

Multi-Country Resilience Study Listening to Local People's Voices

Exploring Capacities and Choices to Manage Risks,
Shocks and Stresses at Programme and Project Level
India – Mali – Malawi

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NOTE

The three reports of the Country Case Studies India, Mali and Malawi in the annex of the main report are conceptualised and designed to be used as free-standing documents.

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Abbreviations

BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung German Federal Ministry for Economic Cooperation and Development
CfW	Cash for Work
FAO	Food and Agriculture Organisation of the United Nations
FGD	Focus Group Discussion
FNS	Food and Nutrition Security
FUS	Follow-up Survey
HFIES	Household Food Insecurity Experience Scale
IDDS	Individual Dietary Diversity Score
IDP	Internally Displaced Person
IFPRI	International Food Policy Research Institute, Washington
IMR	Infant Mortality Rate
IPC	Integrated Phase Classification of the <i>Famine Early Warning Network</i>
KAP	Knowledge – Attitude – Practice
KII	Key Informant Interview
MAD	Minimum Acceptable Diet
MDD-W	Minimum Dietary Diversity Indicator for Women
MTR	Mid-term Review
NBS	Nutrition Baseline Survey
NGO	Non-governmental Organisation
PLA	Participatory Learning and Action
RLI	Resilience Learning Initiative (supported by BMZ)
SBCC	Social and Behaviour Change Communication
SDG	Sustainable Development Goal
SEWOH	BMZ's Special Initiative 'ONEWORLD without Hunger'
SUN	Scaling-up Nutrition

Executive Summary

'We are tired of funding emergencies!'

*(Department of Disaster Management Affairs officer,
Malawi, May 2019)*

Crisis can be a driver of change – and **resilience** is about enhanced capacities to actively and positively manage this change, fulfil human rights and enable wellbeing in spite of shocks, stresses and uncertainty. The application of the concept of resilience has steadily become more influential in food and nutrition security projects and programmes in the last years. The reason behind is that integrating a resilience lens into project and programme design and implementation adds value in terms of increasing the impact of project activities by particularly identifying and strengthening capacities of people and communities beyond the mere capacity to absorb crises. Resilience focuses attention on the capacities to overcome the adverse long-term consequences of – acute, slow-onset, chronic and recurrent – crises and not just of their immediate effects.

In contexts of recurrent crises, while humanitarian responses remain important in acute shocks, societies and governments need to develop capacities and long-term solutions to anticipate, absorb and adapt to foreseeable food and nutrition crises – and to transform structures and livelihoods. This is especially important in addressing chronic undernutrition and malnutrition since high levels of stunting indicate a loss of long-term developmental potential for the whole society. In other words, **strengthening resilience** aims at generating lasting social, economic and environmental change and at empowering people and their communities to develop and create new livelihood options given the prevailing crises risks.

GIZ's 'Global Programme Food and Nutrition Security, Enhanced Resilience' has commissioned this Multi-country Resilience Study (i) to assess whether selected country packages have been contributing to improved capacities to react to food and nutrition crises and thus strengthened resilience, and (ii) to explore whether there are ways to even better react to crises at various levels. The **country packages India, Mali and Malawi** were selected for the study.

The **approach and methodology** constitute a coherent analysis package. It comprises – in addition to the analysis of background literature and secondary data with recent insights in successful measures to strengthen resilience – of (i) defining resilience and resilience capacities, (ii) defining the scope of the study and answering the scoping questions for each context, (iii) analysing the food and nutrition security crises in the target areas, (iv) exploring bottom-up, analysing and reflecting resilience capacities at different levels using the Resilience Analysis Matrix, and (v) assessing the contribution of the country packages to improve anticipatory, absorptive, adaptive and transformative capacities to react to the crises. Conclusions are being extracted and operational recommendations provided on how to (further) strengthen resilience capacities of the target groups and how to (further) strengthen a respective strategy in the country package.

Causes and determinants of food and nutrition security crises include various (prolonged) **stresses**, such as climate change, unsettled land issues, diminishing forest resources, environmental degradation, chronic water scarcity, limited livelihood options, lack of income opportunities (often linked to seasonal labour migration) as well as a lack of knowledge and practises regarding appropriate nutrition of women, men and children. More or less often and intensive, these stresses are aggravated by **acute shocks**, esp. recurrent natural disasters (droughts, flooding, hailstorms) but also by political and security incidences that lead to forced displacement, so that people's and organisations' capacities to react are further challenged.

Predominant **resilience capacities** identified at individual and household level were absorptive and adaptive capacities at community level, including adjustments to traditional and customary livelihoods. Preparedness seems to be a widely unknown concept for many rural households. Anticipatory and transformative capacities still need further attention and support at individual, household and community level. At national level, anticipatory capacities are theoretically abounding, e.g. in the form of public safety-net schemes but are often not or insufficiently delivering the expected results for the poor and for food and nutrition insecure people. Further support to adaptive and transformative capacities of individuals and organisations – especially at local level – is necessary. Political leadership and good governance are prerequisites for the success of programmes requiring multi-sectoral, multilevel and multi-stakeholder approaches.

Still, it is important to be aware of the strong dependency of a high number of crises-affected people on public and governmental safety-net schemes. Long-lasting – or permanent – alimention suffocates motivation, creativity, determination, responsibility, and ownership. The ultimate aim should always be to lead people out of dependency to an independent and self-determined life, based on their own capacities and – when individuals' and communities' own capacities are overstretched – supported by the Government and by non-governmental actors.

All three country packages are pursuing community-based approaches as promoted by the Global Programme that contribute to strengthened self-determination based on capacities and informed choices that can still be expanded (as specifically recommended in the respective country case study reports), e.g. by developing a Participatory Learning and Action 2.0 approach that further strengthens the autonomy of women and men and the capacities of service providers (India), by exchanging experiences with successful approaches to resilience capacity building and their implementation at sub-national and regional level (Mali), by introducing *Community Score Cards* (CSC) as a community-based participatory tool for social auditing, planning, monitoring, evaluation and reporting (Malawi and Mali), and/or by strengthening the inclusion of men into nutrition security activities (all three countries).

In general, it is essential that

- (i) individuals (men, women, girls and boys), households and communities get support in claiming their human right to adequate food and the respective entitlements when their own capacities are overstretched,
- (ii) their transformative and anticipatory capacities are strengthened so that future food and nutrition crises will have fewer negative effects, and
- (iii) they own the processes.

'Resilience is fundamentally about transformation – changing the very basis on which individuals and households can make decisions that influence their capacity to deal with stresses and shocks.'

(Emergency Nutrition Network 2015)

1. Introduction

The German Federal Ministry for Economic Cooperation and Development (BMZ) aims at making a significant contribution to the reduction of poverty and hunger. Within its special initiative *ONE WORLD – No Hunger* it particularly strives to improve food and nutrition security, and to enhance people’s resilience to food and nutrition crises. On these grounds, GIZ has been commissioned to implement the ‘Global Programme Food and Nutrition Security, Enhanced Resilience’ – hereafter referred to as Global Programme – in twelve countries in Africa and Asia. The objective of the programme is to improve food and nutrition security of women of reproductive age and children below two years of age through a food-based and multi-sectoral approach in the selected countries.

Beginning of 2019, the Global Programme commissioned this Multi-country Resilience Study in order (i) to assess whether selected country packages have been contributing to improved capacities to react to food and nutrition crises and thus strengthened resilience, and (ii) to explore whether there are ways to even better react to crises at individual, household, community and governmental level. The country package India was selected as a pilot for the study and the learnings here had been included into and adapted for the study approaches for the Country Case Studies Malawi and Mali (see also the Country Case Study Reports in the Annexes).

This focus on resilience in Germany’s international cooperation is in line with respective objectives, developments and efforts at global level (e.g. in the Agenda 2030/Sustainable Development Goals and in the Agenda for Humanity), at European level (*A Strategic Approach to Resilience in the EU’s External Action*), and at partner country level (e.g. *Priorité Résilience Pays in Mali and Malawi Growth Development Strategy III 2017 – 2022 – Building a Productive, Competitive and Resilient Nation* in Malawi).



2. Objectives, Approach and Methodology

2.1 Objectives

The objective of the Multi-country Resilience Study is to assess whether selected country packages of the Global Programme have been contributing to improved capacities to react to food and nutrition crises and thus strengthened resilience. Also, it aims at understanding the ways the Global Programme can contribute to enhancing resilience in the respective country context.

The specific objectives of the study are:

- to assess the situation in terms of resilience and the contribution of food and nutrition security interventions of the selected country packages India, Mali and Malawi to strengthen capacities and improve resilience strategies to react to food and nutrition crises,
- to provide operational recommendations on potential entry-points to further strengthen resilience strategies at different levels (including policy level), and
- to provide a cross-country analysis, including conclusions and recommendations (on how to focus and strengthen resilience against food and nutrition insecurity) at the level of the Global Programme.

2.2 Approach and Methodology

Based on the experiences and learning gathered in the BMZ supported *Resilience Learning Initiative* (RLI) (GIZ/BMZ 2016), the study includes (i) the analysis of background documents and secondary data with recent insights in successful measures to strengthen resilience, (ii) the development of the methodology for the pilot study in India, and (iii) the application of the methodology as developed during the pilot study and its adaptation for the country case studies Mali and Malawi. Resilience capacities in the project areas and of the responses of various actors at different levels related to strengthening resilience were analysed for of the respective country packages and across the three countries. In brief, the study includes:

- Methodological elements (Chapter 2):
 - Defining resilience and resilience capacities
 - Defining the scope of the study – answering the scoping questions
 - Bottom-up exploration and analysis of resilience capacities at different levels
 - Data collection and analysis tools
 - Description of the course of action
- A brief overview of the Global Programme and the three country packages involved in the study (Chapter 3)
- Findings regarding the food and nutrition security crises in the target areas and regarding the contributions of the three country packages to improve anticipatory, absorptive, adaptive and transformative capacities to react to the crises (Chapter 4)
- Extracting conclusions and providing operational recommendations on how to (further) strengthen resilience capacities of the target groups and how to (further) strengthen a respective strategy in the country packages and at programme level; if relevant, recommendations for further studies and analyses (Chapter 5)

This approach constitutes a coherent analysis package. It is meant to help programme and project staff, target group representatives and project partners to understand the interlinkages of different crises and their influences on the food and nutrition situation. In addition, it allows for effective and efficient assessment of existing and potential resilience capacities at different levels and options for further strengthening the resilience of target groups.

2.2.1 Defining Resilience and Resilience Capacities

This study uses the resilience definition developed by the RLI: ‘**Resilience** is the ability of people and institutions – whether individual, household, local communities or states – to cope with and quickly recover from shocks caused by fragile situations, crisis, violent conflict, economic crisis or extreme natural events, and to adapt to chronic stress or transform their means of living or functions without compromising their medium to long-term prospects.’ (GIZ/BMZ 2016). In the context of the pilot study – country package India – to this study, also the FAO definition was taken into consideration that defines resilience as ‘... the ability to prevent disasters and crises as well as to anticipate, absorb, accommodate or recover from them in a timely, efficient and sustainable manner. This includes protecting, restoring and improving livelihoods systems in the face of threats that impact agriculture, nutrition, food security and food safety.’ (FAO 2013)

In this study, **crises** are understood as any events that are going (or are expected) to lead to an unstable and dangerous situation affecting an individual, group, community, or whole society (OECD 2014). This comprises shocks and stresses. **Shocks** are defined as sudden events with an important and often negative impact on the vulnerability of a system and its parts. Shocks represent significant negative (or positive) impacts on people’s means of living and on the functioning of a state. **Stress** is defined as a long-term trend, weakening the potential of a given system and deepening the vulnerability of its actors (OECD 2014).

Broadly used resilience concepts use three **resilience capacities** to describe and analyse people’s, organisations’ and institutions’ reaction to crises. These resilience capacities have been defined as follows:

- **Absorptive** (coping and recovery) capacities include a range of harmful to positive coping strategies that aim at maintaining people’s, organisations’ and systems’ wellbeing at a given level in the face of shocks – with no basic changes to people’s livelihoods (RLI 2016 based on OECD DAC). Strengthening positive absorptive / coping and recovery capacities contributes to enhanced stability.
- **Adaptive** capacities enable people, organisations, and systems to manage impacts of long-term trends and change – progressive and gradual change in the structure of people’s livelihoods (RLI 2016 based on OECD DAC). Adaptive capacities enable individuals, households and communities to improve their livelihoods through asset-building and income generation activities that are less vulnerable to crises. Strengthening of adaptive capacities contributes to more positive options for adjustments.
- **Transformative** capacities enable people, organisations, and systems to manage the underlying causes of shocks, stressors and change – a fundamental change in the political/power and economic status of people, and hence, the structure of people’s livelihoods (RLI 2016 based on OECD DAC). Strengthening of transformative capacities contributes to structural or systemic changes.

After a thorough review of new resilience-related research and development, the study team expanded the resilience analysis framework further by including anticipatory capacities (ODI/ BRACED 2016) as a fourth analysis category. This is also in line with the FAO definition above and highlights the importance of ‘preparedness’ in the face of recurrent shocks threatening the food and nutrition security of the target groups. Thus, the three capacities as defined by OECD and the RLI have been complemented by:

- **Anticipatory** capacities, which enable people and systems to be better prepared for the eventuality of a specific shock through proactive action. This includes the ability of planning in advance and setting up ‘contingency plans’ (ODI / BRACED 2016). Strengthening of anticipatory capacities contributes to improved preparedness.

Whilst resilience and resilience capacities can be defined this way, it is necessary to recognise that in a given context women and men, communities in the target areas and relevant institutions have their own experience and ways of describing resilience and the capacities that lead to resilience. These specific perceptions are the core of all further assessment and analysis – they need to be understood and integrated into project and programme design and implementation in (recurrent) crises contexts.

2.2.2 Defining the Scope of the Study

This study uses the Scoping Questions developed by the RLI (GIZ/BMZ 2016). To determine the scope of the study in the respective context of each of the three country packages, the Scoping Questions have been answered as follows:

- **Resilience of what?**
 - Food and nutrition security system of people in the project areas
- **Resilience to what?**
 - Food and nutrition security crises (insufficient dietary diversity, unacceptable diets of young children, insufficient availability and access to food) resulting from acute shocks and chronic stresses, e.g. droughts, floods, earthquakes, economic crises, climate variability and change, political unrest, social unrest, technological risks
- **Resilience for whom?**
 - Women of reproductive age, infants and young children (6–23 months of age) in their households, communities and organisations/institutions in the project areas
- **Resilience over which time frame?**
 - for the country package India until June 2020,
 - for the country packages Mali and Malawi until March 2023, and beyond.
- **Resilience with respect to what?**
 - Improved dietary diversity, more children with a minimum acceptable diet, and improved access to (nutritious) food even in times of crisis

2.2.3 Bottom-up Exploration & Analysis of Resilience Capacities at Different Levels

The core of the approach is the bottom-up exploration – **listening-to-people** approach – of existing resilience capacities to withstand and deal with food and nutrition risks and crises at individual, household, community, and if possible, at district and/or national level. People are inherently creative: they usually have developed coping and adaptive strategies in the past and are always trying new ideas and new activities. Our approach recognises existing capacities to react to crises, stress and change – in every context there will be new opportunities emerging. The point is to listen to the affected people in their communities first to identify their capacities and how external assistance can strengthen these capacities to become (more) resilient towards future crises. The focus is strictly on capacities and how to strengthen them – not on gaps – so that existing needs are better met, and human rights are progressively realised.

For exploring and analysing crisis patterns and resilience capacities at different levels, **qualitative methods** using a set of guiding questions (see Appendix A) had been used: Focus Group Discussions with crisis-affected people were conducted and a number of key informants were interviewed at community, district and national level to get their point of view to complete the information received from the affected people. Briefing meetings and discussions were conducted with staff and partners at the beginning and at the end of the field work.

Core of the methodology is the analysis based on the **Resilience Analysis Matrix** (see Appendix A) originally developed by the RLI and augmented by the study team. In order to explore and grasp the diverse existing capacities and to relate them to the analysis matrix, a number of **Guiding Questions** for the Focus Group Discussions and Key Informant Interviews have been developed. Additionally, secondary data has been analysed taking Nutrition Baseline Survey, Midline Survey and Follow-up Survey (FUS) results into consideration for interpretation of findings.

The **analysis** included:

- an **assessment of crises patterns**, fragility and vulnerability affecting food and nutrition security of the target groups taking Baseline Survey, Midline Survey and FUS results of the country packages into consideration for reflection and interpretation of findings,
- an **assessment of existing resilience capacities** to react to food and nutrition risks and crises at individual, household, community and – if possible – at district and/or national level using the Resilience Analysis Matrix,
- an assessment of the **contribution of the respective country packages** to improve anticipatory, absorptive, adaptive and transformative capacities, and
- a **comparative meta-analysis** across the three country packages for overall findings and recommendations.

Based on the results of the analysis, **operational recommendations** on how to (further) strengthen resilience capacities of the target groups, and how to (further) strengthen a respective strategy in the country packages have been extracted, and recommendations for further studies and analyses have been provided.

The timeline and course of action of the study are documented in Appendix B.

3. The Global Programme Food and Nutrition Security, Enhanced Resilience – Country Packages India, Mali and Malawi

The Global Programme

Around the world, almost 821 million people are undernourished and another two billion are chronically malnourished. Malnutrition is particularly widespread in sub-Saharan Africa and Asia, preventing individual human beings from developing their potential and affecting the development opportunities of entire countries. Inadequate provision of micronutrients such as iron, zinc and vitamin A during what is called the 1,000-days window of opportunity – the period from conception to a child’s second birthday – has a long-term effect on a child’s health and quality of life. Malnutrition affects physical and mental development, reduces considerably opportunities to study and to embark on a career. There are many different causes of hunger and malnutrition: poverty, crises provoked by scarcity of essential resources, conflicts, natural disasters as well as by a lack of access to health services, nutritious food, safe drinking water and sanitation. Often, there is a lack of nutrition knowledge and simple yet effective hygiene measures. A broad-based approach is therefore required to combat hunger and malnutrition and tackle the varied and complex causes comprehensively.

Commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ), the Global Programme *Food and Nutrition Security, Enhanced Resilience* is executed in twelve countries (Benin, Burkina Faso, Cambodia, Ethiopia, India, Kenya, Madagascar, Malawi, Mali, Togo, Yemen, Zambia) by GIZ in cooperation with national partners. It started in 2014 and will end in 2023. The objective is to enhance people’s food and nutrition security and the resilience to food crises, above all for women of child-bearing age, pregnant women, nursing mothers and small children.

In order to tackle the manifold causes of malnutrition and undernutrition in an integrated manner, the programme supports and connects measures from a variety of sectors, including agriculture, health, education, social protection and WASH (water, sanitation, and hygiene). The programme’s main target group comprises women of child-bearing age, pregnant women, nursing mothers and small children, who are particularly affected by food and nutrition insecurity and malnutrition. The programme educates women and men about eating a healthy, balanced diet and supports them to grow, store and prepare adequate food for their families, especially those members who are most at risk of malnutrition. Knowledge about good, hygienic practices in households and the provision of clean water boost human health, as healthy bodies absorb and use nutrients more effectively.

The Global Programme supports food and nutrition security strategies in partner countries, is closely aligned with the relevant ministries and cooperates with national and international non-governmental organisations and other donors. The programme also builds on existing programmes run by German development cooperation. This ensures continuity and a common approach to enhancing food and nutrition security and resilience. The approaches are permanently integrated into local structures. By supporting governments as part of the international *Scaling-up Nutrition* (SUN) movement, the programme makes a direct contribution towards global efforts to improve food and nutrition security and thus to the United Nations Sustainable Development Goals (SDGs).

The Country Package India

The country package India aims to strengthen food and nutrition security by improving the dietary diversity of women of reproductive age and children (6–23 months) and by strengthening the national system for the distribution of subsidised food, the *Targeted Public Distribution System* (TPDS), in the two districts of Chhatarpur and Sheopur in the state of Madhya Pradesh. The project follows a dual approach: On the one hand, the project works with non-governmental organisations (NGO) to raise awareness among the target group regarding the importance of nutritional diversity, to train community health workers – Anganwadi Workers responsible for delivering *Integrated Child Development Services* (ICDS) – on nutrition diversity and to empower women with knowledge and practices on nutrition. On the other hand, the project supports improving transparency and effectiveness of the TPDS – implementing partner is the Department of Food and Public Distribution under the *Ministry of Consumer Affairs, Food and Public Distribution*. The project also works with the *Department of Women and Child Development* to mainstream nutrition diversity in its policies and planning.

The project's awareness campaigns at district and state level sensitise the target group and decision-makers about the importance of a nutritious and diversified diet to bring about sustainable changes concerning the availability, preparation and intake of quality food. In particular, *Anganwadi Workers* have been trained on *Participatory Learning and Action* (PLA) modules to improve their capacities and understanding on nutrition intake, diet diversity, pregnancy care, *Infant and Young Child Feeding* practices and increasing the availability of nutritious food through nutrition gardens.

In collaboration with the *Department of Women and Child Development* in the federal state's capital Bhopal, an online virtual learning platform to improve ICDS implementation has been jointly developed to achieve a standardised form of high-quality training for more than 3,200 Supervisors and more than 97,000 *Anganwadi Workers*. Additionally, various measures have been implemented to advance nutrition and dietary diversity at community level and to promote nutrition literacy and good nutritional practices at household level.

The Country Package Mali

The Mali country package of the Global Programme aims to strengthen the resilience of the population at risk of food and nutrition insecurity, particularly refugees and internally displaced persons (IDP) in the process of resettlement, and the food diversity of women of reproductive age. Its intervention areas are specifically concentrated in the *Delta Intérieur du Niger*, which covers parts of the five circles of the Timbuktu region in Northern Mali. The interventions target some 30,900 refugees or IDPs – who have been confronted with droughts and recurrent violent conflicts, accentuated by the political crisis 2012 – and women of reproductive age.

The country package *Sécurité Alimentaire et Renforcement de la Résilience* is intervening in five areas through a multisectoral approach by (i) supporting livelihoods based on irrigated agriculture to become nutrition-sensitive and more resilient, (ii) supporting pastoralists to become resilient towards potential/recurrent food crises, (iii) communicating with women for and promoting healthy and diversified diets, (iv) building capacities of intermediary actors on the multisectoral approach of building resilience to food crises, and (v) capitalising and disseminating good practices at municipal, regional and national levels.

All interventions in the sectors of agriculture, livestock (including the rehabilitation of pastoral wells which are often also used to provide drinking water), nutritional counselling, food and water hygiene, income-generating and temporary local social safety-nets are interlinked. Sustainable approaches and systems are promoted in agriculture and livestock, as well as in the rehabilitation and use of wells and fodder production. The persons concerned are trained accordingly.

The country package also pursues a multi-level approach. At the micro level, households and individuals (especially women, but also explicitly men) and corresponding local networks/groups are directly addressed by human capacity development measures, e. g. social and behavioural change communication, support for the development of home gardens, small livestock and unconditional cash transfers in emergency situations. At local and regional level, relevant state and non-state actors are involved through capacity building measures. The results are being integrated into regional planning and strategies and coordinated with the relevant bodies.

The project builds on measures that have been successfully tested in Mali, such as the development of small irrigation areas and the production of parboiled rice. A contribution to the reconciliation of different population groups and ethnic groups has been made, on the one hand by taking the interests of different groups (small farmers, agro-pastoralists and migrant or livestock herders as well as returning refugees, IDPs and local populations) into account, and on the other hand by taking appropriate accompanying measures that promote dialogue and strengthens the capacities of different population groups to manage conflicts.

The Country Package Malawi

The country package Malawi aims to improve the food and nutrition security situation of food and nutrition insecure people, in particular of women of reproductive age and young children in the districts of Dedza and Salima. The target areas are dominated by subsistence farming, with few income generating opportunities and limited access to services. Many households are trapped in the vicious cycle of poverty, HIV and AIDS and food insecurity. The FNSP focuses on the following intervention areas: (i) improvement of knowledge, attitudes and practices regarding nutrition and hygiene, (ii) strengthening the resilience of households and communities with regard to food and nutrition insecurity, (iii) strengthen-

ing design and coordination of nutrition-sensitive interventions, and (iv) feeding back lessons learnt into the bilateral portfolio and anchoring scalable approaches in national processes. So far, the project has not specifically aimed at improving quantitative access to food – which is an important focus of the *Household Food Insecurity Experience Scale* (HFIES) – but on diversifying food and nutrition.

Measures include nutrition education and advocacy in community-based *Care Groups*, saving and loan groups, promotion of and support to participatory *Village Level Action Plans* with a bottom-up planning approach from village to district level, and support to government service providers. Regular exchange visits and joint meetings facilitate learning and sharing of experiences.

In the *Care Group* system is based on peer to peer counselling. Training modules include among others infant & young child feeding practices, exclusive breast feeding, hygiene & sanitation, agricultural production & irrigation, food processing, utilisation and storage, as well as manure making. In addition, implementing partners provide inputs to the target households such as energy saving stoves, fruit and tree seedlings, legumes and vegetable seeds.

Since its start, the project has reached approximately 37,000 households directly. Almost 450 basic service providers have been trained to deliver knowledge on nutrition practices, hygiene and sanitation as well as on agriculture practices. Mothers confirm enhanced knowledge on dietary diversity, child feeding practices, hygiene and sanitation as well as on signs and prevention of malnutrition. Through active nutrition counselling, women's dietary diversity and children's diets have improved. Trainings in agriculture practices are supported by the distribution of vegetable seeds, tree seedlings and livestock through implementing partners. Additionally, the establishment of a nationwide health service hotline – *Chipatala Cha Pa Foni*, Chichewa for 'Hospital by Phone' – advises up to 2,000 people monthly on adequate nutrition.

4. Findings

4.1 Manifestations of Food and Nutrition Security Crises

Different types of food and nutrition crises and their manifestations are widespread over target areas of all three country packages. The types and prevalence vary in the different contexts (for details, please refer to the respective Country Case Studies).

In **India**, the target areas of the country package are characterised by high levels of acute and chronic malnutrition with an overall low percentage of children reaching the Minimal Acceptable Diet (MAD). The *National Family Health Survey* conducted in 2015–2016 showed that 52% of children under five years of age in Sheopur are stunted, more than 28% of children are wasted, out of which 9% are severely wasted, and more than 55% of the children and 78% of women of reproductive age are anaemic.

The results of the baseline survey and a midline survey conducted in the project areas in 2015 and 2018 suggest that a majority of women and children in Sheopur are not able to achieve (micro-) nutrient adequacy. The dietary diversity (*Individual Dietary Diversity Score*, IDDS) of women was assessed to be 3.4 (baseline) and 3.7 (midline survey) out of ten predefined food groups. The analysis the *Minimum Dietary Diversity* indicator for women (MDD-W) showed that only 13.2% (baseline) and 26.2% (midline survey) of the women were able to consume the recommended five or more food groups (out of ten). An overall low share of 12% (baseline) and 18% (midline survey) of the children receiving the MAD suggest that the majority of children are receiving neither a minimum feeding frequency nor a minimum dietary diversity. During the baseline survey 2015, the severity of food insecurity at household level was also assessed using the *Household Food Insecurity Experience Scale* (HFIES). The results show proportions of severely and moderately food insecure households of 5% and nearly 11%.

In the target areas of the country package **Mali**, food insecurity is prevalent as well as high levels of acute and also high levels of chronic malnutrition with a very low share of women reaching dietary diversity and children reaching the MAD. Household food insecurity is widespread. Data from various surveys indicate that the prevalence of acute malnutrition among small children (below five years of age) in the Tombouctou Region has been around 15% at least since 2011. Since then, the prevalence of chronic malnutrition has been between about 20% and 30%. The *National Food and Nutrition Security Survey* conducted in February 2018 showed that 25% of the households in the Tombouctou Region were food insecure and 7% of the children acutely malnourished at that time.

The results of the baseline and the follow-up surveys (FUS) conducted in the project areas in 2016 and 2018 revealed that a majority of women and children in the project area are not able to achieve (micro-)nutrient adequacy. The IDDS of women was assessed to be 3.2 (baseline) and 3.3 (FUS). The analysis of the MDD-W showed that only 8% (baseline) and 10% (FUS) of the women were able to consume the recommended five or more out of ten food groups. An overall low share of 16% (baseline) and 11% (FUS) of the children receiving the MAD suggest that the majority of children are receiving neither a minimum feeding frequency nor a minimum dietary diversity. Access to food as measured through the HFIES was also low with 61% of households in severe or moderated food insecurity in 2016 (baseline) as compared to 36% in 2018 (FUS).

In **Malawi**, the target areas are characterised by high levels of household food insecurity. Chronic malnutrition is persistent and a major health problem. According to the *Malawi Demographic and Health Survey 2017*, the prevalence of stunting among children (aged 0–5 years) is 43% in Dedza District – which is above the national average of 37% – and 35% in Salima District. Prevalence of wasting is relatively low with 2.6% in Dedza and 1.4% in Salima. Overweight and obesity, hypertension, and diabetes among adults are also prevalent. Whereas the prevalence of anaemia in women was about 25% in Dedza and 31% in Salima, it was considerably higher in children with 59% in Dedza and 72% in Salima.

The baseline survey in the target areas of the country package, conducted in 2015, and the FUS in 2018 suggest that a majority of women and children in Dedza and Salima are not able to achieve (micro-)nutrient adequacy. The IDDS of women was assessed to be 3.9 (baseline) and 4.5 (FUS). The analysis of the MDD-W showed that only 27.3% (15.6% Dedza, 30.6% Salima, baseline) and 36.4% (27.1% Dedza, 47.2% Salima, FUS) of the women were able to consume the recommended five or more out of ten food groups. The share of children receiving the MAD considerably increased between 2015 and 2018 from 22.9% in Dedza and 36.5% in Salima (baseline) to 36% in Dedza and 49.2% in Salima (FUS). Nevertheless, the figures suggest that many children still are neither receiving a minimum feeding frequency nor a minimum dietary diversity. Also, the severity of food insecurity at household level was assessed in Dedza and Salima through the HFIES. Results show that the proportion of moderately or severely food insecure households in both districts together was 87% at the time of the baseline survey and about 76% at the time of the FUS.

4.2 Causes and Determinants of Food and Nutrition Crises

The causes and determinant of the food and nutrition crises show some commonalities but also country specificities and differences. The main common causes are natural disasters (mainly droughts), climate change and its consequences for nature and human beings, environmental degradation (soil, forest, pasture resources), widespread poverty and insufficient business and job opportunities. Insufficient governance for food and nutrition security and resilience is a key issue in all three countries.

The main causes and determinants of food and nutrition security crises in **India** include lack of (rain) water **exacerbated** by droughts, diminishing forest resources, unsettled land ownership issues, limited livelihood options and lack of income opportunities outside agriculture, seasonal migration as well as a lack of knowledge regarding adequate nutrition.

In **Mali**, the main causes for chronic as well as (recurrent) acute food and nutrition security crises are frequent droughts (sometimes also floods), land degradation as well as widespread insecurity and instability as a result of protracted violent conflicts. The cumulative effects have contributed to a progressive deterioration of livelihoods and high numbers and rates of food insecurity and malnutrition. The Sahel region of northern Mali including the project area in the Tombouctou Region is in a constant state of nutrition emergency.

In **Malawi**, recurrent droughts and floods cause recurrent food and nutrition and humanitarian crises. Other determinants that contribute to the crises and add to the inability of affected households to recover comprise pests (Fall Armyworm), environmental and soil degradation, a strong dependency on agriculture with limited livelihood options and lack of income opportunities outside agriculture, a lack of community involvement in decision-making and planning processes (lack of ownership), and a lack of dietary diversity and nutrition knowledge. Additionally, the daily exposure to mycotoxins is high in many areas.

4.3 Resilience Capacities

During data collection, existing capacities at individual, household, community, district (and/or group and/or state) and national level have been identified and documented by means of Guiding Questions and the Resilience Analysis Matrix – together with the capacities promoted and supported by the individual country package (marked in bold in the matrix).

In general, more or less distinct absorptive, adaptive and anticipatory capacities have been identified at different levels. Predominant resilience capacities identified at individual and household level were **absorptive and adaptive capacities**, e.g. ‘selling’ labour against food or cash, borrowing money and (staple) food items, eating stored grains and beans, and sales/destocking of animals. **Negative coping and absorption capacities** have been identified to a large extent, e.g. adapting food habits such as eating less and/or less diversified meals and/or sales of assets.

Project interventions relate to a large extent to strengthening **adaptive capacities** at group and community level, e.g. by introducing new (water saving) production technologies, drought tolerant varieties, and home gardening. Depending on the context, projects also support **absorptive capacities**, e.g. by distributing food and non-food items.

In all three countries, **anticipatory capacities** (preparedness) have been identified at national (state) and district level. But not all of them meet the requirements to prepare for the apparent food and nutrition crises. In India, the respective government programmes do not reach target groups in times of need due to poor implementation. In Malawi, preparedness is widely understood as having measures in place for humanitarian responses (financed by donors) in recurrent and expected crises. In Mali, national resilience priorities exist but are hardly used as policy and strategy frameworks – the government’s institutional set-up to strengthen resilience is weak and focuses on emergency response.



No or very few transformative capacities have been found. As transformation needs time, this does not seem to be uncommon. If existent, the transformative capacities are being supported by the respective country package in most of the cases, e.g. by supporting the empowerment of producer groups, supporting women in deciding on their own about the use of money earned from own small business. Anticipatory and transformative capacities still need further attention and support in particular at individual, household and community level.

In **Mali**, resilience capacities at individual and household level are very well developed throughout all four dimensions. As indicated by the still very high levels of food insecurity and malnutrition, these capacities are, however, still insufficient or overstretched in the given context of protracted and complex crises. By contrast, preparedness and anticipatory capacities seem to be weakly developed in the target areas of the country packages in **India** and **Malawi**. In both countries, anticipatory capacities are theoretically abounding at national level, e.g. in the form of policies, strategies, public responsibilities, and public safety-net schemes. But often, schemes are not or insufficiently delivering the expected results for the poor. For detailed country-level analysis, please refer to the Country Case Study Reports.

5. Conclusions and Recommendations

Conclusions

- By using the Resilience Analysis Matrix as a **basis for discussion, for communicating and sharing results, reaching a mutual understanding and a shared commitment of different stakeholders at different levels** can be reached. Thus, project resources can be used efficiently by multi-sectoral cooperation across multiple or institutional, civil society and development cooperation actors, breaking traditional operational silos. Eventually, sustainable hand-over scenarios can be developed at the end of the project by combining multi-sector vulnerability reduction activities with resilience capacity-building that lead to structural changes in household and community livelihood systems.
- Integrating a resilience lens to programme and project design and implementation adds a value in terms of increasing the impact of project activities by particularly identifying and **strengthening resilience-building capacities** of people and communities **beyond the mere capacity to absorb shocks** (such as natural disasters).
- The designs and approaches of the three country packages allow to strengthen people's and civil society organisations' capacities as well as government's services at different levels. Resilience-strengthening measures are **relevant and part of all three country packages** – with different emphasis: The three country packages are strong in strengthening adaptive capacities at individual and household, group/community and commune/district level.
- **Strengthening transformative capacities needs more attention.** It is important to be aware of the strong dependency of a high number of crises-affected people on public and governmental safety-net schemes. Long-lasting – or permanent – alimantation suffocates motivation, creativity, determination, responsibility and ownership. The ultimate aim should always be to lead people out of dependency to an independent and self-determined life. In pursuing community-based approaches as promoted by the Global Programme and implemented by the three country packages, it is essential that (i) individuals (men, women, girls and boys), households and communities themselves get support in demanding their rights and entitlements, (ii) their transformative and anticipatory capacities are strengthened, and (iii) – most important – that they own the processes.
- As identified during the study, **new income opportunities** – in and outside agriculture – are of highest priority. Livelihoods that are predominantly based on agricultural and livestock production and yields are extremely dependent on reliable rainfall and irrigation – and therefore need diversification. Public investment in relevant agriculture-related infrastructure may have a direct impact, e.g. creating infrastructure through safety-net schemes has the potential for a dual effect: providing short-term employment and income opportunities in lean seasons, creating lasting structures to stabilise agriculture-based livelihoods and increasing agricultural production (with maintenance structures to be thoroughly planned and put in place in advance for sustainability).
- **Empowering and participatory approaches putting community initiatives in the centre** – such as the *Village Level Action Plan* processes in Malawi, the *Participatory Learning and Action* for nutrition in Sheopur/Madhya Pradesh and group activities in Mali – are key to transparently identifying and advancing community solutions and, thus, to the success of resilience development.
- **Political leadership and good food and nutrition security governance are prerequisites** for the success of programmes requiring multi-sectoral, multilevel and multi-stakeholder approaches and actions.

Conclusions with Regard to the Resilience Analysis Approach

The approach and methodology of **Resilience Analysis** developed in the context of this study – and based on the results of the BMZ *Resilience Learning Initiative* – is a simple and comprehensive operationalised package to analyse **resilience capacities** of various actors at different level in diverse crises contexts.

It is available for replication and adaptable to various project and programme contexts and different food and nutrition security crises situations. It takes into account the respective causes and determinants of the crises. The Resilience Analysis allows an insight into the respective food and nutrition security crises and the crises response capacities from the viewpoint of the affected people. It takes into account all aspects from absorption to anticipation and thereby connects the humanitarian and the development spheres.

Typically, programmes and projects that respond to crises focus on reducing the vulnerability of people to limited parts of the risk landscape whilst strengthening the absorptive and sometimes adaptive capacity of people. Thus, people's and organisations' capacities to adapt and anticipate crises and/or transform the system to manage changes in the longer run is less in the focus. The Resilience Analysis strengthens the focus on anticipatory and transformative capacities, to identify entry-points for project interventions.

Ideally, the Resilience Analysis is conducted from the start of a programme or project in order to use the **Resilience Analysis Matrix** consistently as a frame of reference throughout the project cycle. The Resilience Analysis Matrix allows to identify Resilience Capacity gaps, thus making opportunities and potentials for interventions immediately visible. And it allows for consequent follow-up and monitoring of intended results with regard to strengthening resilience capacities.

This field-tested approach and methodology is adaptable to various project and programme levels within the Global Programme and beyond, e.g. to interventions under the BMZ *Transitional Development Assistance (Übergangshilfe)* approach.

Recommendations

Programme Level

- Systematically analyse the relevance of a resilience perspective for all country packages of the Global Programme that are prone to chronic and acute food and nutrition insecurity crises.
- Where relevant, systematically introduce a resilience approach (as described in the box above) and ensure respective competencies at project level.
- Integrate the results and the experiences with the present study into the ongoing reflections about a resilience approach in BMZ and GIZ and participate in respective agenda setting at national and, if relevant, international level.

Country Level

- Systematically analyse and strengthen resilience capacities in order to identify already existing resilience capacities and potentials for improvements.
- In cases of acute food and nutrition security crises, support people and relevant institutions to ensure early response and avoid negative coping – ensure a ‘resilience lens’ on all activities from the very beginning.
- Participatory and inclusive approaches – such as the VLAP process in Malawi – to identify community needs and solutions is key to the success of resilience development. These approaches have a high potential to strengthen adaptive, transformative and anticipatory capacities of the target groups, of intermediaries and beyond, and to enable empowerment and ownership. By raising awareness, communities should focus on own achievements and options since the government may lack the resources to respond effectively to an increased demand for means and services.

In pursuing community-based approaches it is essential that the communities themselves own the processes. Efforts to involve communities in development planning must be backed by a transparent and responsive institutional set-up.

- Use the outcome indicators of the Global Programme to systematically analyse effects of acute shocks and chronic stresses on people’s food and nutrition security and steer the programme accordingly; in this context, the Household Food Insecurity Experience Scale (HFIES) has the specific advantage to reflect immediate results of acute food access problems, especially when it is regularly analysed.
- Strengthen the development of viable adaptive (and transformative) capacities, e.g. support the development of viable economic activities (agriculture and non-agricultural sectors), the diversification of livelihoods, the improvement of knowledge on adequate diets of particularly vulnerable persons, the advocacy and sensitisation for using available incomes for improved food and nutrition security, and the functioning of crises-sensitive social safety nets.
- Put more emphasis on the identification of transformative capacities and their implementation in a participatory manner, i.e. use the resilience capacity gaps documented in the Resilience Analysis Matrix for further dialogue with crises affected people on how to transform their livelihood systems and respective support systems at various levels so that future crises can no longer yield the same serious consequences as before – ‘thinking out of the box’ and (physical) exposure to completely new solutions can support such dialogues.

Appendices

Appendix A: Data Collection and Analysis Tools

1. List of Guiding Questions

Aim: Understanding people's perception of resilience and resilience capacities at various levels.

Guiding Questions

- 1) What were / are the main **crises** – acute shocks and chronic stresses – that affect(ed) your food and nutrition security (FNS) / the FNS of people in the target areas in the last years? What was / is their influence on the FNS situation?
 - 2) What have you done to **react** to this? (*... in the last five years max. and with regard to every single crisis mentioned before*)
What has your household done to react to this?
What has your community done?
Were there other actors (influencers) who also reacted and what have they done?
(*to be adapted to the resource persons and context of interview / discussion*)
 - 3) Why were you / they in a position to react like this on the crisis? (*with regard to every single crisis mentioned before*)
(Which abilities / capacities allowed you / them to react like this)?
 - 4) What would have enabled you / them to react better / in another way?
 - 5) What are the main **surprises** – positive and negative – that you (people) perceived as a reaction to the FNS crisis (shock or stress)? What did you not expect?
 - 6) Once the FNS crises (mentioned under question 1) is over:
What will / would you do to **prepare** for the next FNS crisis?
What do you think you actually can do to prepare?
 - 7) Who else needs to react?
What concretely should this person / organisation do?
- ... for Key Informant Interviews:**
- 8) What are you / is your organisation doing to **support** people to better react to crises?
... to be better prepared for crises?
 - 9) What are you or your organisation doing to enable people to make an **informed decision** to better react to FNS crises and to be better prepared?

2. Resilience Analysis Matrix (sample)

	Anticipatory Capacity	Absorptive / Coping and Recovery Capacity	Adaptive Capacity	Transformative Capacity
Definition	<i>... enables people and systems to be better prepared for the eventuality of a specific shock through proactive action – ability of planning in advance and setting up ‘contingency plans’ (ODI / BRACED 2016)</i>	<i>... includes a range of harmful to positive coping strategies that aim at maintaining people’s, organisations’ and systems’ wellbeing at a given level in the face of shocks – no basic changes to people’s livelihoods (RLI 2016 based on OECD DAC)</i>	<i>... enables people, organisations, and systems to manage impacts of long-term trends and change – progressive and gradual change in the structure of people’s livelihoods (RLI 2016 based on OECD DAC)</i>	<i>... enables people, organisations, and systems to manage the underlying causes of shocks, stressors and change – a fundamental change in the political/power and economic status of people, and hence, the structure of people’s livelihoods (RLI 2016 based on OECD DAC)</i>
Result	Strengthening contributes to improved preparedness	Strengthening contributes to enhanced stability – if coping is positive <i>Documented negative/harmful coping strategies</i>	Strengthening contributes to more positive options for adjustment	Strengthening contributes to structural systemic changes
Individual Level				
Household Level				
Community Level				
District Level				
National Level				

Appendix B: Timeline and Course of Action

The **timeline** for the multi-country study included the following elements:

- an Inception Meeting at GIZ in Bonn: 01/04/2019
- the Country Case Study India as pilot study (two consultants): 11/04 – 23/04/2019
- the Country Case Study Mali: 06/05 – 12/05/2019
- the Country Case Study Malawi: 12/05 – 21/05/2019
- a joint Analysis Workshop of the two consultants: 06/06 – 07/06/2019
- a Debriefing Meeting at GIZ in Bonn: 19/06/2019

The **course of action in each of the countries** included the following steps:

- Briefing with the respective project team and the partner
- Briefing with the staff of the implementing partners
- Focus Group Discussions with women and men in their respective communities or – in the case of Mali – in the capital.
- Key informant Interviews with village authorities and representatives, government staff at district and national level, and with partners.
- Analysis of findings and first drafting of report format.
- Debriefing and discussion with project team on the preliminary results of the assessment and analysis.
- Drafting the country case study report.

