MEL Specialists, Country Coordinators, and innovators. These training sessions represented opportunities for all involved parties over the years to ask questions, seek clarifications, and brush up on the indicators ahead of data reporting rounds.

STEP 2: INNOVATOR SUBMISSION AND HUB REVIEW

Following the innovators' onboarding, every six months there was a collection submission period. The six-month data submission typically saw less data submitted than the annual submission, when all innovators were required to submit their results for review and verification. The results cleared by the RIH MEL Specialist and the Secretariat Unit MEL Manager were then utilized as part of the innovator's annual review.

Each individual result submitted by the innovators was checked for:

- Data quality: RIH MEL Specialist confirmed that innovators used the correct units of measure; that all results fell within the correct reporting period and that there was no overlap with prior cycle; and that the innovator did not have any basic formula errors (e.g., energy produced vs. saved).
- Technical accuracy: The RIH MEL Specialist then reviewed for common indicator-specific errors; confirmed that there were data sources cited for all variables; and ensured the submitted results aligned with the definitions in the WE4F Performance Indicator Reference Sheets.
- Documentation: The final step for the RIH MEL Specialists was to ensure that all required documentation was uploaded to Egnyte and that the results in surveys matched the results in supporting documents.

Some examples of issues that could arise during the RIH MEL Specialist data verification and the Secretariat Unit MEL Manager data verification included:

- During comparison against external sources/studies/research: average yield per season in a given country and for a specific crop; flow rate of control-group irrigation being replaced by a WE4F-supported innovation; and average tons of traditional fertilizer used per season in given country or for a specific farming activity (for comparison against compost innovation usage).
- During comparison against innovator trends over the course of the life of program reporting: If there was a high outlier, then the formulas needed to be checked for errors. If there was a low outlier then formulas also needed to be checked for errors and replaced with variable data found through External Surveyors (when possible) and the final result needed to be recalculated. Some innovators needed their constant rate of impact per end-user to ensure there were no errors or miscalculations.

STEP 3: DATA QUALITY ASSESSMENT BY SECRETARIAT MEL MANAGER

Following the approval of results by the RIH MEL Specialist, the data was entered into the cohort-specific MEL Results Tracker for the MEL Manager to conduct a line-by-line review of the submitted results against the data and documentation stored in the Egnyte system. To ensure all submissions met program expectations, the MEL Manager reviewed for:

- Correct formula applied per indicator methodology
- Accurate variables used as formula inputs
- Result reported in correct unit of measure per KPI/indicator definition
- Reporting period correct with no overlap with previously reported periods
- Reported result matches value in supporting documentation
- Supporting documentation meets WE4F MEL reporting standards (type, detail level, methodology)
- Data sources cited for all variables
- Result consistent with related indicator reporting (e.g., unit sales align with end-user count)
- Result not an outlier relative to prior reporting periods; if so, formula and inputs re-examined

STEP 4: FINALIZATION

After reviewing the data submitted by the hubs and conducting an in-depth review, the MEL Manager then completed the next step in the process:

- If there were questions pertaining to the data submitted by the hub, then the Secretariat MEL Manager would contact the RIH MEL Specialist for clarification on the results.
- If there were errors that were revisible in the accessible Egnyte data then the Secretariat MEL Manager would correct it.
- If the standards of the program were met, then the data was entered into Salesforce as finalized data.
- If the standards were not met and it was not possible to revise the data to become accurate, then the innovator received a zero for the result.

All results that had been assessed and approved by the Secretariat MEL Manager were final. In order to preserve fairness to innovators who met deadlines and to avoid disruption to RIH activities, no revisions were made after the process's completion. In the instance where a result was not revisable at the time, but could be in the future, then the innovator was permitted to resubmit in the next MEL cycle.

