

SuPER Food Systems: Four Principles To End Hunger





CARE's Focus on Food

THE PROBLEM

Today's food systems are broken. Globally, **over 795 million people are chronically hungry and over 160 million children are stunted**. At the same time that we must feed and nourish these 800 million, we face increasing impacts of climate change, natural resource scarcity, and a growing global population. Put simply, feeding and nourishing today's hungry and malnourished and the growing population of tomorrow – without destroying the planet and in the context of climate change – is perhaps the greatest challenge we face.

Two-thirds of ecosystems are already used unsustainably; one-fifth of cropland is degraded and unsuitable for farming; and agriculture is both one of the largest contributors to greenhouse gasses, and already showing reduced yields as a result of a changing climate and unpredictable weather patterns. For women the challenges are even greater: they are often the last to eat when food is scarce; carry a heavy labor burden that is largely natural resource dependent; and do not have equal access with men to productive inputs. Even countries that produce enough food do not often produce enough nutritious food to meet people's needs for balanced diets. Simply put, business as usual will not create sustainable and equitable food and nutrition security for the planet, much less for the poorest, most vulnerable people.

THE SOLUTION

We know change is possible. CARE's roots are in tackling hunger by delivering CARE packages. In our 70 years, we have evolved our approach to deliver lasting change – not just food. CARE's food and nutrition security work spans from responding to emergencies to enabling small scale farmers, fishers, and pastoralists to sustainably increase productivity, access markets, build resilience to climate change, and ensure the nutrition of their families. We emphasize the role that smallscale food producers play in ensuring the food and nutrition security of all – and particularly emphasize the role and rights of women as food producers and consumers.

CARE focuses on a few key principles to help us get to just and sustainable food systems. We know we're heading in the right direction when our work is SuPER: Sustainable, Productive, Equitable, and Resilient.

CARE's SuPER Principles

- Sustainable: grounded in healthy ecosystems; stable, accountable and enduring institutions and policies; and long-term financing that protects people and the environment;
- Productive (including profitable and nutritious): increases yield without damaging the environment, increases returns on investment, including of labor, by farmers and is climate 'smart';
- Equitable: enables equal rights, opportunities, resources and rewards for smallholder farmers, taking into account women's needs and constraints, and supporting access to affordable nutritious food by rural and urban consumers;
- Resilient: where individuals, families, communities and systems are able to withstand shocks and stresses, including climate impacts and other risks.

What does this look like in practice?

We're presenting evidence from 10 programs in 16 countries that using SuPER principles delivers food and nutrition security and climate resilience for the poorest of the poor. This is just a fraction of CARE's SuPER portfolio, which includes more than 400 projects that address some or all of our principles in more than 61 countries worldwide.



Sustainable

Sustainable food systems must be grounded in healthy ecosystems, but they also depend on the human and political component: stable, accountable and durable institutions that equally support men and women, rich and poor. So CARE prioritizes a range of interventions around promoting sustainable ecosystems, building social solidarity, creating and supporting systems for inclusive governance, facilitating access to markets, and focusing on how programs can build systems that will last long after CARE and its partners leave.

PRIMERAS AND SECUNDAS, MOZAMBIQUE

Along the northern coast of Mozambique, CARE and WWF are working to make marine and terrestrial food systems more sustainable for the 300,000 people in this area who depend on them. Designing for sustainability starts from the understanding that healthier, more robust, community-managed ecosystems provide better access to natural resources, and more dependable ecosystems services. We're seeing big results, in many places.

With People: The program seeks to help farmers and fishers to manage increasing uncertainty: improve their confidence and ability to analyze their situation, experiments with a range of options to reduce their risk, and restore and manage natural resources wisely now and in the future.

On the ground: Conservation agriculture improves soil fertility and quality; reduces erosion, saves labor, and—combined with improved varieties—increases yields without intensive use of external inputs. After just 3 years, improvements in soil health enabled rainfall to be absorbed nearly twice as quickly into the soil, ensuring more precious moisture for crops and protecting carbon in the soil. This healthier soil also makes crops more resistant to flooding—providing a buffer against both extremes of climate change.