References

- BRACED, 2016: How Can Social Protection Build Resilience? Insights from Ethiopia, Kenya and Uganda. Authors: Martina Ulrichs and Rachel Slater. Working Paper December 2016
<http://www.odi.org/sites/odi.org.uk/files/resource-documents/11123.pdf>
- Concern Worldwide / Deutsche Welthungerhilfe / IFPRI 2009: The Global Hunger Index 2009 – The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality. By: K. v. Grebmer, B. Nestorova, A. Quisumbing, R. Fertziger, H. Fritschel, R. Pandya-Lorch, Y. Yohannes. Bonn, Washington D. C., Dublin, October 2009
<https://www.globalhungerindex.org/pdf/en/2009.pdf>
- Development Initiatives, 2018: 2018 Global Nutrition Report: Shining a Light to Spur Action on Nutrition. Bristol, UK: Development Initiatives, November 2018
https://reliefweb.int/sites/reliefweb.int/files/resources/2018_Global_Nutrition_Report.pdf
- ENN, 2015: Nutrition and Resilience. A Scoping Study by L. Gostelow, G. Desplats, J. Shoham, C. Dolan, P. Hailey. Version 1.0, Emergency Nutrition Network (ENN)
<https://www.ennonline.net/attachments/2450/Resilience-report-final.pdf>
- FAO, 2018: The State of Food Security and Nutrition in the World (SOFI) – Building Climate Resilience for Food Security and Nutrition.
<http://www.fao.org/3/CA1354EN/ca1354en.pdf>
- FAO, 2014: Strengthening the Links between Resilience and Nutrition in Food and Agriculture – Operational Recommendations to maximize the Nutritional Impacts of Resilience-building Interventions. A Discussion Paper.
<http://www.fao.org/3/a-i3777e.pdf>
- FAO, 2013: Resilient Livelihoods – Disaster Risk Reduction for Food and Nutrition Security Framework Programme. United Nations Food and Agriculture Organisation, 2013 Edition
<http://www.fao.org/3/i2540e/i2540e00.pdf>
- FAO / IDS, 2017: Social Protection and Resilience. Supporting Livelihoods in Protracted Crises and in Fragile and Humanitarian Contexts. FAO Position Paper. United Nations Food and Agriculture Organisation & Institute of Development Studies:
<http://www.fao.org/3/a-i7606e.pdf>
- FSIN – Food Security Information Network, 2019: Global Report on Food Crises 2019 – Joint Analysis for Better Decisions. April 2019
<http://www.fsinplatform.org/global-report-food-crises-2019>
- GIZ / Biodiversity International, 2017: Nutritional Baseline Survey Summary Report, Global Programme Food and Nutrition Security, Enhanced Resilience. Authors: Gina Kennedy, Gudrun Keding, Esther Evang, Giulia Rota Nodari and Lars Scheerer, Bonn, May 2017
- GIZ / BMZ, 2016: Boosting Resilience in Fragile Contexts – A Field-tested Approach of the Resilience Learning Initiative. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on behalf of the German Federal Ministry of Economic Cooperation and Development (BMZ) Bonn/Berlin 5/2016

- GIZ, 2015: Resilience Learning Initiative – Synthesis Report. Key Learnings from the Field and Implications for the Future. Comit Consulting on behalf of GIZ Sector Project Transitional Development Assistance, final draft 12/2015 (not published)
- Global Resilience Partnership, 2019: Resilience Insights – Lessons from the Global Resilience Partnership. Report by D. Wilson, S. Verkaart, D. Nel with B. Murphy, S. Robens, G. Yaron. Stockholm, September 2019
http://grpinsightsreport.info/wp-content/uploads/2019/10/GRP_Resilience_Insights_Report.pdf
- Hoddinott, John, 2014: Understanding Resilience for Food and Nutrition Security. 2020 Conference Building Resilience for Food & Nutrition Security. Conference Paper 8, May 2014
http://www.fsincop.net/fileadmin/user_upload/fsin/docs/resources/2020resilienceconfpaper08.pdf
- ODI, 2016: Analysis of Resilience Measurement and Approaches. Overseas Development Institute (ODI) & The Resilience Evidence and Learning Community of Practice (CoP), October 2016
https://www.fsnnetwork.org/sites/default/files/analysis_of_resilience_measurement_frameworks_and_approaches.pdf
- ODI / BRACED, 2016: How Can Social Protection Build Resilience? Insights from Ethiopia, Kenya and Uganda. Working Paper by M. Ulrichs and R. Slater, December 2016
www.odi.org/sites/odi.org.uk/files/resource-documents/11123.pdf
- ODI / BRACED, 2015: The 3 As: Tracking Resilience Across BRACED. BRACED (Building Resilience and Adaptation to Climate Extremes and Disasters) Working Paper by A.V. Bahadur, K. Peters, E. Wilkinson, F. Pichon, K. Gray, T. Tanner. August 2015
<https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9812.pdf>
- OECD, 2014: Guidelines for Resilience Systems Analysis – How to Analyse Risk and Build a Roadmap to Resilience. OECD Publishing.
<https://www.oecd.org/dac/Resilience%20Systems%20Analysis%20FINAL.pdf>
- Oxfam, 2017: The Future is a Choice – Absorb, Adapt, Transform – Resilience Capacities. H. Jeans, G.E. Castillo, S. Thomas. Oxfam International, January 2017
<https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620178/gd-resilience-capacities-absorb-adapt-transform-250117-en.pdf?sequence=4&isAllowed=y>

Annex

Case Study

India

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Abbreviations

ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AWW	Anganwadi Worker – focal point for delivery of Integrated Child Development Services (ICDS) to children and mothers
CSC	Community Score Cards
DAO	District Agriculture Officer
DC	District Collector
DFPD	Department of Food and Public Distribution
DPO	District Programme Officer
DWCD	Department of Women and Child Development
WHH	Deutsche Welthungerhilfe
FaNS	Food and Nutrition Security, Enhanced Resilience Project
FAO	Food and Agriculture Organisation of the United Nations
FNS	Food and Nutrition Security
FUS	Follow-up Survey
GMP	Growth Monitoring and Promotion
Govt	Government
HFIES	Household Food Insecurity Experience Scale
ICDS	Integrated Child Development Services
IDDS	Individual Dietary Diversity Score
IEC	Information, Education, Communication
IFPRI	International Food Policy Research Institute, Washington
IMR	Infant Mortality Rate
IRs	Indian Rupees
IYCF	Infant and Young Child Feeding
KAP	Knowledge – Attitude – Practice
MAD	Minimum Acceptable Diet
MAM	Moderate Acute Malnutrition
MDD-W	Minimum Dietary Diversity Indicator for Women
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
NBS	Nutrition Baseline Survey
NFSA	National Food Security Act (2013)
NGO	Non-governmental Organisation
NRLM	National Rural Livelihood Mission
PLA	Participatory Learning and Action
PMMVY	Prime Minister's Maternity Benefit Scheme
RLI	Resilience Learning Initiative (supported by BMZ)
SAM	Severe Acute Malnutrition
SBCC	Social Behaviour Change Communication
SDG	Sustainable Development Goal
SEWOH	BMZ's Special Initiative 'ONE WORLD - No Hunger'
SHG	Self-help Group
SNP	Supplementary Nutrition Programme
SUN	Scaling-up Nutrition
TPDS	Targeted Public Distribution System
WASH	Water, Sanitation and Hygiene

Executive Summary

Crisis can be a driver of change – and **resilience** is about enhanced capacities to actively and positively manage this change, realise human rights and enable wellbeing in spite of shocks and stresses. The application of the concept of resilience has steadily become more influential in food and nutrition security projects and programmes in the last years. The reason behind is that integrating a resilience lens into project and programme design and implementation adds value in terms of increasing the impact of project activities by particularly identifying and strengthening capacities of people and communities beyond the mere capacity to absorb crises. Resilience focuses attention on the capacities to overcome the adverse long-term consequences of – acute, slow-onset, chronic and recurrent – crises and not just of their immediate effects.

In contexts of recurrent crises, while humanitarian responses remain important in acute shocks, people, societies and governments need to develop capacities and long-term solutions to anticipate, absorb and adapt to foreseeable food and nutrition crises – and to transform structures and livelihoods. This is especially important in addressing chronic undernutrition and malnutrition since high levels of stunting indicate a loss of long-term developmental potential for the whole society. In other words, **strengthening resilience** aims at generating lasting social, economic and environmental change and at empowering people and their communities to develop and create new livelihood options given the prevailing crises risks.

GIZ's 'Global Programme Food and Nutrition Security, Enhanced Resilience' has commissioned this Multi-country Resilience Study (i) to assess whether selected country packages have been contributing to improved capacities to react to food and nutrition crises and thus strengthened resilience, and (ii) to explore whether there are ways to even better react to crises at various levels. The **country package India** was selected as pilot for the study.

The **approach and methodology** constitute a coherent analysis package. It comprises – in addition to the analysis of recent background literature and secondary data – (i) defining resilience and resilience capacities, (ii) defining the scope of the study and answering the scoping questions for each context, (iii) analysing the food and nutrition security crises in the target areas, (iv) exploring bottom-up, analysing and reflecting resilience capacities at different levels using a Resilience Analysis Matrix, and (v) assessing the contribution of the country packages to improve anticipatory, absorptive, adaptive and transformative capacities to react to the crises. Conclusions are being extracted and operational recommendations provided on how to (further) strengthen resilience capacities of the target groups and how to (further) strengthen a respective strategy in the country package.

This pilot study focuses in particular on the India country package's interventions in the district of Sheopur in Madhya Pradesh. In this district, **causes and determinants of food and nutrition security crises** include unsettled land ownership, diminishing forest resources, environmental degradation, recurrent natural disasters (droughts, flooding, hailstorms), water scarcity, limited livelihood options and lack of income opportunities, seasonal labour migration as well as a lack of knowledge and practises regarding appropriate nutrition of women, children and men.

Predominant **resilience capacities** identified at **individual and household level** were absorptive and adaptive capacities: Absorptive capacities include e.g. changing of diets and switching to – diminishing – wild forest products, consuming stored grain, borrowing and lending food and money, selling labour against food or money. Absorptive capacities also include a number of harmful coping strategies, e.g. eating less quantity of food in larger intervals, borrowing money at high interest rates that is likely to lead into excessive indebtedness. The adaptive capacities comprise among others the drying and storing of produces from nutrition gardens, the shift to drought resistant seeds, migrating for work, and women applying new knowledge and skills acquired through *Participatory Learning and Action* (PLA) to improve family nutrition. Preparedness, though, seems to be a widely unknown concept for many rural households. At **community level**, only a few absorptive capacities were identified relating to e.g. sharing and exchanging food and seeds and claiming government support in times of crises. Adaptive capacities include e.g. constructing check dams to increase ground water levels, organising and conducting joint collective actions to demand basic rights and the respective support from district administration, the fast scale-up of nutrition gardens through peer support (facilitated by the country package), and committed *Anganwadi* workers demanding the involvement of men in sharing the responsibility for family nutrition. Anticipatory capacities comprise e.g. planning, demanding and applying for support from the government – the courage and tenacity to keep demanding employment and the creation of infrastructure are decisive capacities. Nutrition gardening mainly for own consumption and the production of small livestock for income generation are also seen as measures contributing to preparedness for food and nutrition crises. Transformation was reported with regard to the way decisions are reached and implemented in the communities, e.g. through the use of *Community Score Cards*, and with regard to strengthened cohesion among women through the PLA approach. Nevertheless, anticipatory and transformative capacities still need further attention and support at individual, household and community level. At **national level**, anticipatory capacities are theoretically abounding in the form of public safety-net schemes. But these schemes are not or insufficiently delivering the expected results. Further support to the reform of the *Targeted*

Public Distribution System (TPDS) and potentially other important safety-net schemes – such as the *Mahatma Gandhi National Rural Employment Guarantee Act* (MGNREGA) – are necessary. Here, political leadership is a prerequisite for the success of resilience programmes requiring multi-sectoral, multilevel and multi-stakeholder approaches.

Key **recommendations** relate to further strengthening existing capacities and developing absent capacities. One major element is to continue strengthening the current PLA for nutrition approach and develop it further to make even better use of the transformative power of PLA. This should include a new focus on migration and migrating families. The existing *Anganwadi* system in itself is a major asset for further capacity development at community level but it needs (i) further support to reach its full potential and entire target group, and (ii) the involvement of men in nutrition-related activities. Support of training and supervision of *Anganwadi* workers (AWW) is recommended along with ensuring the provision of adequate facilities and infrastructures. In order to be able to fulfil their ambitious tasks, AWW need to have basic educational qualifications and more frequent interactions with supervisors for upgraded information and awareness.

It is important to be aware of the strong dependency of a high number of crises-affected people in Sheopur on public and governmental safety-net schemes. Long-lasting alimentation suffocates motivation, creativity, determination, responsibility and ownership. The ultimate aim should always be to lead people out of dependency to an independent and self-determined life. In pursuing community-based approaches as implemented by the project, it is essential that (i) individuals (men, women, girls and boys), households and communities themselves get support in demanding their rights and entitlements, (ii) their transformative and anticipatory capacities are strengthened, and (iii) – most important – that they own the processes.

'Resilience is fundamentally about transformation – changing the very basis on which individuals and households can make decisions that influence their capacity to deal with stresses and shocks.'

(ENN 2015)

1. Introduction

The German Federal Ministry for Economic Cooperation and Development (BMZ) aims at making a significant contribution to the reduction of poverty and hunger. Within its special initiative *ONE WORLD – No Hunger*, GIZ has been commissioned to implement the ‘Global Programme Food and Nutrition Security, Enhanced Resilience’ – hereafter referred to as Global Programme – in twelve countries in Africa and Asia. The objectives of the programme are to improve the food and nutrition security in particular of women of reproductive age and children below two years of age, and to enhance people’s resilience to food and nutrition security crises through a food-based and multi-sectoral approach.

India is one of the countries supported by the programme. The country has made progress in improving rates of under- and malnutrition in recent years: Between 2006 and 2016, stunting in children below five years of age declined from 48% to 38% (UNICEF 2017, Govt of India 2017a). Yet, India continues to have one of the world’s highest child undernutrition rates with nearly 47 million or 4 out of 10 children being chronically undernourished (Development Initiatives 2018). Despite decades of implementing governmental programmes and interventions undernutrition and major nutritional deficiencies persist.

Within the framework of the Global Programme, the India country package ‘Digitalisation of the Indian Targeted *Public Distribution System* and

Improved Food Diversity in Madhya Pradesh’ – in short ‘Food and Nutrition Security, Enhanced Resilience (FaNS) Project’ – has been established to improve the food and nutrition situation of food and nutrition insecure people, in particular of women of reproductive age, infants and young children (6 to 23 months) in the two districts of Sheopur and Chhatarpur. The aim is that target groups have sufficient supplies of healthy food at all times. The FaNS Project focuses on two areas of intervention: (1) pursuing a multi-sectoral approach to combat structural undernutrition and malnutrition, particularly among women of reproductive age, infants and young children, and (2) improving the effectiveness and efficiency of the *Targeted Public Distribution System (TPDS)* through digitalisation and reforms.

The Global Programme commissioned this Multi-country Resilience Study in order (i) to assess whether selected country packages have been contributing to improved capacities to react to food and nutrition crises and thus strengthened resilience. And (ii) to explore whether there are ways to even better react to crises at individual, household, community and governmental level. The country package India has been selected to be the pilot for the study – that includes three countries altogether. This report is part of the Multi-Country Resilience Study Report and designed to be used as a stand-alone document – therefore, some replications and recurrences with regard to the methodology are inevitable.



2. Pilot Study India – Objectives, Approach and Methodology

2.1 Objectives

The objective of the Multi-country Resilience Study is to assess whether selected country packages of the Global Programme have been contributing to improved capacities to react to food and nutrition crises and thus strengthened resilience. Also, it aims to understand the ways the Global Programme can contribute in enhancing resilience in the respective country context. Selection criteria for the country packages are vulnerability of the target group and project area to recurrent shocks, conflicts and crises and the capacity and willingness of the project team to support the mission. Since the India country package does not have the explicit objective of strengthening resilience, the aim is to learn whether the current food and nutrition interventions have an outcome and/or impact and/or the potential to build up and strengthen resilience capacities at target group and intermediary level and possibly beyond. Operational recommendations at country package level are meant to contribute to a better understanding of how to enhance resilience within the scope of food and nutrition security interventions.

The specific objectives of the country case study India are:

- to assess the situation in terms of resilience and the contribution of food and nutrition security interventions of the country package India to strengthen capacities and improve resilience strategies to react to food and nutrition crises,
- to provide operational recommendations on potential entry-points to further strengthen resilience strategies at different levels (including policy level), and
- to draw conclusions from this pilot study for Resilience studies in other country packages.

2.2 Approach and Methodology

Based on the experiences and learnings gathered in the BMZ supported *Resilience Learning Initiative* (RLI) (GIZ/BMZ 2016), this study includes the analysis of background literature and secondary data with recent insights in successful measures to strengthen resilience, the development of the methodology for the pilot study in India, a reflection and analysis of resilience capacities in the target areas and of the responses related to strengthening resilience of the respective country package. In brief, the study includes:

- Methodological elements (Chapters 2.2.1 – 2.2.5):
 - Defining resilience and resilience capacities
 - Defining the scope of the study – answering the scoping questions
 - Bottom-up exploration and analysis of resilience capacities at different levels
 - Data collection and analysis tools
 - Description of the course of action
- A description of the country package India (Chapter 3)
- An analysis of the food and nutrition security crises in the target area and of the contribution of the country package to improve anticipatory, absorptive, adaptive and transformative capacities to react to the crises (Chapter 4)
- Extracting conclusions and providing operational recommendations on how to (further) strengthen resilience capacities of the target groups and how to (further) strengthen a respective strategy in the country package; if relevant, recommendations for further studies and analyses (Chapter 5)

This approach constitutes a coherent analysis package. It is meant to help project staff, target group representatives and project partners to understand the interlinkages of different crises and their influences on the food and nutrition situation. In addition, it allows for effective and efficient assessment of existing and potential resilience capacities at different levels and options for further strengthening the resilience of target groups.

2.2.1 Defining Resilience and Resilience Capacities

This study uses the resilience definition developed by the RLI: '**Resilience** is the ability of people and institutions – whether individual, household, local communities or states – to cope with and quickly recover from shocks caused by fragile situations, crisis, violent conflict, economic crisis or extreme natural events, and to adapt to chronic stress or transform their means of living or functions without compromising their medium to long-term prospects.' (GIZ/BMZ 2016).

In this study, **crises** are understood as any events that are going (or are expected) to lead to an unstable and dangerous situation affecting an individual, group, community, or whole society (OECD 2014). This comprises shocks and stresses. **Shocks** are defined as sudden events with an important and often negative impact on the vulnerability of a system and its parts. Shocks represent significant negative (or positive) impacts on people's means of living and on the functioning of a state. **Stress** is defined as a long-term trend, weakening the potential of a given system and deepening the vulnerability of its actors (OECD 2014).

In its study on 'Building Resilience to Enhance Food and Nutrition Security' conducted in 2018 (GIZ / FaNS 2018), the FaNS Project referred to the FAO definition of resilience as '... the ability to prevent disasters and crises as well as to anticipate, absorb, accommodate or recover from them in a timely, efficient and sustainable manner. This includes protecting, restoring and improving livelihoods systems in the face of threats that impact agriculture, nutrition, food security and food safety.' (FAO 2013)

Broadly used resilience concepts use three **resilience capacities** to describe and analyse people's, organisations' and institutions' reaction to crises. These resilience capacities have been defined as follows:

- **Absorptive** (coping and recovery) capacities include a range of harmful to positive coping strategies that aim at maintaining people's, organisations' and systems' wellbeing at a given level in the face of shocks – with no basic changes to people's livelihoods (RLI 2016 based on OECD DAC). Strengthening positive absorptive / coping and recovery capacities contributes to enhanced stability.
- **Adaptive** capacities enable people, organisations, and systems to manage impacts of long-term trends and change – progressive and gradual change in the structure of people's livelihoods (RLI 2016 based on OECD DAC). Adaptive capacities enable individuals, households and communities to improve their livelihoods through asset-building and income generation activities that are less vulnerable to crises. Strengthening of adaptive capacities contributes to more positive options for adjustments.
- **Transformative** capacities enable people, organisations, and systems to manage the underlying causes of shocks, stressors and change – a fundamental change in the political/power and economic status of people, and hence, the structure of people's livelihoods (RLI 2016 based on OECD DAC). Strengthening of transformative capacities contributes to structural or systemic changes.

After a thorough review of new resilience-related research and development, the study team expanded the resilience analysis framework further by including anticipatory capacities (ODI / BRACED 2016) as a fourth analysis category. This is also in line with the FAO definition above and highlights the importance of ‘preparedness’ in the face of recurrent shocks threatening the food and nutrition security of the target groups. Thus, the three capacities as defined by OECD and the RLI have been complemented by:

- **Anticipatory** capacities, which enable people and systems to be better prepared for the eventuality of a specific shock through proactive action. This includes the ability of planning in advance and setting up ‘contingency plans’ (ODI / BRACED 2016). Strengthening of anticipatory capacities contributes to improved preparedness.

Whilst resilience and resilience capacities can be defined this way, it is necessary to recognise that in a given context women and men, communities in the target areas and relevant institutions have their own experience and ways of describing resilience and the capacities that lead to resilience. These specific perceptions have been the core of all further assessment and analysis – they need to be understood and integrated into project design and implementation in (recurrent) crises contexts.

2.2.2 Defining the Scope of the Study

This study also uses the Scoping Questions as developed by the RLI (GIZ/BMZ 2016). To determine the scope of this study in the context of the India country package, the Scoping Questions have been answered as follows:

- **Resilience of what?**
 - Food and nutrition security system of people in the project area in the district of Sheopur, Madhya Pradesh
- **Resilience to what?**
 - Food and nutrition security crises (insufficient dietary diversity, unacceptable diets of young children, insufficient access to food) resulting from acute shocks and chronic stresses, e.g. droughts, floods, earthquakes, economic crises, climate variability and change, political unrest, social unrest, technological risks
- **Resilience for whom?**
 - Women of reproductive age, infants and young children (6–23 months of age) in their households and communities in the project area in the district of Sheopur, Madhya Pradesh
- **Resilience over which time frame?**
 - Until June 2020, handover for the India country package, and beyond
- **Resilience with respect to what?**
 - Improved dietary diversity, more children with a minimum acceptable diet, and improved access to food (correspondingly to the objectives of the FaNS Project) even in times of crisis

2.2.3 Bottom-up Exploration & Analysis of Resilience Capacities at Different Levels

The core of the approach is the bottom-up exploration – **listening-to-people** approach – of existing resilience capacities to withstand and deal with food and nutrition risks and crises at individual, household, community, and if possible, at district, state and/or national level. People are inherently creative: they usually have developed coping and adaptive strategies in the past and are always experimenting with new ideas and new activities. Our approach recognises existing capacities to react to crises, stress and change – in every context there will be new opportunities emerging.

The point is to listen to the affected people in their communities first to identify their capacities and how external assistance – like Government programmes, the Global Programme etc. – can strengthen these capacities to become (more) resilient towards future crises. The focus is strictly on capacities and how to strengthen them – not on gaps – so that existing needs are better met, and human rights are progressively realised.

For exploring and analysing crisis patterns and resilience capacities at different levels, **qualitative methods** had been used: six Focus Group Discussions with crisis-affected people and rural health workers (*Anganwadi* workers, AWW) were conducted in six villages in Sheopur district, and eleven key informants were interviewed at community, district, state and national level – to get their point of view to complete the information received from the community members. A briefing meeting and a workshop were conducted with staff of the implementing partner in Sheopur at the beginning and at the end of the field work.

Core of the methodology is the analysis based on the **Resilience Analysis Matrix** originally developed by the RLI and adapted by the study team. In order to explore and grasp the diverse existing capacities and to relate them to the analysis matrix, a number of **Guiding Questions** for the Focus Group Discussions and Key Informant Interviews have been developed. Additionally, secondary data has been analysed taking Nutrition Baseline Survey and Midline Survey results into consideration for interpretation of findings.



The **analysis** included:

- an **assessment of crises patterns**, fragility and vulnerability affecting food and nutrition security of the target groups taking Nutrition Baseline Survey and Midline Survey results of the country package into consideration for reflection and interpretation of findings,
- an **assessment of existing resilience capacities** to react to food and nutrition risks and crises at individual, household, community and – if possible – at district, state and/or national level using the Resilience Analysis Matrix,
- an assessment of the **contribution of the country package** to improve anticipatory, absorptive, adaptive and transformative capacities.

Based on the results of the analysis, **operational recommendations** on how to (further) strengthen resilience capacities of the target groups, and how to (further) strengthen a respective strategy in the country package have been extracted, and recommendations for further studies and analyses have been provided.

2.2.4 Data Collection and Analysis Tools

The tools used for gathering and analysing the data for this study were:

- the List of Guiding Questions developed by the study team (see Appendix C)
- the Resilience Analysis Matrix (see chapter 4.3 for the short version and Appendix D for the comprehensive version)

2.2.5 Course of Action

The course of action of the pilot study included the following steps (for the overall timeline and list of resource persons / key informants, see programme of the mission in Appendix A and B):

- Briefing with the FaNS project team in New Delhi
- Briefing meeting with implementing NGO staff in Sheopur
- Focus Group Discussions with women, men and *Anganwadi* workers (AWW) in their respective communities in Sheopur district, one each in the villages of: **Sabadi, Kakkardah, Gandhi Gaon and Ranipura** in Karahal Block, **Chak Banuliya and Hirapur** in Sheopur Rural Block.
- Key Informant Interviews with village authorities and representatives, government staff at district (Sheopur), state (Bhopal) and national (New Delhi) level, and project partners
- Workshop with the staff of the implementing NGO sharing and discussing preliminary results of the assessment and analysis
- Study team exchange, analysis of findings and drafting of report format
- Debriefing and discussion with FaNS project team on the preliminary results of the assessment and analysis
- Drafting the report

3. The Country Package India: The Food and Nutrition Security, Enhanced Resilience (FaNS) Project

Within the Global Programme, the FaNS Project aims to strengthen food and nutrition security by improving the dietary diversity of women of reproductive age and children (6–23 months) and by strengthening the national system for the distribution of subsidised food (*Targeted Public Distribution System*, TPDS) in two districts in Madhya Pradesh. The project follows a dual approach: On the one hand, the project works with non-governmental organisations (NGO) to raise awareness among the target group regarding the importance of nutritional diversity, to train AWW on nutrition diversity and to empower women with knowledge and practices on nutrition. On the other hand, the project supports streamlining, improving transparency and effectiveness of the government's TPDS – for which the implementing partner is the Department of Food and Public Distribution (DFPD) under the Central Ministry of Consumer Affairs, Food and Public Distribution. The project also works with the *Department of Women and Child Development* (DWCD) to mainstream nutrition diversity in its policies and planning.

The project's awareness campaigns at district and state level sensitise the target group and decision-makers about the importance of a nutritious and diversified diet to bring about sustainable changes concerning the availability, preparation and intake of quality food. In particular, AWW have been trained on *Participatory Learning and*

Action (PLA) modules to improve their capacities and understanding on nutrition intake, diet diversity, pregnancy care, *Infant and Young Child Feeding* (IYCF) practices and increasing the availability of nutritious food through nutrition gardens.

The activities focus on the two districts of Chhatarpur and Sheopur in the federal state of Madhya Pradesh. In Sheopur district the NGO *Mahatma Gandhi Sewa Ashram* is the local partner supporting the implementation of the intervention activities by trained village based frontline workers (Anganwadi workers, AWW) of the *Integrated Child Development Services* (ICDS) scheme.

In collaboration with the *Department of Women and Child Development* (DWCD) in the federal state's capital Bhopal, an online virtual learning platform to improve ICDS implementation has been jointly developed with support from GIZ to achieve a standardised form of high-quality training for more than 3,200 Supervisors and more than 97,000 AWW in Madhya Pradesh. Additionally, various measures have been implemented to advance nutrition and dietary diversity at community level and to promote nutrition literacy and good nutritional practices at household level, e.g. the development and promotion of a nutrition calendar that highlights the importance of dietary diversity and how it can be achieved by using locally available seasonal food.



4. Findings

Sheopur is a district in the Northwest of Madhya Pradesh. In the state, the rate of stunting among children under five years (height for age) has decreased from 50% to 42% between 2005–2006 and 2015–2016 as per *National Family Health Survey* (NFHS) data, and infant mortality has fallen from 70 per 1,000 births to 51 per 1,000 births. Nevertheless, the state still lags behind regarding health and nutrition indicators: Malnutrition and anaemia among women are major public health problems. Half of the children under the age of 5 are stunted and 35% are wasted. Overall, 60% are underweight, which takes into account both chronic and acute undernutrition (Govt of India 2017b). Madhya Pradesh has the highest number of malnourished children under the age of six in India (Save the Children 2016). The state's *Child Sex Ratio* of the age group 0–6 years has alarmingly declined to 912 in 2011 whereas the national average is 940 (Govt of India 2011). Madhya Pradesh has one of the highest *Infant Mortality Rates* (IMR) in the country. According to the latest *Sample Registration System Baseline Survey* in 2014, the state has the highest IMR with 52 deaths of children less than one year of age per 1,000 live births (Govt of India 2014). Madhya Pradesh is home to the largest number of scheduled tribes who are especially vulnerable and marginalized. The *Rural Health Survey* 2017 shows that within the tribal-dominated states and areas, Madhya Pradesh has a 53% shortfall of primary health care centres.

The district of Sheopur has an estimated population of 700,000. According to the last census in 2011, the district has a population density of 104 inhabitants per square kilometre, a population growth rate of 22.96%, and a literacy rate of 58.02% (Govt of India 2011).

4.1 Manifestation of Food and Nutrition Security Crises in Sheopur District

There are several official sources reflecting the food and nutrition security crises in Sheopur district. The *National Family Health Survey* conducted in 2015–2016 (NFHS-4) showed the following results for Sheopur: 52.1% of children under 5 years of age are stunted, more than 28.1% of children are wasted (low weight-for-height), 9% are severely wasted, and more than 55% of the children and 78% of women of reproductive age are anaemic. According to the DWCD, the development of the child sex ratio in the district is even more alarming than at state level: in 2001 the ratio was 929 girls/1,000 boys, and in 2011 it was 897 girls/1,000 boys (Govt of India, 2011).

In September 2016, reports on a high number of children dying from malnutrition in Sheopur attracted nationwide attention. A White Paper on malnutrition was announced by the minister in charge – which has not been published yet.

The FaNS Project conducted a baseline survey in its target areas in 2015 (GIZ 2016) and a Midline Survey in 2018 (GIZ 2018). The results suggest that a majority of women and children in Sheopur are not able to achieve (micro-)nutrient adequacy. The dietary diversity (*Individual Dietary Diversity Score*, IDDS) of women was assessed to be 3.4 (Baseline Survey) and 3.7 (Midline Survey) out of ten predefined food groups. The data collected for the *Minimum Dietary Diversity* indicator for women (MDD-W) showed that only 13.2% (Baseline Survey) and 26.2% (Midline Survey) of the women were able to consume the recommended five or more (out of ten) food groups. An overall low share of 12% (Baseline Survey) and 18% (Midline Survey) of the children receiving the *Minimal Acceptable Diet* (MAD) suggest that the majority of children are receiving neither a minimum feeding frequency nor a minimum dietary diversity.

During the Baseline Survey 2015, also the severity of food insecurity at household level in Sheopur was assessed and categorised using the *Household Food Insecurity Experience Scale* (HFIES) showing the proportion of severely food insecure households was about 5% and the proportion of moderately food insecure households reached nearly 11% (GIZ 2016).

During the visit of the study team, the *District Programme Officer* (DPO) reported 4,500 SAM and 19,000 MAM cases in Sheopur district for April 2019. In the communities visited for this study, people reported that they change their food habits in times of crises, e.g. by eating less quantity of food and decreasing meal frequency (1–2 times instead of 2–3 times a day), and by eating the last available food, e.g. boiled or baked potatoes only, grounded red chillies with salt and roti only, cooked watery Gond ki laddu (a local sweet) or salt balls (roti with salt).

4.2 Causes and Determinants of Food and Nutrition Security Crises in Sheopur District

The main causes and determinants of the food and nutrition security crises reported during Focus Group Discussions and Key Informant Interviews are further illustrated below. They comprise primarily: unsettled land ownership, diminishing forest resources, lack of (rain) water, limited livelihood options and lack of income opportunities, seasonal migration as well as a lack of knowledge regarding nutrition.

Unsettled Land Ownership

Access to land is the basis for agriculture-based livelihoods, land titles and official documentation of land ownership and use are of great importance. In Sheopur, access to land and land rights are major issues in particular among households of tribal and forest dwelling communities of whom many are landless or without land certificates. Many tribal families are yet to get their rights on land. According to information from the *District Collector* (DC) and the *District Programme Officer* (DPO), only approximately 50% of tribal households have registered land, 25% have land on paper (but do not know where it is, or the land is occupied by others), 25% are officially landless.



The FaNS project's Baseline Survey found that 65% of the households in Sheopur had access to arable land for agriculture. Large parts of the land are rocky or barren, which equally compromises cultivation and livelihoods.

The *Forest Rights Act* (FRA) of 2006 grants legal recognition to the land and livelihood rights of forest dwellers. The Act recognises the rights of the forest dwellers to live on the forest land, to gather forest resources like fruits, leaves, firewood and others, trade them, and to conserve forest resources as per their traditional practices. Also, the *Provision of the Panchayat (Extension to the Scheduled Areas) Act* 1996 (PESA) was initially issued to empower tribal and forest dwelling communities by recognising their rights over land and forest produce. But the overall scale of implementation seems to be very low.

Thus, landlessness is linked with limited employment or unemployment and limited income. Many households that have too little land without the means to overcome the dry season are forced to (seasonally) migrate seeking labour outside their community, district and state.

Diminishing Forest Resources

Sheopur is a forest rich district with 52% of its geographical area being covered by – mainly open and moderately dense – forest (Govt of India 2017c). But forests are drying out and are being depleted by villagers and non-villagers. The latest *Forest Survey of India* shows a fast and considerable decrease in Sheopur's forest cover with a loss of 39 square kilometres of forest alone in the two preceding years (ibid.). Deforestation through unsustainable extraction, fast depleting forest resources and increased pressure on common lands have caused fuelwood scarcity, decreased livestock fodder drastically, and reduced availability of timber and non-timber forest products. With damaged plant cover and damaged vegetation, soils in forest areas have started degrading.

Many tribal communities in Sheopur are traditionally dependent on the forests for food, medicine and livelihood – gathering and selling forest products such as wood, gum, *Tendu* (leaves used for making local cigarettes known as *Bidi*), honey, *Mahua* (a local tree whose parts are being used for preparing medicines and local liquor) and medicinal herbs – but are no longer allowed to enter the forest. With the forests out of bounds, their primary source of nutrition is – legally – no longer available. The resulting unstable livelihoods and additional agricultural distress have pushed many members of tribal communities to become seasonal migrants. A study by the *Atal Bihari Vajpayee Institute of Good Governance* in 2018 found that the children of Saharia communities in Sheopur are twice as much affected by malnutrition as children from non-tribal communities (AIGGPA 2018).



Lack of Rain or Poor and Erratic Rainfall

Sheopur is chronically drought prone. The climate is characterised by a hot summer and general aridity except during the south-west monsoon from June to September. The district has experienced deficient rainfall for the past years. Rivers and streams that provide water frequently run dry, surplus water for ground water recharge is available only during the monsoon. The extremely rocky terrain does not hold groundwater. Another lean monsoon in 2018 brought a lack of water for drinking, farming, gardening, and livestock for the third consecutive year.

There is a strong connection between drought and malnutrition. The water scarcity has caused a distinctly decrease in crop yields of the mainly rain-fed agriculture in the last years – in some areas crops have failed completely. The sustainability of agriculture very much depends on the provision of supplemental irrigation. Without necessary productive assets and financial resources to achieve greater productivity, this sustainability will not be reached. In some villages visited, check dams have been constructed to hold back water for minimal irrigation of the main cereal (wheat, sorghum, pearl millets and maize), oilseed (mustard) and pulse (chickpeas, grams and pigeon peas) crops. Hence, less local coarse grains are being produced and people are eating less of these nutritionally rich varieties, e.g. pearl millet (Bajra), barnyard millet (Sanwa), sorghum (Jowar), finger millet (Ragi), and leafy vegetables. Additionally, more and more people turn away from their traditional nutritious diet due to other preferences and mod-

ern eating habits. Only 18% of respondents of the Baseline Survey stated that they had access to fruit (GIZ 2016). Many households have lost livestock due to water scarcity and unavailability of fodder.

Drought affected households are becoming more dependent on government safety nets and are consuming mostly wheat and rice provided by the TPDS – with the consequence of a low and inadequate food diversification which negatively affects their nutrition.

Sources of drinking water in the villages are hand pumps, open wells, ponds and bore wells. Only 2% of the people in Sheopur district have access to tap water (GIZ 2018). The FaNS project's Baseline Study reported that during the hot and dry season, the ground water level sinks, borewells and handpumps tend to dry out, the quality of drinking water deteriorates, and families rely on water coming from – in many cases polluted – streams and rivers. As reported in FGD for this study, women and older children are forced to collect water from distant places – 4 to 15km away – during times of water scarcity which affects women's and children's daily routine, increases the workload for women and reduces their time available for other duties. As a result, women lack the time to give adequate attention and care to their children which impacts the health of mothers and children. Moreover, in shortage of water, it is challenging for villagers to keep up adequate WASH practices: people stop bathing which leads to widespread skin problems, and they clean kitchen utensils only with sand which may affect food hygiene and safety.



Limited Livelihood Options and Lack of Income Opportunities

Livelihood options are determined to a large extent by literacy and education. The general literacy rate in Sheopur is 57% (Govt of India 2011), whereas only 27% of members of the tribal communities are literate (AIGGPA 2018).

Most households in the communities visited in Sheopur who have access to land engage in agriculture on a small scale or subsistence level. But due to droughts, lack of water, lack of infrastructure and resources, it is difficult for them to earn a sufficient and reliable income from agricultural production. Governmental support schemes in agriculture are – according to the *District Agricultural Office, DAO* – mostly targeted towards farmers who have registered land and who are able to add a smaller or larger own contribution, which does not apply for most members of the rural and tribal communities.

In the face of recurrent crises and implementation problems, government schemes have not proven to be a reliable source of earnings and remuneration. The communities visited hoped for and expected reliable temporary employment through government and donor-supported safety-net and support schemes such as the *Mahatma Gandhi Rural Employment Guarantee Act* (MGNREGA) scheme to be able to cover lean seasons – and to contribute to durable community infrastructure improvement. But inefficient implementation of the schemes and

long delays of payment make households fear not to be able to cope during the summer. In addition, the infrastructure constructed can apparently not be maintained by the communities themselves.

Thus, existing schemes obviously do not reach all crisis-affected households and not in a sustainable manner. Since there is hardly any other labour-intensive employment available in nearby places, many people are forced to borrow money from lenders at high interest rates and/or to migrate seasonally in search for wage labour, mostly on the fields of owners of large estates.

Seasonal migration for work has become a regular part of the livelihoods of the households in the communities visited. According to a study conducted in 2018, for example, more than 90% of the members of the Saharia community work as migrant labourers (AIGGPA 2018). Major migration takes place in the time from February to June, and from October to November, e.g. to Gujarat (working on cotton farms for approx. 300 Rupees a day). The associated seasonal employment is characterised by low wages (especially for women), child labour, abuses and indebtedness from contractors (IRIS 2016). During FGD for this study, male community members stated that their primary interest was to stay in their village or as close to their homes as possible for work and income generation. They also expressed their frustration about more and more manual work getting replaced by machines which makes it even more difficult for them to find work particularly in the agricultural sector.



In most cases, the whole family migrates including pregnant and lactating women and children of all ages. Older siblings drop out of school to take care of younger children. Children are carried along to workplaces, e.g. construction sites, where they often lack dignified living conditions, adequate care, sufficient and appropriate nutrition, and educational facilities.

Frequent seasonal migration is presumably directly and indirectly linked to undernutrition and malnutrition and has a significant impact on the health of migrants. Adding the fact that migrant workers are often not registered, therefore not entitled for ration cards and do not benefit from existing social schemes such as *Anganwadi Centres* – making them even more vulnerable. During times of migration, the nutrition and health status of the accompanying children usually deteriorates: Many children are reported to be (partly severely) malnourished upon return. Constant migration also hinders the process of recovery of malnourished children: Even if they return to their *Anganwadi Centre*, their attendance is interrupted by longer periods of absence, thus they miss out regular support, e.g. daily nutritious food. Another negative effect of seasonal migration is that children do not receive any kind of education and health support especially routine immunisation.

Lack of Nutrition Knowledge

Lack of adequate parental awareness and knowledge regarding nutrition, lack of infant and young child feeding practices, hygiene and sanitation are also causes of nutrition insecurity and the high prevalence of malnutrition in Sheopur. With regard to infant and young child feeding practices, this often includes deficient knowledge on healthy feeding quantity and frequency, balanced diets, initiation of breast feeding, and initiation of complementary feeding. The lack of knowledge and awareness can lead to delayed recognition of undernutrition and delayed care seeking.

Parents' and caregivers' level of education is known to have a direct impact on nutrition and child health and is an important influencing factor. Explicitly, areas with more educated women show better health outcomes for children (Concern et al. 2009). In Sheopur, the literacy rate of women is 44%, the literacy rate of men 69%. Sheopur district, which has the highest rate of stunting (52.1%) in the state, and the lowest percentage of women who had had four antenatal visits (18.7%), also has one of the lowest proportions (11.8%) of women who had completed 10 years of schooling (Govt of India 2017b).



In many interviews, government staff and NGO representatives mentioned that health and nutrition have a low priority among men and women of tribal villages. The narrative includes that they spend large parts of cash on locally made alcohol and tobacco, and that consumption of tobacco products and liquor are high among both men and women.

The persistence of child malnutrition also seems to be tied closely to the traditional household-internal labour division with a high workload, subsequent time constraints and expended vigour of women and mothers. In FGD, male participants stated that they lack the knowledge of the scope of women's daily workload – what all is included and keeps them busy. They also explained that they generally lack nutrition knowledge since they have never been told what good nutrition is. Most of the men never heard of the nutrition meetings under PLA except for PLA community meetings.

The **AWW play a vital role in promoting nutrition knowledge**. Since they are recruited from within their communities, they usually have a good overview of the nutritional status and health of mothers and children belonging to that particular community. Nevertheless, the AWW have a high workload and bear a certain responsibility. Not all of them are well trained or educated so that there is a high risk of overstretching their capacities and by this reducing the quality of the services provided. Thus, the quality of service delivery and the impact of *Anganwadi Centres* depend on the educational status of the AWW, her job status, infra-structure facilities of the *Anganwadi Centre*, logistical facilities, adequate training, frequent and supportive supervision, intersectoral coordination, and community participation.

In FGD, the knowledge of rural community members regarding indigenous (wild) food – and its nutritional value – seemed still be available to a larger or lesser extent with the potential to contribute to nutritionally complete dietary patterns. This can be of help – given their availability – to compensate micronutrient-poor diets which have spread with consumption habits shifted from highly nutritious millets to rice supplied through TPDS (DeFries et al. 2018).



4.3 Resilience Capacities

Many actors at different levels react to these food and nutrition security crises. As an immediate reaction, they absorb acute shocks. In cases of repeated shocks and chronic stresses, they may adapt and transform their livelihoods. Ideally, anticipatory capacities already exist or are created to be better prepared for future crises. Table 1 presents the existing capacities at individual, household, community, federal state and national level as identified during the study together with the capacities promoted / supported by the FaNS country package (marked in **bold**).

Table 1: Key Resilience Capacities (please refer to Appendix D for the comprehensive version of the Resilience Analysis Matrix)

	Anticipatory Capacity	Absorptive / Coping and Recovery Capacity	Adaptive Capacity	Transformative Capacity
Individual Level	<ul style="list-style-type: none"> Women save money secretly from their husbands 	<ul style="list-style-type: none"> Using the stored grain Selling <i>Chia</i> seeds and other forest produce Collecting (by women) and eating mainly forest products – healthy but no diverse diet (lack of a variety of food groups) Selling wood cut and gum collected in the wood (hard work done by women) Selling labour against food and money Using water from water trucks (tanker) 	<ul style="list-style-type: none"> Men migrating and working daily or seasonally as wage labourers on big farms of high cast people for up to 4 months/year Showing courage to participate in a roadblock rally in order to get water and electricity for the village Drying and storing vegetables and seeds Women applying knowledge and skills to improve family nutrition 	
Household Level	<ul style="list-style-type: none"> Saving food and money Developing a nutrition garden with a package of seeds 	<ul style="list-style-type: none"> Borrowing/lending staple food grains and money between the households to support each other Selling of bad quality TPDS food grains 	<ul style="list-style-type: none"> Migrating of the whole family Planting and using fruits and vegetables Producing a second seasons of vegetables using seasonally adapted seeds and using wastewater for irrigation Starting vegetable seed banks Drying and storing produces from the nutrition gardens Using drought resistant seeds for cultivation 	
Community Level	<ul style="list-style-type: none"> Community planning and demanding for support from the government for the construction of bore wells for irrigation throughout the year Community demanding work under the MGNREGA scheme Community establishing grain banks in some villages Nutrition gardening Producing livestock mainly for selling/income generation 	<ul style="list-style-type: none"> Sharing and exchanging food and seeds Community meetings under PLA triggering government support and claiming the community's rights/entitlements for water and food <ul style="list-style-type: none"> → government sent water trucks → mid-term meal became more regularised 	<ul style="list-style-type: none"> Constructing check dams for increasing the ground water level Conducting a joint collective action to demand basic rights (water, work, electricity) Raising the voice on basic issues like hygiene, sanitation, livelihood to district administration Enabled AWW delivering quality nutrition services according to PLA-protocol (quality improvement and assurance still necessary) incl. capacity to demand involvement of men in sharing responsibilities with women Scaling-up nutrition gardens through peer support and linking the community with government seed distribution scheme (<i>Below Poverty Line package</i>) 	<ul style="list-style-type: none"> Empowered women are able to make informed decisions on food and nutrition security (FNS) activities Strengthened cohesion among women through PLA group approach Improved transparency, accountability and performance of public services (safety nets) with regard to FNS through <i>Community Score Cards</i> (CSC)

	Anticipatory Capacity	Absorptive / Coping and Recovery Capacity	Adaptive Capacity	Transformative Capacity
State Level	<ul style="list-style-type: none"> ● Scheme for pregnant and lactating tribal women to providing 1,000 Indian Rupees (IRs)/ month for nutrition complemented by IEC on how to use the money ● <i>Below Poverty Line</i> scheme from Ministry of Horticulture providing vegetable seed packets for nutrition gardens ● DWCD promoting 5 plants to treat malnutrition (Moringa, Mango, Guava, Amla and Papaya) under Panchavati se Poshan ● MP including pulses in TPDS rations after reform ● Enhanced DWCD services 		<ul style="list-style-type: none"> ● Madhya Pradesh joining the SUN movement ● Department of Women and Child Development (DWCD) in collaboration with GIZ FaNS project initiating an e-learning training to improve knowledge and skills of AWW in delivering nutrition services to women and children 	<ul style="list-style-type: none"> ● DWCD services able to address chronic and acute food insecurity through institutionalised PLA approach and trained AWW
National Level	<ul style="list-style-type: none"> ● ICDS addressing chronic and acute malnutrition: Additional food for malnourished children ● TPDS addressing insufficient access to food: Making additional food available during officially declared disasters ● MGNREGA providing income opportunities to address chronic poverty ● PMMVY (<i>Prime Minister's Maternity Benefit Scheme</i>) for pregnant and lactating women providing 6,000 IRs for health, nutrition and wellbeing ● NRLM supporting tribal communities through SHG 			<ul style="list-style-type: none"> ● Women are more independent and the voice of their community raising key issues through a dedicated programme on women empowerment and girl's education ● National Nutrition Mission ● National Nutrition Month (September every year)

Synopsis of Identified Resilience Capacities

Individual and Household Level

Resilience capacities to react to the recurrent and expectable food and nutrition security crises at individual and household level predominantly relate to absorptive and adaptive capacities.

