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Building Food Security and Resilience in South Sudan:

EXAMINING THE IMPACT OF THE *PATHWAYS TO RESILIENCE* PROJECT IN JONGLEI AND EASTERN EQUATORIA

CRS
CATHOLIC RELIEF SERVICES

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Background & Justification

Located in East Africa, South Sudan gained independence from Sudan in 2011. The country is socio-culturally and ecologically diverse, with considerable natural resource wealth. The South Sudanese economy is heavily reliant on oil, although most people pursue agricultural or livestock-based livelihoods.

South Sudan is characterized by recurrent and overlapping shocks and stresses that affect stability and the well-being of its citizens. The country has experienced three civil wars and decades of multi-level, violent conflict between the government and opposition groups, as well as sub-national anti-government insurgencies, inter-communal conflict over resources, and rivalries among ethnic groups. Protracted conflict, paired with endemic natural and climatic shocks like drought, flooding, and crop and livestock pests and disease have exposed communities to extreme instability and trauma; disrupted agricultural production and adaptive capacity; displaced families; eroded trade, markets, and basic services; exacerbated food and nutrition insecurity; and increased household dependency on humanitarian aid. Consequently, South Sudan faces widespread poverty; hunger and malnutrition; lack of access to basic social services like healthcare and education; and on-going vulnerability.

Given these conditions, Catholic Relief Services (CRS) prioritizes building the resilience of South Sudanese communities. Resilience – or the ability to prepare for as well as to bounce back and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth[1] – requires a holistic approach to building people's individual capacities, assets, and agency, empowering them to be more prepared, able to cope with shocks, and adaptive to longer-term stresses, and ultimately to become resilient. Addressing key factors in the enabling environment and strengthening systems further removes barriers and creates a context where vulnerability is reduced and resilience can flourish.[2]

The *Pathways to Resilience* Project (or P2R), funded by the United States Agency for International Development Bureau of Humanitarian Assistance (USAID/BHA) delivered a multi-sectoral, layered, and sequenced response to food and nutrition insecurity in Jonglei and Eastern Equatoria States of South Sudan. P2R responded to the needs of host and returnee populations that have experienced decades of conflict and other natural shocks and stressors. P2R's approach focused on developing sustainable capacity within these communities and laying foundations for resilience through integrated social cohesion, livelihoods, disaster risk reduction (DRR), water sanitation and hygiene (WASH), and nutrition interventions. The project drew on learning from CRS' extensive experience in Greater Jonglei, including the flagship Resilience and Food Security Program (RFSP) and Responding to Emergency Nutrition Health and Wash (RENHW) programs funded by USAID/BHA.

[1] https://www.crs.org/our-work-overseas/program-areas/resilience
[2] https://www.crs.org/crs-resilience-framework-%202023-eng

Table 1: Overview of the Pathways to Resilience (P2R) project

PATHWAYS TO RESILIENCE (P2R) KEY PROJECT FACTS	
Program Goal:	Communities have improved and sustained food and nutrition security
Program Objectives:	(1) Food and nutrition insecure communities have improved resilience to climate and conflict shocks and stressors (2) Food and nutrition insecure households have increased food production
Participants:	682,060 participants (57% female; 43% male)
Implementation Area:	Duk and Akobo Counties in Jonglei State Budi and Kapoeta North Counties in Eastern Equatoria State
Program Period:	December 2020 to January 2024
Resources:	$45 million USD (plus in-kind resources from WFP and FAO)

By project end, P2R successfully empowered communities to increase food production, more effectively engage with markets, adapt to climate-driven shocks, reduce violence, increase peaceful co-existence, and improve nutrition practices (see Table 2 below). P2R also effectively pivoted between emergency response, recovery, and resilience building based on the rapidly changing livelihood status of participants, adapting its response to the evolving needs of targeted communities.

P2R was strongly coordinated with local authorities and the Relief and Rehabilitation Commission (RRC) and implemented through inclusive and sustainable community structures which strengthened local leadership and capacity. P2R also coordinated closely with other humanitarian and development actors, especially other USAID funded programs in Jonglei and Eastern Equatoria States and leveraged resources from pipeline partner UN Food and Agriculture Organization (FAO). The project complemented ongoing emergency food assistance, especially World Food Programme (WFP) assistance delivered by CRS and others in the target areas.[3]

Table 2: Impacts summary of the P2R project

P2R KEY RESULTS
In 2023, farmers supported by P2R produced 9,662 MT of crops, a **265% increase in overall production** over 2022, with improved yields for sorghum and maize.
At the end of the project 78.4% of producers (78.9% of men and 77.5% of women) reported net income from their livelihood. This represents over 150% improvement from the 52% who reported in the previous (2022) cropping season. Among supported Farmer Producer Groups, the percentage of farmers reporting **net income increased from 23.7% in 2022 to 65.8 % in 2023**.
At project closure, households demonstrated a **statistically significant improvement on the mean Ability to Recover from Shocks and Stresses Index** (from 3.84 to 4.63).
Local leaders reported **positive impacts in reducing low-scale conflicts** such as cattle theft, domestic violence, and inter communal conflict, particularly among youth engaged in both livelihood and social cohesion interventions. Project participants also reported reduced fear of conflict with neighboring communities.
P2R more than **doubled the prevalence of exclusive breastfeeding** for children under six months of age from 33% at baseline to 68% at endline. Qualitative data reinforced that nutrition sensitization alongside training and promotion of vegetable gardening contributed significantly to improved dietary diversity.

[3] CRS. P2R Final Report. 2024.

Importantly, the P2R project was intended to deliver results that enabled participants to see sustained impacts beyond the project cycle. This would demonstrate that the assets and capacities built truly improved well-being and promoted durable resilience and self-reliance in the face of post-project or future challenges. However, determining the impacts of P2R requires deliberate study to understand what worked – and works – to build sustainable resilience in South Sudan. This will facilitate more impactful and cost-effective programming, helping people move sustainably away from needing on-going humanitarian support and towards stability, self-reliance, resilience, and empowerment.

As such, this study set out to answer the following research questions:

1. How do the well-being trajectories of project participants compare to non-participants during the project period?
2. What shocks/stresses were experienced during the project period?
3. How did people cope with shocks/stresses?
4. How did project interventions support shock/stress coping, recovery, and resilience-building?