In the sea: The P&S program has helped local communities to manage small 'no-take zones' that enable fish to reproduce and grow, with fishing restricted to the areas outside the no-take areas. After 4 years, the number of species doubled, and fishers caught more, larger fish outside the restricted areas. In addition to protecting the ecosystem, this gives people an important source of protein for their diets.





With Institutions: P&S emphasizes empowering people to engage as active players in relationships with those who hold power, so that they can influence decisions. The P&S program is also increasingly using evidence to shape policies and practices at multiple levels, from the Mozambican Ministries of Fisheries, Tourism and Agriculture to global policy processes to governments and the public in countries like the US, France, and Denmark.

P&S is funded with the generous support of the Sall Family Foundation. For more information, visit: http://primeirasesegundas.net.

GLOBAL WATER INITIATIVE, UGANDA

Sustainably using water for agricultural purposes is critical in communities that depend on increasingly unpredictable rainfall to grow their crops. Beyond climate change and environmental challenges, there are also significant institutional problems. Experts estimate that a third of all rural water supply systems in Sub-Saharan Africa are nonfunctional. In order to adopt a technology, people must know about it, understand it and be able to afford to buy and maintain it. So to solve the water problems, we need to think about both environmental and institutional sustainability.

To this end, the Global Water Initiative worked in Otuke, Uganda to determine the most effective sustainable water use techniques. GWI worked with 24 champion farmers to create demonstration plots showcasing water conservation techniques and used the data to support advocacy efforts around sustainable water use and to promote local adoption.

What did they find? Yields more than doubled, from 1,340 kg/acre to 3,079 kg/acre. That means farmer income could go up to \$862 per acre, from the \$375 that was possible before. Not only that, but results show that rainwater harvesting improves soil moisture available to crops during the extended dry spell periods, so the health and outputs of crops and soil is improved with a minimum of external inputs. Long-term, this leads to healthier and more productive soil, lower costs for farmers, and more sustainable farming practices. All of this was possible using technologies that ranged from \$4 worth of investment to \$1,100 for a fully constructed rainwater harvesting system, making the processes more sustainable for farmers and for the soil.

GWI East Africa was funded by the Howard Buffet Foundation. For more information, visit http://www.gwieastafrica.org



Productive

Productivity is about more than increasing yields for particular crops, whether they are staple foods or cash crops. It includes the idea that families have more access to and eat **nutritious**. These foods might not all come from the family farm; we also look at food markets. Productive food systems allow food producers to make a **profit** on their investment, increase availability of nutritious foods, and give consumers access to nutritious and diverse foods that they can buy for home consumption.

UNNATI, NEPAL

UNAUTI works with 1,200 households to help them to grow vegetables for sale to improve their income and dietary diversity. A combination of improved farming techniques, irrigation, and improved seeds led to an increase yield of 228% per acre. Combining this yield increase with connections to markets where farmers could sell their products led to an additional \$269 of income from vegetable sales alone each year. That's tripling the average annual income. Impacts went beyond income. Home consumption of fresh vegetables went up by 15%, so nutrition got better. Gender equality changed, too. Households are demonstrating more equitable sharing of household tasks, and more conversation between men and women. The irrigation technologies, locally based collection centers, and low-weeding strategies especially have freed up women's time, made markets more accessible to them, and allowed them to get more involved in issues of social inclusion.

Several approaches that were key to these remarkable results were:

Investing in local ownership: Instead of simply providing all of the inputs, like better seeds and irrigation technology, the project dropped its support by 25% each year. This gave farmers access to enough income after the first year to continue investing in their own fields, and to reduce their reliance on the project. Farmers are continuing to spend money on the new techniques.

Involving the government: In addition to farmers and farmer's cooperatives investing their own money into new technologies, District Agriculture Departments are also investing in new systems in line with CARE's recommendations, and are building the upkeep and construction of new facilities into their future budgets.

Using the Value Chain Approach: Higher production and productivity are only part of the story to increased household income. UNAUTI's was only possible by linking production to end markets. The project works across the whole value chain, from finding locally available and affordable inputs, to helping farmers work together, to improved farming techniques, to using market information to get better prices. Looking at the whole picture dramatically increases the return on investment.