The **absorptive capacities** mentioned during discussions and interviews include changing diets and switching to wild forest products for own consumption and also for selling to middlemen (e.g. wood cut, gum, *Chia* seeds for low prices), consuming the stored grain, borrowing and lending food grains and money among households of a community, selling labour against food or money on the fields of better-off farmers, using water from the water trucks, and selling of TPDS food grains (which are considered of low quality).

Adaptive capacities comprise among others the drying and storing of produces from nutrition gardens (vegetables and seeds), the change to drought resistant and seasonally adapted seeds for cultivation in order to be able to produce two seasons of vegetables (using wastewater for irrigation), women's application of new knowledge and skills to improve family nutrition, the courage of whole households to participate in a roadblock rally (for the first time) to demonstrate for community needs and interests (water and electricity), and seasonal migration for work. Seasonal migration includes migration for a few days of individual

household members working as wage labourers on large farms of better-off ('high cast') people as well as migration of the whole family to distant places for up to 4 months. With support of the FaNS project, households have started establishing vegetable seed banks, planting and using (more) fruits and vegetables.

'I have started drying pumpkins and other vegetables, also vegetables from the forest, in the sun. This is very successful. I have the feeling that we (young women) can change our lives ourselves.'

Adolescent girl in a village

There have been only a few **anticipatory capacities** identified which relate to planning for the next dry season which includes preserving food and saving money – in some cases secretly by the women. With support of the FaNS project, gained knowledge has been applied to develop and start nutrition gardens with a package of seeds.

No transformative capacities at individual and household level were identified during FGD and interviews.

Community Level

At community level, only a few **absorptive capacities** were identified relating to sharing and exchanging of food and seeds in times of crises and claiming government support, rights and entitlements with regard to water and food. The latter was – at least in one community successfully – triggered by community meetings under *Participatory Learning and Action* (PLA). The PLA sessions have been supported by local NGOs and self-help groups (SHG).

The following main **adaptive capacities** to better manage impacts of progressive change in the structure of people's livelihoods were identified in the communities visited: Constructing of check dams – through self-help or facilitated by government schemes – to increase the ground water level; organising and conducting joint collective actions to demand basic rights (water, electricity, employment) and the respective support from the administration; raising the voice to demand the improvement of basic issues (sanitation) to the district administration. Supported by the FaNS



project, the fast scale-up of nutrition gardens through peer support and the link to the government seed distribution scheme (*Below Poverty Line* package) has obviously been successful. Committed AWW are enabled to deliver quality nutrition services according to PLA-protocol (while quality improvement and assurance is still necessary) and to demand involvement of men in sharing responsibilities with women.

Anticipatory capacities to be better prepared for the eventuality of a specific crisis at community level were observed in some places and included planning, demanding and applying for support from the government, e.g. for the construction of bore wells for irrigation in order to be able to cultivate crops when there is no, poor or erratic rainfall. The courage and tenacity to keep demanding work/employment and the creation of infrastructure under the MGNREGA scheme are decisive capacities of community members and whole communities to enforce own interests. As a contingency measure and supported by a local NGO, grain banks have been established in some villages where the grain is stored and given to needy people during food and nutrition security crises on a replacement policy. Also, the nutrition gardening mainly for own consumption and the production of small livestock mainly for income generation are seen as preparatory measures.

A number of **transformative capacities** contributing to structural changes in people's livelihoods were identified during FGD and interviews. In some of the communities visited, the cohesion among women has been strengthened through the PLA group approach. Empowered women are now able to make informed decisions on food and nutrition security activities. The transparency, accountability and performance of public services (safety nets) with regard to food and nutrition security has explicitly been improved through the introduction and use of *Community Score Cards* (CSC). All of this has contributed to a transformation of the way decisions are made and implemented in the respective communities.

'We need to involve men in taking care of their children. It's a joint responsibility of mothers and fathers. We can do it! And we will make influential men in the villages participate in mobilising men for improving nutrition.'

AWW in a village in Sheopur District



State Level

No absorptive capacities were identified at state level. As **adaptive capacity** and a contribution to positive adjustments, Madhya Pradesh's joining the SUN movement was considered.

There were some **anticipatory capacities** for the prevention of recurrent and expectable food and nutrition security crises identified which are illustrated in the design and implementation of schemes and measures that aim at preventing and preparing for potential food and nutrition security crises in advance and which include: The promotion of five plants/fruits to treat malnutrition (Moringa, Mango, Guava, Amla and Papaya) under the *Panchavati se Poshan Abhiyaan* of the DWCD, the provision of vegetable seed packets for nutrition gardens under the *Below Poverty Line* scheme of the Ministry of Horticulture, and the *Prime Minister's Maternity Benefit Scheme* (PMMVY), a special scheme for poor pregnant and lactating women under which 6,000 Indian Rupees are provided for nutrition if specific conditions (e.g. antenatal checks) related to maternal and child health are fulfilled. Also, the decision of the state government to strengthen the services of the DWCD and to reform the TPDS scheme are likewise considered as an ability of planning in advance to be better prepared for future food and nutrition security crises. With regard to the TPDS reform, among others the state government started including pulses in TPDS rations – and by this contributing to a more balanced diet and preventing protein deficiency.

Also, at state level the Department of Disaster Management and Relief is responsible for monitoring the drought situation and – if a drought is officially declared – to regulate the release of financial assistance to the districts.

As a **transformative capacity** – inducing a sustainable transformation of the community child health and nutrition service system – the study team valued the fact that the Anganwadi scheme has been permanently established, is in place, and the strengthened DWCD services are – to a large extent – able to address chronic and acute food and nutrition insecurity through an institutionalised PLA approach and through trained AWW.

National Level

No **absorptive** and **adaptive capacities** were identified at national level. Instead, a number of **anticipatory capacities** were identified. These include schemes that have programmes in place to prevent or prepare for a potential food and nutrition security crisis. These include in particular: (i) The ICDS programme that addresses chronic and acute malnutrition with the provision of additional food for malnourished children, pregnant and lactating women; (ii) the TPDS that addresses insufficient access to staple food by making additional food available for officially declared disasters; (iii) the MGNREGA scheme – if functioning according to its design – providing income opportunities to address chronic poverty; (iv) the *Prime Minister's Maternity Benefit Scheme* (PMMVY) seeking to ensure that pregnant and lactating women get proper nutrition and providing 6,000 IRs for health and nutrition; and (v) the National Rural Livelihood Mission (NRLM) supporting tribal communities through the facilitation of SHGs.

A few **transformative capacities** have been identified at state level during the study. One is the establishment of the multi-ministerial convergence *POSHAN Abhiyaan (National Nutrition Mission)* under the Ministry of Women and Child Development (MWCD) with the vision of a malnutrition free India. It strives in particular for adequate nutrition of pregnant women, mothers and children, and for reducing stunting in those districts of the country that have the highest malnutrition rates. Measures are designed to improve the quality of *Anganwadi* service delivery and the utilisation of key *Anganwadi* services. The other is the introduction of the *National Nutrition Month* being celebrated each September organised by the MWCD to spread broad awareness on issues related to malnutrition like stunting, IYCF, undernutrition and anaemia. Also, a fundamental change regarding the status of women in the communities was observed with women being empowered and girls educated – with support from external programmes – making women and adolescent girls more independent and in some cases even making them the voices of their community for raising key development issues.

For a brief introduction of Government schemes relevant for this study, see the overview in Appendix E.

5. Conclusions and Recommendations

Reducing food and nutrition insecurity strongly depends on availability, access and appropriate utilisation of affordable, safe and healthy food throughout the year (stability), which strongly correlates with effective resilience capacities to react to crises – acute shocks and chronic stresses

– and prevent severe impacts of food and nutrition security crises at individual, household, community, district, state and national level. In this chapter, the study team points out conclusions and recommendations with regard to the respective identified capacities.

CONCLUSIONS	RECOMMENDATIONS
<p>At individual and household level, predominant resilience capacities identified were absorptive and adaptive capacities. Preparedness for longer periods of time seems to be an unknown concept for many rural and forest dwelling people – and deserves special attention.</p> <p>At community level, most existing capacities relate to adaptive capacities including adjustments to traditional and customary livelihoods.</p> <p>Anticipatory and transformative capacities regarding recurrent food and nutrition crisis are still weakly developed at individual, household and also at community level – and need further and particular support.</p>	<p>Anticipatory capacities need to be further systematically addressed through awareness raising and through promotion of technical knowledge, e.g. regarding storage of grains, pulses, animal feed, preparation for water supply for human beings and animals, and access to government services and transfer schemes.</p> <p>In order to be able to systematically analyse programme effects at household level, it would be worthwhile considering using the Household Food Insecurity Experience Scale (HFIES) for support of project and programme steering.</p> <p>At community level, the prevention aspect seems to need convergence with a number of actors, especially those that impact household incomes, women's education and empowerment, and nutrition sensitive and specific interventions. Here, the <i>Village Secretary</i> and the <i>Sarpanch</i> play a crucial and critical role in the provision and allocation of benefits from different schemes and in channelling resources for the communities.</p>
<p>The lack of employment and income generating opportunities in the communities and nearby places enforce negative coping strategies. Well designed, but weakly implemented public safety-net schemes do not work for the poor.</p> <p>Regarding the MGNREGA scheme, there seem to be significant differences in the average employment demanded in crises-affected communities and the actual provision of work (CPR 2019). Many people are not confident in the scheme due to weak implementation and delayed payments. Since most people are unable to cope with day to day expenses while waiting for payment they choose or are forced to seasonally migrate.</p>	<p>Consider supporting the communities to demand their entitlements in temporary employment opportunities through the existing governmental support and safety-net schemes. This would help households to be able to cover lean seasons and prevent seasonal labour migration – and to contribute to durable community infrastructure improvement which then may enable local employment and income generation and stabilise agriculture-based livelihoods (see respective section below). Deploying in particular unemployed youths can be a potential source of economic strength.</p> <p>Consider promoting a similar approach as the support to the TPDS reform to make the MGNREGA scheme work for people.</p> <p>Monitor the outcomes and policy of the pilots currently underway to include seasonal migrants better into the scheme.</p>
<p>Employment was reported to be the main factor for seasonal migration. Cash-earning jobs provide immediate relief and satisfy primary needs. With increasing loss of traditional forest- and agriculture-based livelihoods, cash-earning opportunities are becoming more and more important. Periodic migration for wage labour has become a regular part of the livelihoods of many households.</p> <p>During migration, migrant workers often live under most difficult conditions out of reach of ICDS and most <i>Anganwadi Centres</i>. Seasonal migration disrupts childcare support and education and seems to decrease the nutritional status of accompanying children.</p>	<p>Consider a special focus on migration and migrating families – since many target group households migrate for wage labour and are not able to adequately feed and take care of their children during migration periods.</p> <p>Consider a further study to look more closely into the effects and impacts of seasonal migration with regard to food and nutrition security – in particular with regard to the nutritional status and health of children. This could also include the assessment of the effects of the piloted portability and use of ration cards by seasonal migrants outside of their home communities.</p>

CONCLUSIONS	RECOMMENDATIONS
<p>Participatory Learning and Action (PLA) is a key success factor for further adapting livelihoods, anticipating future crises and for systemic transformation. Its transformative potential empowers in particular women through knowledge transfer, joint reflection and relevant actions to improve the nutrition of families in a self-help-oriented manner. As a human rights-based approach it may work as a means for people to claim their rights and entitlements through tools such as <i>Community Scorecards</i> (CSC).</p> <p>Increasing the participation of marginalised groups can only be achieved if this is an explicit part of the programme strategy.</p>	<p>Continue strengthening the current PLA approach which should include:</p> <ul style="list-style-type: none"> ● supporting AWW and Supervisors to ensure a high PLA quality, ● starting to pilot men's and <i>Gram Sabhas'</i> (Village Assemblies') involvement in regular nutrition IEC, ● continuing the respective collaboration and partnership with DWCD at district and state level, ● considering the following suggestions for strengthening the transformative power of PLA by developing the current approach further by: <ul style="list-style-type: none"> – streamlining the current sessions and reducing the number and duration of PLA to a one-year-cycle or 12 sessions – considering specifically the migration periods and respective absence periods of villagers, – using the growth charts as communication tool to strengthen community level monitoring, planning and action to improve FNS; meetings of the Gram Sabha could be important entry points, – ensuring separate IEC sessions for men (and other important decision-taking and influencing people, e.g. mothers-in-law) to strengthen their responsibility for and involvement in actions to improve FNS thus supporting the household-level transformative capacities, – integrating (a) session(s) on migration and its consequences for nutrition, health and education of children with an adaptive and a preparedness perspective, – systematically ensuring IEC on FNS-related entitlements into sessions and use Community Scorecards (CSC) for the respective monitoring. <p>Pursuing this participatory advancement of the current PLA would need to involve GIZ, WHH, the implementing local NGOs and other partners that were involved in developing the actual PLA framework and its sessions. As a precondition, it is necessary to have the time and capacities available to conduct thorough trainings on the advanced PLA, peer learning among AWW and supervisors, and quality assurance of action, e.g. correct weighing and plotting of growth charts as basis for appropriate <i>Growth Monitoring and Promotion</i> (GMP).</p> <p>The concept of Social Auditing should be encouraged and initiated by communities for maximum utilisation of ICDS services.</p>

CONCLUSIONS	RECOMMENDATIONS
<p>The Anganwadi system in itself is a major asset to community health and nutrition. The AWW contribute much to reduce child malnutrition in their respective communities. But not all AWW are well trained or educated – so there is a high risk of overstretching their capacities – and by this reducing the quality of the services provided and increasing the risks of irregularities (as reported from some remote villages). Additional tasks such as getting acquainted with the use of online technologies for monitoring the nutrition status of children will add to their already substantial job description.</p> <p>Additionally, the infrastructure of <i>Anganwadi Centres</i> is often not adequate which hampers essential service delivery. Improvements in <i>Anganwadi Centres'</i> infrastructures and logistic facilities are inevitable for delivering quality services to beneficiaries. However, quality of services still needs to be evaluated.</p>	<p>A regular training and supportive supervision of AWW is recommended along with ensuring the provision of adequate facilities and infrastructures. AWW need to have a basic educational qualification for successfully performing their tasks such as the assessment of growth and minor health issues of children. Frequent interactions among AWW and their supervisors should be ensured and followed-up upon for upgraded information and awareness.</p> <p>In cases of irregularities, this needs to be openly addressed and the AWW supported to make them capable of fulfilling their tasks and securing the quality of services.</p> <p>Regarding gender roles and the responsibility for household-internal food and nutrition security, it is essential that AWW change their own concept and approach to address malnutrition: Men need to be included in nutrition-related activities. Feasible ideas – as mentioned in FGD – include e.g. the organisation of separate meetings with men (at other places than the <i>Anganwadi Centre</i>) to engage men in nutrition-related measures.</p>
<p>The lack of knowledge regarding nutrition – in particular regarding the need for a dietary diversity – contributes to malnutrition.</p>	<p>Continue promoting nutrition gardens.</p> <p>Strengthen basic conservation and transformation as well as storage of vegetables, fruits, grains and seeds.</p> <p>Consider including the diversity of nutritionally rich indigenous foods and the transgenerational knowledge of their uses to address malnutrition within the community. Support and advocacy for their increased consumption can be an important supplementary strategy to improve nutrition. The respective information can be incorporated into nutrition education at community level.</p>
<p>There is a lack of infrastructure and a lack of support for creating infrastructure for drought mitigation, for storing water for drinking, sanitation and hygiene, for irrigating arable land (e.g. through bore wells, check dams, irrigation schemes) at community level. Due to the high dependence on rain-fed agriculture, weather-related shocks are key risks – and the ability to anticipate risks early and take appropriate action in a timely manner is essential.</p>	<p>Consider further promoting and encouraging rainwater harvesting, groundwater recharge and water conservation activities to improve the sustainable availability of water.</p> <p>Community resilience can be advanced through the development, creation and rehabilitation of productive assets, including gardens, water management structures and road construction. Public investment in irrigation systems would have a direct impact.</p> <p>Therefore, support to the communities to effectively demand community infrastructure for drought mitigation including water storage structures and productive assets for agriculture – e.g. through public safety-net schemes such as the MGNREGA scheme – should be considered. The construction of ferro-cement tanks is a long-lasting low-budget technology to store water for household and public use.</p> <p>Creating agriculture-related infrastructure through governmental safety-net schemes has the potential for a dual effect: providing short-term employment and income opportunities and creating lasting structures to stabilise agriculture-based livelihoods and to increase agricultural production.</p>

CONCLUSIONS	RECOMMENDATIONS
<p>There is increasing evidence of the specific contribution that social transfers can make in reducing undernutrition and building resilience. At national level, there is a number of government safety-net schemes which seem to be strong in design but are often not or insufficiently delivering expected results for the poor – due to irregularities and weaknesses in implementation. Also, the TPDS as a social safety net scheme can help address inequalities and household poverty.</p> <p>Although considerable efforts have already been made to improve the efficiency and targeting of the TPDS, there are continuing irregularities at the expense of eligible beneficiaries. Moreover, many people seem to trade benefits for money in order to be able to buy other essential items or services, e.g. ration cards are being mortgaged with the local ration shop owners.</p> <p>Particularly young men seem to have difficulties to get own ration cards when they leave their parent's house. As a consequence, they cannot open a bank account of their own since the ration card is required as collateral – and without bank account they do not get access to grants, such as the 1,000 IRs <i>State Nutrition Grant</i> for tribal families.</p> <p>For seasonally migrating households and individuals, it is difficult or impossible to claim their entitlement during absence from their home community. Most ration shop owners and distribution points presently seem not to be aware that migrating people also have an entitlement to get their rations outside the place they are registered.</p>	<p>Continue supporting the TPDS reform by a dual approach:</p> <ol style="list-style-type: none"> (1) support the government in delivering quality services to eligible households and individuals including during periods of seasonal migration, and (2) support villagers in claiming their rights, entitlements and respective services including during periods of seasonal migration. Here, community monitoring activities and improving awareness on the <i>National Food Security Act 2013</i> (ensuring food as a right for its citizens) can be helpful. <p>Additionally, TPDS can possibly also be used as a channel to deliver nutrition-specific actions, e.g. distributing food supplements to mothers and young children.</p>

General Conclusions and Remarks

In general, it can be stated that the design and approach of the FaNS project contributes to strengthen people's and civil society organisations' capacities as well as government's services at all levels. In addition, the FaNS project has been the first in the region that addresses dietary diversity. The project succeeded in convincing the government of the benefit of working with ten food groups.

Integrating a resilience approach does not replace or relabel established risk- and conflict-management concepts. Instead, integrating a resilience lens to programme and project design and implementation adds a value in terms of increasing the impact of project activities by particularly identifying and strengthening resilience capacities of people and communities beyond the mere capacity to absorb shocks (such as natural disasters).

Still, it is important to be aware of the strong dependency of a growing number of crises-affected people in the district on public and governmental safety-net schemes. Long-lasting – or permanent – alimentation suffocates motivation, creativity, determination, responsibility and ownership. The ultimate aim should always be to lead people out of dependency to an independent and self-determined life. In pursuing community-based approaches, it is essential that the communities themselves own the processes. Efforts to involve communities in development planning must be backed by a transparent and responsive institutional set-up.

By using the Resilience Analysis Matrix as a basis for discussion and for communicating and sharing results, a mutual understanding and a shared commitment of different stakeholders at different levels may be reached. Thus, project resources can be used efficiently by multi-sectoral cooperation across multiple or institutional, civil society and development cooperation actors, breaking traditional operational silos. Eventually, sustainable hand-over scenarios can be developed at the end of the project by combining multi-sector vulnerability reduction activities with resilience capacity-building that lead to structural changes in household and community livelihood systems. Successful nutrition and/or resilience interventions in one place may not be completely replicable in other contexts. All interventions require in-depth understanding of communities' and individuals' existing capacities and strategies, food systems and nutritional needs, the environmental and social system. These results of the India case study thus also confirm previous learnings related to resilience-building of various actors at different levels of the society (RLI 2016).

Appendix A: Itinerary Country Package India (Sheopur, Bhopal, Delhi)

12 April 2019 Friday	Meeting with and briefing of Mr Gerrit Qualitz, Project Director <i>Food and Nutrition Security, Enhanced Resilience</i> Project (FaNS) and team, including Dr. Archana Sarkar, Dr. Tapan Ghope, Ms Neha Khara, Mr Pradeep Yadav, Ms Nadine Bader, Ms Nidhi Ralhan, New Delhi Finalisation of schedule for village visits and key informant interviews.
13 April 2019 Saturday	Travel to Sheopur via Sawai Madhopur by train and car Briefing Workshop with the team of the implementing NGO <i>Mahatma Gandhi Sewa Ashram</i> introducing the objectives, approach and course of action, discussing details of the guiding questions for FGD and Key Informant Interviews
14 April 2019 Sunday	Visiting two villages (split in 2 groups): Sabadi village (Karahal Block): FGD with women, FGD with men, village transect walk Kakardha village (Karahal Block): FGD with women, FGD with men, FGD with AWWs (from neighbouring villages) and their Supervisors Study team: Exchange and preliminary analysis of findings using the Resilience Analysis Matrix
15 April 2019 Monday	Visiting two villages (split in 2 groups): Gandhi Gaon village (Karahal Block): FGD with women, FGD with men Chak Bamuliya village (Sheopur Rural Block): FGD with men, FGD with AWWs (incl AWWs from neighbouring villages) and their Supervisors in AWW-Centre Key Informant Interviews with District Collector Mr Basant Kurre, District Food Supplies Officer (responsible for PDS) Mr Pujya Gujre, and District Horticulture Officer Mr Pankaj Sharma. Study team: Exchange and preliminary analysis of findings using the Resilience Analysis Matrix.
16 April 2019 Tuesday	Visiting two villages (split in 2 groups): Hirapur village (Sheopur Rural Block): FGD with women, FGD with men, Ranipura village (Karahal Block): FGD with women, Interview with Village / Panchayat Secretary Key Informant Interview with District Programme Officer Mr. Ratan Singh Gundiya. Visit of Training on E-Learning for AWW Supervisors. Study team: Exchange and preliminary analysis of findings using the Resilience Analysis Matrix.
17 April 2019 Wednesday	Workshop with the team of the implementing NGO in Sheopur getting the views of the staff on resilience capacities and reflecting jointly preliminary findings of the assessment. Travel to Bhopal, state capital of Madhya Pradesh, via Gwalior by car and train.
18 April 2019 Thursday	Meeting / Key Informant Interviews at state level in Bhopal , state capital of Madhya Pradesh, with – Mr Suresh Tomar, Joint Director, IEC, Dr. Nisha Jain and – Mr. Ashutosh, IEC section-incharge, Department of Women and Child Development (DWCD), state level counterpart – Ms Prathiba Rajiv Srivastava, State Co-ordinator, Welthungerhilfe (WHH) Bhopal, INGO responsible for implementing the activities in two districts of Madhya Pradesh including Sheopur Travel back to Delhi by flight
19 April 2019 Friday	Exchange and preliminary analysis of findings
20 April 2019 Saturday	Analysis of findings and drafting of report format
21 April 2019 Sunday	Start drafting the India Case Study report
22 April 2019 Monday	Meetings and Key Informant Interviews with – Mr Rajeev Ahal, Director, Natural Resource Management, GIZ India, New Delhi – Ms Nivedita Varshneja, Country Director India, WHH New Delhi, and – Mr Philippe Dresrüsse, Programme Advisor, WHH New Delhi – Mr K.L.M. Khalsa, Deputy Secretary, Department of Food and Public Distribution, Ministry of Food, Civil Supplies and Consumer Affairs, New Delhi Debriefing meeting with Mr Gerrit Qualitz and the team of the GIZ FaNS Project, New Delhi

Appendix B: List of Resource Persons and Key Informants

GIZ India, New Delhi	Mr Gerrit Qualitz, Project Director 'Food and Nutrition Security, Enhanced Resilience' (FaNS) Dr. Tapan Ghope, Component Manager Targeted Public Distribution System FaNS Dr. Archana Sarkar, FaNS Advisor Research, Monitoring & Evaluation Ms Neha Khara, Nutrition Expert FaNS Mr Pradeep Yadav, WASH Expert FaNS Ms Nadine Bader, Junior Adviser FaNS Ms Nidhi Ralhan, Junior Project Coordinator FaNS Mr Rajeev Ahal, Director, Natural Resource Management
Villages of Sabadi, Kakardha, Gandhi Gaon, Ranipura (all Karahal Block), Chak Bamuliya and Hirapur (both Sheopur Rural Block) Sheopur District	Villagers, <i>Anganwadi Workers</i> and their supervisors, village secretaries participating in focus group discussions and being available for key informant interviews
District Administration Sheopur	Mr Basant Kurre, District Collector (DC) Mr Ratan Singh Gundiya, District Programme Officer (DPO) Mr Pujya Gujre (In-charge), District Supply Officer (DSO) Mr Pankaj Sharma, District Horticultural Officer (DHO) Mr Pujya Gujre, District Agricultural Officer (DAO)
Implementing NGO <i>Mahatma Gandhi Sewa Ashram,</i> Sheopur, Madhya Pradesh	Mr Jai Singh Jaudaun (Manager) Mr Amit Kumar (Project Coordinator) Mr VS Gautam (Lead Trainer) Ms Shabnam Afgani (Lead Trainer) Ms Jyoti Rajak Mr Matadeen Mr Radhaballabh Ms Arti Sharma Mr Chhagan Nagar Mr Veeramdev Mr Neeraj Shrivastav Mr Sandeep Bhargav
Department of Women and Child Development, DWCD, Bhopal, Madhya Pradesh	Mr Suresh Tomar, Joint Director, Information, Education and Communication (IEC) Dr Nisha Jain, IEC section in charge Mr Ashutosh, IEC section in charge
<i>Welthungerhilfe</i> , WHH, India, New Delhi and Bhopal	Ms Nivedita Varshneja, Country Director India, Delhi Mr Philippe Dresrüsse, Programme Advisor, Delhi Ms Prathiba Srivastava, State Co-ordinator Madhya Pradesh
Ministry of Food and Public Distribution, New Delhi	Mr KLM Khalsa, Deputy Secretary, Department of Food and Public Distribution (DFPD), Ministry of Food, Civil Supplies and Consumer Affairs, New Delhi

Appendix C: Guiding Questions Used for Focus Group Discussions and Key Informant Interviews

Sheopur District

Aim: Understanding people's perception of resilience and their resilience capacities at various levels.

Guiding Questions:

- 1) What were / are the main **crises** – acute shocks and chronic stresses – that affect(ed) your food and nutrition security (FNS) / the FNS of people in the target areas in the last years? What was / is their influence on the FNS situation?
 - 2) What have you done to **react** to this? (... in the last five years max. and with regard to every single crisis mentioned before)
What has your household done to react to this? What has your community done? Were there other actors (influencers) who also reacted and what have they done? (to be adapted to the resource persons and context of interview / discussion)
 - 3) Why were you / they in a position to react like this on the crisis? (*with regard to every single crisis mentioned before*)
(Which abilities / capacities allowed you / them to react like this)?
 - 4) What would have enabled you / them to react better / in another way?
 - 5) What are the main **surprises** – positive and negative – that you (people) perceived as a reaction to the FNS crisis (shock or stress)? What did you not expect?
 - 6) Once the FNS crises (mentioned under question 1) is over:
What will / would you do to **prepare** for the next FNS crisis?
What do you think you actually can do to prepare?
 - 7) Who else needs to react?
What concretely should this person / organisation do?
- ... for Key Informant Interviews:
- 8) What are you / is your organisation doing to **support** people to better react to crises? ... to be better prepared for crises?
 - 9) What are you or your organisation doing to enable people to make an **informed decision** to better react to FNS crises and to be better prepared?



Appendix D: Comprehensive Resilience Analysis Matrix Sheopur

	Anticipatory Capacity	Absorptive / Coping and Recovery Capacity	Adaptive Capacity	Transformative Capacity
Definition	... enables people and systems to be better prepared for the eventuality of a specific shock through proactive action – ability of planning in advance and setting up 'contingency plans' (ODI / BRACED 2016)	...includes a range of harmful to positive coping strategies that aim at maintaining people's, organisations' and systems' wellbeing at a given level in the face of shocks – no basic changes to people's livelihoods (RLI 2016 based on OECD DAC)	... enables people, organisations, and systems to manage impacts of long-term trends and change – progressive and gradual change in the structure of people's livelihoods (RLI 2016 based on OECD DAC)	... enables people, organisations, and systems to manage the underlying causes of shocks, stressors and change – a fundamental change in the political/power and economic status of people, and hence, the structure of people's livelihoods (RLI 2016 based on OECD DAC)
Result	Strengthening contributes to improved preparedness	Strengthening contributes to enhanced stability – if coping is positive <i>Documented negative/harmful coping strategies</i>	Strengthening contributes to more positive options for adjustment	Strengthening contributes to structural systemic changes
Individual Level	<ul style="list-style-type: none"> Women save money secretly from their husbands 	<ul style="list-style-type: none"> Malnourished children up to 6 years, pregnant and lactating women using the increased portions supplied by the government Supplementary Nutrition Programme (SNP) by the State Department of Women and Child Development (DWCD) after the drought 2016 Collecting water from a neighbouring village (4km to 15km away, mostly women) → increased workload for women / less time available for other duties Using (and in one village even fighting with each other for the) water from the water trucks (tanker) – organised by local NGO Using the stored grain Selling Chia seeds and other forest produce, e.g. <i>Gond</i> – at a – too – low price Not bathing – skin problems Cleaning kitchen and other utensils with sand only instead of water – leading to hygiene problems Collecting (by women) and eating mainly forest products (e.g. Mahua longifolia, Tendu fruits = persimmons) – healthy but not a diverse diet (lack of a variety of food groups); but depleting forest produces because of logging / wood cutting by other communities and others Adaptation of food habits, e.g. boiled or baked potatoes only, grounded red chillies with salt with roti only, cooked watery <i>Gond ki laddu</i> (local sweet), salt ball (roti with salt) Eating less quantity of food and lower frequency (1-2 times instead of 2-3 times), sometimes due to water scarcity Selling wood cut and gum collected in the wood (hard work done by women) – increased workload for women → less time available for other duties Selling labour against food and money, e.g. participating in the check dam construction: receiving food for work for a declared drought – opportunity provided as emergency support Men migrating and working daily or seasonally (March to June, up to 4 months) as wage labourers on big fields/ farms of high-cast people (during harvest season of cotton, mustard, peanut, lentils etc), industries, construction work for 100–300 IRs/day with private employers in neighbouring villages, districts and states, e.g. Gujarat, Jaipur (wage of one month work is sufficient for family needs for 2 to 3 months, the monsoon season) 	<ul style="list-style-type: none"> Showing courage to participate in a community-organised roadblock to claim and enforce community interests to get water and electricity in the village Drying and storing vegetables (e.g. pumpkin, bottle gourd, Cucurbita family vegetables, green leaves vegetables) – idea came up through PLA Storing dried vegetable seeds (e.g. pumpkin, gourd, beans) Starting small businesses through SHGs with the help of local NGOs – but failed Women applying knowledge and skills to improve family nutrition 	

	Anticipatory Capacity	Absorptive / Coping and Recovery Capacity	Adaptive Capacity	Transformative Capacity
Household Level	<ul style="list-style-type: none"> • Saving food and money • Developing a nutrition garden with a package of seeds 	<ul style="list-style-type: none"> • Borrowing/lending staple food grains and money between the households to support each other in times of hardship • Migrating of the whole family working as wage labourers on the big fields/farms of high cast people in neighbouring villages, districts and states → <i>with negative consequences of missing government services such as SNP, immunisation, PDS rations, health services; also: health, nutrition and education of their children is not taken care of → with long-term consequences of FNS</i> • Selling of bad quality TPDS food grains to e.g. buy wheat from other than TPDS shops • Using drought resistant seeds for cultivation (e.g. millet) • Borrowing money <i>from lenders (at a high interest rate), sometimes from village secretaries</i> 	<ul style="list-style-type: none"> • Planting gardens and using Moringa and other fruits / vegetables • Drying and storing produces from the nutrition gardens (mainly green vegetables) • Using drought resistant seeds for cultivation (e.g. millet) • Starting vegetable seed banks → reduction of malnutrition through the produce of nutrition gardens • Producing a second seasons of vegetables using adapted seeds and using wastewater for irrigation (in some villages) • Borrowing land for cultivation against payment in kind or cash 	
Community Level	<ul style="list-style-type: none"> • Planning, demanding and applying for support from the government for the construction of 10 to 12 bore wells in their fields for irrigation throughout the year to enable up to 3 harvests per year – along with own financial contribution (writing a letter, participating of village representatives in the public hearing of the district collector) • Demanding work under the MGNREGA scheme to e.g. deepen ponds, digging wells, bore well recharge, check dams to address water crises • Establishing grain banks (in 10 villages): stored grains to be given to needy people on a replacement policy (supported by NGO) • Nutrition gardening • Producing livestock (goat, poultry) mainly for selling / income generation 	<ul style="list-style-type: none"> • Sharing and exchanging food and seeds • Community meetings under PLA triggering government support and claiming community's rights for water and food → government sent water trucks, → mid-term meal became more regularised 	<ul style="list-style-type: none"> • Constructing check-dams that hold back rainwater and increase ground water level, so wells keep water for a longer time • Gaining experience and confidence by organising and conducting a joint collective action of the whole village to demand basic rights (water and electricity) → road blockage (being prepared to stay days) • Raising the voice on basic issues like hygiene, sanitation, livelihood to the district administration (District Collector) • Actively asking / requesting the Village Secretary for more construction work (road, dam etc) nearby to enable income opportunities for villagers • Enabled AWW delivering quality nutrition services according to PLA-protocol (quality improvement and assurance still necessary) • AWW demanding involvement of men in sharing responsibilities with women in improving the FNS situation • Scaling-up nutrition gardens through peer support and linking with government seed distribution scheme (Below Poverty Line package) • Organising small group savings and credits as SHG among female members (at lower interest rates) • Recognising women with well-nourished children (positive deviance) being celebrated e.g. at International Women's Day 	<ul style="list-style-type: none"> • Empowered women through PLA are able to make informed decisions on family nutrition with a focus on IYCN and nutrition of women of reproductive age • Strengthened cohesion among women through PLA group approach, e.g. community practice of drying vegetables, demanding access to water • Improved transparency, accountability and performance of public services (safety nets) with regard to FNS through Community Score Cards (CSC), e.g. 200 non-performing AWW were replaced, ranking of Sheopur District in MP state improved in terms of delivery of ICDS services from the last one to one among the first five • Using digitalisation for nutrition IEC and e-learning

	Anticipatory Capacity	Absorptive / Coping and Recovery Capacity	Adaptive Capacity	Transformative Capacity
State Level	<ul style="list-style-type: none"> • Scheme for pregnant and lactating tribal women pro-viding 1,000 IRs/month for nutrition complemented by IEC on how to use the money • Below Poverty Line scheme providing vegetable seeds for nutrition gardens (one package is sufficient for up to 10 families) • DWCD promoting of 5 plants to treat malnutrition: Mango, Moringa, Guava, Amla, Papaya • TPDS reforms strengthening capacity development of AWW and their supervisors • MP including pulses in TPDS rations after reform 		<ul style="list-style-type: none"> • State of Madhya Pradesh joining the SUN movement • IDEA by DWCD staff: Adapting supplementary food rations and THR to the diversity of food habits and locally available food 	<ul style="list-style-type: none"> • IDEA by DWCD staff: to analyse the concept of 'Husband Schools' (idea from African countries) to integrate men in FNS responsibilities and activities • IDEA by DWCD staff: Consulting with AWW how to include/integrate men in FNS activities and responsibilities • DWCD services able to address chronic and acute food insecurity through institutionalised PLA approach and trained AWW
National Level	<ul style="list-style-type: none"> • ICDS addressing chronic and acute malnutrition (AWW): Additional food for severely & acute malnourished children • TPDS addressing insufficient access to food / food insecurity through grains (and newly introduced pulses depending on state's decision) at highly subsidised prices: Additional food made available in case of officially declared disasters • MGNREGA providing income opportunities to address chronic poverty. • <i>Prime Minister's Maternity Benefit Scheme</i> providing 6,000 IRs for pregnant and lactating women • <i>National Rural Livelihood Mission</i> under the Ministry of Rural Development supporting tribal communities through SHG (e.g. soap, stitching) 			<ul style="list-style-type: none"> • Dedicated programme / scheme on women empowerment and girl's education bringing a change to make women more independent and making them the voice of community on raising key issues (example of young woman in one village benefitting from the scheme – becoming a role model) • National Nutrition Mission • National Nutrition Month

Appendix E: Brief Introduction of Government Schemes Relevant for this Study

Under the **National Food Security Act** (NFSA) adopted in 2013, the Government of India aims to ensure food and nutrition security for the most vulnerable through its associated schemes and programmes. There are several government-owned social safety net and support schemes in place targeting approximately two thirds of <https://en.wikipedia.org/wiki/India> India's population. The NFSA sets the framework for those programmes which include e.g. the **Midday Meal Scheme**, the **Integrated Child Development Services** (ICDS or **Anganwadi Services**) scheme, the Antyodaya Anna Yojana scheme and the **Targeted Public Distribution System**, and it recognises maternity entitlements.

The **Targeted Public Distribution System** (TPDS), one of the world's largest food-based safety-net programmes, has been established under the Ministry of Consumer Affairs, Food, and Public Distribution for the allocation of food and non-food items at affordable prices to people living below the poverty-line. It is jointly managed with state governments which are also responsible to formulate and implement secure arrangements for identification of those eligible and entitled to benefit, for delivery of food to *Fair Price Shops* (also known as Ration Shops) and for its distribution in a transparent and accountable manner. Under the TPDS, a family below the poverty line can receive 10kg of cereals per family per month at specially subsidized prices. Major commodities that are being distributed include wheat, rice, sugar, salt and kerosene.

The **Anganwadi** system is a public service system for mothers, infants and young children of vulnerable households to promote an integrated approach to early child development in nearly every community of the country. It forms the backbone of India's **Integrated Child Development Services** (ICDS) scheme – the world's largest community-based programme for child development. *Anganwadi* (Hindi for *courtyard shelter*) centres have been established in the communities since 1975. The ambitious objective is to deliver high-quality services to improve the nutritional and health status of children in the age-group 0–6 years, to reduce the incidence of mortality, morbidity, malnutrition and school dropout, to achieve effective co-ordination of policy and implementation amongst the various departments to promote child development, and to enhance the capability of mothers to look after the health and nutritional needs of their child. An *Anganwadi Centre* is supposed to provide community nutrition and health education, supplementary feeding, breastfeeding and infant and young child feeding practices, immunisation, **contraceptive** counselling and supply, health check-ups and referral services as well as non-formal pre-school activities.

The design and theoretical set-up of the *Anganwadi* system are commendable and the scheme has contributed to progress over the years – but there are a number of challenges: the scheme suffers institutional weaknesses and not all groups have benefited equally as a recent study disclosed (Avula et al./IFPRI 2018): Women and children from the poorest households have lower access to the scheme. The reasons behind may include poor delivery, difficulty of access to remote regions, and social divisions such as caste.

The **Ministry of Women and Child Development** has laid down guidelines for the responsibilities of *Anganwadi Workers* (AWW) that include in particular references for health and nutrition education to pregnant women and for educating parents about child growth and development. AWW have recently also been tasked with additional responsibilities such as early childhood education and self-help group formation and training – neither of which they are trained for. The AWW are ideally supported by *Anganwadi Helpers*, *Auxiliary Nurse Midwives*, and **Accredited Social Health Activists** (ASHA) who is a community health advocate and provides services like first aid, special needs referrals, and reproductive health counselling.

The AWW and the *Anganwadi Helpers* are paid a fixed honorarium per month and provided a uniform every year. In addition, monthly performance-linked incentives are being paid to *Anganwadi Helpers* to facilitate the functioning of the *Anganwadi Centres*. Additional remuneration can be paid by the state government. The AWW are supported by the *Mukhya Sevika* supervisors. One supervisor looks after 40 to 65 AWW providing them with on-the-job trainings, keeping track of malnourished community members, guiding the AWW in assessing and documenting children's weight and growth, demonstrating effective methods of providing health and nutrition education, and maintaining statistics on *Anganwadi Centres* and AWW to determine what can be improved. A recent an IFPRI study on equity and extent of coverage of ICDS found that the proportion of respondents using ICDS had increased substantially from 2006 to 2016. However, the poorest sections of the population were still left out, especially in states with high levels of malnutrition (Avula et al./IFPRI 2018).

Despite their relatively high level of workload and responsibility being at the frontline in the community, AWW and ASHA are not formally recognized as civil servants and are not having access to the respective benefits. **Vacancy rates** are reported to be high. In recent years, both AWW and ASHA workers have staged **large-scale protests** claiming to be **underpaid, over-worked and undertrained**.

In Madhya Pradesh, there are approximately 97,000 *Anganwadi* and so-called *Mini-Anganwadi Centres*. Still, many of them lack basic infrastructures such as kitchen facilities, toilets, basic seating arrangements and electricity. In Sheopur, one *Anganwadi Centre* is responsible for up to 1,000 people, one *Mini-Anganwadi Centre* is responsible for 500 people. In around 15 districts of the state, over 1,100 posts of AWW and 1,300 posts of *Anganwadi Helpers* are vacant which impairs the functioning of the centres in those districts.

Additionally, Madhya Pradesh has launched different other schemes to prevent, control and manage the needs of women and children. One of them is the 2010 introduced *Atal Bal Aarogya Evam Poshan Mission*, short **Atal Bal Mission**, to systematically reduce child malnutrition. The mission's objectives include integrated planning by multiple government departments from various sectors including women and child development, public health, rural development, tribal welfare, food and civil supplies, engineering, school education, and finance (Das et al./IFPRI 2014).

The **Mahatma Gandhi National Rural Employment Guarantee Act** (MGNREGA) scheme is widely known and one of the largest public works employment programmes in the world. It aims at rural poverty reduction by improving the income situation of rural households granting every rural household who demands work a legal right to wage employment of up to 100 days per year in public works programmes. According to the scheme guidelines, wages must be paid within 15 days of work completion and closure of the muster roll. The scheme also aims at regenerating the environment through the creation of productive assets such as water tanks, ponds, bunds, check dams and through afforestation programmes.