Methodology

This *ex post facto* study used a mixed methods approach to address the research questions. Due to logistical and financial constraints, it was not possible to collect new data from previous P2R project communities. The study instead relied on additional analysis of existing project data, reports, and learning products, alongside secondary data sources. Steps taken to address each research question are as follows:

RQ1: How do the well-being trajectories of project participants compare to non-participants during the project period?

To address RQ1, the study utilized food security as an indicator of well-being and monitored trends over time, including in relation to shocks experienced during the project timeframe.

P2R itself collected three relevant food security indicators – the Food Consumption Score (FCS), Reduced Coping Strategies Index (rCSI), and Household Hunger Scale (HHS) – from project households at project baseline, midline, and endline. Since these indicators include different dimensions of food security and use different recall periods for respondents, CRS calculated a composite indicator designed using Machine Learning (ML) to give a single score of food security across these different dimensions[4]. The CRS composite indicator includes the same scoring thresholds as provided in the Integrated Food Security Phase Classification (IPC) guidance[5]. Resulting data for project households was assigned to the five IPC phases of acute food insecurity, with a focus on the percentage of households in each IPC phase. Newly analyzed project data was compared to population-level IPC reports using similar five-level IPC phases to determine differences and changes over time of food security status at baseline, midline, and endline.

[4] Analytics for Impact - Labelling HH Food Consumption Status Using Machine Learning
[5] IPC Manual

This approach does include some limitations. First, the composite indicator calculated by CRS does not fully match the methodology used by the IPC. Notably, IPC reports are generated using FCS, rCSI, and HHS, but also other indicators pertaining to livelihoods, agro-climatic conditions, market trends, etc., and the IPC analysis process involves expert consultation in addition to the data, leading to a more comprehensive set of current and projected food security numbers. Analysis of the P2R data focused only on the FCS, rCSI, and HHS food security indicators collected by the project and used machine learning to determine the comparable IPC phase. In addition, the P2R project targeted people (or households) in need, meaning that the selected households were expected to have lower starting food security status than the general population.

Consequently, IPC population-level data did not precisely match P2R data categorized using the machine learning composite indicator approach. As seen in Figure 1, there are clear differences in the IPC percentages and P2R percentages across the four target counties. It is unclear whether the IPC process' use of other indicators catches different vulnerability factors, or if the project participants are in fact different than the general population. Tables 3 and 4 show the respective match rate at baseline between the IPC data and machine learning-derived P2R data outputs.

Figure 1: *Food security phase categories at baseline comparing IPC & P2R data*

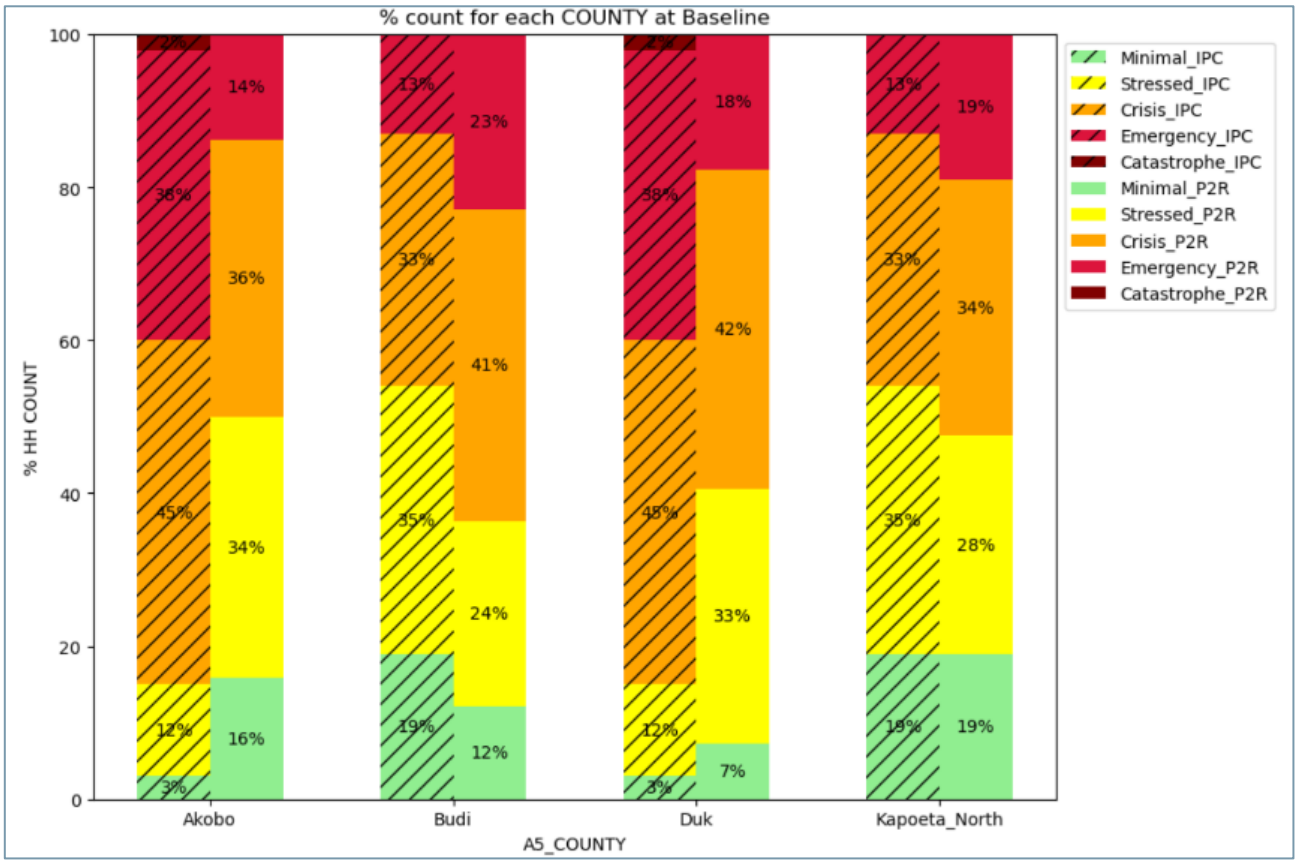


***Table 3**: Comparison of IPC and P2R data at baseline in Akobo County*

Phase name	IPC value (%)	P2R value (%)	Difference (%)	Matched (y/n)
Minimal	3	16	13	n
Stressed	12	34	22	n
Crisis	45	36	9	y
Emergency	38	14	24	n
Catastrophe	2	0	2	y

***Table 4**: Match Rate between IPC and P2R data across the four target counties*

County	Match Rate w/ 5 IPC Phases	Match Rate w/ IPC Phase 3+
Akobo	40%	67%
Budi	80%	100%
Duk	60%	67%
Kapoeta North	100%	100%

Analysis therefore focused on trends from baseline to endline for both IPC data and P2R data, instead of comparing absolute numbers. However, despite these differences, what is still notable is how food security status changed between the population-level IPC datasets compared with how P2R participants' food security changed over time. Differences in trends and trajectories illustrate the influence of the project on food security and resilience.