UNNATI is funded by European Union and implemented in partnership with the local Center for Environmental and Agricultural Policy Research, Extension and Development (CEAPRED).

SHOUHARDO, BANGLADESH

Working with more than 3 million people since 2005, SHOUHARDO was able to increase household incomes and reduce stunting by more than 13 percentage points, more than double the national average. Dietary diversity nearly doubled for families in the SHOUHARDO program, and families' income grew by 85%. Not only that, the hungry season got shorter. Families in SHOUHARDO saw the number of months out of the year that they spent without enough food drop from 6.1 to 1—an 83% improvement.

SHOUHARDO supported improved seeds and irrigation, access to the tools to make fisheries, homestead gardening, and new income generating activities. Up to 90% of food producers adopted these technologies, which greatly increased production. SHOUHARDO also focused on infant and young child feeding practices, which takes improved production and profitability and channels it into nutrition outcomes.

Most importantly,, the project looks at women's empowerment as a way to support food and nutrition security. SHOUHARDO works with women and men to improve women's ability to leave the house, access income opportunities, and have a say in their own destinies. Women are about 3 times more involved in income generating activities than they were at the start of SHOUHARDO II. They are also more than 15% more likely to have control over their own earnings. Women in SHOUHARDO II are also dramatically more likely to access ante-natal care (about 2.5 times more likely) and practice improved feeding and care behaviors to support their children's nutrition, showing how the different SuPER principles are stronger together—building equity, production, profitability, and nutrition together have bigger impacts than any one component alone.



SHOUHARDO id funded by USAID. For more information, visit: http://www.care.org/food

Equitable

Inequality and injustice are the primary drivers of poverty, climate change and food insecurity in our world. The poorest people in the world cannot access—either by growing or buying—the food that they need. Gender inequality is particular challenge. Women are often the last to eat, they have a heavy labor burden (fetching water, fuel, food; caring for children and elderly; and providing substantial agricultural labor). This is compounded by policies, legislation and practice — among the consequences of which are that women are denied secure and adequate land, basic tools and inputs, credit, and appropriate infrastructure and technology. The FAO estimates that if women had equal access to inputs as men, as many of 150 million fewer people would be hungry. So how do we tackle inequality?

COFFEE INDUSTRY SUPPORT PROGRAM, PAPUA NEW GUINEA

Along CARE Papua New Guinea works on the Coffee Industry Support Project, where they aim to create gender equality by changing the way private companies do business. They are focusing on coffee buyers as actors who can revolutionize gender dynamics in communities.

Companies got really uncomfortable when CARE talked about women's empowerment. As one person told us: "...at first our staff minds were closed off to the training because of the word gender..." So what did CARE do? They focused on the business case, and called CARE's Gender, Equity, and Diversity training Family Business Management Training—to put it into the context of getting a more sustainable and reliable value chain for companies.

One woman in a partner company told CARE, "[the training] has changed the way we think as professionals and as individuals. ... I am more confident that women can succeed here. As individuals it has changed the way we interact with each other – I see the young men in my team conversing with ease with women in administration or finance whereas before they would not speak to each other."

It revolutionized companies' behavior. One of CARE's partners has started rearranging their extension sessions—both the setup and the timing—to make sure that women can participate. Extension agents are now focusing on working with men and women together. Many of the partners are also seeking CARE's help to conduct gender audits, and adopt





better HR policies to get women involved. As a result, women's participation in coffee-related extension services went from less than 5% to up to 55%, depending on the partner. Partner companies have agreed to implement internship programs where they specifically recruit and train female extension agents—something they have never done before. CISP is funded with the generous support of the Australian Government

PATHWAYS, BANGLADESH, GHANA, INDIA, MALI, MALAWI, TANZANIA

CARE's Pathways Program works directly with 49,000 women farmers through more than 5,500 Village Savings and Loan Associations. We know that the face of hunger is largely female, and promoting equality helps reduce food insecurity, so Pathways focuses on levelling the playing field for women, and help them get equal access to land, resources, and power. Using improved agricultural methods, Farmers' Field and Business Schools, marketing techniques, and lessons on nutrition and gender equality has had a huge impact.