References

- ACF, 2016: Preliminary Assessment Report on WASH and Nutrition in Sheopur District of Madhya Pradesh. By Vivek Yadav, Nutrition & Health Programme, ACF / Action Against Hunger, March 2016
https://reliefweb.int/sites/reliefweb.int/files/resources/acf-report-on-wash-nutrition-sheopur-district_v2.pdf
- AIGGPA, 2018: Study of Malnutrition Among Under-6 Children of Sheopur District with Special Focus on Saharia Tribe. Atal Bihari Vajpayee Institute of Good Governance & Policy Analysis, Project Report.
<http://www.aiggpa.mp.gov.in/images/files/pdf/reports/Study%20Report-Study%20of%20malnutrition%20among%20under-6%20children%20of%20Sheopur%20district%20with%20special%20focus%20on%20Saharia%20tribe.pdf>
- AIGGPA, 2017: Roles, Responsibilities and Functions of District Collectors in Madhya Pradesh. Atal Bihari Vajpayee Institute of Good Governance & Policy Analysis, Project Report.
<http://www.aiggpa.mp.gov.in/images/files/pdf/reports/Study%20on%20Roles,%20Responsibilities%20and%20Functions%20of%20District%20Collectors%20in%20Madhya%20Pradesh.pdf>
- Avula, R., E. Sarswat, S. Chakrabarti, P.H. Nguyen, P. Mathews, P. Menon, 2018: District-level Coverage of Interventions in the Integrated Child Development Services (ICDS) Scheme During Pregnancy, Lactation and Early Childhood in India – Insights from the National Family Health Survey-4. POSHAN Data Note 4. New Delhi, India: International Food Policy Research Institute (IFPRI)
<http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/132803>
- Bose, V., S. Batra-Dua, S. Menon, S. Mathur, G. Sharma, and K. Chauhan, 2014. A Landscape Analysis of Nutrition Initiatives in Madhya Pradesh: Policies, Actors and Networks. IFPRI: Delhi, India, Report No. 4, March 2014.
<http://ebrary.ifpri.org/utills/getfile/collection/p15738coll2/id/128207/filename/128418.pdf>
- Concern Worldwide / Deutsche Welthungerhilfe / IFPRI 2009: The Global Hunger Index 2009 – The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality. By: K. v. Grebmer, B. Nestorova, A. Quisumbing, R. Fertziger, H. Fritschel, R. Pandya-Lorch, Y. Yohannes. Bonn, Washington D. C., Dublin, October 2009
<https://www.globalhungerindex.org/pdf/en/2009.pdf>
- CPR – Centre for Policy Research / Accountability Initiative, 2019: Budget Brief: Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), Govt of India, 2019-20. Delhi, Vol 11 / Issue 9
<https://www.cprindia.org/research/reports/budget-brief-2019-20-mahatma-gandhi-national-rural-employment-guarantee-scheme>
- Das, P., M. Dwivedi, S. Sharma, N. Ramnani and A. Ranu, 2014: Toward Improved Nutrition: The Atal Bal Arogya Evam Poshan Mission. POSHAN Implementation Note 7. New Delhi, India: International Food Policy Research Institute (IFPRI)
<http://ebrary.ifpri.org/utills/getfile/collection/p15738coll2/id/128465/filename/128676.pdf>
- DeFries R., A. Chhatre, K.F. Davis, A. Dutta, J. Fanzo, S. Ghosh-Jerath, S. Myers, N.D. Rao, M.R. Smith, 2018: Impact of Historical Changes in Coarse Cereals Consumption in India on Micronutrient Intake and Anaemia Prevalence. Food and Nutrition Bulletin 2018, Vol. 39(3) 377-392
<https://journals.sagepub.com/doi/pdf/10.1177/0379572118783492>

- Department of Women and Child Development, Government of Madhya Pradesh, :
Atal Bal Aarogya Evam Poshan Mission – Vision Document 2020
- Development Initiatives, 2018: 2018 Global Nutrition Report: Shining a Light to Spur Action on Nutrition. Bristol, UK: Development Initiatives, November 2018
https://reliefweb.int/sites/reliefweb.int/files/resources/2018_Global_Nutrition_Report.pdf
- ENN, 2015: Nutrition and Resilience. A Scoping Study by L. Gostelow, G. Desplats, J. Shoham, C. Dolan, P. Hailey. Version 1.0, Emergency Nutrition Network (ENN)
<https://www.ennonline.net/attachments/2450/Resilience-report-final.pdf>
- FAO / IDS, 2017: Social Protection and Resilience. Supporting Livelihoods in Protracted Crises and in Fragile and Humanitarian Contexts. FAO Position Paper. United Nations Food and Agriculture Organisation & Institute of Development Studies:
<http://www.fao.org/3/a-i7606e.pdf>
- FAO, 2018: The State of Food Security and Nutrition in the World (SOFI) – Building Climate Resilience for Food Security and Nutrition.
<http://www.fao.org/3/CA1354EN/ca1354en.pdf>
- FAO, 2014: Strengthening the Links between Resilience and Nutrition in Food and Agriculture – Operational Recommendations to maximize the Nutritional Impacts of Resilience-building Interventions. A Discussion Paper.
<http://www.fao.org/3/a-i3777e.pdf>
- FAO, 2013: Resilient Livelihoods – Disaster Risk Reduction for Food and Nutrition Security Framework Programme. United Nations Food and Agriculture Organisation, 2013 Edition
<http://www.fao.org/3/i2540e/i2540e00.pdf>
- FSIN – Food Security Information Network, 2019: Global Report on Food Crises 2019 – Joint Analysis for Better Decisions. April 2019
<http://www.fsinplatform.org/global-report-food-crises-2019>
- GIZ, Global Programme Food and Nutrition Security, 2019: Progress Review 2018-2019 of the Country Package India ‘Digitalisation of the Indian Targeted Public Distribution System and Improved Food Diversity in Madhya Pradesh’
- GIZ, Food and Nutrition Security, Enhanced Resilience (FaNS) Project, 2018: Building Resilience to Enhance Food and Nutrition Security in Sheopur District of Madhya Pradesh – A Formative Study. By Archana Sarkar. New Delhi, November 2018 (not published)
- GIZ, 2018: Midline Study Report – Evaluation of the Intervention Strategies of the ‘Food and Nutrition Security, Enhanced Resilience’ (FaNS) Project. By EY India, September 2018
- GIZ, 2016: Nutrition Baseline Survey India for the Global Programme ‘Food and Nutrition Security, Enhanced Resilience’. By Aarati Pillai, Judith Kuchenbecker. Bonn, January 2016
- GIZ / BMZ, 2016: Boosting Resilience in Fragile Contexts – A Field-tested Approach of the Resilience Learning Initiative. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on behalf of the German Federal Ministry of Economic Cooperation and Development (BMZ) Bonn/Berlin 5/2016

- GIZ / Ministry of Rural Development (Govt of India), 2013: Environmental Benefits and Vulnerability Reduction through Mahatma Gandhi National Rural Employment Guarantee Scheme. Synthesis Report. <https://www.giz.de/de/downloads/giz2013-en-environmental-benefits-vulnerability-reduction-india.pdf>
- Global Resilience Partnership, 2019: Resilience Insights – Lessons from the Global Resilience Partnership. Report by D. Wilson, S. Verkaart, D. Nel with B. Murphy, S. Robens, G. Yaron. Stockholm, September 2019
http://grpinsightsreport.info/wp-content/uploads/2019/10/GRP_Resilience_Insights_Report.pdf
- Government of India, 2017a: National Family Health Survey (NFHS-4) 2015-16. Ministry of Health and Family Welfare & International Institute for Population Sciences (IIPS), December 2017
<http://rchiips.org/nfhs/NFHS-4Reports/India.pdf>
- Government of India, 2017b: National Family Health Survey (NFHS-4) 2015-16, District Fact Sheet Sheopur, Madhya Pradesh. Ministry of Health and Family Welfare & International Institute for Population Sciences (IIPS)
http://rchiips.org/NFHS/FCTS/MP/MP_FactSheet_418_Sheopur.pdf
- Government of India, 2017c: State of Forest Report 2017. Forest and Tree Resources in States and Territories: Madhya Pradesh.
<http://fsi.nic.in/isfr2017/madhya-pradesh-isfr-2017.pdf>
- Government of India, 2014: Sample Registration System Baseline Survey 2014.
http://www.censusindia.gov.in/vital_statistics/BASELINE%20TABLES08082016.pdf
- Government of India, 2011: Census 2011. Analytical Report on Primary Census Abstract: Chapter 2, Sex Ratio and Child Population:
http://censusmp.nic.in/censusmp/Data/PCA_DATA/004%20-%20chapter%20-2-%20sex%20ratio%20&%20child%20Populaton.pdf
- Government of Madhya Pradesh, 2012: Status Report on Children in Madhya Pradesh. State Planning Commission
<http://mpplanningcommission.gov.in/international-aided-projects/pmpsu/publication/Status%20report%20on%20children%20in%20MP.pdf>
- Government of Madhya Pradesh, 2012: District Profile of Sheopur District. Ministry of Women and Child Development, Madhya Pradesh
- Hoddinott, John, 2014: Understanding Resilience for Food and Nutrition Security. 2020 Conference Building Resilience for Food & Nutrition Security. Conference Paper 8, May 2014
http://www.fsincop.net/fileadmin/user_upload/fsin/docs/resources/2020resilienceconfpaper08.pdf
- IRIS, 2016: Seasonal Migrations of Marginalised (Tribal) Communities in Madhya Pradesh and Rajasthan: Foresight Analysis and Scenarios by 2020. IRIS – Institut de Relations Internationales et Stratégiques, Humanitarian and Development Programme, September 2016
<https://www.iris-france.org/wp-content/uploads/2016/11/ENG-Observatoire-Prospective-Huma-Seasonal-Migration-India-Septembre-2016.pdf>
- ODI / BRACED, 2016: How Can Social Protection Build Resilience? Insights from Ethiopia, Kenya and Uganda. Working Paper by M. Ulrichs and R. Slater, December 2016
www.odi.org/sites/odi.org.uk/files/resource-documents/11123.pdf

OECD, 2014: Guidelines for Resilience Systems Analysis – How to Analyse Risk and Build a Roadmap to Resilience. OECD Publishing

<https://www.oecd.org/dac/Resilience%20Systems%20Analysis%20FINAL.pdf>

Office of the Registrar General & Census Commissioner, 2013: Madhya Pradesh Annual Health Survey 2012-2013 Fact Sheet. Ministry of Home Affairs, Govt of India.

http://www.censusindia.gov.in/vital_statistics/AHSBulletins/AHS_Factsheets_2012-13/FACTSHEET-MP.pdf

Oxfam, 2017: The Future is a Choice – Absorb, Adapt, Transform – Resilience Capacities.

By H. Jeans, G.E. Castillo, S. Thomas. Oxfam International, January 2017

<https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620178/gd-resilience-capacities-absorb-adapt-transform-250117-en.pdf?sequence=4&isAllowed=y>

Peng, N. et al, 2019: Changes in Child Nutrition in India: A Decomposition Approach.

International Journal of Environmental Research and Public Health, MDPI, Basel/ Switzerland, May 22, 2019

<https://www.mdpi.com/1660-4601/16/10/1815/pdf>

Save the Children, 2016: Malnutrition in India Statistics State Wise, June 2016:

<https://www.savethechildren.in/articles/malnutrition-in-india-statistics-state-wise>

UNICEF, 2017: Reducing Stunting in Children Under Five Years of Age: A Comprehensive Evaluation of UNICEF's Strategies and Programme Performance – India Country Case Study.

Evaluation Office, New York, March 2017

https://www.unicef.org/evaldatabase/files/Stunting_Evaluation_India_Case_Study_final_report_2017-001.pdf

World Bank, 2018: Evaluating Integration in the ICDS: Impact Evaluation of an AWC-cum-creche pilot in Madhya Pradesh. World Bank, September 2018

<http://documents.worldbank.org/curated/en/49395153776051558/pdf/Impact-Evaluation-of-an-AWC-cum-creche-pilot-in-Madhya-Pradesh.pdf>



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À son titre d'entreprise fédérale, la GIZ aide le gouvernement fédéral allemand à concrétiser ses objectifs en matière de coopération internationale pour le développement durable.

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Abréviations

ACF	Action contre la Faim
AGIR	Alliance Globale pour l'Initiative Résilience au Sahel
BMZ	<i>Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung</i> Ministère Fédéral de la Coopération Economique et du Développement
CAD	Comité d'Aide au Développement
CNSAN	Conseil National de Sécurité Alimentaire et Nutritionnelle
CONACILSS	Comité National du Comité permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel
CSA	Commissariat à la Sécurité Alimentaire
ECHO	Direction Générale Protection civile et opérations d'aide humanitaire européennes
ENN	<i>Emergency Nutrition Network</i>
ENSAN	Enquête Nationale sur la Sécurité Alimentaire et Nutritionnelle
FAO	<i>Food and Agriculture Organisation</i> Organisation Mondiale pour l'Alimentation et l'Agriculture
FUS	<i>Follow-up Survey</i> Enquête de Suivi
GIZ	<i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i>
INSTAT	Institut National de Statistique
IPRODI/PMN	Irrigation de Proximité dans le Delta Intérieur/Programme Mali Nord
MAD	<i>Minimum Acceptable Diet</i> Régime Alimentaire Minimal Acceptable
OCDE	Organisation de Coopération et de Développement Economiques
ONG	Organisation(s) Non-gouvernementale(s)
PAM	Programme Alimentaire Mondial
PASSIP	Programme d'Appui au Sous-Secteur de l'Irrigation de Proximité
PRP	Priorité Résilience Pays AGIR
RLI	<i>Resilience Learning Initiative</i> Initiative d'Apprentissage Résilience
SANR	Sécurité Alimentaire et Nutritionnelle, Renforcement de la Résilience
SAP	Système d'Alerte Précoce
SEWOH	<i>Sonderinitiative Eine Welt ohne Hunger</i> Initiative spéciale UN SEUL MONDE sans faim
SMART	<i>Standardized Monitoring and Assessment of Relief and Transitions</i> Suivi et évaluation standardisés des urgences et transitions
SUN	<i>Scaling-up Nutrition Movement</i>
WHH	<i>Welthungerhilfe</i>

Résumé exécutif

Une crise peut être un moteur de changement - et la résilience consiste à renforcer les capacités de faire face activement et efficacement aux changements, gérer positivement ce changement, réaliser les droits de l'homme et permettre le bien-être, en dépit des chocs et du stress. L'application du concept de résilience a progressivement gagné en influence dans les projets et programmes de sécurité alimentaire et nutritionnelle au cours des dernières années. La raison en est que l'intégration d'une perspective de résilience dans la conception et la mise en œuvre des projets et des programmes apporte une valeur ajoutée en termes d'augmentation de l'impact des activités de projet en identifiant et en renforçant en particulier les capacités des personnes et des communautés au-delà de la simple capacité à absorber les crises. La résilience attire l'attention sur les capacités à anticiper et surmonter les conséquences négatives à long terme des crises - aiguës, lentes, chroniques et récurrentes - et pas seulement sur leurs effets immédiats.

Dans les contextes de crises récurrentes comme au Mali, si les interventions humanitaires restent importantes en cas de chocs aigus, les populations, les sociétés et les gouvernements doivent développer des capacités et des solutions à long terme pour anticiper, absorber et s'adapter aux crises alimentaires et nutritionnelles prévisibles, et pour transformer les structures et les moyens de subsistance. Cela est particulièrement important pour lutter contre la dénutrition chronique et la malnutrition, car des niveaux élevés de retard de croissance indiquent une perte de potentiel de développement à long terme pour l'ensemble de la société. En d'autres termes, le renforcement de la résilience vise à générer des changements sociaux, économiques et environnementaux durables et à donner aux populations et à leurs communautés les moyens de développer et de créer de nouvelles options de moyens d'existence compte tenu des risques liés aux crises actuelles.

Le « Programme global sécurité alimentaire et nutritionnelle, renforcement de la résilience » de la GIZ a commandité la présente étude sur la résilience dans trois pays (l'Inde, le Mali, le Malawi) pour (i) évaluer si les composantes pays sélectionnés ont contribué à améliorer les capacités de réaction aux crises alimentaires et nutritionnelles et donc à renforcer la résilience et (ii) explorer s'il existe des moyens de réagir encore mieux aux crises à différents niveaux.

L'approche et la méthodologie constituent un ensemble cohérent d'instruments d'analyses. Il comprend - en plus de l'analyse de la littérature de base récente et des données secondaires - (i) définir la résilience et les capacités de résilience, (ii) définir la portée de l'étude et répondre aux questions de cadrage pour chaque contexte, (iii) analyser les crises de sécurité alimentaire et nutritionnelle dans la région cible, (iv) explorer les capacités de résilience à différents niveaux en utilisant une Matrice d'analyse de la résilience et (v) évaluer la contribution des composantes pays à l'amélioration des capacités d'anticipation, d'absorption, d'adaptation et de transformation face aux crises. Des conclusions sont tirées et des recommandations opérationnelles sont fournies sur la manière de renforcer davantage les capacités de résilience des groupes cibles et la stratégie de chaque composante pays.

Cette étude pays porte sur les interventions de la composante Mali qui intervient dans le Delta Intérieur du Niger principalement dans les cinq cercles de la région de Tombouctou). Dans cette région, **l'insécurité alimentaire et nutritionnelle** est répandue. Les **causes/déterminants** des crises de sécurité alimentaire et nutritionnelle sont multiples, complexe et d'une durée prolongée. Elles touchent tous les domaines de la vie économique, sociale et politique ainsi que l'environnement.

Les **capacités de résilience prédominantes** identifiées au **niveau des individus et des ménages** étaient des capacités d'absorption, d'adaptation et d'anticipation : Les capacités d'absorption comprennent par exemple la consommation des aliments de crises (qui étaient aussi des aliments traditionnel avant, la décapitalisation/déstockage des animaux, migrations temporaire). Certains mécanismes d'absorption néfastes peuvent aussi être constatés, p.ex. la diminution de la quantité et de la qualité de la nourriture, la vente des biens et l'endettement (à des coûts très chers). Les capacités d'adaptation concernent surtout l'introduction de petit élevage et un élevage diversifié, l'augmentation de la culture de contre-saison, la préparation d'un repas nutritifs (1-2x par semaine) pour femmes en commun avec leurs propres cotisations, la création d'une caisse villageoise des femmes pour s'entraider (p.ex. achat des médicaments), la transformation/conservation (en conséquence, les femmes sont en mesure de contribuer de manière significative à l'alimentation de leurs familles et d'assurer les frais de l'école, de la santé etc.) et l'introduction des produits biologiques comme insecticides. L'anticipation est assurée p.ex. par un échelonnage des cultures, la construction des digues pour contenir l'eau dans les mares et protéger les champs et une migration saisonnière, régulière (des hommes).

Au **niveau groupement et communautaire**, les capacités d'absorption sont également assez « riches », par exemple mobilisation d'une moto-pompe pour évacuer l'eau des quartiers, reconstitution sociale du cheptel et l'augmentation de l'entraide. Quelques capacités d'adaptation peuvent aussi être identifiées à ce niveau, p.ex. création de banques d'aliments de bétail et/ou d'une caisse de femmes pour entretenir les chèvres pour pouvoir utiliser le lait pour les enfants.

Au **niveau national**, les capacités d'anticipation existent sous la forme du cadre politique/institutionnel (Priorité Résilience Pays, PRP ; Politique Nationale de Sécurité Alimentaire et Nutritionnelle, PolNSAN ; dispositif d'analyse d'alerte précoce) et de différents programme/projets du gouvernement malien et de ses partenaires humanitaires et de développement. Cependant, une analyse de la couverture des besoins des personnes touchées et/ou vulnérables, surtout en ce qui concerne le renforcement durable des capacités d'adaptation, de transformation et d'anticipation est encore nécessaire. Le renforcement de la résilience nécessite des approches multisectorielles, multi-niveaux et multipartites. La réalisation de celles-ci demande une forte volonté politique et le leadership des organes mandatés comme conditions préalables au succès des programmes et projets de résilience.



Les **principales recommandations** portent sur le renforcement des capacités existantes et le développement des capacités absentes. Des principaux éléments sont de :

- continuer à appuyer surtout les capacités d'adaptation et d'anticipation dans le domaine de l'Agriculture, y compris appui aux services et domaine en amont (accès à la terre, aux intrants et service appui-conseil, surtout pour les femmes) et en aval (conservation, transformation, stockage, accès au marché) ;
- continuer à soutenir les capacités d'absorption en cas de crises aiguës si les capacités des personnes/organisations touchées sont débordées au travers (i) de transferts sociaux sensibles aux crises et (ii) d'actions d'amélioration des mécanismes endogènes déjà développés dans ce sens par les groupes cibles (p.ex. déstockage/décapitalisation, réduction qualité/nombre de repas (capacité d'absorption négative)), mais qui méritent d'être revues/réadaptées/améliorées pour éviter que ces dernières n'exacerbent leur vulnérabilité ;
- renforcer le dispositif public au niveau communal et local pour un/e appui/gestion plus efficace des potentialités d'anticipation et d'adaptation des populations vulnérables ;

- faciliter – ensemble avec tous les partenaires pertinents, surtout les organisations publiques (ministères sectoriels, le Point Focal Alliance Globale pour l'Initiative Résilience au Sahel, le Commissariat à la Sécurité Alimentaires), les collectivités territoriales et les partenaires techniques et financiers multilatéraux, bilatéraux et non-gouvernementaux – un dialogue à tous les niveaux sur une approche encore plus axée sur le renforcement des capacités de transformation qui permettent des solutions encore plus durables et plus résilientes aux crises futures qui menacent la sécurité alimentaire et nutritionnelle au Mali.

« La résilience est fondamentalement une question de transformation - changer la base même sur laquelle les individus et les ménages peuvent prendre des décisions qui influencent leur capacité à faire face aux stress et aux chocs. »

(ENN 2015)



1. Introduction

Le Ministère Fédéral Allemand de la Coopération Economique et du Développement (BMZ) vise à apporter une contribution significative à la réduction de la pauvreté et de la faim. Dans le cadre de son initiative spéciale UN MONDE Sans Faim (*ONE WORLD - No Hunger*), la *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) a été chargé de mettre en œuvre le « Programme global Sécurité alimentaire et nutritionnelle, renforcement de la résilience » - ci-après dénommé « Programme Global » - dans douze pays en Afrique et en Asie. Les objectifs du programme sont (i) d'améliorer la sécurité alimentaire et nutritionnelle, en particulier celle des femmes en âge de procréer et des enfants de moins de deux ans, et (ii) de renforcer la résilience des populations face aux crises de sécurité alimentaire et nutritionnelle par une approche basée sur des produits alimentaires et multisectorielle.

Le Mali est l'un des pays soutenus par le programme. L'insécurité alimentaire et nutritionnelle est une réalité pour beaucoup de Maliens depuis des années. En septembre 2018, un peu moins de 1/5 (soit 19,1%) des ménages sont en insécurité alimentaire (essentiellement dans sa forme modérée 16,5% - vs 2,6% pour la forme sévère). Toutefois, des disparités plus ou moins importantes entre les différentes régions, cercles et zones de moyens d'existence du Mali sont observées. Comparé à 2017, la prévalence de l'insécurité alimentaire est en diminution dans la plupart des régions mais 11 cercles, dont quatre de la région de Tombouctou (Tombouctou, Gourma Rharous, Diré et Niafunké) présentent les fortes dégradations par rapport à septembre 2017. En même temps, la prévalence de la malnutrition aiguë chez les enfants était de 3,4% dont 0,5% de formes sévère (évaluée avec la bande de Shakir) contre 2,7% dont 0,5% de forme sévère en février 2018 et 3,5% dont 0,6% de formes sévère en septembre 2017. Les régions de Kidal avec 12,1%, Tombouctou avec 7,2% et Mopti avec 5,5% sont les plus affectées.

Dans le cadre du Programme Global, la composante pays Mali a été mis en place pour renforcer la résilience de la population en risque d'insécurité alimentaire (en particulier des réfugiés et déplacés internes en voie de réinstallation) et la diversité alimentaire des femmes en âge de procréer (voir chap. 3 pour plus de détails).

Le Programme Global a commandé cette étude sur la résilience dans plusieurs pays afin (i) d'évaluer si les composante pays sélectionnés ont contribué à améliorer les capacités de réaction aux crises alimentaires et nutritionnelles et ont ainsi renforcé la résilience et (ii) d'explorer s'il existe des moyens de mieux réagir aux crises au niveau individuel, familial, communautaire et gouvernemental. Le Mali a été choisi pour l'étude, qui concerne trois pays en tout. Ce rapport fait partie du Rapport d'étude sur la résilience dans plusieurs pays et est conçu pour être utilisé comme un document autonome - par conséquent, certaines répétitions en ce qui concerne la méthodologie sont inévitables.



2. Etude de cas pays Mali – objectifs, approche, méthodologie

2.1 Objectifs

L'objectif de l'étude sur la résilience dans plusieurs pays est d'évaluer si certaines composantes pays du Programme Global ont contribué à améliorer les capacités de réaction aux crises alimentaires et nutritionnelles et ont ainsi renforcé la résilience. Il vise également à comprendre comment le Programme Global peut contribuer à améliorer la résilience dans le contexte de chaque pays.

Les critères de sélection des composantes pays sont la vulnérabilité du groupe cible et de la zone du projet aux chocs, conflits et crises récurrents, ainsi que la capacité et la volonté de l'équipe de projet à soutenir l'étude sur place. Étant donné que l'ensemble de mesures en faveur du Mali a pour objectif explicite de renforcer la résilience, l'objectif est de savoir si les interventions alimentaires et nutritionnelles actuelles ont un résultat et/ou un impact et/ou la possibilité de renforcer les capacités de résilience au niveau des groupes cibles et des intermédiaires et éventuellement au-delà. Les recommandations opérationnelles au niveau de l'ensemble des pays visent à contribuer à une meilleure compréhension de la manière d'améliorer la résilience dans le cadre des interventions en matière de sécurité alimentaire et nutritionnelle.

Sur la base des résultats de l'étude de cas pilote en Inde, les objectifs spécifiques de l'étude de cas du Mali sont les suivants :

- évaluer la situation en termes de résilience et la contribution des interventions de la composante pays Mali au renforcement des capacités de résilience et améliorer les stratégies de résilience aux crises alimentaires et nutritionnelles et
- formuler des recommandations opérationnelles sur les points d'entrée potentiels afin de renforcer encore davantage, les capacités de résilience à différents niveaux (y compris au niveau politique).

2.2 Approche et méthodologie

Basée sur les expériences et les apprentissages recueillis dans le cadre de l'initiative RLI (Resilience Learning Initiative) (GIZ/BMZ 2016) soutenue par le BMZ, cette étude comprend l'analyse de la littérature de base et des données secondaires avec des aperçus récents sur les mesures réussies pour renforcer la résilience, le développement de la méthodologie pour l'étude pilote en Inde, une réflexion et analyse des capacités de résilience dans les zones cibles et des réponses relatives au renforcement de la résilience du paquet pays concerné. En bref, l'étude comprend :

- Éléments méthodologiques (chapitres 2.2.1 - 2.2.5) :
 - Définir la résilience et les capacités de résilience
 - Définir la portée de l'étude - répondre aux questions de détermination de la portée
 - Exploration et analyse ascendante (bottom-up) des capacités de résilience à différents niveaux
 - Outils de collecte et d'analyse des données
 - Description du plan d'action ;
- Une description du paquet pays Mali (chapitre 3) ;
- Une analyse des crises de la sécurité alimentaire et nutritionnelle dans la zone cible et de la contribution de l'ensemble des mesures prises par le pays pour améliorer la capacité d'anticipation, d'absorption, d'adaptation et de transformation face aux crises (chapitre 4) ;
- Tirer des conclusions et formuler des recommandations opérationnelles sur la manière de renforcer davantage les capacités de résilience des groupes cibles et sur la manière de renforcer (encore plus) une stratégie respective dans la composante pays ; le cas échéant, recommandations d'études et d'analyses complémentaires (chapitre 5).

Cette approche constitue un ensemble cohérent d'analyses. Il vise à aider le personnel du projet, les représentants des groupes cibles et les partenaires du projet à comprendre les liens entre les différentes crises et leurs influences sur la situation alimentaire et nutritionnelle. En outre, il permet une évaluation efficace et efficiente des capacités de résilience existantes et potentielles à différents niveaux et des options pour renforcer davantage la résilience des groupes cibles.

2.2.1 Définir résilience et les capacités de résilience

Cette étude utilise la définition de la résilience développée par le RLI : « La **résilience** est la capacité des personnes et des institutions - qu'il s'agisse des individus, des ménages, des communautés locales ou des États - à faire face et à se remettre rapidement des chocs causés par des situations fragiles, crises, conflits violents, crises économiques ou événements naturels extrêmes et à s'adapter au stress chronique ou transformer leurs moyens de vie ou fonctions sans compromettre leurs perspectives à moyen et long terme » (GIZ/BMZ 2016).

Dans cette étude, on entend par crise tout événement qui conduit (ou est susceptible de conduire) à une situation instable et dangereuse affectant un individu, un groupe, une communauté ou une société entière (OCDE 2014). Cela comprend les chocs et les contraintes. Les chocs sont définis comme des événements soudains ayant un impact important et souvent négatif sur la vulnérabilité d'un système et de ses composants. Chocs représentent des impacts négatifs (ou positifs) importants sur le mode de vie des gens et sur la qualité de vie de la population et sur le fonctionnement d'un État. Le **stress** est défini comme une tendance à long terme qui affaiblit le potentiel d'un système donné et accroît la vulnérabilité de ses acteurs (OCDE 2014).

La FAO définit la résilience comme « ... la capacité de prévenir les catastrophes et les crises ainsi que de les anticiper, de les absorber, de s'y adapter ou de s'en relever d'une manière rapide, efficace et durable. Il s'agit notamment de protéger, de rétablir et d'améliorer les systèmes de subsistance face aux menaces qui pèsent sur l'agriculture, la nutrition, la sécurité alimentaire et la sécurité sanitaire des aliments » (FAO 2013).

Les concepts de résilience largement acceptés utilisent trois capacités de résilience pour décrire et analyser les réactions des personnes, des organisations et des institutions face aux crises. Ces capacités de résilience ont été définies comme suit :

- Les **capacités d'absorption** (capacité de résistance (coping) et de relèvement) comprennent une série de stratégies d'adaptation négatives ou positives qui visent à maintenir le bien-être des personnes, des organisations et des systèmes à un niveau donné face aux chocs - sans changement fondamental des moyens de subsistance des personnes (RLI 2016 basé sur le CAD de l'OCDE). Le renforcement des capacités positives d'absorption/de résistance et de récupération contribue à une stabilité accrue.
- Les **capacités d'adaptation** permettent aux personnes, aux organisations et aux systèmes de gérer les impacts des tendances et des changements à long terme - changement progressif dans la structure des moyens d'existence de la population (RLI 2016 basé sur le CAD de l'OCDE). Les capacités d'adaptation permettent aux individus, aux ménages et aux collectivités d'améliorer leurs moyens d'existence grâce à la constitution d'actifs et à des activités génératrices de revenus qui sont moins vulnérables aux crises. Le renforcement des capacités d'adaptation contribue à des options d'ajustement plus positives.
- Les **capacités de transformation** permettent aux personnes, aux organisations et aux systèmes de gérer les causes sous-jacentes des chocs, des facteurs de stress et du changement - un changement fondamental dans le statut politique/de pouvoir et économique des personnes, et donc dans la structure des moyens d'existence des personnes (RLI 2016 basé sur le CAD de l'OCDE). Le renforcement des capacités de transformation contribue aux changements structurels ou systémiques.

Après un examen approfondi des nouvelles activités de recherche et de développement liées à la résilience, l'équipe chargée de l'étude a élargi le cadre d'analyse de la résilience en incluant les capacités d'anticipation (ODI/BRACED 2016) comme quatrième catégorie d'analyse. Cela est également conforme à la définition de la FAO ci-dessus et souligne l'importance de la « préparation » (preparedness) face aux chocs récurrents qui menacent la sécurité alimentaire et nutritionnelle des groupes cibles. Ainsi, les trois capacités définies par l'OCDE et le RLI ont été complétées par :

- Les **capacités d'anticipation**, qui permettent aux personnes et aux systèmes d'être mieux préparés à l'éventualité d'un choc spécifique par une action proactive. Cela inclut la possibilité de planifier en avance et de mettre en place des « plans de contingence » (ODI/BRACED 2016). Le renforcement des capacités d'anticipation contribue à une préparation améliorée.

Si la résilience et les capacités de résilience peuvent être définies de cette manière, il est nécessaire de reconnaître que, dans un contexte donné, les femmes et les hommes, les communautés des zones cibles et les institutions concernées ont leur propre expérience et leurs propres façons de décrire la résilience et les capacités qui conduisent à la résilience. Ces perceptions spécifiques ont été au cœur de toutes les appréciations et analyses ultérieures - elles doivent être comprises et intégrées dans la conception et la mise en œuvre des projets dans les contextes de crises (récurrentes).

2.2.2 Définir la portée de l'étude

Cette étude utilise également les questions de détermination de la portée élaborées par la RLI (GIZ/BMZ 2016). Afin de déterminer la portée de cette étude dans le contexte de la composante pays Mali, les questions de détermination de la portée sont répondues comme suit :

- La résilience **de quoi**?
 - Système de sécurité alimentaire et nutritionnelle des populations de la zone du projet dans les cinq cercles de la région de Tombouctou
- Résilience **à quoi**?
 - Crises de sécurité alimentaire et nutritionnelle (diversité alimentaire insuffisante, accès insuffisant à la nourriture) résultant de chocs aigus et de stress chroniques, par exemple sécheresses, inondations, crises économiques, changements climatiques, troubles politiques, troubles sociales
- La résilience **pour qui**?
 - Femmes en âge de procréer dans leurs foyers et communautés dans la zone du projet
- Résilience **sur quelle période de temps**?
 - Jusqu'en juin 2023 (date limite du projet), et au-delà
- La résilience en **ce qui concerne quoi**?
 - Une meilleure diversité alimentaire des femmes en âge de procréer et un meilleur accès à la nourriture même en temps de crise (correspondant aux objectifs et indicateurs du projet).

2.2.3 Exploration et analyse ascendante des capacités de résilience à différents niveaux

Ecouter les voix des personnes affectées par des crises, explorer leurs choix et capacités

(au niveau projet et programme dans un contexte donné)

Le cœur de l'approche est l'exploration ascendante (bottom-up) - l'approche de **l'écoute de la population** - des capacités de résilience existantes pour résister et faire face aux risques et aux crises alimentaires et nutritionnelles au niveau individuel, familial, communautaire et, si possible, au niveau du cercle/de la région et/ou national. Les gens sont intrinsèquement créatifs : ils ont généralement développé des stratégies de résistance et d'adaptation dans le passé et sont toujours en train d'expérimenter de nouvelles idées et de nouvelles activités. L'approche de cette étude reconnaît les capacités existantes à réagir aux crises, au stress et au changement - dans chaque contexte, de nouvelles opportunités apparaissent.

Il s'agit d'écouter d'abord les personnes touchées dans leurs communautés pour identifier leurs capacités et la manière dont un soutien extérieur - comme les programmes gouvernementaux, le Programme Global etc. - peut renforcer ces capacités pour devenir (plus) résilient face aux crises futures. L'accent est strictement mis sur les capacités et les moyens de les renforcer - et non sur les lacunes - afin de mieux répondre aux besoins existants et de réaliser progressivement les droits humains.

Pour explorer et analyser les types de crise et les capacités de résilience à différents niveaux, des **méthodes qualitatives** ont été utilisées : de groupes de discussion avec des personnes touchées par la crise et des agents des organisations non-gouvernementales (ONG), services déconcentrés (agriculture, santé, hygiène et assainissement, hydraulique), des collectivités territoriales (maire) ont été organisés à Bamako (due à la situation sécuritaire prévalant dans la zone d'intervention du projet, il n'était pas possible de se rendre sur le terrain dans le contexte de cette étude). En plus, de personnes ressources ont été interrogées aux niveaux national - pour recueillir leurs points

de vue et compléter les informations reçues des membres des communautés et des organisations/ services du niveau régional. Deux réunions d'information et de réflexion ont été organisées avec le personnel du projet au début et à la fin de la mission au Mali.

Le cœur de la méthodologie est l'analyse basée sur la **Matrice d'analyse de la résilience** développée à l'origine par le RLI et adaptée par l'équipe d'étude. Afin d'explorer et de saisir les diverses capacités existantes et de les relier à la Matrice d'analyse, un certain nombre de **Questions directrices** pour les groupes de discussion et les entretiens avec les informateurs clés ont été élaborées. De plus, les données secondaires ont été analysées en tenant compte aussi des résultats de l'Enquête de base sur la sécurité alimentaire et nutritionnelle ainsi que de l'Enquête de suivi pour l'interprétation des résultats.

L'**analyse** comprenait :

- une évaluation des types de crises, de la fragilité et de la vulnérabilité affectant l'alimentation et la nutrition des groupes cibles du projet ;
- la sécurité des groupes cibles en tenant compte des résultats de l'enquête de base sur la SANR et de l'enquête de suivi de la composante pays pour la réflexion et l'interprétation des résultats ;
- une évaluation des capacités de résilience existantes pour réagir aux risques et aux crises alimentaires et nutritionnelles au niveau individuel, familial, communautaire et - si possible - au niveau du cercle, de la région et/ou national en utilisant la Matrice d'analyse de résilience ;
- une évaluation de la contribution de la composante pays à l'amélioration des capacités d'anticipation, d'absorption, d'adaptation et de transformation.

Sur la base des résultats de l'analyse, des **recommandations opérationnelles** sur la manière de renforcer davantage les capacités de résilience des groupes cibles et de renforcer respectivement une stratégie dans la composante pays ont été extraites, et des recommandations pour de nouvelles études et analyses ont été fournies.



2.2.4 Outils de collecte et d'analyse des données

Les outils utilisés pour la collecte et l'analyse des données de cette étude sont les suivants :

- la liste des questions directrices élaborée par l'équipe d'étude (voir l'Appendice C)
- la Matrice d'analyse de la résilience (voir l'Appendice D)

2.2.5 Description du plan d'action

Le plan d'action de l'étude de cas du Mali comprenait les étapes suivantes (voir les Appendices A et B pour plus de détails sur le programme de la mission et les personnes ressources rencontrées) :

- briefing avec l'équipe de projet;
- atelier avec le personnel des ONG de mise en œuvre partageant et discutant des modèles de crises, des capacités de résilience des personnes et des organisations et de l'appui aux projets pour renforcer ces capacités;
- discussion de groupe avec des femmes et des hommes des communautés ciblées par le projet ainsi que des représentants des services déconcentrés et des ONG partenaires dans la mise en œuvre du projet;
- entretiens avec des informateurs clés des services/institutions gouvernementaux et des représentants des partenaires de développement et de l'aide humanitaire
- analyse préliminaire des résultats (conclusions et recommandations);
- brève séance de débriefing avec l'équipe de projet sur les résultats préliminaires de l'évaluation et de l'analyse;
- rédaction du rapport.

3. SEWOH SANR – Composante Pays Mali

La composante pays Mali du Programme Global a pour objectif de renforcer la résilience de la population en risque d'insécurité alimentaire et nutritionnelle, en particulier des réfugiés et déplacés internes en voie de réinstallation, et la diversité alimentaire des femmes en âge de procréer. Ses zones d'intervention se concentrent spécifiquement dans la zone du Delta intérieur du Niger et touchent les cinq cercles de la région de Tombouctou au Nord du Mali.

Les actions menées sont destinées à environ 30.000 personnes réfugiées ou déplacées internes en voie de réinstallation, ayant été confrontées à des situations de sécheresse et de conflits récurrents, accentuées par la crise politique de 2012 et aux femmes en âge de procréer.

SEWOH SA/Résilience œuvre à renforcer la résilience aux crises alimentaires des populations les plus vulnérables, en intervenant sur cinq axes :

- Agriculture irriguée sensible à la nutrition et plus résiliente aux crises alimentaires;
- Pastoralisme résilient aux crises alimentaires;
- Communication envers les femmes pour une alimentation saine et diversifiée;
- Renforcement des capacités des acteurs intermédiaires sur l'approche multisectorielle de renforcement de la résilience aux crises alimentaires;
- Capitalisation et diffusion des bonnes pratiques au niveau communal, régional et national.

Plusieurs partenaires interviennent dans la mise en œuvre de SEWOH SA/Résilience, entre autres :

- les services techniques déconcentrés du Ministère de l'Agriculture (DRGR, DRA), des ministères de l'hydraulique et de la Santé, le Commissariat de la Sécurité Alimentaire (CSA) les points focaux de l'Alliance Globale pour l'Initiative Résilience au Sahel (AGIR) et du mouvement *Scaling Up Nutrition* (SUN) ;
- les organisations non gouvernementales internationales Deutsche Welthungerhilfe e.V. (WHH) et Action Contre la Faim-Espagne (ACF-E) et leurs partenaires locaux ;
- les prestataires des secteurs public et privé (les bureaux d'études, ONGs locales et centres de formation) ;
- les collectivités territoriales et leurs instances d'élus ;
- les autorités traditionnelles ;

- les organisations paysannes et les chambres d'agriculture.

L'approche multisectorielle est au cœur de la composante pays Mali. Les secteurs de l'agriculture, de l'élevage, y compris la réhabilitation des puits pastoraux (qui servent souvent aussi à fournir de l'eau potable), le conseil nutritionnel, l'hygiène alimentaire et de l'eau, les mesures génératrices de revenus et filets sociaux locaux temporaires sont liés. D'approches et de systèmes durables sont encouragés dans l'agriculture et l'élevage ainsi que dans la réhabilitation et l'utilisation des puits et la production du fourrage. Les personnes concernées sont formées en conséquence.

La composante pays poursuit également une approche à plusieurs niveaux. Au niveau micro, les ménages et les individus (en particulier les femmes, mais aussi explicitement les hommes) ainsi que les réseaux/groupes locaux correspondants sont adressés directement par les formats de développement des capacités humaines, p.ex. communication pour le changement social et de comportement, appui pour une mise en valeur des périmètres maraîchers, petit élevage et transferts monétaires non-conditionnés en situation d'urgence. Aux niveaux local et régional, les acteurs étatiques et non étatiques concernés sont impliqués par des mesures appropriées de renforcement des capacités, p.ex. appui-conseils. Les résultats escomptés sont intégrés dans la planification et les stratégies régionales et coordonnés avec les organes compétents, surtout les services techniques et les collectivités territoriales.

Le projet s'appuie sur les mesures déjà expérimentées au Mali, par exemple la valorisation des petites zones d'irrigation et la production de riz étuvé. Une contribution à la réconciliation des différents groupes de population et groupes ethniques est apportée, d'une part, par la prise en compte des intérêts des différents groupes (petits agriculteurs, agro-pasteurs et bergers migrants ou éleveurs de bétail ainsi que réfugiés de retour, personnes déplacées et populations locales) et, d'autre part, par la prise de mesures d'accompagnement appropriées qui favorisent le dialogue et la capacité des différentes populations à gérer les conflits (approche « *do no harm* »).

4. Constats

4.1 Terminologie et définitions « résilience » au Mali

Les phénomènes de crises, chocs et stress ainsi que le concept de résilience sont bien connus par la population locale ciblée par la composante pays au Mali. Le fait qu'il existe des termes dans les langues locales de la région du projet pour les différents types de crises et même pour le concept de « résilience » en témoigne. Ce n'était pas le cas dans les autres études de cas pays. Dépendant de la situation spécifique, différents termes sont utilisés en langue locale (voir Tableau 1 pour les langues parlées dans la région du projet).

Tableau 1 : Petit glossaire

Français	Songhay	Tamasheq
Contrainte	Sitey	Tissoust
Catastrophe	Albala, almachibah	Albalh, almachibah
Dégâts	Hassaraw	Oughchad
Résilience	Key (se tenir debout/ se relever)	Tébédé
Solidarité	Dinchéré	Tanmidhalt

Au cours de l'atelier avec les groupes cibles, il est également apparu clairement que les personnes touchées par les crises dans le nord du Mali ont mis leur situation en relation avec les situations de crise dans d'autres régions d'Afrique. Ainsi, dès le début des discussions, il a été précisé que, dans la région du projet à Tombouctou, il prévaut « sitey » et non « albala » comme au Mozambique (cette comparaison par pays a été introduite dans la discussion par les groupes cibles eux-mêmes).

Selon AGIR la résilience est « la capacité des ménages, familles, communautés et des systèmes vulnérables à faire face à l'incertitude et au risque de choc, à résister au choc, à répondre efficacement, à récupérer et à s'adapter de manière durable » (AGIR 2017).

Cette définition est très proche et cohérente avec la définition utilisée dans le cadre de cette étude (voir ci-dessus). Pour rendre les résultats comparables entre les trois pays, la Matrice d'analyse de la résilience a été légèrement adaptée (voir l'Appendice D) pour aussi assurer la cohérence avec la définition AGIR. Les réponses/capacités « Faire face » et « répondre efficacement » (définition AGIR) sont considérées comme termes généraux. Le terme « résister » est utilisé comme synonyme du terme « absorber » - terme qui est combiné avec le terme « récupérer ». Les capacités de transformation et d'anticipation ne sont pas reflétées dans la définition AGIR. Elles sont, cependant, introduites dans le contexte de cette étude vues leur pertinence et la nécessité d'une analyse cohérente entre les trois pays de cette étude.

4.2 Crises alimentaires et nutritionnelles Région Tombouctou, Mali

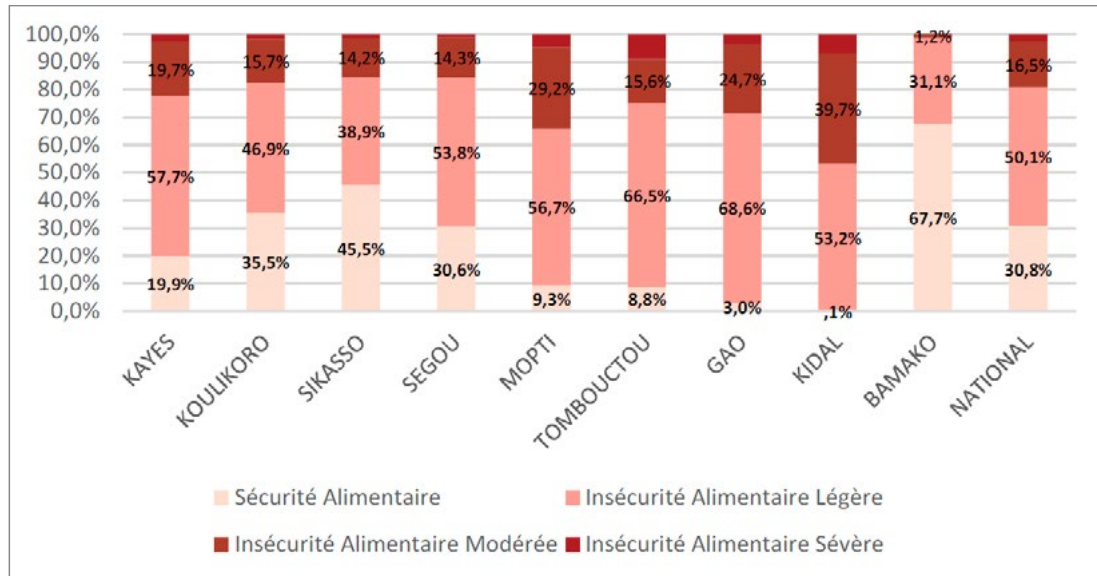
Plusieurs manifestations de crises alimentaires et nutritionnelles sont connues dans la région du projet, notamment la faim, l'insécurité alimentaire (insuffisance d'accès aux aliments), l'insécurité nutritionnelle (manque de diversité alimentaire chez les femmes et les enfants et différents types de malnutrition, surtout chez les enfants et moins de cinq ans). Dépendant de la saison et de l'année, cette insécurité alimentaire et nutritionnelle peut être plus ou moins aiguë, transitoire et/ou chronique, plus ou moins sévère et avec un nombre plus ou moins élevé de personnes affectées dans différentes parties du pays.