RQ2: What shocks/stresses were experienced during the project period?

Understanding the type, frequency, severity, and timing of the shocks and stresses that project participants faced is crucial to understanding well-being trends over time. For example, a flooding event could be a major factor in food security worsening, even if project interventions are effective. To answer RQ3, the study utilized the details captured in the Ability to Recover from Shocks & Stresses Index data, which includes a detailed list of the shocks experienced and was collected during baseline and endline. Shock experience was also determined through extensive project document review and key informant interviews with former P2R and CRS South Sudan country office staff.

RQ3: How did people cope with shocks/stresses?

Data regarding how people coped with shocks over the course of the project was pulled from the endline evaluation report, which had a question dedicated to coping. The data was analyzed at project level but also disaggregated by factors including county, gender of household head, food security status, resilience capacities, etc.

RQ4: How did project interventions support shock/stress coping, recovery, and resilience-building?

The project collected two dedicated resilience indicators – the Adaptive Capacities Index (ACI) and the Ability to Recover from Shocks & Stresses Index – at baseline, midterm, and endline. Trendlines were calculated to see if resilience was built per these indicators over the course of the project.

The intent was to conduct additional analytics with P2R data to compare households based on the interventions – or packages of interventions – they received and calculate correlations between food security and resilience indicators and receipt of specific interventions to see if certain interventions were more impactful than others. However, because there is a lack of unique identifiers for households due to there being no formal registry in South Sudan and many project participants with the same name, it was not possible to match interventions to specific households. Also, some households received complementary interventions – such as a husband receiving agricultural training and wife receiving nutrition training – which further complicated correlational analyses.

Instead, the study utilized a range of evidence from project reports to determine the influence of different interventions on the food security and resilience of project households. P2R used a sequenced and layered approach, meaning all households received social cohesion programming while only some received agricultural training, care groups, etc. Analysis therefore also looks at common packages of interventions in addition to standalone interventions, and dimensions of sequencing, layering, and integration of interventions. Personal narratives of the role of project interventions in supporting coping, recovery, and resilience – being more qualitative in nature – were also drawn from project reports and key informant interviews.

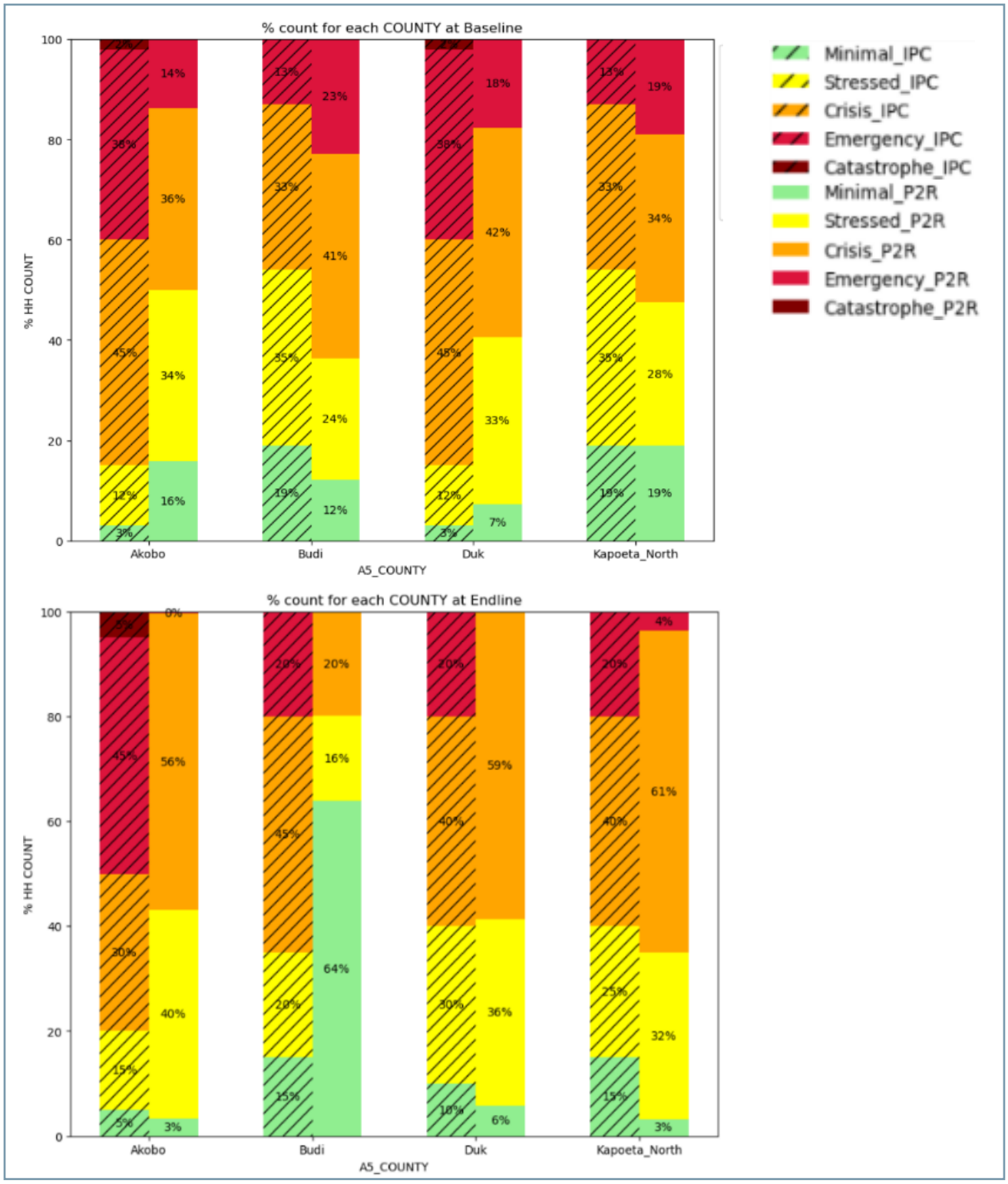
Findings

RQ1: How do the well-being trajectories of project participants compare to non-participants during the project period?