STEP 5: REFLECTION AND IMPROVEMENT

After the close of the data reporting cycle, the Secretariat Unit MEL Manager then shared errors with the RIH MEL Specialist for innovator capacity building; flagged innovators that would need to receive an External Surveyor assignment; and notified the Technical Assistance Unit of technical assistance (TA) gaps that should be considered for the next round of TA.

INDICATOR DEFINITIONS, UNITS OF MEASUREMENT, AND REPORTING STIPULATIONS

Water and Energy for Food defined binding, indicator-specific reporting standards prior to each MEL cycle, governing required: 1) formulas, 2) allowable data sources, and 3) exact documentation requirements for all results submitted.

FOR ALL INDICATORS:

- No results accepted unless documented per the program's standards
- Units of measure, indicator definitions, and reporting stipulations per WE4F PIRS
- Results accepted for current reporting period only; no overlap with prior cycles permitted
- Results must not be projections; only confirmed, realized impact reported

CALCULATION OF INDICATORS:

Number of End-Users Impacted by WE4F Innovations

- *Formula:* number of innovation end-users multiplied by the country-specific average household size
- *Data sources:*
  - Must utilize the program-provided average country household size sheet UNLESS a more specific household size was obtained by an External Surveyor's field study. If a new household size was provided by an External Surveyor then that figure could be used as a multiplier going forward.
  - Must use the income quintile thresholds provided by the program.
- *Documentation:* named or uniquely-identified end-user list by country with the required fields: gender, location, income quintile, end-user type, and contact information.

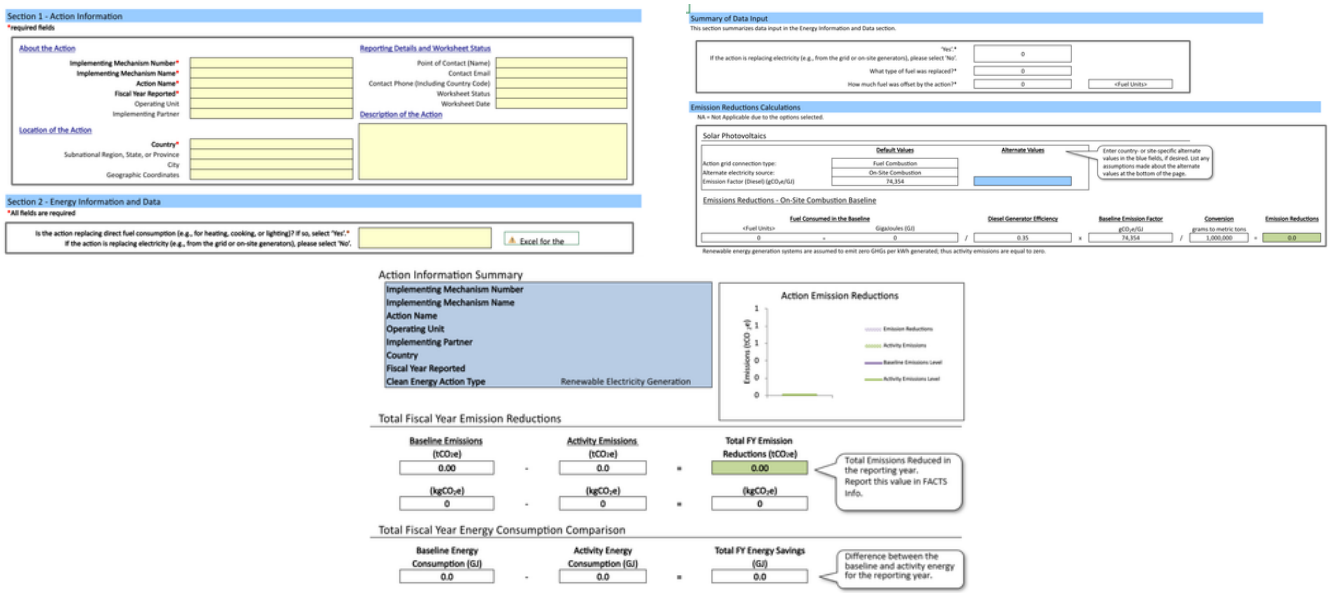
Tons of Food Produced or Processed; Liters of Water Consumption Reduced; and Hectares of Land under Improved Management Practices