En général, dans les zones cibles de la composante pays Mali, l'insécurité alimentaire et nutritionnelle est répandue ainsi que des niveaux élevés de malnutrition aiguë et chronique, avec de très faibles pourcentages de femmes atteignant la diversité alimentaire minimale et d'enfants atteignant le régime alimentaire minimal acceptable (*minimum acceptable diet*, MAD). L'insécurité alimentaire des ménages est généralisée.

L'Enquête nationale sur la sécurité alimentaire et nutritionnelle (ENSAN) menée en septembre 2018 a montré que 24,7% des ménages de la région de Tombouctou souffraient d'insécurité alimentaire (Graphique 1). Tombouctou fait partie des quatre régions du pays qui sont les plus touchées par l'insécurité alimentaire des ménages.

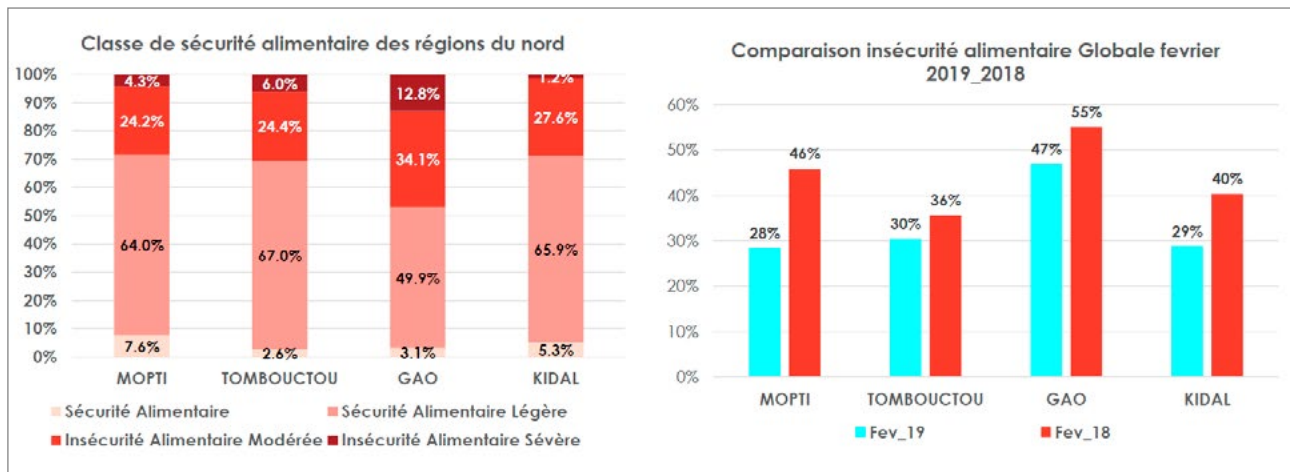
Au fur et à mesure que la saison progresse, cette distribution a augmenté jusqu'à environ 30% en février 2019 (Graphique 2).

Graphique 1 : Prévalence de l'insécurité alimentaire au Mali (septembre 2018)



Source: SAP (2018), p. 49

Graphique 2 : Evolution de l'insécurité alimentaire au Nord du Mali



Source: SAP (2019), p. 38

Graphique 3 : Profil des ménages en insécurité alimentaire

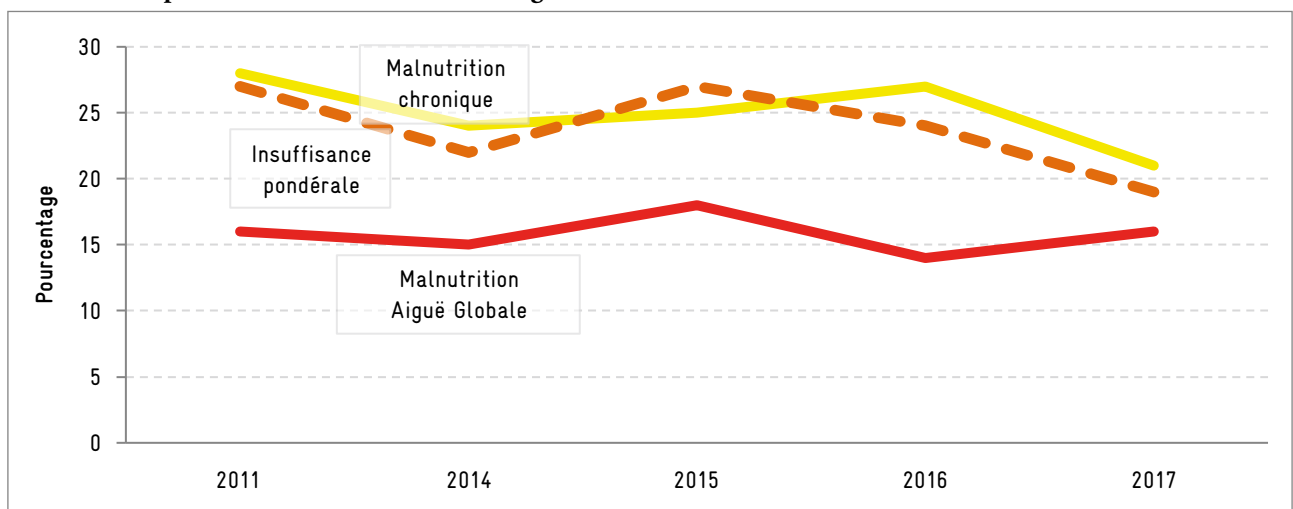
<p>Ménages dirigés par des femmes et des personnes à faible niveau d'éducation :</p> <ul style="list-style-type: none"> • La proportion de ménages en insécurité alimentaire diminue à mesure que le niveau d'éducation du chef de ménage augmente. • Les femmes chefs de ménages sont plus en insécurité alimentaire. 	<p>Ménages ruraux :</p> <ul style="list-style-type: none"> • La prévalence de l'insécurité alimentaire est plus importante dans le milieu rural que le milieu urbain.
<p>Ménages pauvres :</p> <ul style="list-style-type: none"> • La proportion de ménages en insécurité alimentaire diminue en fonction de l'amélioration du bien-être économique (augmentation de la richesse); • certains ménages les plus riches des régions du nord sont en insécurité Alimentaire. 	<p>Ménages vivant de :</p> <ul style="list-style-type: none"> • Exploitation forestières (vente d'herbe/fourrage/bois collectés, charbon...) • Artisanat • Production et vente de produit d'élevage • Aides et dans sociaux et humanitaire • Emprunt et dettes • Ouvrier, travailleurs journaliers

Source: SAP (2019), p. 41

Le profil des ménages qui vivent en insécurité alimentaire au Mali est bien connu (Graphique 3) ce qui aide à cibler les ménages et personnes bénéficiaires de projets. Ce profil correspond également à l'état de la recherche sur les déterminants de la vulnérabilité des ménages en général. Il est à noter que même certains ménages riches de la région sont néanmoins touchés par l'insécurité alimentaire. Cela nécessite des recherches et des explications plus approfondies.

Les données de diverses enquêtes indiquent que la prévalence de la malnutrition aiguë chez les jeunes enfants (moins de 5 ans) dans la région de Tombouctou est d'environ 15% au moins depuis 2011. Depuis lors, la prévalence de la malnutrition chronique se situait entre 20% et 30% (Graphique 4).

Graphique 4 : Tendence de la malnutrition aiguë globale, chronique et l'insuffisance pondérale dans la période de 2011 à 2017 dans la région de Tombouctou



Source: GIZ (2018), basé sur les rapports des enquêtes SMART 2011 à 2017 (INSTAT)



Les résultats des enquêtes de base et de suivi (*follow-up survey*, FUS) menées dans les zones du projet en 2016 et 2018 ont révélé qu'une majorité de femmes et d'enfants dans la zone du projet ne sont pas en mesure d'atteindre un niveau suffisant de couverture de leurs besoins en (micro-)nutriments. Le score de diversité alimentaire individuelle (*Individual Dietary Diversity Score*, IDDS) des femmes a été évaluée à 3,2 (enquête de base) et 3,3 (FUS). L'analyse de la diversité alimentaire minimale des femmes (*Minimum Dietary Diversity-Women*, MDD-W) a montré que seulement 8% (enquête de base) et 10% (GIZ 2018) des femmes étaient capables de consommer les cinq groupes alimentaires recommandés ou plus (sur 10). Une faible proportion globale de 16% (enquête de base) et de 11% des enfants atteignant la MAD suggère que la majorité des enfants ne reçoivent ni une fréquence minimale d'alimentation ni une diversité alimentaire minimale (GIZ 2018).

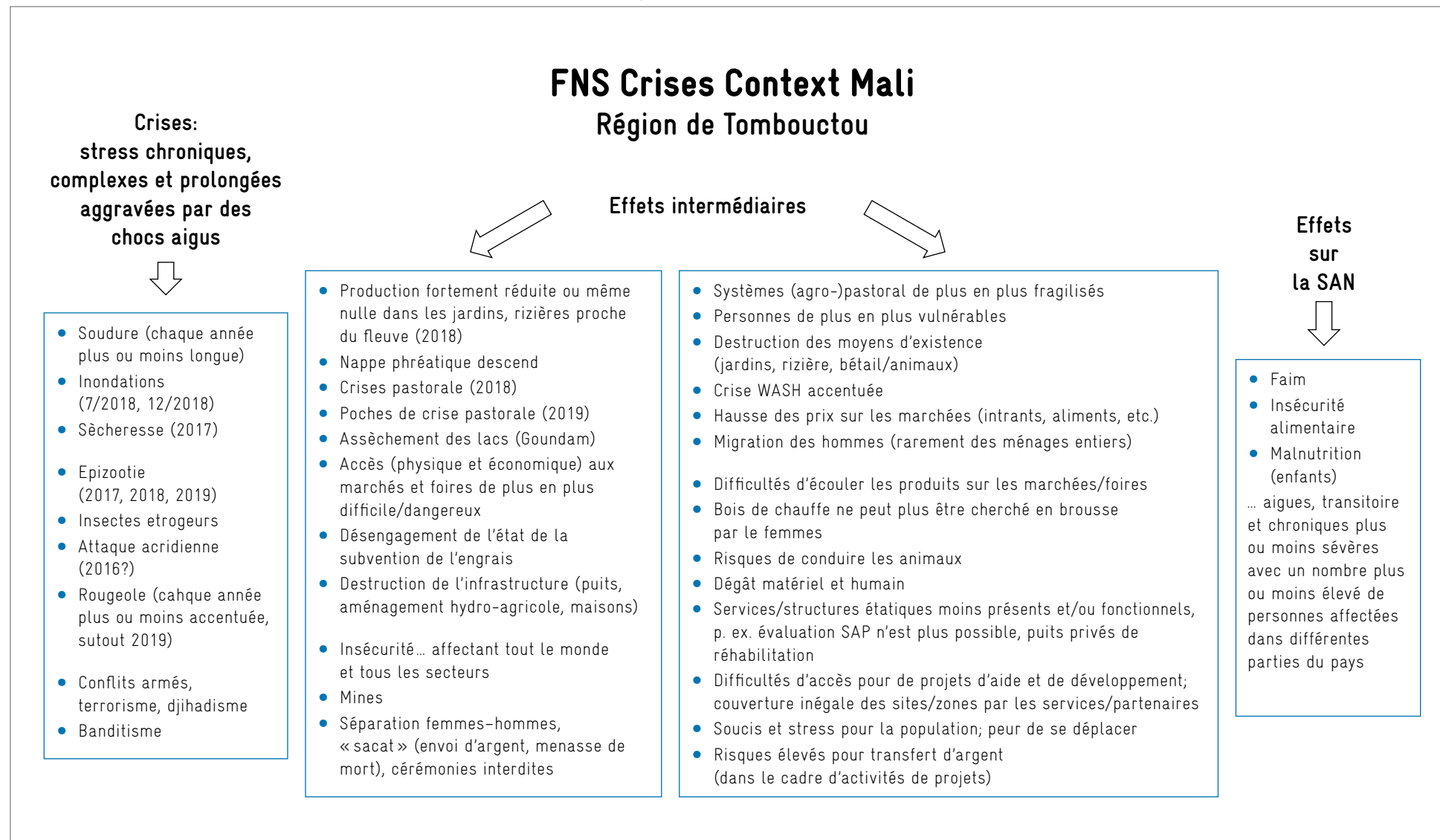
L'accès à la nourriture, tel que mesuré par le HFIES (*Household Food Insecurity Experience Scale*, Echelle d'expérience de l'insécurité alimentaire des ménages), était également très faible avec 61% des ménages en insécurité alimentaire sévère ou modérée en 2016 (enquête de base), contre 36% en 2018. En avril/mai 2018, dans la

zone d'intervention du projet, plus d'un ménage sur dix (16,5%), vit en insécurité alimentaire sévère, moins de deux tiers (59,0%) en insécurité alimentaire légère et plus d'un sur six (19,5%) sont dans une situation caractérisée par une sécurité alimentaire modérée. Bien que ces résultats traduisent une nette amélioration de la perception de la population par rapport à l'accès aux aliments, ils reflètent aussi une situation de fragilité qui peut facilement s'aggraver pendant la soudure et/ou à la suite d'un choc. Les ménages en sécurité alimentaire représentent seulement 5,0% des ménages dans les zones d'interventions (GIZ 2018).

4.3 Causes et déterminants des crises alimentaires et nutritionnelles dans la Région Tombouctou, Mali

Les causes de l'insécurité alimentaire et nutritionnelle dans la région du projet sont multiples. Les différentes discussions en groupes et avec les personnes ressource de cette étude ont abouti à une analyse assez détaillée et spécifique pour la région du projet (Graphique 5).

Graphique 5 : Crises et effets sur la sécurité alimentaire et nutritionnelle, Région Tombouctou au Mali



En général, les crises sont caractérisées par un stress chronique, complexe et prolongé, p.ex. changement climatique, crise politico-sécuritaire avec des conflits armés, croissance de la population, faible base de ressources naturelles, périodes récurrentes de soudure, des maladies récurrentes (p.ex. rougeoles), qui peut être aggravé à chaque moment par des chocs aigus naturels, politico-sécuritaires, sanitaires et/ou économique, comme la sécheresse (p.ex. en 2017), des inondations (p.ex. en 7/2018 et 12/2018), des périodes d'épizootie (p.ex. en 2017, 2018 et 2019), des attaques acridienne, des insectes et rongeurs ainsi que des attaques de terroristes, djihadistes et bandits.

Ces causes fondamentales ont des effets dans plusieurs domaines :

- Production fortement réduite ou même nulle dans les jardins, rizières proches du fleuve (2018) ;
- Baisse de la nappe phréatique, assèchement des lacs (cercle de Goundam) ;
- Crises pastorales (2018) et poches de crise pastorale (2019) ;
- Accès (physique et économique) aux marchés et foires de plus en plus difficile/dangereux ;
- Diminution de l'engagement de l'Etat de la subvention de l'engrais ;
- Destruction des infrastructures (puits, aménagement hydro-agricole, maisons) ;
- Insécurité générale affectant tout le monde et tous les secteurs, y compris la pose de mines ;
- Séparation femmes – hommes ;
- « sacat » (envoi d'argent, menace de mort), cérémonies interdites.

Suite à ces effets, les moyens d'existence se dégradent de plus en plus :

- Systèmes (agro-)pastoraux de plus en plus fragilisés ;
- Personnes de plus en plus vulnérables ;
- Destruction des moyens d'existence (jardins, rizière, bétail/animaux) ;
- Crise WASH (*water/sanitation/hygiène, eau/assainissement/hygiène*) accentuée ;
- Hausse des prix sur les marchés (intrants, aliments, etc.) ;
- Migration des hommes (rarement des ménages entiers) ;
- Difficultés d'écouler les produits sur les marchés/foires ;
- Bois de chauffe ne peut plus être cherché en brousse par les femmes ;
- Risques de conduire les animaux sur les pâturages ou les transporter sur les marchés ;
- Dégâts matériel et humain ;
- Services/structures étatiques moins présents et/ou fonctionnels, p.ex. évaluation SAP difficile, puits privés de réhabilitation ;
- Difficultés d'accès pour de projets d'aide et de développement ; couverture inégale des sites/zones par les services/partenaires ;
- Soucis et stress pour la population ; peur de se déplacer ;
- Risques élevés pour transfert d'argent (dans le cadre d'activités de projets).

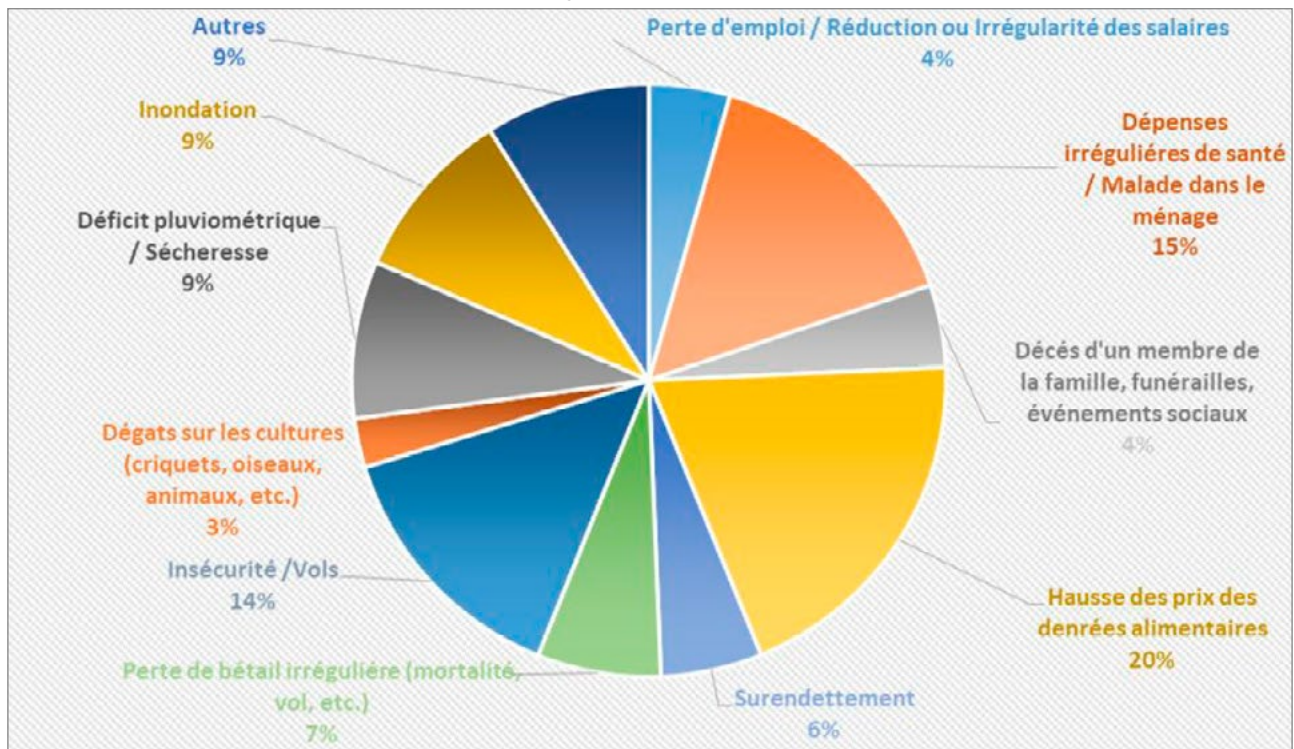
Lors de l'atelier avec des représentants de la région de Tombouctou, une discussion a également eu lieu sur la question qui est le plus touché par les crises, hommes ou femmes. Toutefois, les opinions divergeaient sur cette question. Selon l'analyse d'un certain nombre de participants, les femmes sont plus durement touchées parce que les hommes migrent souvent et les femmes sont très stressées lorsque les hommes ne contribuent plus à l'entretien de leur famille par la nourriture. D'autres participants ont soutenu que les hommes sont plus touchés parce qu'ils sont très stressés de trouver de la nourriture pour leur famille et parce qu'ils sont les premiers à être attaqués par des hommes armés.

Cette analyse dans le contexte de l'étude sur la résilience dans la région du projet à Tombouctou est très cohérente avec les résultats de l'ENSAN du mois de septembre 2018. Cette enquête identifie les principales causes de la vulnérabilité à l'insécurité alimentaire des ménages au Mali comme suit :

- Les pertes de production et la dégradation des moyens d'existence à cause des inondations surtout sur le riz de submersion libre et au niveau des zones basses ;
- La forte hausse des prix des denrées alimentaires ;
- Une soudure pastorale difficile ;
- L'insécurité persistante qui continue d'affecter négativement les flux commerciaux et les activités économiques dans les régions de Tombouctou, Gao, Kidal, Mopti et le Nord de celle de Ségou (ENSAN 2018).

La hausse des prix des denrées alimentaires (20% des réponses), les dépenses irrégulières de santé (15%), l'insécurité/vols (14%), les inondations (9%) et le déficit pluviométrique/sécheresse (9%) ont été identifiés comme les principaux chocs cités (Graphique 6). Dans la région de Tombouctou, les inondations constituent le premier choc pour 25% des ménages (SAP 2018).

Graphique 6 : Principaux chocs subis par les ménages au Mali dans les six derniers mois



Source: SAP 2018, p. 44

4.4 Capacités de résilience

De nombreux acteurs à différents niveaux réagissent aux crises alimentaires et nutritionnelles (comme présentées ci-dessus). En réaction immédiate, ils absorbent les chocs aigus. En cas de chocs récurrents et de stress chronique, ils peuvent s'adapter et transformer leurs moyens de subsistance. Il serait souhaitable d'avoir déjà des capacités d'anticipation ou de les créer pour mieux se préparer aux crises futures.

Le Tableau 2 (voir page suivante pour la version abrégée et l'Appendice E pour la version complète) présente les capacités existantes aux niveaux individuel et ménage, groupement, communautaire, régional et national telles qu'identifiées au cours de l'étude, ainsi que les activités d'adaptation négatives (soulignées) et les capacités promues / soutenues par la composante pays (indiquées en gras). En général, les acteurs du projet favorisent une approche qui vise un soutien aux capacités endogènes des populations qui est adéquate pour ne pas casser la cohésion sociale qui est toujours très forte dans la région du projet, p.ex. la reconstruction sociale de cheptel.

Synopsis des capacités de résilience identifiées

Au niveau de l'individu et du ménage

Exposés à des crises complexes depuis des décennies, la population dans la région, les individus et leurs familles ont développé de nombreuses capacités. Les capacités de résilience pour réagir aux crises récurrentes et prévisibles de sécurité alimentaire et nutritionnelle au niveau des individus et des ménages sont principalement liées aux capacités d'absorption, d'adaptation et d'anticipation.

Les **capacités d'absorption** (de résistance/récupération) mentionnées au cours des discussions et des entretiens comprennent surtout

- Consommation des aliments de crises (qui étaient des aliments traditionnels avant) ;
- Distribution des aliments au sein de la famille → priorisation des filles et femmes
- Echange (p.ex. lait contre céréales) ;
- Confiage du bétail, i.e. de familles nécessiteuses reçoivent un animal pour pouvoir utiliser son lait en contrepartie ;
- Secours de la diaspora ;
- Déstockage/vente de bétail ;
- Migration temporaire des hommes, des fois avec animaux (souvent d'animaux meurent en route) ;
- Déplacement des animaux vers le pâturage et de l'eau (grands éleveurs seulement) ;
- Payer son/aliment de bétail (très cher) pour pouvoir garder (un petit nombre) de bétail à côté de la maison ; mélanger du carton etc. avec l'aliment de bétail ;
- Donner du riz/paddy or sorgho aux animaux au détriment de l'alimentation des hommes ;
- Réaction à l'insécurité : cotisation par la population, contribution aux paiements de patrouilles.

Il faut déjà souligner ici que la population de la région du projet - selon le type et la gravité de la situation de crise - a développé des formes très ciblées et spécifiques de migration qui peuvent être attribuées à différentes capacités (voir aussi les capacités de transformation et d'anticipation).

Tableau 2 : Capacités de résilience clés dans la région du projet, Région Tombouctou au Mali (version complète en Appendice E)

Remarques : Réactions négatives sont soulignées et les capacités soutenues par le projet sont **indiquées en gras**.

Faire face et répondre efficacement				
	Capacité d'anticipation	Capacité d'absorption (de résistance et récupération)	Capacité d'adaptation	Capacité de transformation
Niveau individuel et ménage	<ul style="list-style-type: none"> Echelonner les cultures Utilisation des cultures (riz, mil) adaptées Production maraichère Réparation des digues de protection Construction de digues pour contenir l'eau dans la mare et protéger les champs Migration (des hommes) saisonnière, régulière Réunion des maires pour initier une réflexion comment prévenir le dégât sur les cultures 	<ul style="list-style-type: none"> Distribution des aliments au sein de la famille → priorisation des enfants et femmes Consommation des aliments de crises (qui étaient des aliments traditionnels avant) Secours de la diaspora Décapitalisation/vente de bétail Echange (p.ex. lait contre céréales) Confiance du bétail (→ utilisation du lait) Migration temporaire des hommes (des fois avec animaux (<u>souvent des animaux meurent en route</u>)) Payer son/aliment de bétail (très cher) pour pouvoir garder (un petit nombre) de bétail à côté de la maison; mélanger du carton etc. avec l'aliment de bétail Donner du riz/paddy ou du sorgho aux animaux au détriment de l'alimentation des hommes Réaction à l'insécurité: cotisation par la population, contribution aux patrouilles <u>Réduction de la qualité de la nourriture; réduction de la ration journalière</u> <u>Vente des biens précieux des femmes (bijoux etc.); vente des ustensiles de cuisine</u> <u>Endettement (à des coûts élevés)</u> Distribution des ustensiles de cuisine, de l'assistance alimentaire (voucher, cash-for-work), des kits d'hygiène 	<ul style="list-style-type: none"> Petit élevage Elevage diversifié Augmentation de la culture de contre-saison Préparation d'un repas nutritifs (1-2x par semaine) pour femmes en commun avec propres cotisations Caisse villageoise des femmes pour s'entraider (p.ex. achat des médicaments) Transformation/conservation (séchage, avec vinaigre) d'oignon, de tomate, choux, carottes etc.) → Femmes qui assurent les frais de l'école, de la santé etc. Produits biologiques (insecticides), faits par les femmes: piment pilé, l'eau chaude sur les plantes, nem et savon sur les feuilles Promotion de l'agroforesterie Introduction des nouvelles technologies (production) et variétés Maraichage en hivernage Appui à la production (semences, formation) 	<ul style="list-style-type: none"> Migration permanente des hommes (Mali et hors du pays) A Goundam: pêche (change de métier) Diversification des moyens d'existence suite à l'appui à l'élevage (voir Encadré 1) <u>Idée des jeunes de choisir soit la « profession » d'un fonctionnaire ou la migration comme moyens d'existence</u>
Niveau groupement		<ul style="list-style-type: none"> Motopompe: évacuer l'eau des quartiers Maire/jeunes pour creuser les canaux avec contribution personnelle du maire Maire fait loger les gens dans les salles de classes Voisins non-inondés accueillent les inondés et donnent à manger Au moment des inondations: bras valides mobilisés pour renforcer les digues Assistance en aliment de bétail Reconstitution sociale de cheptel Fonds d'urgence 	<ul style="list-style-type: none"> Petite caisse de femmes pour entretenir les chèvres (→ lait de chèvres pour les enfants) Banque d'aliments de bétail Appui à la production maraichère y compris cultures bio Appui à la transformation/conservation des aliments/produits agricoles (renforcement des capacités techniques, équipement) Activités génératrices de revenus Sensibilisation pour la nutrition 	<ul style="list-style-type: none"> Soutien à l'autonomisation des groupes producteurs Accompagnement soutien à l'autonomisation des femmes dans leurs rôles SAN (activités génératrices de revenus, structuration, formation) Plantation de fourrage et ensemencement de pâturage

Faire face et répondre efficacement				
	Capacité d'anticipation	Capacité d'absorption (de résistance et récupération)	Capacité d'adaptation	Capacité de transformation
Niveau communauté	<ul style="list-style-type: none"> • Alerte précoce à travers des SCAP-RU (Système Communautaire d'Alerte Précoce et de Réponse aux Urgences) 	<ul style="list-style-type: none"> • Mairie: stock d'aliment de bétail qui est vendu en cas de crise • Confiage/reconstitution sociale du cheptel (don d'un petit animal) • Augmentation de l'entraide • Réhabilitation des points d'eau (potable et pour animaux) • Santé animale et formation des agents (vaccination, déparasitage) 	<ul style="list-style-type: none"> • Fonds de roulement pour achat de semences • Appui et suivi communautaire des GSAN (Groupes de Soutien à l'Alimentation et la Nutrition) • Construction des points d'eau • WASH: accès à l'eau potable, promotion des pratiques d'hygiène 	
Niveau région	<ul style="list-style-type: none"> • Plan de contingence/de réponse • Campagnes de vaccination • Service élevage/agriculture: évaluation de la campagne • Surveillance pastorale • Renforcement des capacités du CRSAN • Réseautage, plaidoyer 	<ul style="list-style-type: none"> • Services techniques: évaluation rapide et élaboration des plans de réponses • Assistance d'urgence • Campagne de vaccination de rougeole en cas d'urgence 	<ul style="list-style-type: none"> • Privilégier les femmes (jardins, volaille) • Renforcement des capacités (services techniques) • Appui à l'organisation de foire • Dialogue résilience - niveau régional (planifié) 	
Niveau national	<ul style="list-style-type: none"> • PRP (Priorité Résilience Pays) • DNSAN • Programmes et projets du gouvernement et/ou des partenaires • Contributions aux PRP • Dialogue résilience • Réseautage, plaidoyer 			

On constate aussi un nombre de réactions qui ont – de manière directe ou indirecte – des conséquences négatives sur la sécurité alimentaire et nutritionnelle, surtout

- Réduction de la qualité de la nourriture (moins de diversité)
- Réduction de la ration journalière (réduction de la quantité d'aliments et/ou de nombre de repas)
- Vente des biens précieux des femmes (bijoux etc.)
- Vente des ustensiles de cuisine
- Endettement (auprès des commerçants à des coûts élevés).

Le **projet** soutien les individus et leurs familles surtout par la distribution des ustensiles de cuisine, des kits d'hygiène et/ou de l'assistance alimentaire (voucher, cash-for-work, transfert monétaire non-conditionné).

Les **capacités d'adaptation** mentionnées au cours des discussions et des entretiens comprennent surtout

- Introduction de petit élevage et un élevage diversifié
- Augmentation de la culture de contre-saison
- Préparation d'un repas nutritifs (1-2x par semaine) pour femmes en commun avec propres cotisations
- Caisse villageoise des femmes pour s'entraider (p.ex. achat des médicaments)
- Transformation/conservation (séchage, avec vinaigre) d'oignon, de tomate, choux, carottes etc.); en conséquence, les femmes sont en mesure de contribuer de manière significative à l'alimentation de leurs familles (qui est traditionnellement la tâche et la responsabilité des hommes) et d'assurer les frais de l'école, de la santé etc.
- Introduction des produits biologiques comme insecticides, faits par les femmes, p.ex. piment pilé, l'eau chaude sur les plantes, nem et savon sur les feuilles.

Les interventions du **projet** adressent surtout ces capacités (d'adaptation). Il s'agit essentiellement de la promotion de l'agroforesterie, de l'introduction des nouvelles technologies de production et de nouvelles variétés (plus adapté au changement climatique), du maraichage en hivernage et d'un appui à la production au travers d'une distribution de semences et/ou des formations. Cependant, il est nécessaire de bien analyser dans quelle mesure ces activités sont économiquement rentable/viable et durable.

Dans ce contexte, un risque est à signaler aussi. Le projet ensemble avec les autorités (traditionnelles et « modernes » s'engage aussi pour assurer un accès sécurisé à la terre pour les femmes. Cependant, quand l'exploitation des terres devient profitable, on peut constater que le propriétaire (masculin) vient retirer la terre. Actuellement, ce sont encore de rares cas, mais ce risque doit être considéré et des mesures doivent être entreprises pour prévenir une telle situation dans le futur.

Les **capacités d'anticipation** développées concernent l'agriculture (échelonner les cultures, application des cultures adaptées (mil, riz), introduction de la production maraichère), l'infra-structure, la migration saisonnière et régulière (des hommes) et une mobilisation sociale par les autorités (certains maires qui initient une réflexion comment prévenir le dégât des cultures).

Un nombre très limité de **capacités de transformation** peuvent être constaté au niveau micro (individus et familles), notamment une migration permanente des hommes (à l'intérieur du Mali ou hors du pays) et le début de la pêche comme changement de métier (à Goundam). On constate aussi une capacité de transformation négative dans la région du projet. Pendant une discussion sur le futur et les perspectives pour les jeunes dans la région du projet, les participants à l'atelier ont signalé que les jeunes (surtout hommes) vont à l'école jusqu'à l'âge d'environ 15 ans et partage la vision de devenir fonctionnaire après ou de migrer (vers l'Europe) pour assurer leurs vies – idées qui ne sont pas de vraies perspectives pour un grand nombre de personnes.

Cependant, le changement introduit par l'appui du projet peut être très significatif et aussi trans-

formatif pour des individus et leurs familles (voir l'Encadré 1).

Encadré 1 : Changement transformatif initié par le projet

« Quand j'ai compris que j'allais bénéficier des animaux*, j'ai commencé à mettre de côté tout ce que je trouvais qui pouvait servir d'aliment pour les chèvres (son, résidus de thé que je séchais ...). Cela m'a beaucoup aidé. Après la mise-bas de deux des 4 chèvres, j'ai vendu un bouc. J'ai utilisé la moitié de la recette pour acheter de l'aliment pour bétail que j'ai gardé pour la période de soudure. Avec l'autre moitié, j'ai démarré un petit commerce de produits de première nécessité. J'utilise une partie des bénéfices de ce petit commerce pour payer l'aliment que je stock pour les animaux en prévision des périodes difficiles et chaque semaine (le jeudi) j'épargne 500 FCFA. En 10 mois, j'ai épargné 20 000 FCFA, que j'ai utilisé pour payer un mouton. Aujourd'hui, j'ai un troupeau de 8 chèvres dont certaines sont encore gestantes. J'ai déjà constitué le stock d'aliment pour la période de soudure. Le mouton sera vendu à l'approche de la tabaski. Une partie de cet argent sera utilisé pour payer 2 autres moutons et l'autre pour renforcer mon petit commerce. Beaucoup de femmes viennent me demander comment je fais. Ce projet a complètement changé ma vie. Aujourd'hui, mon mari écoute tout ce que je dis. Je suis fière d'assurer une grande partie des charges de mon foyer sans demande de l'aide à ma famille. »

* Noyau de 5 chèvres dont elle a bénéficié dans le cadre du projet

Fadimata Moulaye, Région de Tombouctou, Cercle de Goundam



Niveau groupement

Au Mali, le niveau « groupement » est très important pour assurer les moyens d'existence et développer des capacités de résilience. Les capacités endogènes des populations assurent surtout l'absorption des chocs et stress et une adaptation à ceux-ci. Les **capacités d'absorption** (de résistance/récupération) identifiés sont :

- Mobilisation d'une motopompe pour évacuer l'eau des quartiers ;
- Mobilisation des jeunes par un maire pour creuser les canaux avec contribution personnelle du maire pour une compensation des travailleurs ;
- Au moment des inondations : bras valides mobilisés pour renforcer les digues (banco, paille) pendant deux mois ;
- Maire qui fait loger les gens dans les salles de classes (en cas d'inondation)
- Voisins non-inondés accueillent les inondés et donnent à manger.

Certaines **capacités d'adaptation** existent aussi au niveau de groupement, p.ex. la création d'une petite caisse de femmes pour entretenir les chèvres pour pouvoir utiliser le lait de chèvres pour les enfants et/ou d'une banque d'aliments de bétail.

Au niveau groupement, le **projet** soutient surtout les capacités d'adaptation (p.ex. appui à la production maraichère y compris cultures bio, appui à la transformation et la conservation des aliments/ produits agricoles (renforcement des capacités techniques, équipement), activités génératrices de revenus et sensibilisation pour la nutrition) et de transformation (p.ex. soutien à l'autonomisation des groupements des producteurs, accompagnement soutien à l'autonomisation des femmes dans leurs rôles SAN (activités génératrices de revenus, structuration, formation), plantation de fourrage et ensemencement de pâturage). Néanmoins, il soutient aussi les capacités d'absorption des groupements, p.ex. au travers d'une assistance en aliment de bétail, d'une reconstitution sociale de cheptel et d'un fonds d'urgence.

Niveau communauté

Au niveau communautaire, seules quelques **capacités d'absorption** ont été identifiées concernant (i) la création d'un stock d'aliment de bétail (par un maire) qui est vendu en cas de crise, (ii) la reconstitution sociale du cheptel (don d'un petit animal à des nécessiteux par des membres de la communauté relativement mieux portant) et (iii) une augmentation de l'entraide.

Plusieurs activités du **projet** soutiennent les capacités de résilience au niveau communauté, surtout :

- Capacités d'absorption : réhabilitation des points d'eau (potable et pour animaux) ainsi qu'un appui à la santé animale et formation des agents (vaccination, déparasitage)
- Capacités d'adaptation : fonds de roulement pour achat de semences, appui et suivi communautaire des Groupes de Soutien à l'Alimentation et la Nutrition (GSAN), construction des points d'eau, interventions dans le domaine WASH (accès à l'eau potable, promotion des pratiques d'hygiène)
- Capacités d'anticipation : introduction d'un système d'alerte précoce à travers des Système Communautaire d'Alerte Précoce et de Réponse aux Urgences (SCAP-RU)

Niveau commune

Actuellement, le niveau « commune » est pratiquement négligeable pour améliorer les capacités de résilience aux crises alimentaires et nutritionnelles. Seule une assistance d'urgence (capacité d'absorption) et un ciblage privilégié des femmes dans le soutien aux jardins et au petit élevage de volaille (capacité d'adaptation) sont identifiés ici. Le projet renforce et dynamise actuellement le comité communal de sécurité alimentaire et nutritionnel en vue d'améliorer une meilleure prise en compte/coordination (gouvernance) de la SAN à ce niveau.

Niveau région

Par contre, le niveau régional est plus important pour le renforcement de la résilience. Il y existe plusieurs **capacités d'absorption**, p.ex. évaluation rapide et élaboration des plans de réponses par les services techniques, une assistance d'urgence et de campagnes de vaccination de rougeole en cas d'urgence. Le niveau régional dispose aussi de **capacités d'adaptation** (ciblage privilégié des femmes dans le soutien aux jardins et au petit élevage de volaille, comme déjà mentionné pour le niveau commune) et surtout **d'anticipation** (p.ex. élaboration d'un plan de contingence/de réponse, organisation de campagnes de vaccination et l'évaluation de la campagne pastorale et agricole par les services d'élevage et de l'agriculture).

A ce niveau, le **projet** apporte surtout un appui aux

- capacités d'adaptation (renforcement des capacités des services techniques, faciliter le lien entre le service de santé et de celui d'agriculture, appui à l'organisation de foire de semences/équipement, organisation d'un « dialogue résilience » (planifié) ainsi que le réseautage et plaidoyer) et
- capacités d'anticipation (p.ex. appui à la surveillance pastorale et renforcement des capacités des organes de décisions décentralisés du Dispositif National de Sécurité Alimentaire et Nutritionnel (DNSAN) et de ses structures décentralisées.

Il y a aussi d'autres partenaires de développement qui appuient les capacités de résilience à ce niveau, p.ex. Agronomes et Vétérinaires Sans Frontière (AVCF) Belgique/Suisse avec la FAO qui ont organisé deux opérations de déstockage, l'abatage, un appui en produits vétérinaires ainsi que des activités de formation et d'accompagnement au niveau de la région.



Niveau national

Au niveau national, il existe surtout les Priorité Résilience Pays (voir l'Encadré 2) de l'AGIR et divers programmes et projets du Gouvernement et des partenaires. Ces interventions sectorielles ou à vocation spécifique de renforcer la résilience¹ sont définies (dans le contexte de cette étude) essentiellement comme capacités d'anticipation.

Les interventions du **projet SEWOH SANR** au niveau national renforcent les capacités d'anticipation au niveau nationale surtout au travers de contribution aux PRP (particulièrement au pilier 3), un « Dialogue résilience » (organisé en mai 2018) et ainsi que le réseautage et le plaidoyer au niveau national.

Encadré 2 : Les Priorités Résilience Pays de l'AGIR au Mali

L'Alliance est née de la compréhension commune des Sahéliens et Ouest-africains et de leurs partenaires de la communauté internationale sur le caractère structurel et chronique des crises alimentaires et nutritionnelles affectant les moyens d'existence et la résilience des ménages vulnérables.

Objectif global des PRP Mali est de réduire structurellement et de manière durable la vulnérabilité alimentaire et nutritionnelle en accompagnant la mise en œuvre des politiques sahéliennes et ouest-africaines – « Faim zéro » dans 20 ans.

Les PRP Mali suivent 4 objectifs spécifiques/piliers :

- Pilier 1:** Améliorer la protection sociale des communautés et ménages vulnérables pour une sécurisation de leurs moyens d'existence
- Pilier 2:** Renforcer la nutrition des ménages vulnérables
- Pilier 3:** Améliorer durablement la productivité agricole et alimentaire, les revenus des plus vulnérables et leur accès aux aliments
- Pilier 4:** Renforcer la gouvernance de la sécurité alimentaire et nutritionnelle

En tout, 21 priorités résilience sont issues de ces quatre piliers qui ciblent surtout trois différents groupes cibles qui sont le plus touchés et/ou vulnérables aux crises alimentaires et nutritionnelles :

1. **Agriculteurs vulnérables:** mal connectés au marché; en insécurité foncière; exposés aux aléas climatiques; face aux problèmes d'accès aux services sociaux de base, services agricoles et financiers
2. **Agro-pasteurs ou pasteurs, pêcheurs artisanaux:** confrontés aux mêmes contraintes et risques que les agriculteurs face à l'érosion de leur cheptel ou de la ressource halieutique
3. **Travailleurs pauvres (ruraux & urbains):** face manque/précarité de l'emploi; exposés au risque d'exploitation des réseaux criminels /terroristes.

En plus, un accent particulier sur: (i) enfants < 5 ans, (ii) femmes enceintes et mères allaitantes, (iii) femmes chefs de ménage, (iv) personnes âgées, (v) personnes vivant avec le VIH; etc.

Source: AGIR 2017 et présentation du Point Focal AGIR lors du « Dialogue Résilience » en 2018

¹ En l'absence d'une vue d'ensemble complète des interventions contribuant aux quatre axes des PRP (Point Focal AGIR prévoit une telle analyse depuis un certain temps), plusieurs partenaires ont été contactés dans le cadre de cette étude (voir Personnes de ressource en l'Annexe B). En fonction de l'objectif, leurs programmes/projets contribuent de manière sectorielle ou multisectorielle à l'amélioration des différentes capacités de résilience. Toutefois, une analyse et une classification détaillées de ces programmes/projets dépassent le cadre de la présente étude.

5. Conclusions et Recommandations

La réduction de l'insécurité alimentaire et nutritionnelle dépend fortement de la disponibilité, de l'accès et de l'utilisation appropriée d'aliments sûrs et sains tout au long de l'année (stabilité). Ceux-ci sont étroitement liés à la capacité de résilience effective aux crises - chocs graves et stress chroniques - et prévenir les graves impacts des

crises de sécurité alimentaire et nutritionnelle aux niveaux individuel, familial/ménage, groupement, communautaire, communal, régional et national. Dans ce chapitre, des conclusions et des recommandations concernant les capacités respectives identifiées sont formulées.