As noted in the Methodology section above, the public IPC reports and the P2R composite indicator calculations do not precisely match in terms of food security status. Using P2R's baseline and endline as time points for comparison:

- CRS' P2R data shows higher food security in Akobo and Duk counties but lower food security in Budi and Kapoeta North counties at baseline than the IPC reports from the same time period.
- At midline, P2R data shows higher food security in Akobo and Duk, but slightly lower in Kapoeta North than IPC reports.
- At endline, P2R data shows much higher food security in Akobo and Budi, and comparable food security in Duk and Kapoeta North as well.

Figure 2: *Food security phase categories using IPC & P2R data at three periods across the four target counties*



Looking across the project timeline (Table 5 below):

- In Akobo, food security conditions worsened, but P2R participants didn't experience the same severity of food security impacts as the general population. The IPC data shows that the total number in IPC 3+ decreased slightly (-5%) but severe food insecurity of IPC 4+ increased (+10%), which suggests households were moving from IPC 3 to IPC 4. In contrast, P2R data shows that the total number of households in severe food insecurity of IPC 4+ decreased (-14%) to no households by the end of the project.
- In Budi, food security conditions worsened substantially, whereas P2R participants' food security actually improved during the same period. The IPC data shows the total number in both IPC 3+ (+19%) and IPC 4+ (+7%) increased, while the P2R data shows the total number in IPC3+ (-44%) and IPC 4+ (-23%) decreased substantially, again with no project households in IPC 4+.
- In Duk, general food security improved in the county, with P2R participants' food insecurity generally less severe than their peer households. The IPC data shows decreases in the numbers in IPC 3+ (-25%) and IPC 4+ (-20%), while the P2R data shows that all 18% of households in IPC 4+ at baseline improved to IPC 3 or better by endline.
- In Kapoeta North, food security conditions generally worsened, although P2R participants didn't experience the same severity of food security impacts. IPC data show increases in IPC 3+ (+14%) and IPC 4+ (+7%), but 15% of project households were downgraded from IPC 4 to IPC 3 or better.

Table 5: *Changes in IPC 3+ and IPC 4+ across the project timeline – IPC vs. P2R data*

County	IPC 3+		IPC 4+	
	IPC	P2R	IPC	P2R
Akobo	-5%	+6%	+10%	-14%
Budi	+19%	-44%	+7%	-23%
Duk	-25%	-1%	-20%	-18%
Kapoeta North	+14%	+12%	+7%	-15%

Overall, the IPC reports show that the food security for the general population worsened in terms of total numbers of food insecure households and the severity of that food insecurity. Meanwhile, project participants in Akobo, Duk, and Kapoeta North Counties experienced improvements in the severity of food insecurity, and in Budi County they experienced particularly significant improvements, while the general food security conditions were worsening. So, while food security conditions in these counties were worsening, they were improving among P2R participants. The contrasting trajectories for project participants versus the context is notable and suggests P2R had an influence in driving food security improvements.

RQ2: What shocks/stresses were experienced during the project period?

Unsurprisingly given the context, participants in the P2R project experienced a multitude of shocks and stresses during the course of their involvement. However, there are considerable differences based on the types of shocks experienced, location of different project counties, time of year, etc.

At project baseline, participants reported their most common shocks to be drought (65%), floods (44%), cattle raiding (37%), and revenge attacks (6%), among others. Key informant interviews and project documents also highlight the severity of flooding in Duk during 2020-2021 and extreme drought across the project zone in 2023 that affected agricultural production[6]. The shock experience of participants was similar at project end, where P2R's endline survey determined that households had experienced an average of 2.67 shocks over the previous 12 months. This varied by county, with the highest number of shocks experienced in Kapoeta and Duk (3.51 and 3.16 respectively), and lowest number of shocks experienced in Budi (1.37).

When categorized by shock type, climate-related shocks (70%) are most common followed by crop and livestock (46%), conflict shocks (22%), and economic shocks (17%). Again, there is considerable difference by county, as seen in Table 6:

***Table 6**: Shocks experienced by P2R participants[7]*

Shocks (in last 12 months)		County and % (n=751)	County				Total
			Akobo	Duk	Budi	Kapoeta North	
Climatic Shocks	Excessive rains	Count	40	35	3	11	89
		%	17.2%	22.6%	2.0%	5.1%	11.9%
	Flooding	Count	136	110	3	33	282
		%	58.6%	71.0%	2.0%	15.2%	37.5%
	Too little rain	Count	27	2	41	83	153
		%	11.6%	1.3%	27.9%	38.2%	20.4%
	Variable rain	Count	9	2	84	54	149
		%	3.9%	1.3%	57.1%	24.9%	19.8%
Biological Shocks	Crop disease	Count	18	54	14	124	210
		%	7.8%	34.8%	9.5%	57.1%	28.0%
	Pests	Count	9	31	7	107	154
		%	3.9%	20.0%	4.8%	49.3%	20.5%
	Weeds	Count	0	37	3	125	165
		%	0.0%	23.9%	2.0%	57.6%	22.0%
	Livestock disease	Count	27	47	13	94	181
		%	11.6%	30.3%	8.8%	43.3%	24.1%
Conflict related shocks	Theft of assets	Count	4	14	1	1	20
		%	1.7%	9.0%	0.7%	0.5%	2.7%
	Land conflict	Count	1	5	10	4	20
		%	0.4%	3.2%	6.8%	1.8%	2.7%
	Water conflict	Count	1	11	0	2	14
		%	0.4%	7.1%	0.0%	0.9%	1.9%