- *Formula:*
  - Each formula was category-specific, with the innovator required to identify and cite the applicable methodology (i.e., direct collection, sample-based extrapolation, or external study).
  - The program provided a list of full methodology options for each indicator.
- *Data sources:* direct meter/monitoring data, sample survey results, or external studies. If using external studies, they were required to match country, crop/activity type, and technology.
- *Documentation:*
  - Clear methodology summary
  - All variable data and calculations shown
  - Disaggregated results by end-user type and country.
  - Supporting evidence for any estimates used (examples: Pump flow rate required product/technology specifications document; average water consumption by hectare/season required a citation by the external study or data source used; average crop yield by end-user/hectare required a copy of the external study used and it must cite country, technology, and crop type; sample survey results required the original survey findings showing average food/water/hectares per end-user or innovation unit).

Kilowatt-Hours of Energy Saved and Greenhouse Gas Emissions Savings in Tons of Carbon Dioxide Equivalent

- *Formula:*
  - For greenhouse gas emissions, the use of the CLEER tool was mandatory where greenhouse gas calculations were measured by Action GHG Emissions = Activity Data × GHG Emission Factor × GHG Specific Global Warming Potential and emission reductions for clean energy implementation were estimated by GHG Emissions Reduced = Baseline GHG Emissions – Action GHG Emissions.
  - To calculate the energy result, it was post-innovation consumption minus pre-innovation/alternative consumption.
- *Data sources:*
  - Supporting evidence required for each variable input (fuel type and quantity, electricity generated/consumed, generator fuel usage, grid type).
  - In situations where additional sources are needed, the CLEER tool can be used to estimate energy consumption of certain energy technologies.
  - Data may be obtained directly from operating information (e.g. utility records), or calculated using a commonly accepted methodology.
  - Pre-innovation baseline must be documented
- *Documentation:*
  - CLEER tool documentation template required with all variable inputs
  - MEL Specialists and MEL Manager independently re-ran CLEER calculations to cross-check submitted results

Example of the Offline CLEER Tool Using Solar PV as the Technology



Number of End-Users with Increased Income

- Formula: total number of end-users whose income increased since first using the innovation; three allowable options: 1) current versus pre-innovation income per end-user; 2) current income versus external comparison group income; or 3) current income in relation to innovation-specific savings and income gains
  - Once an end-user is counted, not re-counted in future cycles

- *Data sources:*
  - End-user sample surveys;
  - External studies on farmer income, crop prices, yields (must match country, agricultural activity, and demographics of end-users)
  - Innovation-linked savings evidence (e.g., WE4F energy savings or greenhouse gas savings reporting for fuel savings, sample survey for input cost reductions)
- *Documentation:*
  - Unique identifier required for each end-user reported
  - Clear methodology summary with all variable data (prices, yields, etc.)
  - Copy of any sample surveys or external studies used

External Investment Mobilized; Gross Sales by Innovator; and Co-Funding Provided by Innovator

- *Formula:*
  - Reported in USD
  - Exchange rate applied on date of signature (investment and co-funding)
  - Date/month of sale
  - Country-specific exchange rate exceptions applied where defined
- *Data sources:*
  - Signed legal documents (investment and co-funding)
  - Dated sales logs or invoices in excel format (sales)
  - Income or financial statements (co-funding)
- *Documentation:*
  - Investment: signed term sheet/memorandum of understanding with funding organization's name, original currency amount, and signature date
  - Sales: original local currency value, USD conversion, exchange rate used, buyer ID, sale date, product/service sold
  - Co-funding: financial statements showing source of co-funding