Conclusions	Recommandations
L'approche et les activités du projet SEWOH SANR au Mali contribue fortement à renforcer les capacités de résilience, surtout les capacités d'adaptation et de transformation des individus et leurs familles, mais aussi des groupements/communautés. Au niveau régional et national, un dialogue résilience et une contribution à l'institutionnalisation de bonnes pratiques résilience sous le chapeau des PRP a « timidement » commencé.	Renforcer les efforts vers une institutionnalisation de l'approche et des bonnes pratiques résilience à tous les niveaux se basant sur les dispositifs prévus dans le contexte du DNSAN et de la décentralisation.
Dans la région du projet au Nord du Mali, les crises alimentaires et nutritionnelles et leurs causes sont chroniques (souvent exacerbées par des chocs aigus) complexes, prolongées et multiples. Cette situation demande une flexibilité dans la réponse, surtout pour pouvoir réagir en cas de crise aiguë.	Assurer une flexibilité dans la réponse aux chocs aigus dans le contexte volatile qui prévaut dans la région du projet et ainsi éviter toute dégradation supplémentaire des capacités de résilience existantes des populations touchées.
Les interventions du projet dans le domaine d'Agriculture soutiennent les bénéficiaires à diversifier et renforcer leurs capacités économiques. Cependant, une analyse de la rentabilité/viabilité économique et de la durabilité de ces activités (en partie nouvellement introduites) reste à faire.	Analyser la viabilité et durabilités des activités économiques introduites pour assurer le développement de modèles économiquement rentables (« faire le vrai développement », comme un des participant à la discussion en groupe l'a appelé).
De même, presque toutes les activités du projet dépendent des ressources naturelles dans le Delta Intérieur du Niger. La gestion de ressources (terre, eau, humaines) dans le contexte fragile qui prévaut dans la région du projet de manière durable mérite une attention particulière pour (i) assurer la base économique (ii) prévenir des crises futures, y compris de conflits de ressources supplémentaires.	Analyser systématiquement et régulièrement si la gestion des ressources est adéquate pour assurer une durabilité ainsi que de prévenir de conflits et autres crises; analyser de facteurs aggravant la crise (niveau village) et évaluer les capacités des population (niveau village) à gérer les ressources dans ce sens.
Les capacités d'anticipation sont primordiales pour atteindre la résilience. Vu les risques d'inondations causées par des crues et/ou des pluies un soutien dans la préparation à ce type de chocs aigus est très important.	Sensibiliser toute la population à risque d'être touchée par des inondations pour faire des drainages de l'eau avant l'hivernage; sensibiliser les populations par rapport aux crises (préparer de places/enclos pour les animaux et identifier les maisons à risques; créer de ceintures/digues autour des périmètres; renforcer les digues de ceintures avant l'hivernage; aménager les périmètres plus loin du fleuve; sensibiliser pour que les gens n'occupent pas les voies de passage de l'eau. Comme les inondations peuvent être aussi une opportunité, aménager les mares pour collecter les eaux des pluies.

Conclusions	Recommandations
<p>Certains aspects « genre » sont déjà bien intégrés dans les capacités de résilience endogènes et celles soutenues par le projet. Cependant, cette approche peut toujours être renforcée.</p>	<p>Contribuer à mobiliser les hommes pour qu'ils aident les femmes à aménager les parcelles de cultures/jardinages; sensibiliser les hommes à accepter que les femmes sortent de la maison pour faire des activités qui renforcent leur propre résilience ainsi que celle de leurs familles; dans les contextes où les hommes donnent déjà la terre aux femmes pour le jardinage, la sécurisation de cette terre pour les femmes reste à faire</p>
<p>La culture de riz et le jardinage sont des capacités importantes dans la région du projet. Selon les personnes de ressource participant à l'étude, il existe encore du potentiel à améliorer et renforcer les techniques de culture pour rendre les systèmes de culture encore plus résilients.</p>	<p>Favoriser le respect du calendrier agricole (p.ex. développer les pépinières à temps); assurer l'approvisionnement en semences à priori améliorées (c'est-à-dire p.ex. adaptées aux trois saisons (hivernale, sèche froide, sèche chaude)) et insecticides (de priorité biologiques) à temps; creuser de nouveaux points d'eau et réhabiliter d'anciens; réaliser des formations pour approfondir les connaissances sur le jardinage adapté à la région.</p>
<p>Un deuxième pilier des moyens d'existence dans la région du projet est l'élevage. Apparemment, il existe aussi un potentiel dans ce domaine pour le rendre plus résilient.</p>	<p>Considérer un appui aux banques d'aliment de bétails (en commençant par étudier les modèles existants, p.ex. celui planifié avec ICRAF et l'approche comparable aux banques céréalières); sensibiliser et formater les concernés sur une gestion durable de cheptel qui est adaptée aux crises (déstockage – restockage, vente – achat aliments de bétail, dépendant de la situation de pâturage et de l'eau); anticiper le déplacement des éleveurs avec leurs troupeaux et construire des puits dans les zones de retrait (en considérant les risques de surexploitation des ressources naturelles!); appuyer la santé animale à titre préventif (campagnes de déparasitage, vaccinations)</p>
<p>Toute activités de développement des capacité résilience dans la zone du projet vise finalement la prévention de la l'insécurité alimentaire et nutritionnelle comme objectif de développement. Selon les bénéficiaires, il existe encore du potentiel de renforcer le soutien.</p>	<p>Continuer à appuyer la diversification des cultures, la transformation et conservation des aliments, l'entraide de la population (p.ex. par un soutien aux associations), la préparation de la bouillie enrichie pour les enfants, la sensibilisation de la population (surtout des femmes) à aller se soigner dans un centre de santé. Considérer à multiplier les superficies maraîchères avec système solaire</p>
<p>Vu le manque de perspectives perçu par les jeunes (et partiellement aussi par leurs pères et mères) dans la région du projet, la création des espaces de réflexion, de dialogue et d'actions pour les jeunes filles et garçons dans la région du projet pourrait être une opportunité de développer/d'introduire des perspectives plus réalistes (y compris des innovations) pour adapter et transformer les capacités des jeunes au niveau local.</p>	<p>Conduire une étude de l'« attractivité des zones rurales » (comparable à celle qui a été réalisée par ACF dans la région de Gao); lancer un dialogue avec les jeunes femmes et hommes pour essayer de développer des perspectives de survie et d'épanouissement dans la durée ... tout en reconnaissant les conditions cadres actuellement assez défavorables.</p>

Conclusions et recommandations générales

D'une manière générale, on peut affirmer que la conception et l'approche de la composante pays Mali du Programme Global contribuent à renforcer les capacités de résilience des personnes et des organisations de la société civile ainsi que des services gouvernementaux à plusieurs niveaux.

L'intégration d'une approche axée sur la résilience ne remplace ni ne réétiquette les concepts établis de gestion des risques et des conflits. Au contraire, l'intégration d'une optique de résilience dans la conception et la mise en œuvre des programmes et des projets apporte une valeur ajoutée en termes d'augmentation des effets des activités de projet en identifiant et en renforçant en particulier les capacités de résilience des personnes et des communautés au-delà de la simple capacité à absorber des chocs (comme les catastrophes naturelles).

Néanmoins, il est important de noter que la nature, la durée et la complexité des crises alimentaires et nutritionnelles ainsi que de leurs multiples causes dans la région de Tombouctou font peser une charge extrêmement lourde sur les capacités à tous les niveaux. En l'absence de solutions politiques aux conflits armés et d'approches transformatrices face aux phénomènes météorologiques extrêmes et aux changements climatiques, les mesures de développement par le biais de projets restent fragmentaires et la résilience ne sera possible que dans une mesure limitée.



Appendices

Appendice A: Agenda de la mission

Jour	Activité
Jeudi 02.05.	Briefing sécurité (Bureau Pays de la GIZ)
Dimanche 05.05.	Travail interne
Lundi 06.05.	Echanges et collecte de données avec Coop. Canadienne
	Briefing et échanges avec l'équipe SEWOH SANR
	Briefing avec Directeur du PASSIP
Mardi 07.05.	Atelier d'échanges et de collecte de données avec les partenaires de mise en œuvre (SEWOH SAR, WHH, ACF)
	Echanges et collecte de données (Point Focal résilience AGIR et Point Focal SUN)
Mercredi 08.05.	Atelier d'échanges et de collecte de données avec bénéficiaires, acteurs intermédiaires de Tombouctou, Equipe SEWOH SANR
Jeudi 09.05.	Echanges et collecte de données avec la FAO
	Echanges et collecte de données avec le PAM
	Echanges et collecte de données avec le CSA
	Echanges et collecte de données avec Coop. Suisse
Vendredi 10.05.	Echanges et collecte de données avec ECHO
	Echange de fin de mission avec l'équipe SEWOH SANR
Samedi 11.05.	Travail interne: Documentation et analyse des résultats de la mission Départ de Bamako
Dimanche 12.05	Arrivée en Allemagne

Appendice B: Personnes ressources

Nom, prénom	Organisation	Fonction
Mme. Nibishaka, Pamela	Ambassade du Canada au Mali	Première Secrétaire (Coopération)
Mme. Singaré, Diamilatou	Ambassade du Canada au Mali	Agent de développement/chargé de projets secteur: Sécurité alimentaire
M. Mehou, Raymond	GIZ Mali	SEWOH Sécurité alimentaire, renforcement de la résilience, Chef de Projet
M. Atayabou, Mohomodou	GIZ Mali	SEWOH Sécurité alimentaire, renforcement de la résilience, Coordonnateur
Mme. Sangaré, Tita	GIZ Mali	SEWOH Programme Global Sécurité alimentaire et nutritionnelle, renforcement de la résilience, Conseillère technique diversification alimentaire
M. Hörner, Jürgen	GIZ Mali	Cluster Agriculture Innovante et Sécurité Alimentaire Nutritionnelle (AgriSAN) et Programme d'appui au sous-secteur (PASSIP), Directeur
M. Keita, Mahamadou Namori	Ministère de l'Agriculture	Secrétaire Permanent du CONACILSS, Point Focal AGIR
M. Dembélé, Amadou	Ministère de l'Agriculture	Assistant an Secrétaire Permanent du CONACILSS
M. Bagayoko, Djibril	Ministère de la Santé	Point Focal Mouvement SUN au Mali
M. Touré, Modibo	FAO	Assistant du Représentant (Programme)
Mme Schaefer, Caroline	PAM	Responsable Unité de Programme
M. Amadou, Moustapha	PAM	Chargé de Programme Résilience & Protection Sociale
Mme DICKO, Diané	CSA	Commissaire Adjointe
M. Dembelé, Amadou	CSA	Chef de département Analyse prospective, planification, S&E
M. Fousseyni, Diarra	CSA	Chef de Cabinet
M. Diani, Djibril	Bureau de la Coopération Suisse au Mali	Chargé de Programme Développement Rural et Economies Locales
M. Cissé, Hamet	Bureau de la Coopération Suisse au Mali	Chargé de Programme Développement Rural
M. Esclatine, Antoine	DG ECHO, Bureau Mali	Assistant Technique Mali
Mme. Saurel, Marion (via Skype)	Délégation de l'Union Européenne au Mali	Chargée de programme resilience et nutrition

Participants à l'atelier du 07 mai 2019

6 personnes (4 hommes et 2 femmes):

- représentante de la Welthungerhilfe Mali
- représentants de l'Action Contre la Faim au Mali

(voir liste de présence disponible au niveau du projet)

Participants à l'atelier du 08 mai 2019

45 hommes et femmes

- bénéficiaires du projet
- représentants de collectivités territoriales de Tombouctou
- représentants des partenaires de mise en œuvre
- responsables du projet SEWOH SANR

(voir liste de présence disponible au niveau du projet)

Appendice C: Liste des questions directrices élaborée par l'équipe d'étude

Objectif: Comprendre la perception des personnes sur la résilience à différents niveaux (complété par une analyse de documents)

Compréhension résiliences des personnes:

Y-a-t-il un terme local pour résilience ?

Questions clés pour discussion avec les personnes affectées par des crises SAN:

- I. Quels sont les principaux chocs aigus et stress chroniques dont les personnes ont souffert les années passées? Quelles étaient leurs influences sur la SAN des personnes ?
- II. Qu'est-ce que la personne/les ménages ont fait pour réagir à ce(s) choc(s) et/ou stress ? Qu'est-ce que la communauté a fait ? Y'avait-il aussi d'autres acteurs qui ont réagi et quelles étaient leurs réactions ?
- III. Pourquoi étaient-ils en mesure de réagir ainsi (relatif à toute crise mentionnée avant) (quelle aptitudes/capacités leurs a permis de réagir ainsi) ?
- IV. Qu'est-ce qui aurait leurs permis de réagir encore mieux ?

V. Quelles étaient les surprises principales (positives et négatives) que les personnes ont perçues comme réactions aux chocs ou stress ?

VI. Une fois cette (ces) crise (s) est (sont) surmontée (s), Qu'est-ce que vous allez/voudriez faire pour vous préparer à la crise suivante ? Qu'est-ce que vous pensez que vous pouvez effectivement faire pour vous préparer ?

VII. Qui de plus doit réagir ? Qu'est-ce que cette personne/organisation doit faire spécifiquement ?

... pour entretien avec personne de ressources clé:

VIII. Qu'est-ce que vous faites/votre organisation fait pour soutenir des personnes à mieux réagir face aux crises SAN ? ... pour être mieux préparés ?

IX. Qu'est-ce que vous faites/votre organisation fait pour permettre aux personnes de prendre des décisions informées pour mieux réagir face aux crises SAN ?

Transversal: Considérer de différences/points communs spécifiques au genre!

Appendice D: Matrice d'analyse résilience Mali

	Faire face et répondre efficacement			
	Capacité d'anticipation	Capacité d'absorption (de résistance et récupération)	Capacité d'adaptation	Capacité de transformation
Définition	<i>... permet aux personnes et systèmes à être mieux préparées pour l'éventualité d'un choc spécifique par d'action proactive – aptitude de planifier à l'avance et monter de plans de contingence (ODI 2016)</i>	<i>... inclue une gamme de stratégies positives (ou néfastes) qui ont pour objectif de maintenir le bien-être des personnes, organisations et systèmes à un niveau donné face aux chocs – pas de changement de base des moyens d'existence des personnes (RLI basé sur OECD-DAC 2016)</i>	<i>... permet aux personnes, organisations et systèmes de gérer d'impacts de tendances à longue terme et changement – changement progressif et graduel de la structure des moyens d'existences des personnes (RLI basé sur OECD-DAC 2016)</i>	<i>... permet aux personnes, organisation et systèmes de gérer les causes fondamentales de chocs, facteurs de stress et changement – changement fondamental du statut politique/de pouvoir et économique des personnes et ainsi de la structure des moyens d'existence des personnes (RLI basé sur OECD-DAC 2016)</i>
Résultats	<i>Renforcement contribue à un état de préparation (preparedness) amélioré</i>	<i>Renforcement contribue à une stabilité améliorée</i>	<i>Renforcement contribue à plus d'options positifs pour un ajustement</i>	<i>Renforcement contribue à de changements systémiques structurels</i>
Niveau individuel				
Niveau ménage				
Niveau groupement				
Niveau communautaire				
Niveau commune				
Niveau région				
Niveau national				

Appendice E: Analyse des capacités de résilience, région du projet SEWOH SANR, Région de Tombouctou au Mali

Remarques: Réactions négatives sont soulignées et les capacités soutenues par le projet sont **indiquées en gras**.

	Faire face et répondre efficacement			
	Capacité d'anticipation	Capacité d'absorption (de résistance et récupération)	Capacité d'adaptation	Capacité de transformation
Définition	... permet aux personnes et systèmes à être mieux préparées pour l'éventualité d'un choc spécifique par d'action proactive – aptitude de planifier à l'avance et monter de plans de contingence (ODI 2016)	... inclue une gamme de stratégies positives (ou néfastes) qui ont pour objectif de maintenir le bien-être des personnes, organisations et systèmes à un niveau donné face aux chocs – pas de changement de base des moyens d'existence des personnes (RLI basé sur OECD-DAC 2016)	... permet aux personnes, organisations et systèmes de gérer d'impacts de tendances à longue terme et changement – changement progressif et graduel de la structure des moyens d'existences des personnes (RLI basé sur OECD-DAC 2016)	... permet aux personnes, organisation et systèmes de gérer les causes fondamentales de chocs, facteurs de stress et changement – changement fondamental du statut politique/de pouvoir et économique des personnes et ainsi de la structure des moyens d'existence des personnes (RLI basé sur OECD-DAC 2016)
Résultats	Renforcement contribue à un état de préparation (preparedness) amélioré	Renforcement contribue à une stabilité améliorée	Renforcement contribue à plus d'options positifs pour un ajustement	Renforcement contribue à de changements systémiques structurels
Niveau individuel et ménage	<ul style="list-style-type: none"> Echelonner les cultures Utilisation des cultures (riz, mil) adaptées Production maraichère Réparation des digues de protection Construction de digues pour contenir l'eau dans la mare et protéger les champs Migration (des hommes) saisonnière, régulière Réunion des maires pour initier une réflexion comment prévenir le dégât des cultures 	<ul style="list-style-type: none"> Distribution des aliments au sein de la famille → priorisation des filles et femmes Secours de la diaspora Décapitalisation/vente de bétail Echange (p.ex. lait contre céréales) Confiage du bétail (→ utilisation du lait) Migration temporaire des hommes (rarement tout le ménage) ailleurs au Mali ou hors du pays ... des fois avec animaux (<u>souvent d'animaux meurent en route</u>) Consommation des aliments de crises (qui étaient des aliments traditionnels avant) Suite à l'effondrement du puit: femmes arrosent avec l'eau du fleuve; achat d'un tuyau par les femmes (dans leur bénéfice) pour connecter le jardin à l'adduction d'eau au village Utilisation des résidus de riz pour alimenter le bétail Déplacement des animaux vers le pâturage (avec l'eau); grands éleveurs seulement Payer son/aliment de bétail (qui est devenu très cher) pour pouvoir garder (un petit nombre) de bétail à côté de la maison Mélanger du carton etc. avec l'aliment de bétail Donner du riz/paddy or sorgho aux animaux au détriment de l'alimentation des hommes qui peuvent demander l'aide des voisins en cas de faim Réaction à l'insécurité: cotisation par la population, contribution aux patrouilles, information/négociation avec tous les concernés sur les intérêts de la population <u>Réduction de la qualité de la nourriture</u> <u>Réduction de la ration journalière</u> <u>Vente des biens précieux des femmes (bijoux etc.)</u> <u>Vente des ustensiles de cuisine</u> <u>Endettement (auprès des commerçants à des coûts élevés)</u> Distribution des ustensiles de cuisine, de l'assistance alimentaire (voucher, cash-for-work), des kits d'hygiène 	<ul style="list-style-type: none"> Petit élevage (complémentaire) Elevage diversifié Augmentation de la culture de contre-saison Préparation d'un repas nutritifs (1-2x par semaine) pour femmes en commun avec propres cotisations Caisse villageoise des femmes pour s'entraider (p.ex. achat des médicaments) Transformation/conservation (séchage, avec vinaigre) d'oignon, de tomate, choux, carottes etc.) → Femmes qui assurent les frais de l'école, de la santé etc. Produits biologiques (insecticides), faits par les femmes: piment pilé, l'eau chaude sur les plantes, nem et savon sur les feuilles Promotion de l'agroforesterie Introduction des nouvelles technologies (production) et variétés Maraichage en hivernage Appui à la production (semences, formation) 	<ul style="list-style-type: none"> Migration permanente des hommes (Mali et hors du pays) A Goundam: pêche (change de métier) Diversification des moyens d'existence suite à l'appui à l'élevage (voir Encadré 1) <u>Idée des jeunes (selon les personnes ressources de la région): fonctionnaire ou migration</u>

Faire face et répondre efficacement				
	Capacité d'anticipation	Capacité d'absorption (de résistance et récupération)	Capacité d'adaptation	Capacité de transformation
Niveau groupement		<ul style="list-style-type: none"> • Motopompe pour évacuer l'eau des quartiers • Maire/jeunes pour creuser les canaux avec contribution personnelle du maire pour une compensation des travailleurs • Maire fait loger les gens dans les salles de classes • Voisins non-inondés accueillent les inondés et donnent à manger • Au moment des inondations: bras valides mobilisés pour renforcer les digues (banco, paille) pendant deux mois • Assistance en aliment de bétail • Reconstitution sociale de cheptel • Fonds d'urgence 	<ul style="list-style-type: none"> • Petite caisse de femmes pour entretenir les chèvres pour pouvoir utiliser le lait de chèvres pour les enfants • Banque d'aliments de bétail (200 femmes) • Appui à la production maraichère y compris cultures bio • Appui à la transformation et la conservation des aliments/produits agricoles (renforcement des capacités techniques, équipement) • Activités génératrices de revenus • Sensibilisation pour la nutrition 	<ul style="list-style-type: none"> • Soutien à l'autonomisation des groupements des producteurs • Accompagnement soutien à l'autonomisation des femmes dans leurs rôles SAN (activités génératrices de revenus, structuration, formation) • Plantation de fourrage et ensemencement de pâturage
Niveau communauté	<ul style="list-style-type: none"> • Alerte précoce à travers des SCAP-RU (Système Communautaire d'Alerte Précoce et de Réponse aux Urgences) 	<ul style="list-style-type: none"> • Maire: stock d'aliment de bétail qui est vendu en cas de crise • Confiage/reconstitution sociale du cheptel (don d'un petit animal) • Augmentation de l'entraide • Réhabilitation des points d'eau (potable et pour animaux) • Santé animale et formation des agents (vaccination, déparasitage) 	<ul style="list-style-type: none"> • Fonds de roulement pour achat de semences • Appui et suivi communautaire des GSAN (Groupes de Soutien à l'Alimentation et la Nutrition) • Construction des points d'eau • WASH: accès à l'eau potable, promotion des pratiques d'hygiène 	
Niveau commune		<ul style="list-style-type: none"> • Assistance d'urgence 	<ul style="list-style-type: none"> • Privilégier les femmes (jardins, volaille) 	
Niveau région	<ul style="list-style-type: none"> • Plan de contingence/de réponse • Campagnes de vaccination • Service élevage et agriculture: évaluation de la campagne pastorale et agricole • Surveillance pastorale • Renforcement des capacités du DRSAN • Dialogue résilience – niveau régional (planifié) • Réseautage, plaidoyer au niveau régional 	<ul style="list-style-type: none"> • Services techniques: évaluation rapide et élaboration des plans de réponses • Assistance d'urgence • Campagne de vaccination de rougeole en cas d'urgence 	<ul style="list-style-type: none"> • Privilégier les femmes (jardins, volaille) • Renforcement des capacités (services techniques) • Faciliter le lien santé – agriculture • Appui à l'organisation de foire de semences/équipement 	
Niveau national	<ul style="list-style-type: none"> • PRP (Priorité Résilience Pays) AGIR • Programmes et projets des partenaires de développement et de l'aide humanitaire du gouvernement et/ou des partenaires • Contributions aux PRP • Renforcement des capacités du DNSAN et de ses structures décentralisées • Dialogue résilience – niveau national • Réseautage, plaidoyer au niveau national 			

Références et documents complémentaires

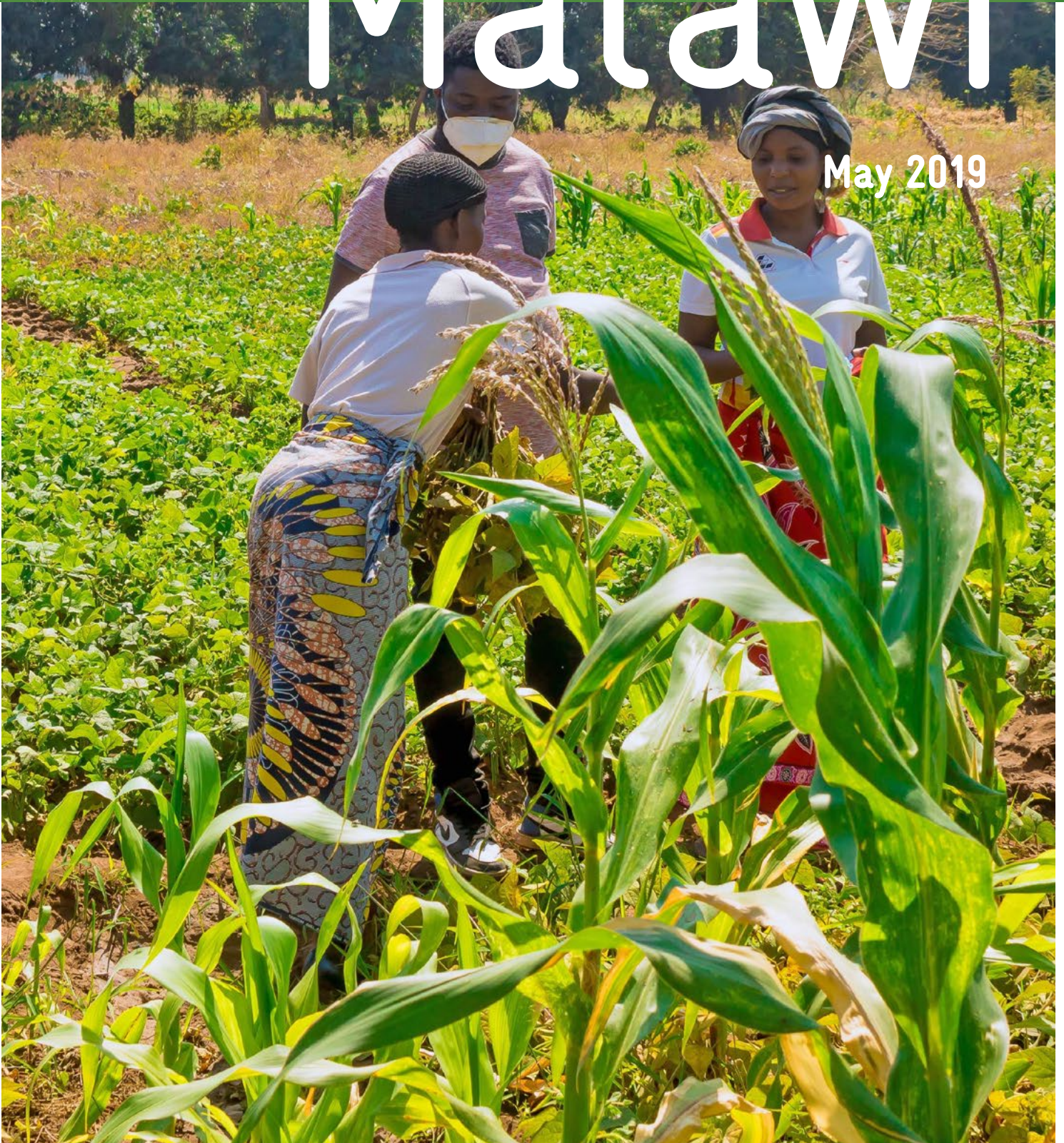
- AGIR (2017). Priorités Résilience Pays, Plan Stratégique 2018-2035 MALI. Rapport Final 2017
- BRACED, 2016: How Can Social Protection Build Resilience? Insights from Ethiopia, Kenya and Uganda. Authors: Martina Ulrichs and Rachel Slater. Working Paper December 2016
<http://www.odi.org/sites/odi.org.uk/files/resource-documents/11123.pdf>
- Concern Worldwide / Deutsche Welthungerhilfe / IFPRI 2009: The Global Hunger Index 2009 – The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality. By: K. v. Grebmer, B. Nestorova, A. Quisumbing, R. Fertziger, H. Fritschel, R. Pandya-Lorch, Y. Yohannes. Bonn, Washington D. C., Dublin, October 2009
<https://www.globalhungerindex.org/pdf/en/2009.pdf>
- Development Initiatives, 2018: 2018 Global Nutrition Report: Shining a Light to Spur Action on Nutrition. Bristol, UK: Development Initiatives, November 2018
https://reliefweb.int/sites/reliefweb.int/files/resources/2018_Global_Nutrition_Report.pdf
- ENN, 2015: Nutrition and Resilience. A Scoping Study by L. Gostelow, G. Desplats, J. Shoham, C. Dolan, P. Hailey. Version 1.0, Emergency Nutrition Network (ENN)
<https://www.ennonline.net/attachments/2450/Resilience-report-final.pdf>
- FAO, 2013: Resilient Livelihoods – Disaster Risk Reduction for Food and Nutrition Security Framework Programme. United Nations Food and Agriculture Organisation, 2013 Edition
<http://www.fao.org/3/i2540e/i2540e00.pdf>
- FAO, 2014: Strengthening the Links between Resilience and Nutrition in Food and Agriculture – Operational Recommendations to maximize the Nutritional Impacts of Resilience-building Interventions. A Discussion Paper.
<http://www.fao.org/3/a-i3777e.pdf>
- FAO, 2018: The State of Food Security and Nutrition in the World (SOFI) – Building Climate Resilience for Food Security and Nutrition.
<http://www.fao.org/3/CA1354EN/ca1354en.pdf>
- FAO / IDS, 2017: Social Protection and Resilience. Supporting Livelihoods in Protracted Crises and in Fragile and Humanitarian Contexts. FAO Position Paper. United Nations Food and Agriculture Organisation & Institute of Development Studies:
<http://www.fao.org/3/a-i7606e.pdf>
- FSIN – Food Security Information Network, 2019: Global Report on Food Crises 2019 – Joint Analysis for Better Decisions. April 2019
<http://www.fsinplatform.org/global-report-food-crises-2019>
- GIZ, 2015: Resilience Learning Initiative – Synthesis Report. Key Learnings from the Field and Implications for the Future. Comit Consulting on behalf of GIZ Sector Project Transitional Development Assistance, final draft 12/2015 (not published)
- GIZ, 2016: Enquête de Base Nutrition Mali. Pour le Programme Mondial Sécurité Alimentaire et Renforcement de la Résilience

- GIZ, 2018: Enquête de suivi/Follow-Up Survey (FUS) sur la Nutrition et la Résilience, MALI, REGION DE TOMBOUCTOU, Delta intérieur du Niger (not published)
- GIZ / Biodiversity International, 2017: Nutritional Baseline Survey Summary Report, Global Programme Food and Nutrition Security, Enhanced Resilience. Authors: Gina Kennedy, Gudrun Keding, Esther Evang, Giulia Rota Nodari and Lars Scheerer, Bonn, May 2017
- GIZ / BMZ, 2016: Boosting Resilience in Fragile Contexts – A Field-tested Approach of the Resilience Learning Initiative. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on behalf of the German Federal Ministry of Economic Cooperation and Development (BMZ) Bonn/Berlin 5/2016
- Hoddinott, John, 2014: Understanding Resilience for Food and Nutrition Security. 2020 Conference Building Resilience for Food & Nutrition Security. Conference Paper 8, May 2014
http://www.fsincop.net/fileadmin/user_upload/fsin/docs/resources/2020resilienceconfpaper08.pdf
- OCDE/OECD, 2014: Guidelines for Resilience Systems Analysis – How to Analyse Risk and Build a Roadmap to Resilience. OECD Publishing.
<https://www.oecd.org/dac/Resilience%20Systems%20Analysis%20FINAL.pdf>
- ODI / BRACED, 2016: How Can Social Protection Build Resilience? Insights from Ethiopia, Kenya and Uganda. Working Paper by M. Ulrichs and R. Slater, December 2016
www.odi.org/sites/odi.org.uk/files/resource-documents/11123.pdf
- Oxfam, 2017: The Future is a Choice – Absorb, Adapt, Transform – Resilience Capacities. H. Jeans, G.E. Castillo, S. Thomas. Oxfam International, January 2017
<https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620178/gd-resilience-capacities-absorb-adapt-transform-250117-en.pdf?sequence=4&isAllowed=y>
- SAP et autres, 2018: ENQUETE NATIONALE SUR LA SECURITE ALIMENTAIRE ET NUTRITIONNELLE, Septembre 2018 (ENSAN MALI). Rapport de synthèse, Version définitive. Octobre 2018
- SAP et autres, 2019: ENQUETE NATIONALE SUR LA SECURITE ALIMENTAIRE ET NUTRITIONNELLE, Février 2019 (Présentation PowerPoint)

Case Study

Malawi

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Abbreviations

ACPC	Area Civil Protection Committee
ADC	Area Development Committee
AEDO	Agriculture Extension Development Officer (District Level)
ANCC	Area Nutrition Coordination Committee
CDA	Community Development Assistant
COMSIP	Community Savings and Investment Promotion
DC	District Commissioner
DCPC	District Civil Protection Committee
DEC	District Executive Committee
DEHO	District Environmental Health Officer
DHS	Demographic and Health Survey
DMECC	District Monitoring and Evaluation Coordination Committee
DNCC	District Nutrition Coordination Committee
DNHA	Department for Nutrition, HIV and AIDS
DoDMA	Department of Disaster Management Affairs
DRMO	Disaster Risk Management Officer (District Level)
FAO	Food and Agriculture Organisation of the United Nations
FAW	Fall Army Worm
FGD	Focus Group Discussion
FNSP	Food and Nutrition Security Programme
FUS	Follow-up Survey
GVH	Group Village Head
HFIES	Household Food Insecurity Experience Scale
HSA	Health Surveillance Assistant
IDDS	Individual Dietary Diversity Score
IMR	Infant Mortality Rate
IPC	Integrated Phase Classification of the Famine Early Warning Systems Network
IPM	Integrated Pest Management
KII	Key Informant Interview
MAD	Minimum Acceptable Diet
MDD-W	Minimum Dietary Diversity Indicator for Women
MNSSP II	Malawi National Social Support Programme II
MoAIWD	Ministry of Agriculture, Irrigation and Water Development
MTR	Mid-term Review
MVAC	Malawi Vulnerability Assessment Committee
NBS	Nutrition Baseline Survey
NGO	Non-governmental Organisation
PLA	Participatory Learning and Action
PNHAO	Principal Nutrition, HIV and AIDS Officer (District Level)
RLI	Resilience Learning Initiative (supported by BMZ)
SBCC	Social Behaviour Change Communication
SEWOH	BMZ's Special Initiative 'ONEWORLD without Hunger'
SUN	Scaling-up Nutrition
TA	Traditional Authority
UBR	Universal Beneficiary Registry
VDC	Village Development Committee
VLAP	Village Level Action Plan
VSL	Village Savings & Loans

Executive Summary

'We are tired of funding emergencies!'

(DoDMA officer, May 2019)

Crisis can be a driver of change – and **resilience** is about enhanced capacities to actively and positively manage this change, fulfil human rights and enable wellbeing in spite of shocks and stresses. The application of the concept of resilience has steadily become more influential in food and nutrition security projects and programmes. The reason behind is that integrating a resilience lens into project and programme design and implementation adds value in terms of increasing the impact of project activities by particularly identifying and strengthening capacities of people and communities beyond the mere capacity to absorb crises. Resilience focuses attention on the capacities to overcome the adverse long-term consequences of – acute, slow-onset, chronic and recurrent – crises and not just of their immediate effects.

In contexts of recurrent crises, while humanitarian responses remain important in acute shocks, societies and governments need to develop capacities and long-term solutions to anticipate, absorb and adapt to foreseeable food and nutrition crises – and to transform structures and livelihoods. This is especially important in addressing chronic undernutrition and malnutrition since high levels of stunting indicate a loss of long-term developmental potential for the whole society. In other words, **strengthening resilience** aims at generating lasting social, economic and environmental change and at empowering people and their communities to develop and create new livelihood options given the prevailing crises risks.

GIZ's 'Global Programme Food and Nutrition Security, Enhanced Resilience' has commissioned this Multi-country Resilience Study to assess whether selected country packages have been contributing to improved capacities to react to food and nutrition crises and thus strengthened resilience, and to explore whether there are ways to even better react to crises at various levels. The **country package Malawi** was selected as one of three countries for this study.

The **approach and methodology** constitute a coherent analysis package. It comprises – in addition to the analysis of recent background literature and secondary data – of (i) defining resilience and resilience capacities, (ii) defining the scope of the study and answering the scoping questions for each context, (iii) analysing the food and nutrition security crises in the target areas, (iv) exploring bottom-up, analysing and reflecting resilience capacities at different levels using the Resilience Analysis Matrix, and (v) assessing the contribution of the country packages to improve anticipatory, absorptive, adaptive and transformative capacities to react to the crises. Conclusions are being extracted and operational recommendations provided on how to (further) strengthen resilience capacities of the target groups and how to (further) strengthen a respective strategy in the country package.

This study focuses on the Malawi country package's interventions in the districts of Dedza and Salima. In these districts, **causes and determinants of food and nutrition security crises** include recurrent natural disasters (droughts, flooding), water scarcity, pests, climate-related stresses, environmental degradation, limited livelihood options and a lack of income opportunities outside agriculture, insufficient economic diversification, a growing jobless youth population, and a lack of knowledge and practises regarding appropriate nutrition.

Predominant **resilience capacities** to react to the recurrent and foreseeable food and nutrition security crises identified at **individual and household level** relate to absorptive and adaptive capacities. There were very few anticipatory and transformative capacities identified that contribute to structural changes in people's livelihoods. In the absence of capacities and mechanisms to reduce seasonal hunger, short-run coping strategies may contribute to and extend the next cycle of hunger. The FNSP and other donor-supported schemes have strengthened in particular adaptive and anticipatory capacities. Fundamental changes regarding the structure of people's livelihoods were not observed. At the same time, many villagers seem to worry little about future crises as they seem to be sure that either NGOs, faith institutions or the government (with donor support) will step in and complement what is lacking.

At **community level**, very few absorptive capacities were identified relating to consuming food and using non-food items provided by external assistance. Some adaptive capacities to better manage impacts of progressive change in people's livelihoods were identified relating in particular to resource and disaster risk protection including soil conservation and flood protection measures. Anticipatory capacities were observed in some places and included applying for support from the government, e.g. for the construction of bore holes for irrigation in order to be able to cultivate crops when there is no, poor or erratic rainfall. Also, community gardening, producing and keeping seeds, and the production of small livestock mainly for income generation are seen as preparatory measures. With the support of NGOs, VSL and COMSIP groups have been established in some places – with mixed outcomes. As a transformative capacity, the establishment of *Care Groups* was identified: The structure in itself is an asset that allows to spread knowledge and information in the villages. Still, there is a number of challenges regarding commitment, quality and reliability of dissemination of messages – and regarding the translation of newly acquired knowledge into practice.

At **district level**, absorptive capacities identified again relate to consuming food and using non-food items provided by external assistance. Adaptive capacities to gradually and progressively changing livelihoods, were identified in Dedza only and included the management of watersheds and measures against soil erosion. There were some anticipatory capacities for the prevention of recurrent and expectable food and nutrition security crises identified which comprise the enhanced district level coordination, the established *District Disaster Risk Management Plans* and the assignment of responsibilities to the *District Civil Protection Committee* (DCPC) and the *Area Civil Protection Committee* (ACPC) to assess effects and impacts of crises. As a transformative capacity, the establishment of the positions of *Principal Nutrition, HIV/AIDS Officers* (PNHAO) at district level – emphasising the importance of nutrition for development in general, and specifically the significance of sustainably transforming nutrition-related knowledge and behaviour – with far-reaching responsibilities is considered. Impacts need to be closely monitored.

At **national level**, no absorptive and few adaptive capacities were identified. Instead, a number of anticipatory capacities were identified that include responsibilities, policies, plans and schemes being in place that are meant to prevent or prepare for potential food and nutrition security crises. These include among others the *Humanitarian Country Team*, the *Malawi Vulnerability Assessment Committee*, the *Standard Operating Procedures* (SOP) during emergencies, the DNHA coordinating actions to address chronic malnutrition under the *National Multi-sector Nutrition Policy 2018-22* and the *National Multi-sector Nutrition Strategic Plan 2018-22*. A few transformative capacities have been identified: One is the newly established Nutrition Cluster under DNHA, the other the introduction of the Universal Beneficiary Registry. The Land Act may also have a long lasting and far-reaching impact when being implemented.

Key **recommendations** relate to further strengthening existing capacities and develop currently absent capacities:

- One major element is to continue strengthening the *Care Group* model. As long as there are no alternatives in term of governmentally supported health and nutrition structures at community level, the existing *Care Group* system in itself is a major asset for further capacity development at community level but it needs further support to reach its full potential and its entire target group. Further assessment is recommended on the challenges, effectiveness, impact and sustainability of *Care Groups*.
- Multi-sectoral cooperation and accountability of stakeholders has a high potential and needs to be strengthened – also at national level – to allow for transformation of livelihoods (e.g. integrated homestead farming IHF) and for an inclusive approach. Effective coordination of donors and programmes is necessary to strengthen civil services, their responsiveness, and accountability.

- Make use of the potential of the new posts of the *Principal Nutrition, HIV and Aids Officers* (PNHAO) for transforming and advancing nutrition-related development at district and community level – in particular with regard to facilitating multi-sectoral coordination and implementation of nutrition(-related) programmes. In particular at community level, the prevention aspect seems to need convergence with a number of actors, especially those that implement nutrition-sensitive and nutrition-specific interventions, women's education and empowerment. Here, the *Traditional Authorities* (TA) and *Village Chiefs* play a crucial and critical role – and the (PNHAO) should ideally seek to strengthen collaboration with them. As part of the *Care Group* structure, the already existing sub-district *Area Nutrition Coordination Committees* (ANCC) on TA level, and the *Village Nutrition Coordination Committees* (VNCC) on *Group Village Head* (GVH) level seem to be a promising entry point for the capacity building of these influencing entities. Further elements of the structure such as the *Community Leaders Action Group in Nutrition* (CLAN) and the *Area Community Leaders Action Group in Nutrition* (ACLAN) should be consistently borne in mind and involved when supporting PNHAO's office.
- Promote and systematically support village level development planning through the nutrition-sensitive *Village Level Action Planning* (VLAP) approach. Ensure that the approach is participatory and inclusive and working to identify community needs and solutions. This is key to the success of resilience development. VLAPs have been identified as a high potential instrument to strengthen adaptive, transformative and anticipatory capacities of target groups, of intermediaries and beyond, and to enable empowerment, social accountability and ownership.
- The transparency, accountability and performance of (public) services with regard to food and nutrition security can be explicitly improved through the introduction and use of *Community Score Cards* (CSC). Ideally in combination with the VLAPs, CSCs can contribute to a transformation of the way decisions are made and implemented in the communities.
- Mixed impressions were gathered on effects and impacts of VSL (*Village Saving & Loan*) and COMSIP (*Community Savings & Investment Promotion*) groups. Answers received from interviewees hint at COMSIP having more potential for reaching critical and sustainable impacts on household income and access to credit due to group members being longer and more closely accompanied in terms of training on financial literacy, business management, group organisation, value chain and nutrition. Thus, it would be important to assess their strengths and (potential) weaknesses before intensifying collaboration with of these structures.
- Community resilience can be advanced through the development, creation and rehabilitation of productive assets, including gardens, water and watershed management structures. Public investment in irrigation systems would have a direct impact. Creating agriculture-related infrastructure through safety-net schemes has the potential for a dual effect: providing short-term employment and income opportunities in lean seasons, creating lasting structures to stabilise agriculture-based livelihoods and increasing agricultural production.
- Anticipatory capacities need to be further systematically addressed through awareness raising and through promotion of technical knowledge, e.g. regarding safe storage of food grains, pulses (with regard to post-harvest losses, aflatoxin etc), animal feed, rainwater harvesting, water conservation activities, and access to government services and transfers.
- The use of the *Household Food Insecurity Experience Scale* (HFIES) will allow for systematically analysing programme effects at household level and support programme steering.

The objective of strengthening resilience is to generate lasting political and social change in order to empower people and their communities to develop and create new livelihood options given the prevailing crisis risks.

Resilience is fundamentally about transformation – changing the very basis on which individuals and households can make decisions that influence their capacity to deal with stresses and shocks.

(ENN 2015)

1. Introduction

The German Federal Ministry for Economic Cooperation and Development (BMZ) aims at making a significant contribution to the reduction of poverty and hunger. Within its special initiative *ONE WORLD – No Hunger* it particularly strives to improve food and nutrition security, and to enhance people's resilience to food and nutrition crises. On these grounds, GIZ has been commissioned to implement the 'Global Programme Food and Nutrition Security, Enhanced Resilience' – hereafter referred to as Global Programme – in twelve countries in Africa and Asia. The objective of the programme is to improve food and nutrition security of women of reproductive age and children below two years of age through a food-based and multi-sectoral approach in the selected countries.

Malawi is one of the countries supported by the programme. The country has made progress to reduce malnutrition in recent years. Based on data from the *Malawi Demographic Health Survey* (DHS), stunting (low height-for-age) of children under 5 years decreased from 47% in 2010 to 37% in 2015/2016. According to findings of the *National Micronutrient Survey*, micro-nutrient deficiencies have decreased, especially in the case of Vitamin A (Govt of Malawi 2017a). Yet, only 8% (19% in 2010) of children of the age of 6 to 23 months meet the minimum acceptable dietary standards (see latest DHS). And according to the recent *Cost of Hunger in Africa Malawi Report*, 23% of all child mortality cases are associated with undernutrition (UNECA/WFP 2015). The situation worsened during 2015 and 2016 when the agricultural growing season was negatively affected by El Niño, which caused late rains and prolonged dry spells (MVAC 2016). Despite decades of implementing governmental programmes and interventions, about 52% of the population still live below the national poverty line, about 20% are considered ultra-poor (MVAC 2018), and undernutrition and major nutritional deficiencies persist.

Within the framework of the Global Programme, the Malawi 'Food and Nutrition Security Programme' (FNSP) has been established to improve the food and nutrition situation of food and nutrition insecure people, in particular of women of reproductive age, infants and young children (6 - 23 months) in the two districts of Dedza and Salima. The FNSP focuses its interventions on (1) increasing dietary diversity, (2) building the institutional capacities of the *District Nutrition Coordination Committees*, and (3) feeding back and sharing lessons learnt with national nutrition fora and within the *Scaling-up Nutrition* movement and its technical working groups.

Beginning of 2019, the Global Programme commissioned this Multi-country Resilience Study in order (i) to assess whether selected country packages have been contributing to improved capacities to react to food and nutrition crises and thus strengthened resilience. And (ii) to explore whether there are ways to even better react to crises at individual, household, community and governmental level. After conducting a respective pilot study in India and analysing the results, the assessment for the Malawi study commenced in May 2019. This Malawi Country Report is part of the Multi-Country Resilience Study Report, and it is designed also to be used as a stand-alone document. Therefore, some replications and recurrences from the main report – in particular with regard to the methodology – are inevitable.