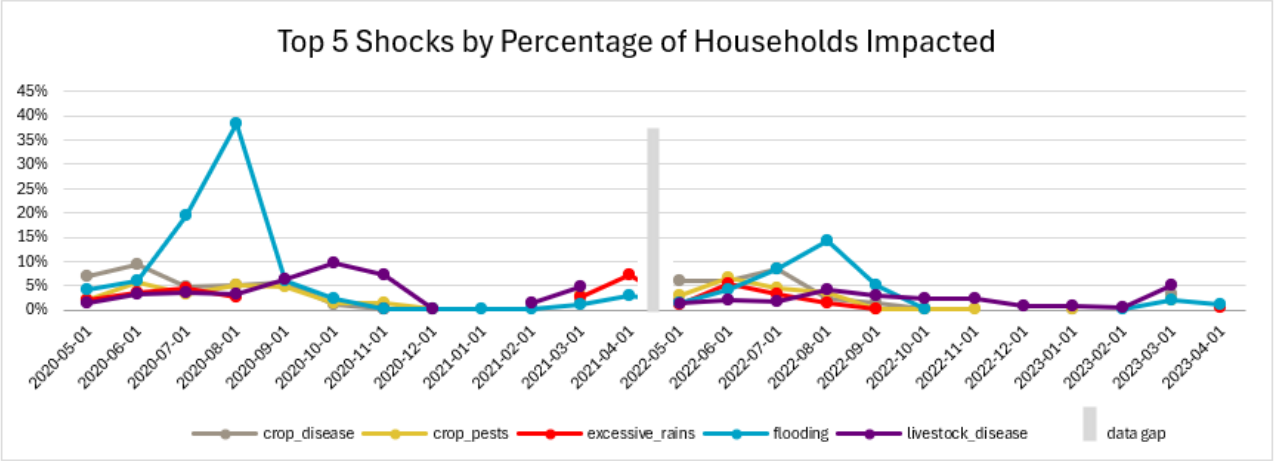
[6] Interview with former P2R MEAL Manager Ermias Emiru. March 2025.
[7] CRS. P2R Final Report. 2024.

	Gender based violence	Count	10	3	8	5	26
		%	4.3%	1.9%	5.4%	2.3%	3.5%
Economic Shocks	Delay in food assistance	Count	103	38	1	12	154
		%	44.4%	24.5%	0.7%	5.5%	20.5%
	Increasing food prices	Count	91	15	1	18	125
		%	39.2%	9.7%	0.7%	8.3%	16.6%
	Unemployment	Count	22	7	3	9	41
		%	9.5%	4.5%	2.0%	4.1%	5.5%

Flooding is the most widespread and commonly experienced shock when it occurs, seemingly spiking in July/August but also sometimes in March/April, as seen in Figure 3 below. Flooding seems to be a problem across all four counties but at different levels across the project timeline. Drought follows a similar pattern. Whereas Akobo and Duk suffered flooding at much higher levels, Budi and Kapoeta North suffered from drought at higher levels.

Crop and livestock shocks were much higher in Duk and Kapoeta North than in Akobo and Budi. Conflict dynamics varied considerably by location, with theft and water being the main sources of conflict in Duk (9% and 7%), land and GBV in Budi (7% and 5%), GBV in Akobo (4%), and fairly low rates of any form of conflict in Kapoeta North. Economic shocks were considerably higher in Akobo and Duk, where delays in humanitarian assistance (44% and 25%) and food price increases (39% and 10%) were common.[8]

Figure 3: *Shocks experienced by P2R households*



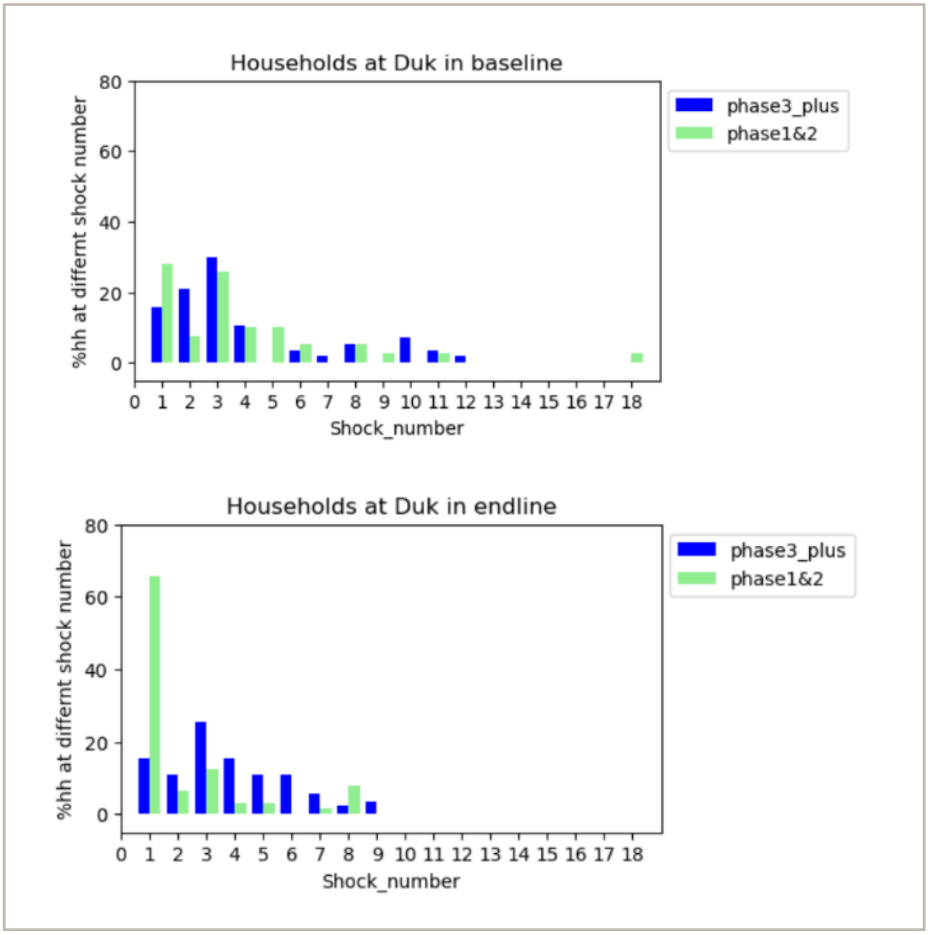
Within years, there are also high seasons for specific types of shocks tied to the seasonal calendar.[9] In addition to the May-August lean season, P2R's project baseline found that drought was a challenge from November to February/March, unpredictable rains affected the majority of households starting in March, transitioning into excessive rains from March to July and flooding from June to August, a cycle that repeated annually. Other shocks related to conflict also increased in March around dry season when travel overland is easier and during the planting season and

[8] CRS. P2R Final Report. 2024.
[9] FEWSNET.

disagreements over land and water, leading to theft, destruction of property, and livestock raids during the March to July period. Issues related to food prices are most acute in January and February, illnesses and death at the onset of the rainy season in March, whereas delayed food assistance, crops and livestock diseases, and GBV span the entire year.[10]