Monitoring of Water or Biodiversity

- *Formula:* Yes or no response from innovators
- *Data sources:*
  - Formal mechanism based on documented and generally accepted methods to identify and record changes in water resources or biodiversity
- *Documentation:*
  - Innovator business documents

EXTERNAL SURVEYOR PROGRAM

The purpose of the External Surveyor Program was to utilize independent, third-party field data collection to verify innovator-reported results and fill gaps where innovator self-reporting was unreliable, inconclusive, or infeasible. As the program was time and resource intensive, innovators were prioritized for an External Surveyor assignment based on several criteria:

1. 100,000 end-users reported
2. Suspiciously high/low or outlier results
3. Business-to-business business model (limited direct end-user records)
4. Water irrigation technologies
5. Persistent reporting gaps that remained unresolvable after the provision of in-house MEL TA

APPROACH:

- All External Surveyors were required to follow the standardized WE4F Survey Guide. Any revisions to survey questions required prior approval from the External Surveyor Coordinator.
- Minimum sample: 40 end-user interviews + 20 control group interviews per innovator; randomized cluster sampling approach
- Real-time data capture via Fulcrum mobile app with GPS; daily uploads were required.
- External Survey conducted bi-weekly check-ins with WE4F External Surveyor Coordinator throughout fieldwork.
- The RIH MEL Specialist was required to review and approve External Survyeor data analysis before finalization.

ANALYSIS/METHODOLOGY:

- All External Surveyors were required to use the WE4F External Surveyor Data Analysis Guide for their analysis which provided indicator-specific calculation equations.
- The MEL Manager reviewed the guide for errors and outliers prior to approving External Surveyor findings.

USE OF EXTERNAL SURVEYOR DATA

MEL Verification/Improved Reporting:

- External Surveyor analysis extrapolated total impact from sample data; innovators updated External Surveyor spreadsheet with current number of end-user households and reporting period to derive MEL cycle result.

- For the number of end-users, the External Surveyor data was used to inform disaggregation (gender, income quintile) and/or refine average household size multiplier. It did not replace verifiable end-user count from indicator documentation.
- For energy savings and greenhouse gas emissions savings, the External Surveyor field study data was the primary and most reliable calculation method where available. External Survey results flagged as inconclusive were excluded from MEL reporting.
- For food produced and water savings, External Surveyor sample data was used to extrapolate food produced/water saved across the full end-user population for that reporting period.

Data Quality Assessment:

- If the External Surveyor results were greater than the previously reported results, then the deficit value was added to next cycle's total result.
- If the External Surveyor results were less than the previously reported results, then: 1) the value was subtracted from future MEL cycle result values; and 2) the concern was raised to the TA team for advisory support or grant termination consideration.
- If environmental concerns were identified or the innovation was found to not be delivering previously claimed impact, then the issue was flagged with the TA team for advisory support and/or grant termination consideration.

ANNEX III: WATER AND ENERGY FOR FOOD COST-BENEFIT ANALYSIS

SUMMARY

The USAID-implemented hubs of the Water and Energy for Food (WE4F) Grand Challenge, which ran from 2020 to 2026, invested $49,822,918 U.S. Dollars (USD) and achieved significant economic, environmental, and social outcomes. The program reached over 4.4 million end-users, increased food production and processing, saved energy and water, and mobilized substantial private investment while reducing greenhouse gas emissions.

Program investment and reach: The total cost for WE4F program was $49,822,918 USD, reaching 4,402,809 end-users and producing 16,968,366 tons of food. It also processed 154,870 tons of food and saved 4,584,598,775 kilowatt-hours (kWh) of energy along with 18,892,557,587-liter reduction in water consumption.

Income gains for end-users: Approximately 2,217,163 end-users experienced increases in income, with an average cost per end-user with increased income of $23 USD. Conservative estimates suggest a minimum income gain per end-user of $100 USD annually over three years, totaling $665,148,900 USD in income gains. A more conservative scenario estimates $349,203,172 USD, assuming 70% of end-users and a $75 USD annual increase.