2. Case Study Malawi – Objectives, Approach and Methodology

2.1 Objectives

The objective of the Multi-country Resilience Study is to assess whether selected country packages of the Global Programme have been contributing to improved capacities to react to food and nutrition crises and thus strengthened resilience. Also, it aims to understand the ways the Global Programme can contribute in enhancing resilience in the respective country context. Selection criteria for the country packages are vulnerability of the target group and project area to recurrent shocks, conflicts and crises and the capacity and willingness of the project team to support the mission. In the context of the Malawi country package – with no explicit objective and mandate of strengthening resilience so far – the aim is to learn whether the current food and nutrition interventions have an outcome and/or impact and/or the potential to build up and strengthen resilience capacities at target group and intermediary level and possibly beyond. Operational recommendations at country package level are meant to contribute to a better understanding of how to enhance resilience within the scope of food and nutrition security interventions.

The specific objectives of the country case study Malawi are:

- to assess the situation in terms of resilience and the contribution of food and nutrition security interventions of the country package Malawi to strengthen capacities and improve resilience strategies to react to food and nutrition crises, and
- to provide operational recommendations on potential entry-points to further strengthen resilience strategies at different levels including policy level.

2.2 Approach and Methodology

Based on the experiences and learning gathered in the BMZ supported *Resilience Learning Initiative* (RLI) (GIZ/BMZ 2016), the study includes the analysis of background literature and secondary data with recent insights in successful measures to strengthen resilience, the application of the methodology as developed during the pilot study in India, a reflection and analysis of resilience capacities in the target areas and of the responses related to strengthening resilience of the respective country package. In brief, the study includes:

- Methodological elements (Chapters 2.2.1 - 2.2.5):
 - Defining resilience and resilience capacities
 - Defining the scope of the study – answering the scoping questions
 - Bottom-up exploration and analysis of resilience capacities at different levels
 - Data collection and analysis tools
 - Description of the course of action
- A description of the country package Malawi (Chapter 3)
- An analysis of the food and nutrition security crises in the target area and of the contribution of the country package to improve anticipatory, absorptive, adaptive and transformative capacities to react to the crises (Chapter 4)
- Extracting conclusions and providing operational recommendations on how to (further) strengthen resilience capacities of the target groups and how to (further) strengthen a respective strategy in the country package; if relevant, recommendations for further studies and analyses (Chapter 5)

This approach constitutes a coherent analysis package. It is meant to help project staff, target group representatives and project partners to understand the interlinkages of different crises and their influences on the food and nutrition situation. In addition, it allows for effective and efficient assessment of existing and potential resilience capacities at different levels and options for further strengthening the resilience of target groups.

2.2.1 Defining Resilience and Resilience Capacities

This study uses the resilience definition developed by the RLI: ‘**Resilience** is the ability of people and institutions – whether individual, household, local communities or states – to cope with and quickly recover from shocks caused by fragile situations, crisis, violent conflict, economic crisis or extreme natural events, and to adapt to chronic stress or transform their means of living or functions without compromising their medium to long-term prospects.’ (GIZ / BMZ 2016).

In this study, **crises** are understood as any events that are going (or are expected) to lead to an unstable and dangerous situation affecting an individual, group, community, or whole society (OECD 2014). This comprises shocks and stresses. **Shocks** are defined as sudden events with an important and often negative impact on the vulnerability of a system and its parts (e.g. floods, sudden death of family member). Shocks represent significant negative (or positive) impacts on people’s means of living and on the functioning of a state. **Stress** is defined as a long-term trend, weakening the potential of a given system and deepening the vulnerability of its actors (e.g. changing rainfall patterns, environmental degradation) (OECD 2014).

Broadly used resilience concepts use three **resilience capacities** to describe and analyse people’s, organisations’ and institutions’ reaction to crises. These resilience capacities have been defined as follows:

- **Absorptive** (coping and recovery) capacities include a range of harmful to positive coping strategies that aim at maintaining people’s, organisations’ and systems’ wellbeing at a given level in the face of shocks – with no basic changes to people’s livelihoods (RLI 2016 based on OECD DAC). Strengthening positive absorptive / coping and recovery capacities contributes to enhanced stability.
- **Adaptive** capacities enable people, organisations, and systems to manage impacts of long-term trends and change – progressive and gradual change in the structure of people’s livelihoods (RLI 2016 based on OECD DAC). Adaptive capacities enable individuals, households and communities to improve their livelihoods through asset-building and income generation activities that are less vulnerable to crises. Strengthening of adaptive capacities contributes to more positive options for adjustments.
- **Transformative** capacities enable people, organisations, and systems to manage the underlying causes of shocks, stressors and change – a fundamental change in the political/power and economic status of people, and hence, the structure of people’s livelihoods (RLI 2016 based on OECD DAC). Strengthening of transformative capacities contributes to structural or systemic changes.

After a thorough review of new resilience-related research and development, the study team expanded the resilience analysis framework further by including anticipatory capacities (ODI/BRACED 2016) as a fourth analysis category. This is also in line with the FAO definition above and highlights the importance of ‘preparedness’ in the face of recurrent shocks threatening the food and nutrition security of the target groups. Thus, the three capacities as defined by OECD and the RLI have been complemented by:

- **Anticipatory** capacities, which enable people and systems to be better prepared for the eventuality of a specific shock through proactive action. This includes the ability of planning in advance and setting up ‘contingency plans’ (ODI / BRACED 2016). Strengthening of anticipatory capacities contributes to improved preparedness.

Whilst resilience and resilience capacities can be defined this way, it is necessary to recognise that in a given context women and men, communities in the target areas and relevant institutions have their own experience and ways of describing resilience and the capacities that lead to resilience. These specific perceptions have been the core of all further assessment and analysis – they need to be understood and integrated into project and programme design and implementation in (recurrent) crises contexts.

2.2.2 Defining the Scope of the Study

This study also uses the Scoping Questions as developed by the RLI (GIZ/BMZ 2016). To determine the scope of this study in the context of the Malawi country package, the Scoping Questions have been answered as follows:

- **Resilience of what?**
 - Food and nutrition security system of people in the project area in the two districts of Dedza and Salima

- **Resilience to what?**
 - Food and nutrition security crises (insufficient dietary diversity, unacceptable diets of young children, insufficient access to food) resulting from acute shocks and chronic stresses, e.g. droughts, floods, earthquakes, economic crises, climate variability and change, political unrest, social unrest, technological risks
- **Resilience for whom?**
 - Women of reproductive age, infants and young children (6-23 months of age) in their households and communities in the project area in the districts of Dedza and Salima
- **Resilience over which time frame?**
 - Until March 2023, when the Malawi country package will end, and beyond
- **Resilience with respect to what?**
 - Improved dietary diversity, more children with minimum acceptable diet, and improved access to food (correspondingly to the objectives of the FNSP) even in times of crisis

2.2.3 Bottom-up Exploration & Analysis of Resilience Capacities at Different Levels

The core of the approach is the bottom-up exploration – **listening-to-people** approach – of existing resilience capacities to withstand and deal with food and nutrition risks and crises at individual, household, community, and if possible, at district and/or national level. People are inherently creative: they usually have developed coping and adaptive strategies in the past and are always trying new ideas and new activities. Our approach recognises existing capacities to react to crises, stress and change – in every context there will be new opportunities emerging. The point is to listen to the affected people in their communities first to identify their capacities and how external assistance can strengthen these capacities to become (more) resilient towards future crises. The focus is strictly on capacities and how to strengthen them – not on gaps – so that existing needs are better met, and human rights are progressively realised.

For exploring and analysing crisis patterns and resilience capacities at different levels, **qualitative methods** had been used: four Focus Group Discussions with crisis-affected people were conducted in four villages in the project area, and number of key informants were interviewed at community, district and national level – see list of resource persons and key informants in Appendix B – to get their point of view to complete the information received from the community members. A briefing meeting and discussions were conducted with staff and partners in Lilongwe at the beginning and at the end of the field work.

Core of the methodology is the analysis based on the **Resilience Analysis Matrix** originally developed by the RLI and augmented by the study team. In order to explore and grasp the diverse existing capacities and to relate them to the analysis matrix, a number of **Guiding Questions** for the Focus Group Discussions and Key Informant Interviews have been developed. Additionally, secondary data has been analysed taking Nutrition Baseline Survey and Follow-up Survey (FUS) results into consideration for interpretation of findings.

The **analysis** included:

- an **assessment of crises patterns**, fragility and vulnerability affecting food and nutrition security of the target groups taking Baseline Survey and FUS results of the country package into consideration for reflection and interpretation of findings,
- an **assessment of existing resilience capacities** to react to food and nutrition risks and crises at individual, household, community and – if possible – at district and/or national level using the Resilience Analysis Matrix,
- an assessment of the **contribution of the country package** to improve anticipatory, absorptive, adaptive and transformative capacities.

Based on the results of the analysis, **operational recommendations** on how to (further) strengthen resilience capacities of the target groups, and how to (further) strengthen a respective strategy in the country package have been extracted, and recommendations for further studies and analyses have been provided.

2.2.4 Data Collection and Analysis Tools

The tools used for gathering and analysing the data for this study were:

- the List of Guiding Questions developed by the study team (see Appendix C)
- the Resilience Analysis Matrix (see chapter 4.3 for the short version and Appendix D for the comprehensive version)

2.2.5 Course of Action

The course of action of the pilot study included the following steps (for the overall timeline and a list of resource persons / key informants, see programme of the mission in Appendix A and B):

- Briefing with the FNSP team and the partners at the *Department of Nutrition, HIV and AIDS* (DNHA), Ministry of Health and Population, in Lilongwe
- Briefing with the staff of the implementing NGOs in the two districts of Dedza and Salima
- Focus Group Discussions with women and men in their respective communities in Dedza and Salima in the villages of: **Chinkombero** and **Nkhungumbe** (both TA Kamenyagwaza), **Dedza District**, **Mtende** and **Chindungwa** (both TA Pemba), **Salima District**.
- Key Informant Interviews with village authorities and representatives, government staff at district and national level, as well as with FNSP partners.
- Analysis of findings and first drafting of report format.
- Debriefing and discussion with FNSP team on the preliminary results of the assessment and analysis.
- Drafting the report.

3. Country Package Malawi: The Food and Nutrition Security Programme (FNSP)

Within the Global Programme, the FNSP aims to improve the food and nutrition security situation of food and nutrition insecure people, in particular of women of reproductive age and children under two years of age in the districts of Dedza and Salima. The target areas are dominated by subsistence farming, with few income-generating opportunities and limited access to services. Many households are trapped in the vicious cycle of poverty, HIV and AIDS and food insecurity. The FNSP focuses on the following intervention areas: (i) improvement of knowledge, attitudes and practices regarding nutrition and hygiene, (ii) strengthening the resilience of households and communities with regard to food and nutrition insecurity, (iii) strengthening design and coordination of nutrition-sensitive interventions, and (iv) feeding back lessons learnt into the bilateral portfolio and anchoring scalable approaches in national processes. So far, the FNSP has not specifically aimed at improving quantitative access to food – which is an important focus of the *Household Food Insecurity Experience Scale* (HFIES) – but on diversifying food and diets.

Measures include nutrition education and advocacy in community-based *Care Groups*, Village Savings and Loans groups, promotion of and support to participatory *Village Level Action Planning* (VLAP) with a bottom-up planning approach from household, village to district level, as well as support to and counselling of governmental service providers at national and district level. Regular exchange visits and joint meetings facilitate learning and sharing of experiences.

Through the *Care Group* model, community volunteers work together in groups and conduct trainings to other community members on nutrition and health. The model is based on peer to peer counselling. Training modules include infant & young child feeding practices, exclusive breast feeding, hygiene & sanitation, agricultural production & irrigation, food processing, utilisation and storage, as well as manure making. In addition, implementing partners provide inputs to the beneficiary households such as energy-saving stoves, fruit and tree seedlings, legumes and vegetable seeds.

Since its start, FNSP has reached approximately 37,000 households directly in the two districts. Almost 450 basic service providers have been trained to deliver knowledge on nutrition practices, hygiene and sanitation as well as on agriculture practices. Mothers confirm enhanced knowledge on dietary diversity, child feeding practices, hygiene and sanitation as well as on signs and prevention of malnutrition. Through active nutrition counselling, women's dietary diversity and children's diets have improved. Many beneficiaries participate in *Care Groups* and a quarter of them take on active roles within their community. Trainings in agriculture practices are supported by the distribution of vegetable seeds, tree seedlings and livestock through implementing partners. Additionally, the establishment of a nationwide health service hotline – *Chipatala Cha Pa Foni*, Chichewa for 'Hospital by Phone' – has been supported by the FNSP and currently advises up to 2,000 people monthly on adequate nutrition.

4. Findings

The nutrition situation in Malawi has improved over the last decades but major challenges remain: Continuous food and nutrition insecurity is reflected by the high national prevalence of stunting (low height-for-age) of 37% among children under five years of age. Although this is a significant decline from 47.1% in 2010/11, approximately 1.1 million children under five years of age are still stunted. The Government's medium-term target is to reduce stunting rates to 31% by 2022. Considerable 12% of children are underweight (low weight-for-age), more commonly in rural than in urban areas according to the latest *Demographic and Health Survey* (DHS) 2015-2016. The prevalence of wasting (low weight-for-height) as a symptom of acute malnutrition though is 3% among children which is lower than the global average of 7.7% (UNICEF 2019). As of 2016, only 7.8% of children aged 6 to 23 months seem to receive a diet that meets the minimum nutritional requirements for adequate growth and development. Overall, 63% of the children of 6 to 59 months are anaemic – with anaemia being more common in children from the poorest households and those whose mothers have no education (Govt of Malawi/ICF 2017, FSIN 2019). All of this points to a need to improve *Infant and Young Child Feeding* (IYCF) practices.

By comparison, the results of the *Fourth Integrated Household Survey* 2017 show that 73% of the population felt they did not have enough food in the twelve months prior to the survey. A higher proportion was reported for households in rural areas (79%) as compared to those in urban areas (48%). Households who have no education are highly affected by crises situations (80%) as compared to those who had primary, secondary and tertiary education (68%, 52% and 19% respectively) (Govt of Malawi 2017b). It is worthwhile noting, that during the last decade the rate of households that feel to have very low food security increased continuously from 31% in 2010 to 40% in 2013 to 56% and 73% in 2015/2016 (World Bank 2019).

Additionally, it can be concluded that Malawi's undernourishment rate increased between 2013 and 2015, and between 2015 and 2017 coinciding with the 2015 flooding and 2015/16 drought

(Concern/DWHH 2019). Again, at the height of the last lean season from January to March 2019, recurrent and foreseeable climate-related crises have affected an estimated 3.3 million people – an increase of 1.1 million people from the previous figures from July to September 2018 in need of assistance to save lives, protect livelihoods, reduce food consumption gaps and acute malnutrition (FSIN 2019, OCHA 2019). The primary responsibility for organising relief efforts is with the *Department of Disaster Management Affairs* (DoDMA).

A *National Resilience Plan* has been drafted by DoDMA under the Office of the Vice-President in August 2016 with the sub-title 'Breaking the Cycle of Food Insecurity in Malawi'. The ensuing *National Resilience Strategy* (NRS) from 2018 seems to be in the stage of revisions and approval. The overall objective is to make Malawi resilient to economic and environmental shocks for sustained growth and food security. The NRS is supposed to guide the design and implementation of resilience programmes aimed at breaking the cycle of food insecurity and chronic vulnerability to climate change and disasters until 2030.

Adequate safety nets are important to successfully strengthening resilience in a society by improving human capital, protecting the poor against (recurrent) crises and promoting strategies for growth and development. There is evidence that safety nets in Malawi, especially social cash transfers, are an effective investment to enhance household resilience. The recently approved *Malawi National Social Support Programme II* (MNSSP II) is intended to facilitate the creation of a safety net system that can better respond to recurrent crises. Also, Malawi's *Social Cash Transfer Programme* has had strong and positive impact: A recent review concluded that it had strong outcomes in terms of equity, resilience and long-term opportunities – overall, beneficiaries increased their total consumption by 24% and food consumption by 23%, households were able to build-up their resilience to economic crises by investing more in productive and durable assets. The study also found that the *Social Cash Transfer Programme* has encouraged the development of human capital (World Bank 2017b).

Nutrition is officially high on the agenda of the Malawian Government. The *Malawi Growth and Development Strategy III* (MGDS III) recognises that eliminating stunting and other forms of malnutrition is necessary for inclusive and sustained development. Considering that the causes of malnutrition are multi-faceted, the Government envisages a multi-sectoral approach that involves several key sectors such as health, education, social welfare and agriculture. The *Department of Nutrition and HIV/AIDS* (DNHA) in the Ministry of Health and Population is responsible for providing oversight, strategic leadership, policy direction, coordination, resource mobilisation, capacity building, quality control and monitoring and evaluation of the national nutrition response.

4.1 Manifestation of Food and Nutrition Security Crises in Dedza and Salima

The prevalence of stunting is 43% in Dedza – which is above the national average of 37% – and 35% in Salima. Prevalence of wasting is relatively low with 2.6% in Dedza and 1.4% in Salima (Govt of Malawi/ICF 2017). Overweight and obesity, hypertension, and diabetes among adults are also prevalent (The Lancet 2018). The FNSP conducted a baseline survey in its target areas in 2015 (GIZ 2016) and a Follow-up Survey (FUS) in 2018 (GIZ 2018). The results suggest that a majority of women and children in Dedza and Salima are not able to achieve (micro-)nutrient adequacy: The meal dietary diversity (*Individual Dietary Diversity Score*, IDDS) for children was assessed to be 3.0 (out of seven) food groups in Dedza and 3.2 in Salima at the time of the baseline survey, and 2.9 in Dedza and 3.5 in Salima at the time of the FUS.

The data collected for the *Minimum Dietary Diversity* indicator for women (MDD-W) showed that only 27.3% (15.6% Dedza, 30.6% Salima; baseline survey) to 36.4% (27.1% Dedza, 47.2% Salima; FUS) of the women were able to consume the recommended five or more (out of ten) food groups. Whereas the prevalence of anaemia in women was 25.3% in Dedza and 31.4% in Salima, it was considerably higher in children with 59% in Dedza and 72% in Salima (Govt of Malawi/ICF 2017). The share of the children receiving

the *Minimal Acceptable Diet* (MAD) increased between 2015 and 2018 considerably: from 22.9% in Dedza and 36.5% in Salima (baseline survey) to 36% in Dedza and 49.2% in Salima (FUS). Nevertheless, the figures suggest that many children still are receiving neither a minimum feeding frequency nor a minimum dietary diversity.

Also, the severity of food insecurity at household level was assessed in Dedza and Salima and with the *Household Food Insecurity Experience Scale* (HFIES) showing that the proportion of severely food insecure households declined from 66.7% in Dedza and 58.5% in Salima (baseline) to 36.4% in Dedza and 48.2% in Salima three years later (FUS). In both districts together, the share of food secure households increased from 2.8% at the time of the baseline survey to 7.2% at the time of the FUS. The proportion of moderately or severely food insecure households in both districts together was 87% at the time of the baseline survey and about 76% at the time of the FUS.

Between October 2018 and April 2019, 23% of the population in Dedza and 33% in Salima were estimated to be dependent on humanitarian assistance, according to a report of the *Malawi Vulnerability Assessment Committee* (MVAC 2018).

4.2 Causes and Determinants of Food and Nutrition Security Crises in Dedza and Salima

Recurrent droughts and floods, low household incomes, environmental degradation and deforestation, lack of agricultural and livelihood diversification, limited irrigation development, HIV and AIDS, limited supply of health and WASH services, and rapid population growth are among the underlying causes of malnutrition in Malawi. Only about 11% of the population have access to electricity, infrastructure development and adoption of new technologies are low. Corruption levels remain high with *Transparency International* ranking Malawi at 120/180 economies in 2018 (TI 2018).

Deep-rooted gender imbalances as well as low levels of maternal education and literacy disadvantage many women especially in rural areas, further compromising their and their children's nutritional status.

In the 12 months preceding the IHS4, 99% of households experienced at least one crisis. Among those most frequently reported were high prices for food (68%), irregular rains (58%), high costs of agricultural inputs (46%), drought (36%), low prices for agricultural outputs (13%) (Govt of Malawi 2017b). More than a third of all households lack the resources to cope with and recover from consecutive shocks which further increases their vulnerabilities to hazards (FSIN 2019).

Recurrent Natural Disasters and Pests

Malawi is particularly exposed and vulnerable to droughts and floods – and intensity, duration, and frequency of weather-related shocks are likely to increase as a result of climate change. Over the past five decades, Malawi has experienced more than 19 major floods and seven droughts (Govt of Malawi 2019). The last major floods of 2015 were followed by a drought in 2016/2017 that affected 6.5 million people, over a third of the total population. Weather-related and climate shocks are key risks for the livelihoods of the majority of small-scale farmers – and the situation is worsened in many parts of the country by poor watershed management, absence of water regulating infrastructure, and human encroachment into high-risk flood zones. The districts of Dedza and Salima are highly vulnerable to the combination of consecutive droughts mixed with strong floods.

When disasters hit, production and distribution systems get disrupted, decreased production pushes up prices of maize and other staple foods, the purchasing power weakens squeezing household food access. Caregivers can face major challenges in providing children diverse foods that cover key micronutrients (FSIN 2019). During the so-called lean seasons between October and April when food stocks of the last harvest are depleted, and the new yield has not been harvested yet – a yearly recurring phenomenon – households increase their reliance on market purchases earlier than normal. But poor subsistence farmers generally lack the financial means to buy sufficient food. This development increases the vulnerability of many Malawians since most of Malawi's economy and livelihoods depend directly on small-scale and rain-fed agriculture.

Overall good yields in the last two years have had a stabilising impact on food security. The number of people in crisis or worse (IPC phase 3 or above) decreased to 3.3 million in late 2018 (FSIN 2019). But again, on 8 March 2019, the Government of Malawi declared a State of Disaster following persistent rains which led to severe flooding across some districts in southern Malawi: 15 districts including Dedza and more than 800,000 people were affected.

Additionally, the damage from the **Fall Armyworm** (FAW) to agricultural yields has been significant since December 2016 when the agricultural pest made its way into Malawi. Since then, it spreads quickly due to short reproductive cycles and its ability to travel long distances within short time. The FAW has affected staple crops like sorghum, millet, and especially Malawi's primary staple crop maize as well as cash crops like cotton. In 2017, more than one million families were affected by infestation of the FAW. Roughly 5% of 2017's non-irrigated maize was destroyed by the FAW – the 2018/19 agricultural production season has seen a substantial reduction in pest infestations and attacks so far (MoAIWD).

Malawi's maize dominated mono-cropping provides ideal conditions for the FAW and other pests. It is estimated that the FAW could destroy as much as 20% of the region's maize if it remains uncontrolled. Initially, the Government of Malawi decided to prioritize pesticide distribution as a response. Farmers are applying synthetic/chemical pesticides with high risks to human health. Pesticide selection is limited by what is available in the marketplace, which does not always correspond with current recommendations. Availability itself is limited – and many farmers do not have the resources to buy validated and low-risk alternatives. Farmers need training on effective IPM alternatives including locally derived and accessible management methods.

Women make up the majority of the agricultural labour force in Malawi (reported to be as high as 80% in some areas), which places a disproportionate burden of risk on this population and requires a more targeted effort to address capacity development among women farmers (CYMMIT 2019).

Dependency on Agriculture

Most households in the communities visited engage in agriculture on a small scale or subsistence level and are highly dependent on agriculture. Estimates from the last *Integrated Household Survey* (IHS4) indicate that more than 80% of Malawians are smallholder farmers practising rain-fed agriculture. Their most important asset is land – and the main determinant of wealth is how much land a household is able to cultivate. This again depends on the amount of land owned and/or the capacity to rent (additional) land as well as on the labour a household is able to call on (MVAC/FEWS NET 2016). An estimated 70% of land is devoted to maize. More labour-intensive crops vital for food security – such as vegetables and fruits – have been neglected (FAO, 2015). Worth noting: Only approximately 2% of the arable land is irrigated.

On-farm activities are the main sources of income for most rural households (IFAD 2018). But low levels of productivity and poorly developed markets contribute to chronic food and nutrition insecurity. Poor households mostly are able to cover 60% to 70% of their food needs through own crop production but rely on local agricultural labour (*ganyu*) hired by better-off households to meet cash income requirements, purchase food and cope with food gaps (MVAC/FEWS NET 2016). In general, the level of poverty among people involved in agriculture is high compared to those in non-agricultural livelihoods or those moving to diversified sources of work. The most positive effects on poverty decline is the shift of occupation from agriculture to more diversified livelihoods and income-sources (IFAD 2018).

Additionally, rural households can seldomly afford sufficient farm inputs, such as fertilisers to restore soil fertility, which has resulted in the expansion of cultivation land to increase harvest yields. But this gets more and more difficult due to ever-smaller plot sizes on increasingly marginal land (World Bank 2019).

Weather and climate variability and change have made it even more difficult for farmers in the districts to be productive when cropping cycles get interrupted, e.g. prolonged dry spells as experienced in the first half of 2018 have had far-reaching negative effects on maize production. Cereal production shortfalls due to unfavourable rains have led to income losses which again have increased food insecurity. The fall armyworm infestation additionally reduced maize yields and respective incomes of rural households.

Environmental Degradation

Communities in the districts of Salima and Dedza are heavily dependent on the environment and natural resources such as water, land, forests, and biodiversity for their livelihoods. At the same time, unsustainable land-use practices, charcoal burning, and brickmaking are contributing to environmental degradation. Forests and woodlands have dwindled due to over-extracting firewood and charcoal use on a large scale. Wood fuels are used by 98% of the population, primarily for cooking (Govt of Malawi 2017b), since electricity is inaccessible, unreliable, and/or unaffordable for most households. But forests and trees are sources of soil fertility and they have a vital role in protecting watersheds. Also, the cultivation on riverbanks triggers more floods and droughts. And as natural forests disappear, prices for wood fuel and charcoal will rise as supplies diminish.

Climate change seems to exacerbate these effects of environmental degradation and the condition of the land – including soil erosion and flooding – severely effects community livelihoods. Additionally, the problem seems to be aggravated by poor land management practices and land tenure insecurity. Smallholder farmers seem to rarely adopt *Sustainable Land Management* (SLM) practices and crop diversification. One of the reasons may be the uncertain right to farm on certain plots in future since a new *Land Act* is supposed to be implemented in the near future.

Limited Livelihood Options and Lack of Income Opportunities

Livelihood options are determined to a large extent by literacy and education. The general literacy rate in Dedza is about 63% and in Salima about 60% (Govt of Malawi 2017b). A large share of young people drops out of school very early and does not acquire basic skills – the overall net enrolment rate in secondary education remains very low at 18% (OECD 2018). With low education levels and the absence of job opportunities outside agriculture, rural people often start small businesses out of necessity – and acquire business skills informally or by learning from family members. Most rural businesses seem to be small, informal and mostly in agriculture, with very limited value added and consequently low profits (OECD 2018).

But scarce land and low farm productivity levels cannot sustain the growing needs of a growing population. More than 46% of the population are below 15 years of age and more than 25% of the population are young people between 15 - 29 years of age. Since it gets more and more difficult to earn a sufficient and reliable income from agricultural production alone, poorer households engage in a range of self-employment activities, including selling baked goods, collecting and selling firewood, or making bricks.

The absence of a labour market demand with few employers offering employment opportunities for the rural poor makes their prospects limited to non-existent. Opportunities are only available for those who are ready or forced to work for poorly remunerated wage labour – mostly self-employed seasonal income-generating activities.

To develop and provide social protection measures for poor and unproductive households and those unable to remain productive in the face of economic changes and recurrent food and nutrition security crises seems to be a major challenge. But safety nets can have a positive impact on rural poor households by bridging the need for money in times of crises, reducing the amount of time spent engaged in *ganyu* (and instead spending working time on own farms), enabling beneficiaries to save and possibly invest income, potentially enables some children and young people to attend and remain in school, facilitating participation in community decision-making, and improving self-esteem that may lead to greater social engagement.

Lack of Nutrition Knowledge

A lack of adequate parental awareness and knowledge regarding nutrition as well as infant and young child feeding practices, hygiene and sanitation are also causes for food and nutrition insecurity and the high prevalence of chronic malnutrition. With regard to infant and young child feeding practices, this often includes deficient knowledge on healthy feeding quantity and frequency, and balanced diets. Concentrating on maize as the main source of calories for small children leads to a deficient dietary diversity. In general, food security is interpreted as ‘maize security’. The lack of knowledge and awareness can lead to delayed recognition of undernutrition and delayed care seeking.

Parents' and caregivers' level of education is known to have a direct impact on nutrition and child health and is an important influencing factor. According to a recent IFPRI study, education is – together with household size and market access – a significant determinant of dietary quality in varying degrees (IFPRI 2019). In general, areas with more educated women show better health outcomes for children (Concern et al. 2009). Consequently, deficiencies in knowledge lead to suboptimal household choices and thereby distorted levels of child health. A study by USAID in Malawi and two other countries showed that the nutritional status of children significantly increases with increased levels of mother's education. The threshold level of maternal education above which it significantly improves child stunting and underweight is nine years of schooling in Malawi (USAID 2013). The implication is that primary education is not sufficient to address child malnutrition. If maternal education is to play a significant role in reducing child malnutrition, women need to be educated beyond primary school level.

4.3 Resilience Capacities

Many actors at different levels react to these food and nutrition security crises. As an immediate reaction, they absorb acute shocks. In cases of repeated shocks and chronic stresses, they may adapt and transform their livelihoods. Ideally, anticipatory capacities already exist or are created to be better prepared for future crises. Table 1 presents the existing capacities at individual, household, community, district and national level as identified during the study together with the capacities promoted / supported by the Malawi country package (marked in **bold**).



Table 1: Key Resilience Capacities (please refer to Appendix D for the comprehensive version of the Resilience Analysis Matrix)

	Anticipatory Capacity	Absorptive Capacity	Adaptive Capacity	Transformative Capacity
Individual Level	<ul style="list-style-type: none"> ● Setting-up backyard gardens (onion, mustard, beans, peas) for selling vegetables – mostly within the community, some in the market – and for consumption of processed vegetables in the lean season ● Drying and storing of vegetables (pumpkin leaves, bean leaves, cow pea leaves) and fruits (mango, papaya) ● Using new knowledge on how to budget income from harvest in order not to get in difficulties during lean season (calculating also costs for school fees, clothing, celebrations) 	<ul style="list-style-type: none"> ● Using stored grain (maize) and beans which – depending on the yield – last until next lean season if not sold ● Eating dried and stored vegetables (pumpkin leaves, bean leaves, cow peas leaves), in Salima also fruits (papaya and mango) – sometimes also selling them ● Cutting of trees in the nearby forest for selling ● Doing labour on other farmers fields for money on a daily basis: men, women and also children / <i>ganyu</i> ● Adapting food habits and increased consumption of less preferred (e.g. Irish potatoes, sweet potatoes sometimes mixed with groundnut flour) or less nutritious or anti-nutritious foods ● If needed, starting small businesses like baking (mostly by women) 	<ul style="list-style-type: none"> ● Applying knowledge on solar-drying vegetables ● Women improving family nutrition (knowledge, skills) ● Applying new knowledge on hygiene practices ● Starting set up a backyard garden (start-up seeds provided by external support) ● Passing-on livestock as a kind of safety net – livestock is usually not used for own consumption 	<ul style="list-style-type: none"> ● Gender: Some women (in Dedza) take decisions on their own how to spend the money earned from own small businesses and from cropping (encouraged by NGO and Care Group Promoters) – except for cash crops such as tobacco and potatoes which yield higher prices and are controlled by men

	Anticipatory Capacity	Absorptive Capacity	Adaptive Capacity	Transformative Capacity
Household Level	<ul style="list-style-type: none"> Members of saving and loan groups saving money and/or food Using acquired knowledge to develop and start a kitchen garden 	<ul style="list-style-type: none"> Borrowing/lending maize and money between the households Exchanging food between households: maize for vegetables and vice versa Renting land for cultivation against payment in cash (sometimes in kind) Selling of livestock Borrowing maize and paying it back after harvest (sometimes with interest) Using compost manure instead of fertilisers and/or mixing of both 	<ul style="list-style-type: none"> Planting (fruit) trees along riverbanks and maize fields to stop flooding and keep moisture in the soil – using fruits for selling and own consumption Drying and storing products from backyard gardens Using drought resistant seeds for cultivation (including hybrid maize varieties, Dedza) Some households applying intercropping (with advice from FLW) to diversify crops – to be evaluated after the season what works best e.g. mixed farming of maize and cow peas (when one crop fails the other may survive) Keeping seeds at home if seed banks (encouraged by CARE and UP) are not working Applying knowledge on diversifying foods and using new recipes (with advice and support from Care Groups) Applying knowledge on how to prepare manure (with advice from FLW) In advance preparing manure to save (expensive and late arriving) fertilisers Experimenting successfully to fight FAW: using chilli-water, diluted water from fishes, urine, ... 	<ul style="list-style-type: none"> Some households applying crop rotation (being advised by FLW) with Irish potatoes, sweet potatoes, beans, soy: <i>‘Some seeds are drought resistant and easy to grow compared to maize.’</i>
Community Level	<ul style="list-style-type: none"> Local leaders sensitizing villagers on food budgeting, e.g. not to sell all the produce right after harvest when prices are low Applying for support from the government for the construction of bore holes for irrigation to have a second cropping season in the dry season Establishing VSL and COMSIP groups (supported by NGOs) Community gardening and keeping seeds Producing livestock particularly for selling / income generation 	<ul style="list-style-type: none"> Faith-based institutions (mosques and churches) providing food (e.g. maize, cooking oil) FLW providing insecticides against FAW (provided by the government) 	<ul style="list-style-type: none"> Local Leader providing seedlings for planting trees (Dedza) Constructing check dams for increasing the ground water level Digging holes to harvest water Planting trees with advice from the FLW for Forestry 	<ul style="list-style-type: none"> Care Groups established in all villages – with some challenges (e.g. varying interest, commitment and involvement of volunteers to pass-on messages, knowledge, techniques, and volunteers have little time to spare for home visits in times of hardship)

	Anticipatory Capacity	Absorptive Capacity	Adaptive Capacity	Transformative Capacity
District Level	<ul style="list-style-type: none"> • <i>District Disaster Risk Management Plans</i> • <i>District Civil Protection Committees (DPCPs) and the respective Area Civil Protection Committees (ACPCs) being responsible to assess the effects and impacts of the crisis at community level</i> • Enhanced district coordination and services 	<ul style="list-style-type: none"> • In 2019: CARE (FNSP funds) distributing cash (11,500 Kwacha /month for three months) to households with pregnant and/or lactating women and Coopi (WFP funds) distributing cash (9,000 Kwacha for one month) to all other households 	<ul style="list-style-type: none"> • Managing watersheds in Dedza (supported by UP) • Planting indigenous trees and fruit trees to protect river embankments for covering hills and mountains against soil erosion – provided as an El Niño response – in Dedza district in 2016/17 	<ul style="list-style-type: none"> • Establishment of the post/position of the <i>Principal Nutrition, HIV/AIDS Officer</i> with far-reaching responsibilities (influence) and potential for transforming and advancing nutrition-related development at district and community level, and in particular with regard to multi-sectoral coordination and implementation of nutrition(-related) programmes – results and impact to be monitored
National Level	<ul style="list-style-type: none"> • DNHA coordinating actions to address chronic malnutrition – needs to be adequately reflected in policies and strategies • DNHA: <i>National Multi-Sector Nutrition Policy 2018 – 2022</i> • DNHA: <i>National Multi-Sector Nutrition Strategic Plan 2018 – 2022</i> • <i>Standard Operating Procedures (SOP) during Emergencies</i> (does not yet reflect lean seasons) • <i>Malawi Vulnerability Assessment Committee (MVAC)</i>: Based on their data donors are being asked to come in to support in cases of crises • <i>Post Disaster Needs Assessment (PDNA)</i> by DoDMA • <i>Humanitarian Country Team</i> (DoDMA, donors and UN agencies) • <i>Malawi National Social Support Programme II (MNSSP II) 2018</i> with a strong focus on income generation and livelihood diversification • <i>National Resilience Strategy 2017</i> 	<ul style="list-style-type: none"> • Direct MVAC support through cash/in-kind transfers • Distributing maize (usually also pulses and cooking oil) to households in need (selected by the community) up to three months (Febr – April in 2019, usually earlier in the lean season) as a crisis / lean period response under the <i>Food Security Cluster</i> 	<ul style="list-style-type: none"> • DNHA providing special messages on ‘Nutrition in Emergencies’ – depending on the type of crisis 	<ul style="list-style-type: none"> • Established Nutrition Cluster (DNHA) responsible for case management incl. e.g. supplies, treatment, case identification • Established <i>Universal Beneficiary Registry (UBR)</i> a comprehensive electronic registry designed to improve the reach of social support programmes to the poorest (potential to improve the verification of targeting but would not preclude resource diversion post-distribution; question of frequency of up-dates and generally suitability regarding prevailing transient poverty)

Synopsis of Identified Resilience Capacities

Individual and Household Level

At individual and household level, resilience capacities to react to the recurrent and foreseeable food and nutrition security crises predominantly relate to absorptive and adaptive capacities.

The **absorptive capacities** mentioned during discussions and interviews include consuming the stored grain (maize) and beans, consuming and selling dried and stored vegetables and fruits, cutting trees in nearby forests and selling them (which decreases the local resource base and increases vulnerability in the longer-term), selling livestock, using manure instead of fertilisers, exchanging food between households, borrowing and lending maize (as staple food grains) and money among households of a community (sometimes with interests), changing food habits and diets by switching to potatoes, sweet potatoes, pulses and cassava, selling daily labour against food or money on the fields of better-off farmers (*ganyu*, which can also have negative effects in the long-term), and (re)starting small businesses like selling home-made baking products. Some of the diets turned to in times of crises seem to be more diversified – and healthier – than the usual maize-based diets.

Households may react to seasonal hunger by harvesting their crops immature, with the potential long-term consequences of reduced yields and nutritional value. As a result, seasonal hunger may become chronic hunger with negative longer-term health effects, lower labour productivity and negative financial consequences that perpetuate seasonal hunger. In the absence of mechanisms to reduce seasonal hunger, the short-run coping strategies of households may contribute to and extend the next cycle of hunger (Anderson et al. 2018)

A number of **adaptive capacities** were identified that comprise among others the set-up of backyard gardens (with start-up seeds provided by external support), the solar-drying and storing of produce from backyard gardens, switching to drought resistant seeds for cultivation (though sometimes to more expensive hybrid maize varieties whose seeds need to be bought anew every year), wom-

en's application of newly acquired knowledge and skills on diversifying foods and using new recipes to improve family nutrition and hygiene practices with advice and support by *Care Group* members. Others are passing-on livestock as a kind of safety net, planting (fruit) trees along riverbanks and fields to prevent flooding and to keep the moisture in the soil. With support of the FNSP, households have started establishing vegetable seed banks, planting and using (more) fruits and vegetables to increase the households' dietary diversity and adds to household income when fruits and vegetables are sold.

With advice from the *Frontline Workers* a few households have started applying intercropping to diversify crops – with outcomes still to be evaluated. Also, the in advance preparation of manure and its application – to save expensive and often too late arriving fertilisers – has been started. Many villagers have successfully started experimenting to fight the FAW and other pests by using e.g. chilli-water, diluted water from small fishes or urine.

There were few **anticipatory capacities** identified. They include applying the newly acquired knowledge to prepare for difficult lean seasons by developing and starting nutrition gardens – with support of the FNSP – for selling vegetables, pulses etc. (mostly within the community, some in the market) and for own consumption of processed vegetables in lean seasons and in times of food and nutrition crises. Planning for the next lean season also includes preserving food by drying and storing of vegetables (pumpkin leaves, bean leaves, cow peas leaves) and fruits (mango, papaya) in some places. Some households use their new knowledge gained on how to budget the income (from the harvest) in order not to get in difficulties during the lean season – this includes calculating also the costs e.g. for school fees, clothing, celebrations. The effect of saving and loan groups for saving money and/or food was not clear and their impacts, actual advantages and disadvantages need to be closer examined before engaging in closer cooperation: *Village Savings & Loan* (VSL) groups intended to empower women and enable nutrition-sensitive decision-making – including investing additional income in dietary diversification, education and hygiene items – does not seem to work in all places. VSL do not seem to be robust and need significantly

improved governance to be effective and sustainable. In comparison, COMSIP (*Community Savings & Investment Promotion*) groups seem to have more potential for reaching critical and sustainable impacts on household income and access to credit due to group members being longer and more closely accompanied in terms of training on financial literacy, business management, group organisation, value chain and nutrition. The idea of establishing a community grain bank to be able to borrow maize in times of crisis or need has been mentioned by some community members – an idea that might be worse following up in the respective village level action planning.

Very few **transformative capacities** at individual and household level contributing to structural changes in people's livelihoods were identified during FGD and interviews. They include the lasting adoption and routine application of crop rotation – with advice from Frontline Workers – with e.g. potatoes, sweet potatoes, beans, soya, of which some are drought resistant and easy to grow. In Dedza, there has been a shift in the decision-making power in some households with regard to spending money: with women taking decisions on their own how to spend the money earned from own small businesses and from cropping – encouraged by NGOs and Care Group promoters – except for cash crops such as tobacco and potatoes which yield higher prices.

In particular, adaptive and anticipatory capacities have been strengthened by the FNISP and other donor-supported schemes. Recent fundamental changes regarding the structure of people's livelihoods were not observed. At the same time, many villagers seem to worry little about future crises as they seem to be sure that either NGOs, faith institutions or the government (with donor support) will step in and complement what is lacking.

Community Level

At community level, relatively few **absorptive capacities** were identified that related to the provision of food (e.g. maize, cooking oil) and non-food items by external assistance such as faith-based institutions (mosques and churches) in times of crises. Additionally, *Frontline Workers* providing insecticides – provided by the government – against acute FAW infestation.

Some **adaptive capacities** to better manage impacts of progressive change in the structure of people's livelihoods were identified relating in particular to resource and disaster risk protection including measures for (ground) water recharge and protection against flooding such as planting tree seedlings provided by Local Leaders (in Dedza) with advice from *Forestry Frontline Workers*, constructing check dams to increase the ground water level, digging holes to harvest water and store them over longer periods of time.

Anticipatory capacities to be better prepared for the eventuality of a specific crisis at community level were observed in some places and included applying in advance for support from the government, e.g. for the construction of bore wells for irrigation in order to be able to cultivate crops when there is no, poor or erratic rainfall. Also, community gardening, producing and keeping seeds with support from the FNISP, and the production of small livestock mainly for income generation are seen as measures of preparedness. With the support of NGOs, *Village Savings & Loans* (VSL) and *Community Savings and Investment Promotion* (COMSIP) groups have been established in some places – with mixed outcomes.

As a **transformative capacity** contributing to structural changes in people's livelihoods, the establishment of *Care Groups* was identified. The structure in itself is an asset that allows to spread knowledge and information in the villages. In some of the communities visited, the cohesion among women has been strengthened through this group approach. Still, there is a number of challenges regarding commitment, quality and reliability of dissemination of messages – and of course regarding the translation of newly acquired knowledge into practice.

In general, there seems to be ample space for strengthening adaptive, anticipatory and transformative capacities at community level.

District Level

The only **absorptive capacities** identified relate to the one-time distribution of cash by donors and NGOs in 2019: CARE (with FNISP funds) distributed cash for three months to households with pregnant and/or lactating women and the

NGO Coopi (with WFP funds) distributed cash for one month to all other households in the three FNSP-supported TAs in Salima.

Adaptive capacities to gradually and progressively changing livelihoods, were identified in Dedza only and included the management of watersheds – supported by the NGO United Purpose – and measures against soil erosion such as planting indigenous (fruit) trees to protect river embankments as an El-Niño response in 2016/17.

There were some **anticipatory capacities** for the prevention of recurrent and expectable food and nutrition security crises identified. They comprise the enhanced district level coordination (supported by FNSP), the established *District Disaster Risk Management Plans* and the assignment of responsibilities to the *District Civil Protection Committee* (DCPC) and the *Area Civil Protection Committee* (ACPC) to assess effects and impacts of crises.

The establishment and deployment of the position of the *Principal Nutrition, HIV/AIDS Officer* (PNHAO) with far-reaching responsibilities is considered a **transformative capacity** – emphasising the importance of nutrition for development in general, and specifically the significance of sustainably transforming nutrition-related knowledge and behaviour at district and community level. The PNHAO does also have a key role in facilitating multi-sectoral coordination and implementation of nutrition(-related) programmes. Impact with regard to the nutrition situation in the districts need to be closely monitored.

National Level

Few **absorptive capacities** and few **adaptive capacities** were identified at national level. Under the *Food Security Cluster* maize (usually also pulses and cooking oil) was distributed to households in need (selected by the community) for up to three months (February to April in 2019, usually earlier in the lean season) as a lean period response. The provision of special messages on ‘Nutrition in Emergencies’ depending on the type of crisis by the DNHA can be considered an adaptive capacity.

A number of **anticipatory capacities** were identified. These include the introduction of responsibilities, policies, plans and schemes that are meant to prevent or prepare for a potential food and nutrition security crisis. These include in particular: (i) the *Humanitarian Country Team* consisting of DoDMA, donors and UN agencies, (ii) the *Malawi Vulnerability Assessment Committee* (MVAC), (iii) the *Standard Operating Procedures* (SOP) during emergencies, (iv) the DNHA coordinating actions to address chronic malnutrition under the *National Multi-sector Nutrition Policy 2018-22* and the *National Multi-sector Nutrition Strategic Plan 2018-22*, (v) DoDMA’s responsibility for the *Post Disaster Needs Assessment* (PDNA), and (vi) the *Malawi National Social Support Programme II* (MNSSP II).