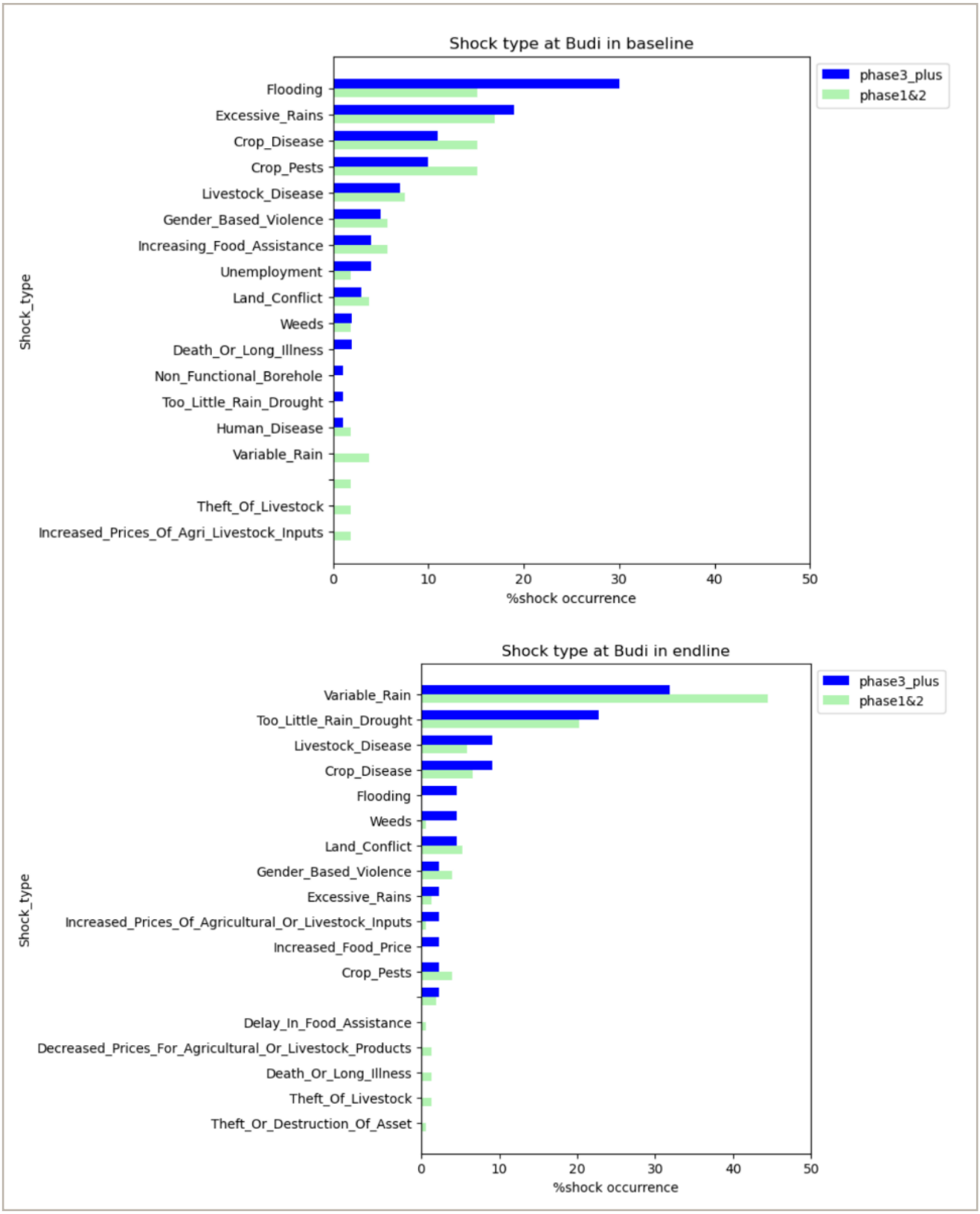
Generally speaking, shocks – neither the number of shocks nor the specific type of shock – were found to be direct drivers of food security outcomes. The context was so shock-prone that households were all affected regardless of characteristics. The only notable and statistically significant correlations were that (1) households in Duk County who experienced fewer shocks had better food security (Figure 4), and (2) households in Budi County who experienced flooding had worse food security outcomes than non-affected households (Figure 5).

Figure 4: *Effect of Shock Number on Food Security in Duk County*



[10] CRS. P2R Baseline Report. 2021.

Figure 5: Effect of Shock Type on Food Security in Budi County



RQ3: How did people cope with shocks/stresses?

Shocks and stresses were common across the context and a constant challenge for P2R participants. However, analysis shows that households' ability to cope and recover from shocks improved from baseline to endline. Using the Ability to Recover from Shocks and Stresses index, the project achieved a statistically significant improvement in this index from 3.84 at baseline to 4.63 at endline (at $p<0.001$). Table 7 provides further details across different household types:

Table 7: *Ability to Recovery from Shocks and Stresses index scores by household type*

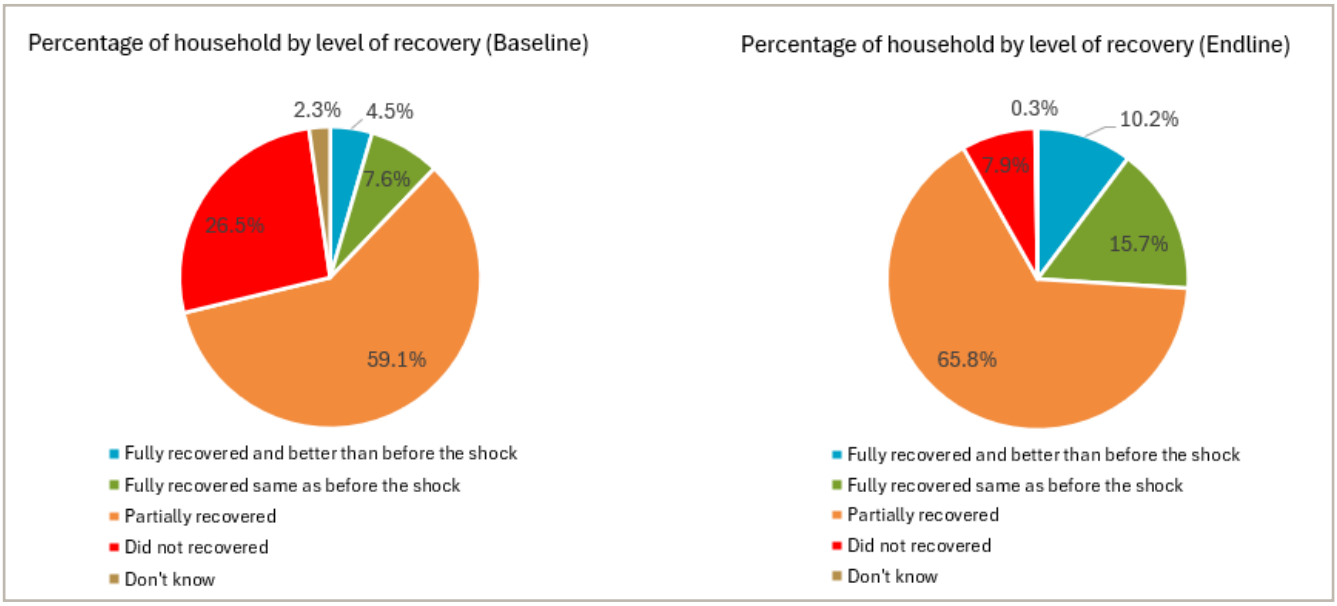
Mean *Ability to Recover from Shocks and Stresses Index* score				
Household Type	**Baseline**	**Target**	**Endline**	**% of Target**
Female & Male Headed Households	3.76	4.2	4.57	109%
Female no Male Headed Households	3.99	4.4	5.00	114%
Male no Female Headed Households	3.93	4.4	4.30	98%
Total	**3.84**	**4.4**	**4.62**	**105%**[11]