Private investment mobilization: The program directly mobilized $201,436,096 USD in private investment, counted as a one-time figure.

Climate benefits: The program achieved a reduction of 2,992,761 tons of carbon dioxide equivalent emissions (CO_2e), valued at $40 USD per ton, leading to $119,710,440 USD in climate benefits. A scenario excluding these climate benefits is also considered.

Total monetized benefits and scenarios: Under the main scenario, total monetized benefits reached $986,295,436 USD, with alternative scenarios yielding $670,349,708 USD and $550,639,268 USD. The latter excludes climate benefits.

Net economic benefits and benefit-cost ratios: The net economic benefit ranges from $500,816,350 USD to $936,472,518 USD across scenarios, with benefit-cost ratios from $11.1 USD to $19.8 USD, indicating strong economic returns for every dollar invested.

Cost-effectiveness indicators: The cost per end-user reached was $37 USD, and the cost per ton of CO_2e avoided was $47 USD. Each dollar invested by WE4F mobilized $5.6 USD from external sources, with 67% of funds directed to grants, technical assistance, and implementation.

Qualitative and strategic benefits: Beyond monetized impacts, the program enhanced food security, small- and medium-sized enterprise (SME) resilience, technology adoption, institutional capacity, and inclusion of gender and youth. It also demonstrated strong leverage and efficiency, with the private sector absorbing most of the financial risks, and markets contributing significantly more funding per end-user than WE4F.

METHODOLOGY (ASSUMPTIONS AND DISCLAIMERS) FOR THE COST–BENEFIT ANALYSIS

The analysis applies a standard ex-post economic cost–benefit framework to assess whether WE4F generated positive net economic value by comparing total program costs with monetized benefits derived from observed results. Total economic costs are treated as equivalent to total financial costs, based on actual audited expenditure for the 2020 to 2026 period, amounting to $49,822,918 USD, and comprising grants and technical assistance, personnel, implementation costs (including subcontractors), and indirect costs. The methodology is aligned with internationally recognized practices, including guidance from the World Bank, the OECD Development Assistance Committee (DAC), and the U.S. Agency for International Development (USAID). Within this framework, analysis follows a standard economic cost–benefit framework, expressed as:

Net Present Value (NPV) = Total Benefits minus Total Costs
Benefit–Cost Ratio (BCR) = Total Benefits divided by Total Costs

The assessment is conducted ex-post using confirmed executed costs and consolidated program-level results and cumulative outcomes.

Monetized benefits were estimated using a conservative approach based on three quantified streams: 1) end-user income gains, 2) private investment mobilized, and 3) climate benefits from avoiding greenhouse gas emissions. Income gains were valued at an assumed minimum of $100 USD per end-user per year over three years, with a more conservative alternative scenario applying 70% attribution and an annual gain of $75 USD. Private investment was counted once and not annualized. Climate benefits were valued at $40 USD per ton of CO2e - in line with multilateral development practices. This approach was designed to ensure transparent, credible, and audit-ready estimates for donor reporting.

- For the minimum income gain per end-user, the basis for the assumption of $100 USD is implied from the cost-effectiveness data. Cost per end-user with increased income ≈ $23 USD, a reasonable economic assumption is that benefits should exceed costs by a meaningful margin. A 4–5x return at end-user level is modest in development programs; this is a conservative implied return.
- A three-year range was selected as a conservative proxy for the persistence of income gains, reflecting typical short-to medium-term impact horizons observed in SME support and innovation programs. Longer-term benefits are plausible but were not included due to limited empirical evidence, ensuring that the analysis does not overstate economic returns.
- The $40 USD per ton of CO2e is used in this analysis, considering the concept of the social cost of carbon, an estimate of the economic damage avoided by reducing a ton of CO2 emissions. The World Bank uses a range-based approach (lower-bound values of approximately $30–50 USD per ton of CO2e). These values appear in World Bank economic analysis guidance and climate-related project appraisals; in practice, approximately $40 USD per ton became a standard conservative proxy within this lower range.
- While $40 USD per ton of CO2e constituted standard practice in 2020, a conservative approach is suggested for the 2020–2026 period because it enables prudent and secure reporting, avoids overestimation of benefits, and provides robustness in the event of potential audits.
- A scenario is presented in which the social cost of reduced carbon emissions is not monetized to discount doubts or concerns from the ecosystem.