Since the program began, Pathways has enabled women to:

- Gain access to 9,296 acres of land for production (that's half the size of Manhattan)
- Increase yields up to 200% on fields and crops
- Generate nearly \$4 million in revenue for female farmers and businesses; and
- Adopt improved agricultural techniques between 65 and 75% of the time.

Perhaps most importantly, Pathways has promoted more equal relationships and decision-making at home. In all of the project areas, women and men are telling stories of how they now work together to increase income and food and nutrition security.

As one woman in Ghana said, "this is the first time my husband has given me land to farm my own crops. Over the years any time I asked for land he would tell me that the land is not even enough for him to share with me and that if I were such a great farmer I wouldn't have left my father's house to come and marry him. So I thank you people for changing the minds of our husbands."

Pathways is funded with the generous support of the Bill & Melinda Gates Foundation. To learn more, visit www.care.org/ pathways and www.care.org/ffbs



Resilient

No intervention can create just and sustainable food systems if we cannot build an adequate response to climate change and other shocks and stresses. The increasing frequency and intensity of shocks (climate and otherwise), pushes the most vulnerable people into a cycle of poverty. CARE works to increase resilience in food and nutrition security by helping women, girls, men and boys build equitable and reliable access to key resources, including inputs, information (market, price, climate, for example), decision-making power, finance, natural resources, strengthening their adaptive capacity to climate impacts and ability to deal with occurring loss and damage, and supporting recovery mechanisms that are accessible to both women and men, such as household savings and formal safety nets.

ADAPTATION AND LEARNING PROGRAMME, GHANA, NIGER, KENYA, MOZAMBIQUE

CARE's Adaptation Learning Programme (ALP) works to increase the capacity of vulnerable households in Sub-Saharan Africa to adapt to climate variability and change. The programme is supported by the United Kingdom's Department for International Development (DfID), The Ministry of Foreign Affairs of Denmark, The Ministry of Foreign Affairs of Finland and the Austrian Development Cooperation.

ALP's Community Based Adaptation and Participatory Scenario Planning approaches bring together poor and vulnerable people with government actors and sources of climate information to create resilience plans at the community and district levels. Communities have from gone having 35% of farmers using climate services to 70% because they feel that they are actionable and reliable. In Niger, research on investing in Participatory Scenario Planning showed that for every \$1 invested in community resilience, the government was able to avoid \$4 of losses.

ALP's evidence and advocacy are so strong that CARE's tools and methods have been adopted in 135 communities and 8 countries that are not ALP targets, but where ALP has been able to share learning and information. These tools have also been written into 9 national policies/development plans and 66 local ones, proving that we can build resilience not just in the communities where we work, but also multiply our impact well beyond an immediate project.

To learn more about the program, visit www.careclimatechange.org/our-work/alp/.

For every \$1 invested in community resilience, the Niger government in saved \$4 in losses. Studies in Kenya show a \$3.03 return for every dollar invested.

MAKA'AS, TIMOR LESTE

CARE's MAKA'AS project increased the resilience of 4,057 people in 1,525 rural households in Timor-Leste's Liquiça district. It worked to enhance access to safe drinking water, deliver improved sanitation, promote climate-resilient livelihoods and reduce landslide risks and erosion.

At the 2015 evaluation, 69% of community members feel better prepared to deal with climate shocks. Communities not only feel more prepared, but are taking actions that help them be more prepared. Community access to climate information more than doubled to 34.9%. This climate information allows communities to have reliable data that they understand and can turn into action in their own livelihoods. 66.7% of farmer group members had access and most used this information to plan their activities. Communities are adopting new farming techniques and diversifying crops to increase their resilience to climate variability.

Another important component to building long-term resilience has been the partnership with the government. The project supported the establishment of the National Climate Change Working Group and the inaugural National Conference on Climate Change Adaptation in November 2014, where the project had high visibility. At the district level the project was seen as a helpful "extended arm", for the District Water and Sanitation Services department.

These activities are not only increasing resilience, but also agricultural production and household incomes. It also increased access to safe drinking water. Taken together, these advances help families build their current livelihoods so they can be more prepared to respond to shocks.