Going deeper into the data, at baseline, households' ability to recover is quite low. Reportedly, 27% of households don't recover at all and 59% partially recover, meaning 86% of households are worse off than pre-shock. At endline, level of recovery improves but is still low across the four counties. While now only 8% of households don't recover at all, 65% still only partially recover, meaning 73% are worse off than pre-shock. Still, this marks a 12% improvement overall and similar improvements were made across the counties. Budi County had the highest percentage of households who cited no ability to recover (37%) at baseline, but this dropped to just 9% unable to recover at all by endline. Duk similarly moved from 31% no recovery at baseline to just 5% at endline.

Data also shows that those households that at least somewhat recover, can recover better after participating in the project. While only 8% felt they could fully recover from shocks at baseline, this increased to 16% by endline. Similarly, households who recovered better than before a shock at baseline (4%) increased to 10% by endline. Across all categories, there is improvement in the ability to recover from shocks and stresses, even if many households still struggle to recover fully in the face of such a challenging context.

[11] CRS. P2R Endline Report. 2024.

Figure 6: *P2R households by level of recovery – baseline vs. endline*



In terms of specific coping strategies, at endline households reported selling livestock (39.3%); reducing food consumption (quantity and number of meals per day) (32%); sending livestock in search of pasture (15.6%); reducing non-essential household expenses (12.9%), and migration of the whole family (11.2%) are the most common approaches. These percentages were roughly equal to those cited at baseline[12].

Importantly, not all coping actions suggest the same level of need or have the same degree of longer-term negative consequences. Per the Livelihood Coping Strategies Index for South Sudan[13], the most commonly reported coping strategies used by P2R households suggest Stress or Crisis level coping, while only households engaging in migration were utilizing Emergency level coping (Figure 7).

Figure 7: *Coping Strategies by Level of Severity*

Strategies		**Mode of Living**	
		Urban/Camp	**Rural**
Stress	1	Send household members to eat with another household.	Send household members to eat with another household because of a lack of food or money to buy food.
	2	Sell more animals than usual for this time of year OR Spent savings.	Sell more animals than usual for this time of year.
	3	Borrowed cash.	Borrow money or purchase food on credit.
	4	Sell household assets/good.	Gather wild foods more than normal.
Crisis	1	Reduce expenses on goods for resale or on business/petty trade or agricultural inputs, etc.	Ask other community members for a support of food.
	2	Reduce expenses on health (including drugs) and education.	Send more household members than normal to cattle and/or fishing camps.
	3	Sell productive assets or means of transport (sewing machine, wheelbarrow, bicycle, car, etc.).	Sell or eat seeds intended for planting this season.
Emergency	1	Sell house or land or sell or slaughter the last of your cows and goats.	Sell or slaughter the last of your cows and goats.
	2	Travel back to the village/ out of town to look for/ search for (begging) food or other resources	Travel to another village to look for/ search for (begging) food or other resources.
	3	Use community leaders or a local court to collect debts or bride wealth/dowry, or engage in illegal income activities (theft, prostitution).	Engaged in illegal income activities (theft, prostitution).

[12] CRS. P2R Endline Report. 2024.
[13] World Bank. South Sudan Poverty & Equity Assessment. June 2024. Link.

RQ4: How did project interventions support shock/stress coping, recovery, and resilience-building?

The P2R project approached resilience – including preparing for, coping with, and recovering from shocks and stresses – using a holistic and integrated approach. As noted above, climate and conflict related shocks and stresses were key challenges in P2R counties and among project participants. In response, the project was designed to integrate social cohesion and trauma awareness programming with interventions in livelihoods (including agriculture and fisheries), WASH and nutrition, DRR-focused resilience plans, adult literacy, and financial inclusion.[14] This integrated design was cited as being well coordinated and meeting the multitude of challenges facing communities, thereby enabling resilience and improved food security despite challenges.

> "The P2R had specific sectors but at its core was integration. The approach attempted to ensure that communities received a menu of services as opposed to individual interventions. This shows the implicit understanding of the multi-dimensional nature of challenges which faced communities we were supporting."
>
> *- CRS staff key informant*

Livelihood diversification was another significant driver of improved resilience and food security for P2R participants. The approach enabled different income streams that meant there was less risk to economic stability for households, and income was more available and sufficient to enable coping when needed. By project end, 77.8% of households had diversified their livelihoods[15]. The project also achieved substantial income gains for participants, with 78.4% (78.9% of men and 77.5% of women) of producers reporting increased incomes from their livelihoods[16].

Furthermore, training on crop and livestock production and sustainable fisheries, and input support including seeds, tools, and livestock health products increased food production and food security, further reducing vulnerability and increasing resilience. The P2R final evaluation found that the project contributed to the total production of 4,482.02 metric tons (MT) of maize, 4,162.55 MT of sorghum, 88.03 MT of ground nut, and 929.99 MT of vegetables across the four counties, along with 282,704 kgs of fish in Akobo and Duk over the life of the project.