TRANSPARENCY NOTES (DISCLAIMER)

This analysis applies a conservative, evidence-based income increase rate drawn from sources such as the World Bank, International Fund for Agricultural Development (IFAD), and related case studies. The baseline income figure reflects a blended average across WE4F's operating regions and does not account for variation across individual countries or innovators. The three-year sustainability assumption is deliberately shorter than the five to seven years used in comparable World Bank and IFAD program evaluations. This estimate captures direct income effects to farmer end-users only and does not include indirect co-benefits such as job creation, food security improvements, water savings, or ecosystem services, meaning the true social value of WE4F's impact is likely significantly higher than presented here.

The below outcomes achieved within WE4F strengthen the narrative but are not included in the calculation of the BCR:
Improved food security and nutrition

- Increased resilience of SMEs and smallholder farmers
- Technology adoption and market integration
- Institutional capacity building
- Gender and youth inclusion effects

Total Cost of WE4F Program (USAID-hubs only) for 2020–2026: $49,822,918 USD

Consolidated Results (Program-Level Totals)

Outcome	Result
Number of End-users Impacted	4,402,809
Tons of Food Produced	16,968,366 tons
Tons of Food Processed	154,870 tons
Kilowatt-Hours of Energy Saved	4,584,598,775 kWh
Reduction in Water Consumption	18,892,557,587 liters
Number of End-users with Increased Incomes	2,217,163
Private Investment Mobilized	$201,436,096 USD
Reduction in Greenhouse Gas Emissions	2,992,761 tons of CO2e

MONETIZED BENEFITS

INCOME GAINS BY END-USERS

Scenario 1

Total number of end-users with increased incomes: 2,217,163
Assumed minimum income gain per end-user (very conservative): $100 USD per year based on a cost per end-user with increased income of about $23 USD and multiplied by a 4–5x return at end-user level.
Assumed duration: 3 years

(2,217,163 end-users x 100 USD) x 3 years = **$665,148,900 USD**

Scenario 2

Considering that not all end-users' income increase was attributed to WE4F intervention, rather than 70% of the total, and adopting an even more conservative approach of an annual increase of $75 USD (10% of a range of annual income $600-800 USD, see below reference) per end-user:

((2,217,163 end-users x .7) x $75 USD) x 3 years = $349,203,172 USD

PRIVATE INVESTMENT MOBILIZED

Directly reported-on results: $201,436,096 USD
Note: investment mobilized is counted once, not annually

CLIMATE BENEFITS (REDUCTION IN GREENHOUSE GAS EMISSIONS)

Uses a conservative social cost of carbon of $40 per ton CO2e (consistent with multilateral development practices).

2,992,761 tons of CO2e x $40 USD = $119,710,440 USD

TOTAL QUANTIFIED BENEFITS (PRESENT VALUE)

Scenario 1: In this scenario, the annual income gain is assumed at $100 USD per end-user with 100% of end-users' income gains attributed to WE4F solutions.

Benefit Category	U.S. Dollars
End-user income gains	$665,148,900
Private investment mobilized	$201,436,096
Climate benefits (CO2e)	**$119,710,440**
Total Monetized Benefits	**$986,295,436**

Scenario 2: In this scenario, the annual income gain is assumed at $75 USD per end-user with 70% of end-users' income gains attributed to WE4F solutions.