MAKA'AS was funded through the generous support of Australian Aid and was conducted in partnership with WaterAid.



Consolidating SuPER

SuPER is not just about each of its separate components, but about bringing all of the pieces together for just and sustainable food systems. Not every project will have all of the pieces—sometimes projects work in partnership to get to the whole spectrum, but there are some projects that meet all the SuPER principles.

GRAD, ETHIOPIA

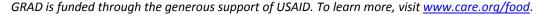
Graduation with Resilience to Achieve Sustainable Development (GRAD) works with 65,000 chronically food insecure households in Ethiopia. The project creates activities in a sequence to help families cope with current food insecurity and eventually graduate out of poverty to new economic opportunities that will be climate resilient. GRAD's results show that it truly is SuPER. Indeed, USAID called it the most cost-effective intervention they have in Ethiopia.

Sustainable: 86% of participants aspire to graduate. GRAD has cultivated collaboration with many different organizations attributing to the success of the project. 2,591 Village Economic and Social Associations (VESA) provide 57,175 people access to sustainable credit and solid institutions. The GRAD program is also contributing to redesigning national policies on poverty and social safety nets—an impact that will reach millions of people in the long term.

Productive: 70% of targeted households were involved in Value Chain Activities and 65% of VESA members have formal microfinance credit. This, combined with new agricultural techniques is increasing household incomes by \$365 per year. Nutrition is represented, too. Essential Nutrition Actions trainings promoting optimal nutritional care for pregnant girls/women, infants and young children reached more than 54,000 households.

Equitable: Most participants reported that women had increased household decision-making abilities. Women made up 36% of the participants trained on improved technologies and/or agricultural practices, and 39% of participants linked to output markets were women.

Resilient: 84% of households adopted at least two practices associated with climate change adaptation, and 96% have adopted at least one practice including early maturing crop varieties, moisture conserving practices, and drought tolerant crop types and varieties.







LINKING AGRICULTURE, NUTRION, AND NATURAL RESOURCES, LANN

With funding from the European Commission, CARE Laos worked with 895 households and 4,759 people to find ways to have integrated programming that could help families face their food and nutrition security challenges as a whole, rather than looking at just individual pieces.

Sustainable: Families adopted better water management techniques that protect the water systems, as well as making crops more productive. The project also increased families' productive capital—the way they make their income, like livestock or farming equipment—by 28%, providing more sustainable livelihoods for the long term because they have resources to build from.

Productive: Families' incomes went up by \$320 per year on rice, cash crops, and fish production—enough to keep them in rice for an additional 265 days a year. Rice production also increased by 40%. Producing more food and making more money aren't enough to guarantee nutrition, though, so the project focused on nutrition and hygiene education to make sure that people are eating the right foods. It worked; protein intake went up by 12%.

Equitable: The program saw that women's workloads were a huge barrier to adopting improved techniques, so they added a component of getting labor-saving technologies into communities. The rice mills they introduced reduced a woman's workload on food preparation by 60 DAYS every year (that's 1460 hours). Men have also begun to share women's household work burdens, especially around cooking and child care-leaving women even more time for vegetable gardens and other income-generating activities.

Resilient: Diversifying income bases and helping families acquire small, portable assets like small livestock contributes to increased resilience at the household level. The income generating activities span a range of value chain, crops, and expertise, ensuring that families are not solely dependent on assets that are vulnerable to the same kind of shocks.

LANN was funded with support from the European Union.

CONCLUSION

These programs prove that SuPER principles can help move towards just and sustainable food systems—systems that can provide enough nutritious food for everyone in the world, rich and poor, men and women. All this is possible without robbing future generations of the opportunity to have just and sustainable food systems of their own. In practice, we have seen incredible results that set the stage for feeding the 795 million people who are hungry today.



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Founded in 1945 with the creation of the CARE Package®, CARE is a leading humanitarian organization fighting global poverty. CARE places special focus on working alongside poor girls and women because, equipped with the proper resources, they have the power to lift whole families and entire communities out of poverty. Last year CARE worked in 90 countries and reached more than 72 million people around the world. To learn more, visit www.care.org/food.