Another fundamental driver of improved resilience and coping within P2R was the deliberate and intensive focus on Social Cohesion and Trauma Awareness and Resilience (TAR) interventions. The breakdown of social and community cohesion was seen as one of the main drivers of vulnerability and food insecurity in P2R areas. The project's integration of social cohesion and TAR interventions with other activities was critical for the success of the project. For example, P2R trained influential community leaders and project participants on trauma healing and approaches to build peaceful co-existence for communities and tribes with historic divisions and disputes, thereby embedding social cohesion in livelihood and DRR activities in the community.

[14] CRS. P2R Endline Report. 2024.
[15] Ibid.
[16] Ibid.

P2R also worked closely with local leaders, youth, and governmental authorities to promote cohesion, resolve conflicts, and build trust, often by helping communities establish Peace Committees and other community-based structures intended to sustain efforts beyond the project itself. In addition to directly reducing the instances of conflict and violence in P2R communities, this approach also helped foster a sustainable enabling environment for successful and durable resilience and food security improvements.

Successful engagement of youth was also seen as a key driver of improved resilience and well-being. Whereas youth – especially young men – were often seen as potential perpetrators of conflict or disruption, P2R deliberately engaged young men in DRR activities and agriculture in a way that both reduced conflict and contributed to community development, supporting resilience and food security. Overall, P2R's social cohesion learning review showed that P2R communities demonstrate a greater ability to cope with shocks and stressors; the status of women has improved; and youth, when gainfully occupied and attend the trainings, can be agents of peace.[17]

> "Communities realized the benefits derived from fully investing in agriculture. The DRR and connector projects resulted in the building of infrastructure of interest to different livelihood groups, bringing people together who in their former isolation had feared each other."
>
> *- P2R consultant-led final evaluation report*

As with conflict, P2R's direct focus on addressing the vulnerability perpetuated by climate change was a key driver of resilience for households and communities. P2R worked closely with communities to develop their own Disaster Risk Management (DRM) plans and implement Disaster Risk Reduction (DRR) activities. These DRM and DRR efforts directly improved communities' ability to mitigate shocks and stressors, and overall adaptive capacity. For example, the community-based DRM work led to the creation of flood protection dikes and hillside restoration. One direct benefit was that the risk of key shocks like flooding and drought were mitigated to a degree, and this helped protect the physical assets that households and communities rely on for their livelihoods and food security.

Linked to these efforts, P2R focused on Connector Projects, which helped improve crucial rural infrastructure – such as access roads, water canals, and water retention ponds – which helped improve absorptive and adaptive capacity through greater mobility, access to markets and basic services, and ultimately food security and resilience. Connector Projects had the additional benefit of fostering positive interactions between diverse stakeholders and conflicting communities, which helped build greater social cohesion and trust, further enhancing resilience outcomes.

Implications & Recommendations

Evidence from the project, secondary data sources, and additional analytics all highlight how volatile and challenging the context is in South Sudan and for P2R households. Nonetheless, results indicate that the P2R project was successful in improving food security and building resilience for participants at the household levels.

[17] CRS. P2R Endline Report. 2024.

Food security trends deteriorated in the general population of the four project counties. This manifested through increased numbers of households considered food insecure (IPC 3+) but also increases in the severity of households' food insecurity. However, households involved in P2R saw their food security improve over that same period, both in terms of total numbers of households in IPC 3+ but also in households moving from more to less severe classifications of food insecurity. Using food security as a proxy, this progress suggests that P2R households are resilient to the challenges of their context and their well-being is improving despite shocks and stresses.

As noted, the context was characterized by diverse shocks, stresses, and general volatility across all four project counties. Shocks related to climate change and weather patterns were the most common. Flooding was a seasonal and annual shock that affected by far the highest number of households, with major impacts on food security and well-being. Conflict, health, and economic shocks were also common. Furthermore, shocks don't seem to be decreasing, meaning programming must focus deliberately on reducing vulnerability to the shocks and facilitating coping and recovery. In addition, the context was so shock-prone – and shocks like flooding and inter-communal conflicts affected households regardless of their individual characteristics – that total shocks experienced, or type of shocks experienced did not broadly correlate with specific food security outcomes.

Indeed, P2R enabled positive changes in the level of recovery, with households able to fully recover or recover better than before more than doubling from 12.1% to 25.7% by project end, and households unable to recover at all decreasing from 26.5% to just 7.9% by project end. This improved ability to cope is also reflected in the food security trajectories of P2R participants – with food security acting as a proxy for resilience – compared to those of non-project households.

This impact can be attributed to project design – using a sequenced, layered, and integrated approach – that was key to risk reduction, coping and recovery, and long-term resilience-building:

- Trauma Awareness & Resilience (TAR), social cohesion, and peacebuilding interventions helped reduce risk of conflict and related impacts and facilitated better cooperation within and across groups and communities.
- The emphasis on DRR planning and community-level activities also helped reduce climate vulnerability, particularly to the most common shocks like flooding.
- Livelihoods diversification helped households increase incomes and become more resilient to shocks and other challenges, while associated technical trainings meant people got more return on their labor in agriculture and other livelihood activities.
- The engagement of local leaders and youth helped create an environment for progress.
- Connector Projects improved infrastructure that reduced vulnerability and enabled absorptive and adaptive capacity through greater mobility and access to food and markets.
- P2R's integrated approach designed with a foundation of social cohesion was a key driver of impact and sustainability, reducing vulnerability and enhancing resilience.

Future food security and resilience programming in South Sudan can build from the results of the P2R project. This would include programming that:

- Emphasizes a well sequenced, layered, and integrated project design that leverages a foundation of social cohesion and climate resilience.
- Invests in livelihoods development that is both diversified and supports adaptation to recurrent climate, conflict and other potential shocks and stresses, with a focus on diversified on- and off-farm livelihoods that purposefully and effectively engages male and female youths and other key groups.
- Deliberately includes diverse groups and populations, particularly women and youth, but also enhances their participation, leadership, and decision-making role in the community.
- Facilitates community-level action towards cohesion and improvements to needed infrastructure.
- Recognizes and is adaptable to the volatility of the context, with pre-planned pivots for anticipated shocks and stresses.
- Recognizes the volatility of the South Sudan context but is holistically designed and implemented with the ultimate outcome of improving food security beyond the household level through longer-term and sustained investments.

CATHOLIC RELIEF SERVICES

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