Benefit Category	U.S. Dollars
End-user income gains	$349,203,172
Private investment mobilized	$201,436,096
Climate benefits (CO2e)	$119,710,440
Total Monetized Benefits	**$670,349,708**

Scenario 3: In this scenario, the annual income gain per end-user is assumed at $75 USD while excluding the value of climate benefits (CO2e).

Benefit Category	U.S. Dollars
End-user income gains	349,203,172
Private investment mobilized	201,436,096
Total Monetized Benefits	**$550,639,268**

COST–BENEFITS RESULTS

NET ECONOMIC BENEFIT (TOTAL MONETIZED BENEFITS MINUS PROGRAM COST)

Scenario 1:

$986,295,436 USD - $49,822,918 USD = $936,472,518 USD

Scenario 2:

$670,349,708 USD - $49,822,918 USD = $620,526,790 USD

Scenario 3 (excludes the social rate of return for carbon):

$550,639,268 USD - $49,822,918 USD = $501,816,350 USD

BENEFIT–COST RATIO (TOTAL MONETIZED BENEFITS DIVIDED BY PROGRAM COST) AND INTERPRETATION

Scenario 1:

$986,295,436 USD / $49,822,918 USD = $19.8 USD

For every $1 USD invested, the program generated approximately $19.8 USD in economic benefits, under conservative assumptions.

Scenario 2:

$670,349,708 USD / $49,822,918 USD = $13.5 USD

For every $1 USD invested, the program generated approximately $13.5 USD in economic benefits, under more conservative assumptions.

Scenario 3 (excludes the social rate of return for carbon):

$550,639,268 USD / $49,822,918 USD = $11.1 USD

For every $1 USD invested, the program generated approximately $11.1 USD in economic benefits, under ultra conservative assumptions.

COST-EFFECTIVENESS HIGHLIGHTS

These are strong efficiency indicators frequently cited in donor reporting:

- Cost per end-user reached $37 USD
- Cost per ton CO2e avoided $47 USD
- $1 USD invested by USAID-implemented WE4F hubs mobilized $5.6 USD
- 67% of total funds flowed directly to grants, technical assistance, and program implementation

CONCLUSION

Based on actual costs and verified results, the WE4F program demonstrates a strong economic justification. With a benefit–cost ratio of approximately 26:1, the program generated substantial income, climate, and investment benefits relative to its total cost.

Water and Energy for Food investment is defined as equal to total grants plus technical assistance. In the In the WE4F program, each dollar invested resulted in impacting 3.46 end-users, producing 1.1 tons of food, saving 301 kWh of energy, reducing water consumption by 1,240 liters, enabling innovators to raise $13.22 USD in external investment for innovation scaling, generating $17 in sales of innovation products/services, and leading innovators to contribute $2.34 USD of their own funds for innovation scaling.

For every $1 USD of WE4F innovator grants and TA funding, $15.60 was mobilized from external sources, including private investment and innovator co-funding. If the leverage ratio were calculated considering WE4F total investment, for every $1 of WE4F investment, $5.60 was mobilized from external sources for the overall economic, social, and environmental impact created by WE4F. The mobilized external investment of WE4F innovators far exceeded the program's innovator funding. Leveraged private sector leveraged funds offset program costs and augmented total impact, demonstrating the program's effectiveness in attracting resources for its innovators that were well beyond its direct contributions.

At the end-user level, market financing shaped both the cost and reach of impact per end-user in ways that demonstrated WE4F's catalytic role of amplifying scale and reach. Of the $57.31 USD invested per end-user across WE4F-supported innovators, only $3.46 USD originated from WE4F direct innovator investment (grants and TA funding), with the majority ($53.85 USD) being contributed by markets.

The program's efficiency multiplier was WE4F investment divided by external private investment plus sales; WE4F funding covered only 21% of the true cost while enabling 100% of the program's impact.

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