A few **transformative capacities** have been identified at national level which seem to have potential but are not yet fully functional or fit for service. One is the newly established Nutrition Cluster under the DNHA responsible for case management including e.g. supplies, treatment, and case identification. The other is the introduction of the *Universal Beneficiary Registry* (UBR), a comprehensive electronic registry to improve the future targeting of social support programmes. The *Land Act* may also have a long lasting and far-reaching impact when being implemented: it aims to improve tenure security through the creation of customary estates, and the acquisition of land through land communities following the Customary Land Act 2016 that has commenced with effect from March 2018.

At national and district level, effective coordination of donors and programmes is highly necessary to strengthen civil services and their responsiveness, accountability and coordinating power at the district level – and should be further promoted.

5. Conclusions and Recommendations

Reducing food and nutrition insecurity strongly depends on the availability, access and appropriate utilisation of affordable, safe and healthy food throughout the year (stability), which strongly correlates with effective resilience capacities to react to crises – acute shocks and chronic

stresses – and prevent severe impacts of food and nutrition security crises at individual, household, community, district and national level. In this chapter, the study points out conclusions and recommendations with regard to the respective identified capacities.

CONCLUSIONS	RECOMMENDATIONS
<p>At individual and household level, predominant resilience capacities identified were absorptive and adaptive capacities. Preparedness seems to be an unknown concept for many rural people – and deserves special attention.</p> <p>Anticipatory and transformative capacities regarding recurrent food and nutrition crisis are still weakly developed at individual, household, community and district level – and need further and particular support.</p> <p>Although strong multi-sectoral frameworks are in place to improve food and nutrition security across the country, there seems to remain massive gaps between officially declared intentions and implementation of programmes and schemes in the communities.</p>	<p>Adaptive, anticipatory and transformative capacities need to be further systematically addressed. Important are awareness raising of beneficiaries and decision-makers about the importance of nutritious and diversified diets to bring about sustainable changes concerning the availability, preparation and intake of quality food, as well as the further promotion of technical knowledge, e.g. regarding storage of grains, pulses, animal feed, water conservation activities.</p> <p>The use of the Household Food Insecurity Experience Scale (HFIES) will allow for systematically analysing programme effects at household level – and will inform and support programme steering.</p> <p>Continue implementing and monitoring programme activities with stakeholders, including government representatives.</p> <p>Multi-sectoral cooperation and coordination of stakeholders has a high potential and needs to be strengthened – also at national level – to allow for transformation of livelihoods (e.g. integrated homestead farming IHF) and for an inclusive approach. Effective coordination of donors and programmes is necessary to strengthen civil services, their responsiveness, and accountability.</p> <p>At community level, the <i>Traditional Authorities</i> and village chiefs play a crucial and critical role in advocating for community interests and the needs of food and nutrition insecure households, in the allocation of benefits from different programmes and in channelling resources for the communities.</p>

CONCLUSIONS	RECOMMENDATIONS
<p>With regard to the high share of people living from agriculture, weather- and climate-related crises are key risks – and the ability to anticipate these risks early and take appropriate action in a timely manner is essential.</p> <p>There is a high potential for gaining and strengthening resilience capacities in agriculture. Currently, there is a lack of support for creating infrastructure for watershed management, drought mitigation, the prevention of flooding, and for irrigating arable land (e.g. through check dams, irrigation schemes) at community level. Investments in irrigation systems – whether public, private or by the communities – would have a direct impact on food availability.</p> <p>Regarding pest management, in particular concerning the FAW, farmers seem to be currently reliant on experimenting and risk poisoning their crops and subsequently humans with pesticides because of lack of knowledge.</p> <p>The upcoming implementation of the Land Act will allow the creation of customary estates, so that smallholder farmers in <i>Traditional Land Management Areas</i> can get legal titles to their land. The <i>Registered Land (Amendment) Act</i> provides for title registration for all land categories. All land will be subject to registration to determine ownership. It is noteworthy that it seems to be traditionally unacceptable for women to possess land – the share of women owning land seems to be low at only 17% of documented land in Malawi (USAID 2015).</p>	<p>Consider further promoting and encouraging rainwater harvesting, groundwater recharge and water conservation activities to improve the sustainable availability of water and soil conservation.</p> <p>Community resilience can be advanced through the development, creation and rehabilitation of productive assets, including gardens and water management structures. Therefore, support to the communities to effectively demanding community infrastructure for drought mitigation, flood prevention and control, including productive assets for agriculture should be considered. Creating agriculture-related infrastructure through public works programme – possibly included in safety-net schemes – has the potential for a dual effect: providing short-term employment and income opportunities, creating lasting structures to stabilise agriculture-based livelihoods and to increase agricultural production.</p> <p>Consider including measures to address and to improve post-harvest practices since currently, post-harvest losses are estimated to reach 25%.</p> <p>Intercropping is one component of Integrated Pest Management – endorsed also by the Malawian Government in its <i>FAW Action Plan</i> – that promotes a healthy and nutrient-rich crop environment which contains natural pests' enemies. Diversified or intercropped fields can slow down the progression of pests by providing a barrier of plants that may not be edible to the pest. Training of farmers is needed: as many pesticides are highly toxic and not always applied as they should, reliable knowledge dissemination – from Frontline Workers – to farmers is priority.</p> <p>Potential effects of the upcoming implementation of the Land Act need to be kept in mind and factored in for planning of interventions – in particular regarding consequences for the target groups including disadvantaged groups, such as widows, divorced women, unmarried women and their children.</p>
<p>The effects of agriculture on poverty reduction can be substantial – but if farming is the only income source and it fails, it will leave households vulnerable.</p> <p>In most communities, subsistence farming does not generate the necessary surplus for households anymore – which is reflected in the decreasing per capita income from agriculture due to population growth and a decline in yields due to crises.</p> <p>Effective coordination of existing government programmes and donor initiatives related to food and/or nutrition security is necessary at national and district level.</p> <p>In particular, coordination and/or even cooperation with the <i>Malawi National Social Support Programme</i> (MNSSP) II might create additional value and benefit: Its overarching framework for social protection aims at supporting consumption needs of poor households through timely, adequate and predictable cash or in-kind transfer, to build resilient livelihoods, and to establish a shock-sensitive social protection system that responds to seasonal needs.</p>	<p>With regard to the high dependency on agriculture, there is a need to diversify livelihoods away from completely relying on agriculture – preferably towards a more balanced range of income sources. Achieving and sustaining a diversification of income-generating activities is the key for a household and community to enable new development prospects. In times of crises, rural non-farm incomes would help farm households to purchase food and non-food items, and invest in other sectors, including in agricultural intensification (IFAD 2018).</p> <p>Continue to strengthen coordination of interventions, activities and services at national and district level – including responsiveness and accountability. In particular, it seems most sensible to strengthen linkages with social safety net programmes such as the MNSSP II. At district level, the newly established posts of <i>Principal Nutrition, HIV and Aids Officers</i> (PNHAO) do have a key role for transforming and advancing nutrition-related development at district and community level – in particular with regard to facilitating multi-sectoral coordination and implementation of nutrition(-related) programmes. Coordinating power might also be used to support, e.g. raising own funds, attracting investors and implementing own development funds as intended by the decentralisation process. Political leadership is a prerequisite for the success of programmes requiring multi-sectoral, multilevel and multi-stakeholder approaches.</p>

CONCLUSIONS	RECOMMENDATIONS
<p>There seems to be a lack of community involvement in decision-making and planning processes – and subsequently a lack of ownership for development processes. Participatory approaches – such as the <i>Village Level Action Planning</i> (VLAP) processes to identify community needs and solutions – are key to the success of resilience development and food and nutrition security.</p> <p>Although Malawi's decentralisation policy requires all group villages to have a VLAP representing development plans for the <i>Village Development Committee</i> (VDC), some village and area committees seem not to be fully functional and meet only when funding or inputs are to be distributed. Many people do not know the role of local governance structures and do not take part in designing, implementing and monitoring of plans and projects. Women are significantly underrepresented at all levels of decision-making (OECD 2019). A VLAP is supposed to develop a vision, sets out goals to achieve that vision, and provides an action plan comprising of activities to reach these goals.</p> <p>There may be many stakeholders and institutions with competing interests working at community level, including traditional, political and government sectoral planning institutions and NGOs. The influence of chiefs often seems to reach far, they have been the intermediary between rural people and government officials. The villages are led by village headmen who report upwards to a <i>Group Village Headman</i> and to the respective <i>Traditional Authority</i> (TA) – all of whom are paid an honorarium by the government. It needs to be factored in that chiefs in general have gate-keeping power.</p> <p>The establishment of multi-sectoral <i>District Food and Nutrition Committees</i> has enabled the participation of communities in nutrition planning, budgeting and service delivery. A key challenge is to ensure that nutrition and local initiatives are included in district development plans.</p> <p><i>Transparency and accountability are crucial</i> and can be achieved when measures are designed, implemented and monitored with the people.</p>	<p>Promote and systematically support village level planning through the VLAP approach. VLAPs have a high potential to strengthen adaptive, transformative and anticipatory capacities of the target groups, of intermediaries and beyond, and to enable empowerment and ownership. Important: Communities need to own the processes!</p> <p>VLAPs provide a platform where all community groups are involved in planning and development and have their views taken into consideration and the interests of government, traditional authorities and other stakeholders are represented. VLAPs institutionalise participation. Important: Ensure the participation of people whose voice is rarely considered in other formal planning and development needs. In most cases, increasing their participation can only be achieved if this is an explicit part of the programme strategy.</p> <p>By raising awareness and building capacity at community level, the focus should always be on community capacities and own achievements since government may lack the capacity and resources to respond effectively to increased demands for services in times of (recurrent) crises.</p> <p>Transparency and accountability are crucial. Efforts to involve communities more in planning and implementing own initiatives must be backed by a transparent and accountable institutional set-up. Access to information needs to be provided to local communities on their rights, entitlements and responsibilities on service delivery as people have a right to know how public funds are used.</p> <p>Consider introducing Community Score Cards (CSC) as a community-based participatory tool for social auditing, planning, monitoring, evaluation and reporting. It can be used to demand accountability, transparency, inclusion and responsibility from service providers by service users by bringing together users and providers at meetings to analyse challenges in service delivery and finding shared solutions. They even might improve the understanding of resource constraints faced by the district.</p>

CONCLUSIONS	RECOMMENDATIONS
<p>The Care Group Model is an important entry point to significantly increase nutrition, health, hygiene and sanitation interventions in the community, spreading essential knowledge and information on nutrition and hygiene (and possibly others) at community level, and by this, strengthening the adaptive and transformative capacities of the target groups. It builds upon pre-existing community ties and trust, along with external guidance, in order to provide a community with important health-related knowledge. Ideally, the model ensures that every household with a young child or pregnant woman within a community can be reached. In the villages, knowledge seems to be increased but behaviour change is still lacking in some areas (regarding WASH and feeding practices).</p> <p>Nevertheless, the success of <i>Care Group</i> implementation over a longer period of time rests on having well-trained, highly motivated, and well-supported field workers. There might be a danger of overloading individual members, mostly women, who have a high workload anyway.</p> <p>Additional <i>Village Savings & Loan</i> (VSL) groups are intended to empower women and enable nutrition-sensitive decision-making including investing additional income in dietary diversification, education and hygiene items. However, VSL are usually not robust and seem to need significantly improved governance to be effective and sustainable.</p>	<p>Consider options to strengthen the Care Groups. The structure in itself is an asset that allows to spread knowledge and information in the villages. The effective transmission of <i>Social and Behaviour Change Communication</i> (SBCC) messages through Care Groups can contribute to strengthened adaptive, anticipatory and transitional capacities at individual, household and community level – and to positive impact on food and nutrition security measures.</p> <p>There are questions as to whether <i>Care Group</i> volunteers can remain committed without further training and reliable incentives. Additional options to keep up or increase motivation and commitment of members may include inter-village learning – e.g. through field trips, community sensitisation campaigns, open days, joint monitoring – and through ensuring that learning is institutionalised at community level.</p> <p>It needs to be thoroughly assessed which effects and impacts the <i>Care Group</i> model actually has on desirable behaviour changes, on coverage, and on health outcomes in the two districts – and with regard to the FNSP indicators, in particular on: Who can be reached with what messages? What are the effects and impacts at household level so far? What are promotional factors and (potential) constraints in reaching target group members? Who 'owns' the <i>Care Group</i>?</p> <p>COMSIP (<i>Community Savings & Investment Promotion</i>) groups seem to have more potential for reaching critical and sustainable impacts on household income and access to credit due to group members being longer and more closely accompanied in terms of training on financial literacy, business management, group organisation, value chain and nutrition. Thus, it would be important to assess their strengths and (potential) weaknesses before intensifying collaboration with of these structures.</p>

CONCLUSIONS	RECOMMENDATIONS
<p>The lack of capacities and knowledge regarding nutrition – in particular regarding the need for a dietary diversity – contributes to malnutrition.</p> <p>Target groups seem to eat more diversified diets – and by this: healthier diets – in times of crises by changing eating habits and switching to e.g. sweet potatoes, potatoes, pulses, groundnuts, cassava.</p> <p>Nutrition extension and advisory services are theoretically available at all levels. But, while the structures are in place, government extension systems at district and community level lack resources and are weak, poorly motivated and unable to ensure that communities can participate in planning and implementation. There seem to be serious problems in reaching the majority of the poor in the villages. In many cases NGOs are filling the gap.</p>	<p>Continue promoting backyard gardens and strengthening basic conservation and transformation as well as storage of vegetables, fruits, grains and seeds. Support and advocacy for their increased consumption should ideally be part of a comprehensive SBCC strategy to sustainably improve nutrition. Information, education and support to fight mycotoxins should be included.</p> <p>Consider the combination of the <i>Care Group</i> approach with the <i>Participatory Learning and Action (PLA)</i> approach. Its transformative potential empowers in particular women through knowledge transfer, joint reflection and relevant actions to improve the nutrition of families in a self-help-oriented manner. As a human rights-based approach it may work as a means for people to claim their rights and entitlements. As a precondition, it is necessary to have the time and capacities available to conduct thorough trainings, peer learning, supervision, and quality assurance of action.</p> <p>Consider including men systematically in nutrition-related measures to strengthen their responsibility for and involvement in actions to improve food and nutrition security, thus supporting the household-level transformative capacities by e.g. actively involving them in <i>Care Group</i> and SBCC activities on nutritious diets and healthy practices. This can also further enhance the impact of agricultural activities on nutrition.</p> <p>Continue to strengthen the local structures such as the multi-sectoral <i>District Nutrition Coordination Committees</i> so that they are able to fulfil their roles and responsibilities – which is key in increasing community involvement in nutrition planning, budgeting and service delivery. The new deployment of <i>Principal Nutrition, HIV and AIDS Officers (PNHAO)</i> to coordinate all nutrition-relevant matters at district level, is an asset with transformative potential – the actual impact on how far the new authority and decision-making power impacts the target groups needs to be closely monitored. An important criterium is the provision and existence of a specific budget line on nutrition at the District Council to improve community-level nutrition responses.</p>

General Conclusions and Remarks

Malawi's poverty rate has remained persistently high declining only marginally in recent years. Recurrent crises increase the risk to exacerbate food and nutrition insecurity pushing an additional 40% of households below the poverty line (World Bank 2017c). This suggests that Malawi can reduce food and nutrition insecurity only if it becomes more resilient to (recurrent) crises. It is therefore essential to develop mechanisms to effectively prevent and/or manage (foreseeable) crises under the current conditions. These conditions include that most development programmes aiming at food and nutrition security are funded by donors – which will most likely continue over the medium-term given the Government's household constraints.

Integrating a resilience approach does not replace or relabel established risk- and conflict-management concepts. Instead, integrating a resilience lens to programme and project design and implementation adds a value in terms of increasing the impact of project activities by particularly identifying and strengthening resilience-building capacities of people and communities beyond the mere capacity to absorb shocks (such as natural disasters). By using the *Resilience Analysis Matrix* as a basis for discussion and for communicating and sharing results, a mutual understanding and a shared commitment of different stakeholders at different levels may be reached. Thus, project resources can be used efficiently by multi-sectoral cooperation across multiple or institutional, civil society and development cooperation actors, breaking traditional operational silos. Eventually, sustainable hand-over scenarios can be developed at the end of the project period by identifying further resilience capacity strengthening potentials that lead to structural changes in household and community livelihood systems.

Overall, the design and approach of the FNSP allow to strengthen people's and civil society organisations' resilience capacities as well as the respective government services at different levels. In addition, the FNSP has been the first in the target regions to address dietary diversity – an important factor to tackle (chronic) malnutrition. This investment in nutrition security is 'smart economy' with considerable potential to contribute to improved household resilience.

Still, it is important to be aware of the strong dependency on public alimentation of a very high number of crises-affected people in the districts – which may further suffocate motivation, creativity, determination, responsibility and ownership. The ultimate aim should always be to lead people out of dependency to an independent and self-determined life. In pursuing community-based approaches it is essential that the communities themselves own the processes – backed by a transparent and responsive institutional set-up.



Appendix A: Itinerary Country Package Malawi (Dedza, Salima, Lilongwe)

<p>13 May 2019 Monday</p>	<p>Meeting with and briefing of FNSP team in Lilongwe: Dr Martina Kress, Team Leader <i>Food and Nutrition Security, Enhanced Resilience Project</i>, Ms Vitowe Batch, Technical / Policy Adviser, Ms Alinafe Kamdonyo, Junior Project Coordinator, Ms Ivana Jurisic, Technical Adviser Knowledge Management, Mr Kai Naegle, Technical Adviser, Discussion of preliminary schedule for village visits, Focus Group Discussions and Key Informant Interviews Briefing of Mr Mulder Mkutumula, Mitigation Officer at the <i>Department of Disaster Management Affairs (DoDMA)</i> Lunch meeting with <i>Irish Aid</i>: Ms Columba O'Dowd, Ms Lilian Chaguluka, Mr Chikumbutso Kilembe Briefing of the official partner of the FNSP at the <i>Department of Nutrition HIV and AIDS (DNHA)</i>, Office of the President and Cabinet: Mr Felix Pensulo-Phiri, Director of Nutrition Mr Kondwani Mpeniwawa, Chief Nutrition Programmes Officer, Mr Blessings Muwalo Ng'umayo, Deputy Director of Nutrition</p>
<p>14 May 2019 Tuesday (public holiday)</p>	<p>Briefing Workshop with consultants Ms Pauline Chifka and Mr Sothine Ntodwa for the village visits introducing the objectives, approach and course of action, discussing details of the guiding questions for FGD and Key Informant Interviews</p>
<p>15 May 2019 Wednesday</p>	<p>Travel to Dedza District Courtesy Call District Commissioner Meeting with field officers of implementing partner <i>United Purpose (UP)</i> in Dedza: Mr Flera Chimango Kulemero, Nutrition Project Manager, Mr Khumbo Kamange, District Nutrition Project Coordinator, Mr Christopher Itimu, Nutrition Project MEAL Card Travel to village Chinkombero (TA Kamwenyagwaza): FGD with 12 women Key Informant Interview with Frontline Workers (FLW): Patrol of the District Forest Office (DFO), Agriculture Extension Development Officer (AEDO), Community Development Assistant (CDA) and Health Surveillance Assistant (HAS) Key informant Interview with District Nutrition Coordination Committee (DNCC) members of Dedza: District Environmental Officer (DEO), Assistant Community Development Officer, Nutritionist, Disaster Risk Management Officer (DRMO) and Assistant DRMO</p>
<p>16 May 2019 Thursday</p>	<p>Travelling to village Nkhungumbe (TA Kamwenyagwaza): FGD with 13 men Key Informant Interviews with four Local Leaders, Group Village Heads of TA Kamenyagwaza Meeting with <i>United Purpose</i> Field Officers Key Informant Interview with Programme Manager of ASPIRE, Mr. Blessings Kambombo Travel from Dedza to Salima</p>

17 May 2019 Friday	Key Informant Interview with DNCC members of Salima: Food & Nutrition Officer (FNO), District Forestry Officer (DFO), DEO Travelling to village Mtende (TA Pemba): FGD with 12 women, Travelling to village Chindungwa (TA Pemba): FGD with 18 men, Key Informant Interview with field officers staff of implementing partner CARE in Salima: Project Manager Mr Joseph Maulana, Field Advisers Ms Thula Saka, Mr Edward Chibambo, Ms Martha Kondwani, and M&E Coordinator Ms Noriah Katungwe
18 May 2019 Saturday	Exchange and preliminary analysis of findings by means of additional transcripts and by using the Resilience Analysis Matrix with consultants and FNSP District Project Coordinator. Travel back to Lilongwe
19 May 2019 Sunday	Preliminary analysis of findings and drafting of report format
20 May 2019 Monday	Meeting and Key Informant Interview with Cynthia Kazembe, Research and Communications Assistant at the <i>International Food Policy Research Institute</i> (IFPRI) in Lilongwe Meeting and Key Informant Interview with Dr George Phiri, Assistant Representative of the <i>Food and Agriculture Organisation of the United Nations</i> (FAO) in Lilongwe Meeting and Key Informant Interview with Mr Adam Davies, Country Director of <i>United Purpose</i> in Malawi Debriefing workshop and exchange on preliminary analysis of findings with Dr Martina Kress and the team of the GIZ FNSP
21 May 2019 Tuesday	Debriefing at DNHA with Mr Felix Pensulo-Phiri, Director of Nutrition, Mr Kondwani Mpeniwawa, Chief Nutrition Programmes Officer, Mr Blessings Muwalo Ng'umayo, Deputy Director of Nutrition, Dr. Martina Kress, FNSP Team Leader, Ms Susanne Schwan and Mr Frank Meyer (both FNSP Technical Adviser) Final discussion on preliminary conclusions and next steps with Dr Martina Kress and Ms Susanne Schwan at FNSP office

Appendix B: List of Resource Persons and Key Informants

GIZ Food and Nutrition Security Programme (FNSP), Lilongwe	Dr Martina Kress, Team Leader Ms Vitowe Batch, Technical / Policy Adviser Ms Susanne Schwan, Technical Adviser Social Protection Ms Alinafe Kamdonyo, Junior Project Coordinator Ms Ivana Jurisic, Technical Adviser Knowledge Management Mr Kai Naegle, Development Adviser, Dedza District Mr Frank Meyer, Development Adviser, Salima District
Villages of Chinkombero and Nkhungumbe (both TA Kamwenyagwaza), Dedza District	25 villagers – 12 women, 13 men – participating in focus group discussions
Local Leaders Chinkombero GVH, TA Kamenyagwaza	Mr Damazio Hetman, M'Dedza Mr Christopher Chimbuya, GVH Chinkombero Mr Elenesito Ludoviko, Jatani Mr Robati Wayiti, GVH Muyowe
<i>United Purpose</i> Implementing NGO for FNSP in Dedza District	Mr Flera Chimango Kulemero, Nutrition Project Manager Mr Khumbo Kamange, District Nutrition Project Coordinator Mr Christopher Itimu, Nutrition Project MEAL Card <i>Field Officers:</i> Mr Ruben Manda, Field Facilitator Mr Kamudli Msangaambe, Field Facilitator Ms Moreen Tembo, Field Facilitator
<i>ASPIRE</i> Programme (funded by <i>Irish Aid</i> and <i>United Purpose</i>) in Dedza District	Mr Blessings Kambombo, Programme Manager <i>ASPIRE</i> (<i>Achieving Sustainable Poverty Reduction through Increased Inclusive Resilience and Empowerment</i>) 2018 – 2022
District Administration Dedza	<i>DNCC members:</i> Mr Bright Mikwamba, District Environmental Officer (DEO) Mr Daktu Mutudu, Assistant Community Development Officer Ms Maureen Mwale, Nutritionist Mr Blessing Kamfane, Disaster Risk Management Officer (DRMO) Mr Mwayi Katundu, Assistant DRMO <i>Frontline Workers (FLW):</i> Mr Fabiamo Buya, Patrol of the District Forest Office (PDFO) Ms Shira Chitsakamile, Community Development Assistant (CDA) Mr Gift Fasiri, Agricultural Extension Development Officer (AEDO) Mr Patrick Kupempha, Health Surveillance Assistant (HSA)
Villages of Mtende and Chindungwa (both TA Pemba), Salima District	30 villagers – 12 women (among them six Care Group Cluster Leaders and two Care Group Promoters) and 18 men – being available for and participating in focus group discussions
District Administration Salima	<i>DNCC members:</i> Ms Meripha Mtika, Food & Nutrition Officer (FNO) Mr Adam Jason, District Forestry Officer (DFO) Mr Samuel Chimowa, District Environmental Officer (DEO)
<i>Care</i> Implementing NGO for FNSP in Salima District	Mr Joseph Maulana, Project Manager Ms Thula Saka, Field Adviser Mr Edward Chibambo, Field Adviser Ms Martha Kondwani, Field Adviser Ms Noriah Katungwe, M&E Coordinator

<i>Kulima – Evangelical Association of Malawi</i> NGO in Salima District	Mr Madalitso Munthali, Project Coordinator for EU-funded <i>Farmer Field School</i> Programme (2018-2022)
Department of Nutrition HIV and AIDS (DNHA), Office of the President and Cabinet, Lilongwe	Mr Felix Pensulo-Phiri, Director of Nutrition Mr Kondwani Mpeniwawa, Chief Nutrition Programmes Officer Mr Blessings Muwalo Ng’umayo, Deputy Director of Nutrition
Department of Disaster Management Affairs (DoDMA), Lilongwe	Mr Mulder Mkutumula, Mitigation Officer
<i>Irish Aid</i> Lilongwe	Ms Columba O’Dowd, Head of Development Ms Lilian Chaguluka, Health and Nutrition Adviser Mr Chikumbutso Kilembe, Vulnerability Adviser
IFPRI – <i>International Food Policy Research Institute</i> , Lilongwe	Ms Cynthia Kazembe, Research and Communications Assistant
FAO – <i>Food and Agriculture Organisation of the United Nations</i> , Lilongwe	Dr George Phiri, Assistant Representative of FAO in Malawi
<i>United Purpose</i> , Lilongwe	Mr Adam Davies, Country Director
GIZ Social Support Programme Malawi	Ms Katharina Diekmann, Technical Adviser



Appendix C: Guiding Questions Used for Focus Group Discussions and Key Informant Interviews

Districts of Dedza and Salima

Aim: Understanding people's perception of resilience and their resilience capacities at various levels.

Guiding Questions:

- 1) What were / are the main **crises** – acute shocks and chronic stresses – that affect(ed) your food and nutrition security (FNS) / the FNS of people in the target area in the last years? What was / is their influence on the FNS situation?
 - 2) What have you done to **react** to this?
(... in the last five years max. and with regard to every single crisis mentioned before)
What has your household done to react to this?
What has your community done?
Were there other actors (influencers) who also reacted and what have they done?
(to be adapted to the resource persons and context of interview / discussion)
 - 3) Why were you / they in a position to react like this on the crisis?
(with regard to every single crisis mentioned before)
(Which abilities / capacities allowed you / them to react like this)?
 - 4) What would have enabled you / them to react better / in another way?
 - 5) What are the main **surprises** – positive and negative – that you (people) perceived as a reaction to the FNS crisis (shock or stress)? What did you not expect?
 - 6) Once the FNS crises (mentioned under question 1) is over:
What will / would you do to **prepare** for the next FNS crisis?
What do you think you actually can do to prepare?
 - 7) Who else needs to react?
What concretely should this person / organisation do?
- ... for Key Informant Interviews:**
- 8) What are you / is your organisation doing to **support** people to better react to crises?
... to be better prepared for crises?
 - 9) What are you or your organisation doing to enable people to make an **informed decision** to better react to FNS crises and to be better prepared?

Appendix D: Comprehensive Resilience Analysis Matrix – Dedza and Salima Districts

	Anticipatory Capacity	Absorptive Capacity	Adaptive Capacity	Transformative Capacity
Definition	... enables people and systems to be better prepared for the eventuality of a specific shock through proactive action – ability of planning in advance and setting up 'contingency plans' (ODI / BRACED 2016)	... includes a range of harmful to positive coping strategies that aim at maintaining people's, organisations' and systems' wellbeing at a given level in the face of shocks – no basic changes to people's livelihoods (RLI 2016 based on OECD DAC)	... enables people, organisations, and systems to manage impacts of long-term trends and change – progressive and gradual change in the structure of people's livelihoods (RLI 2016 based on OECD DAC)	... enables people, organisations, and systems to manage the underlying causes of shocks, stressors and change – a fundamental change in the political/power and economic status of people, and hence, the structure of people's livelihoods (RLI 2016 based on OECD DAC)
Result	Strengthening contributes to improved preparedness	Strengthening contributes to enhanced stability – if coping is positive <i>Documentation of negative coping strategies</i>	Strengthening contributes to more positive options for adjustment	Strengthening contributes to structural systemic changes
Individual Level	<ul style="list-style-type: none"> • Setting up backyard gardens (onions, mustard, beans, peas) for selling vegetables (mostly within the community, some in the market) and for consumption of processed vegetables in the lean season • Drying and storing of vegetables (pumpkin leaves, bean leaves, cow peas leaves) and fruits (mango, papaya) • Using new knowledge on how to budget the income (from the harvest) in order not to get in difficulties during the lean season (calculating also e.g. the costs for school fees, clothing, celebrations) 	<ul style="list-style-type: none"> • Using the stored grain (maize) and beans which – depending on the yield – last until the next lean season if not sold • Eating dried and stored vegetables (pumpkin leaves, bean leaves, cow peas leaves), in Salima also fruits (papaya and mango) and selling them • Cutting of trees in the nearby forest for selling → <i>depleting forest resources</i> • Doing labour on other farmers fields for money on a daily basis: men, women and also children / ganyu → <i>thereby leaving the needs of the own household behind</i> • Adapting food habits and increased consumption of less preferred (e.g. Irish potatoes, sweet potatoes sometimes mixed with groundnut flour) or less nutritious or anti-nutritious food (<i>toxins in the groundnuts</i>) • <i>Eating less quantity of food and lower frequency (1-2 instead of 2-3 times)</i> • If needed: Starting small businesses like baking (mostly by women) • <i>Eating poisonous tubers</i> 	<ul style="list-style-type: none"> • Applying knowledge on solar-drying vegetables • Women improving family nutrition (knowledge, skills) • Applying new knowledge on hygiene practices • Starting set-up of a backyard garden (start-up seeds provided by external support) • Passing-on livestock as a kind of safety net – livestock is usually not used for own consumption → <i>in cases of too many goats, there is a risk of damage to crops, trees and gardens</i> 	<ul style="list-style-type: none"> • Gender: Some women (Dedza) take decisions on their own how to spend the money earned from own small businesses and from cropping (encouraged by NGOs and CG promoters) – except for cash crops such as tobacco and potatoes which yield higher prices and are controlled by men

	Anticipatory Capacity	Absorptive Capacity	Adaptive Capacity	Transformative Capacity
Household Level	<ul style="list-style-type: none"> Members of saving and loan groups saving money and/or food Using acquired knowledge to develop and started a kitchen garden IDEA by community members: Establishing a community grain bank and borrowing maize in times of crisis/need 	<ul style="list-style-type: none"> Borrowing/lending maize (staple food grains) and money between the households Exchanging food between households: maize for vegetables and vice versa Renting land for cultivation against payment in cash (sometimes also in kind) Selling of livestock Selling of land Borrowing maize and paying it back after harvest (sometimes with interest) Using compost manure instead of fertilisers and/or mixing of both 	<ul style="list-style-type: none"> Planting trees, partly fruit trees, along the riverbanks and the maize fields to stop the floods and keep the moisture in the soil – and using fruits them for selling and own consumption with villagers volunteering to do the work Drying and storing products from the backyard gardens Using drought resistant seeds for cultivation (including more expensive hybrid maize varieties whose seeds need to be bought anew every year, Dedza) Some households applying intercropping (with advice from FLW) to diversify crops – and will evaluate after the season what works best e.g. mixed farming of maize and cow peas (when one crop fails the other may survive) Keeping seeds at home if seed banks (encouraged by CARE and UP) are not working Applying knowledge on diversifying foods and using new recipes (with advice and support from Care Groups) Applying knowledge how to prepare manure (advice from FLW) In advance preparing of manure to save (expensive and late arriving) fertilisers Experimenting successfully to fight the FAW: using chilli-water, diluted water from small fishes, urine, ... Storing of grain next to pesticides → intoxication of foods / feed 	<ul style="list-style-type: none"> Some households applying crop rotation (being advised by FLW) with Irish potatoes, sweet potatoes, beans, soy: 'Some seeds are drought resistant and easy to grow compared to maize.'
Community Level	<ul style="list-style-type: none"> Local leaders sensitising villagers on food budgeting – not to sell all the produce after harvest when prices are low Applying for support from the government for the construction of bore holes for irrigation to have a second cropping season in the dry season Establishing VSL (Village Saving & Loans) and COMSIP (Community Savings and Investment Promotion) groups (supported by NGOs) Community gardening and keeping seeds Producing livestock particularly for selling / income generation 	<ul style="list-style-type: none"> Faith-based institutions (mosques and churches) providing food (e.g. maize, cooking oil) FLW providing insecticides against the FAW (provided by the government) 	<ul style="list-style-type: none"> Local Leader providing seedlings for planting trees (Dedza) Constructing check dams for increasing the ground water level Digging holes to harvest water Planting trees with advice from the FLW for Forestry 	<ul style="list-style-type: none"> Care Groups established in all villages – with some challenges e.g. <ul style="list-style-type: none"> Varying interest, commitment and involvement of volunteers to pass-on messages, knowledge, techniques volunteers have little time to spare for home visits in times of need / hardship To be considered: Empowerment of Chiefs by the new Land Act as all land acquisition will have to be approved by them.

	Anticipatory Capacity	Absorptive Capacity	Adaptive Capacity	Transformative Capacity
District level	<ul style="list-style-type: none"> • <i>District Disaster Risk Management Plans</i> • <i>District Civil Protection Committees (DCPCs)</i> and the respective <i>Area Civil Protection Committees (ACPCs)</i> being responsible to assess the effects and impacts of the crisis at community level • Enhanced district coordination and services 	<ul style="list-style-type: none"> • In 2019: CARE (FNPS funds) distributing cash (11,500 Kwacha/ month for 3 months) to households with pregnant and/or lactating women and Coopi (WFP funds) distributed cash (9,000 Kwacha for one month) to all other households 	<ul style="list-style-type: none"> • Managing watersheds in Dedza (supported by UP) • Planting indigenous trees and fruit trees to protect river embankments for covering hills and mountains against soil erosion – provided as an El Niño response – in Dedza district in 2016/17 	<ul style="list-style-type: none"> • Establishment of the post/position of the <i>Principal Nutrition, HIV/AIDS Officer</i> with far-reaching responsibilities (influence) and potential for transforming and advancing nutrition-related development at district and community level, and in particular with regard to multi-sectoral coordination and implementation of nutrition(-related) programmes – results and impact to be monitored • To be considered: Decentralisation: Enhanced (transparent?) decision-making power on district level – and concurrently established procedures for holding district level administration accountable for its decisions and services
National Level	<ul style="list-style-type: none"> • DNHA coordinating actions to address chronic malnutrition – needs to be adequately reflected in policies and strategies • DNHA: <i>National Multi-Sector Nutrition Policy 2018 – 2022</i> • DNHA: <i>National Multi-Sector Nutrition Strategic Plan 2018 – 2022</i> • <i>Standard Operating Procedures (SOP)</i> during Emergencies • Malawi Vulnerability Assessment Committee (MVAC): Based on their data donors are asked to come in to support in cases of crises • <i>Standard Operating Procedures (SOP)</i> during Emergencies (does not yet reflect lean seasons) • <i>Humanitarian Country Team (DoDMA, donors and UN agencies)</i> • <i>Malawi National Social Support Programme II (MNSSP II) 2018</i> with a strong focus on income generation and livelihood diversification • <i>National Resilience Strategy 2017</i> 	<ul style="list-style-type: none"> • Distributing maize (usually also pulses and cooking oil) only to households in need (selected by the community) up to three months (Febr – April in 2019, usually earlier in the lean season) as a crisis / lean period response under the <i>Food Security Cluster</i> 	<ul style="list-style-type: none"> • DNHA providing special messages on 'Nutrition in Emergencies' – depending on the type of crisis 	<ul style="list-style-type: none"> • Nutrition Cluster (DNHA): Case management incl e.g. supplies, treatment, case identification • Established <i>Universal Beneficiary Registry (UBR)</i> a comprehensive electronic registry designed to improve the reach of social support programmes to the poorest (potential to improve the verification of targeting but would not preclude resource diversion post-distribution; question of frequency of up-dates and generally suitability regarding prevailing transient poverty) • To be considered: Land Act: Improved tenure security through the creation of customary estates, and acquisition of land through the Customary Land Act 2016 that has commenced with effect from March 2018 (Customary Land Act Regulations gazetted in April 2018)

Appendix E: Additional Background Information on Relevant Schemes and Policies

Care Group Model

The *Care Group* model aims to create individual and community behaviour change in health, nutrition and hygiene with a focus on simple messaging to mothers. It involves NGO staff, health promoters, volunteer women and men, and beneficiary mothers.

Clusters are formed by 8 to 10 households with pregnant or lactating women or mothers with children of up to two years of age. Cluster Leaders live in the communities and share lessons with members of households in their clusters. 8-10 Cluster Leaders form a *Care Group*. There are usually 2-3 Care Groups per village. The Care Group chooses a promoter who is then responsible for 2-3 Care Groups. S/he is either trained by Frontline Workers who live in the communities or by NGOs. With support of Frontline Workers, the promoter reports on her activities to the *Village Nutrition Coordination Committee*.

The *Care Groups* meet regularly (every 2 to 4 weeks) with the promoter to learn a new set of nutrition- and/or health-related messages and activities (1 to 3 new key messages to share with their neighbours). The health and nutrition messages are often based on studies that identify key enablers and barriers to behaviour change in resource-poor communities. After each *Care Group* meeting, the Cluster Leaders are responsible to share their knowledge with cluster members. Through the *Care Group* cascade 123 promoters reach 354 *Care Group* Leaders who in turn reach 4,240 Cluster Leaders, who pass the information on to 37,313 women and men. The ratio of promoters vs. household members is 1:303.

Participatory Learning and Action (PLA)

A similar but nonetheless distinct approach to engaging the power of groups of women is women's PLA groups. In this approach, a facilitator meets with women in a village, and together they discuss health recommendations for pregnancy, birth, and neonatal care and how they could apply them in their own particular situation. Although pregnant women and those with new-borns are targeted, anyone in the village can attend the meetings. This approach has benefited from rigorous implementation research in a variety of settings (Perry et al. 2015). Robust evidence finds the approach can reduce maternal and neonatal mortality if there are an adequate number of facilitators to ensure high levels of service coverage (Prost et al., 2013).

A key difference between *Care Groups* and PLA groups is that in *Care Groups* systematically every household with a pregnant woman or young child is approached and reached with specific messages. With PLA groups, the focus is on the PLA group discussing key health messages, formulating how they might incorporate these messages in their context, and then, through spontaneous dissemination, engaging other women who do not attend the facilitated sessions.

A combination of the *Care Group* approach with PLA is possible – see India country package where the national system of health and nutrition frontline workers, called *Anganwadi* workers, is working with and applying PLA in the target areas.

The National Resilience Strategy

The National Resilience Strategy (NRS) is a national strategy that, over the period from 2018 to 2030, will guide the design and implementation of national resilience programmes aimed at breaking the cycle of food insecurity and chronic vulnerability to climate change and disasters. It is led by the *Office of the Vice-President* and chaired by a government troika including the *Department of Disaster Management Affairs*, the *Ministry of Agriculture, Irrigation, and Water Development*, and the *Ministry of Finance, Economic Planning and Development*. It follows a more sustainable path in strengthening the resilience of vulnerable households to the major hazards that Malawi faces – drought and floods. The overall objective of the NRS is to make Malawi resilient to economic and environmental shocks for sustained growth and food security.

The steps for moving the agenda forward are to develop an NRS Implementation Plan (NRS-IP) that guides implementation of the NRS. A draft NRS-IP has been developed but needs further consultations and refinement. The NRS-IP covers the first 5-year phase (2018-2023), and guides key management, operational, technical coordination, and budgetary functions supporting the implementation and monitoring and evaluation of the NRS pillar priorities, and collective results under the *Common Programme Framework*. The NRS-IP will guide the following key functions:

- systems and processes supporting all levels of the NRS implementation arrangements,
- parameters and processes for geographic and technical sector targeting and prioritisation,
- the establishment of systems guiding resource allocation processes and prioritisation of resilience programmes supporting NRS pillars,
- detailed technical sector implementation and coordination plans,
- a monitoring, evaluation, and learning (MEL) plan supporting the NRS Common Programme Framework and sector-specific plans,
- a Resilience Learning Agenda, and
- an institutional strengthening and capacity building plan.



References

- Anderson, C.L., T. Reynolds, J.D. Merfeld, P. Biscaye, 2018: Relating Seasonal Hunger and Prevention and Coping Strategies: A Panel Analysis of Malawian Farm Households. *The Journal of Development Studies*, 54:10, 1737-1755
<https://www.tandfonline.com/doi/pdf/10.1080/00220388.2017.1371296?needAccess=true>
- Concern / DWHH, 2019: Global Hunger Index – A Closer Look at Hunger and Undernutrition in Malawi. By J. Bernstein and D. Wiesmann. Concern Worldwide and Deutsche Welthungerhilfe e.V., June 2019
<https://www.globalhungerindex.org/pdf/en/2018/case-study-malawi.pdf>
- Concern / Deutsche Welthungerhilfe / IFPRI, 2009: The Global Hunger Index 2009 – The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality. By: K. v. Grebmer, B. Nestorova, A. Quisumbing, R. Fertziger, H. Fritschel, R. Pandya-Lorch, Y. Yohannes. Bonn, Washington D.C., Dublin, October 2009
<https://www.globalhungerindex.org/pdf/en/2009.pdf>
- CYMMIT, 2019: Fall Armyworm Management for Maize Smallholders in Malawi: An Integrated Pest Management Strategic Plan. Summary of an In-country Consultation, February 2019. By K. Murray and P.C. Jepson, Oregon State University, M. Chaola, Catholic Relief Services, July 2019
https://www.agrilinks.org/sites/default/files/faw_malawi_ipm_strategy_072019_snglpg.pdf
- ENN, 2015: Nutrition and Resilience. A Scoping Study by L. Gostelow, G. Desplats, J. Shoham, C. Dolan, P. Hailey. Version 1.0, Emergency Nutrition Network (ENN)
<https://www.ennonline.net/attachments/2450/Resilience-report-final.pdf>
- FAO / IDS, 2017: Social Protection and Resilience. Supporting Livelihoods in Protracted Crises and in Fragile and Humanitarian Contexts. FAO Position Paper. United Nations Food and Agriculture Organisation & Institute of Development Studies:
<http://www.fao.org/3/a-i7606e.pdf>
- FAO, 2017: Qualitative Research on Decent Rural Employment and Social Protection – Malawi Case Study by E. Fisher, P. Pozarny, E. Estruch
<http://www.fao.org/3/a-i7745e.pdf>
- FAO, 2013: Resilient Livelihoods – Disaster Risk Reduction for Food and Nutrition Security Framework Programme. United Nations Food and Agriculture Organisation, 2013 Edition
<http://www.fao.org/3/i2540e/i2540e00.pdf>
- FSIN – Food Security Information Network, 2019: Global Report on Food Crises 2019 – Joint Analysis for Better Decisions. April 2019
<http://www.fsinplatform.org/global-report-food-crises-2019>
- GIZ, 2019: Follow-Up Survey Malawi 2018. By M.G. Glas and L. Weingärtner for the Global Programme Food and Nutrition Security and Enhanced Resilience. April 2019
- GIZ, 2016: Nutrition Baseline Survey Malawi. By E. Evang and J. Kuchenbecker for the Global Programme Food and Nutrition Security and Enhanced Resilience. August 2016

- GIZ / BMZ, 2016: Boosting Resilience in Fragile Contexts – A Field-tested Approach of the Resilience Learning Initiative. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on behalf of the German Federal Ministry of Economic Cooperation and Development (BMZ) Bonn/Berlin 5/2016
- GIZ, 2015: Resilience Learning Initiative – Synthesis Report. Key Learnings from the Field and Implications for the Future. Comit Consulting on behalf of GIZ Sector Project Transitional Development Assistance, final draft 12/2015 (not published)
- Global Resilience Partnership, 2019: Resilience Insights – Lessons from the Global Resilience Partnership. Report by D. Wilson, S. Verkaart, D. Nel with B. Murphy, S. Robens, G. Yaron. Stockholm, September 2019
http://grpinsightsreport.info/wp-content/uploads/2019/10/GRP_Resilience_Insights_Report.pdf
- Government of Malawi, 2019: Malawi 2019 Floods Post Disaster Needs Assessment (PDNA) Report. Supported by The World Bank, Global Facility for Disaster Reduction and Recovery (GFDRR) and The United Nations, 2019
<https://reliefweb.int/sites/reliefweb.int/files/resources/Malawi%202019%20Floods%20Post%20Disaster%20Needs%20Assessment%20Report.pdf>
- Government of Malawi, Department of Disaster Management Affairs (DoDMA), 2018: National Resilience Strategy 2018 – 2030. Breaking the Cycle of Food Insecurity in Malawi. Unofficial Copy
https://www.usaid.gov/sites/default/files/documents/1860/Malawi_National_Resilience_Strategy.pdf
- Government of Malawi – National Statistical Office (NSO), 2017a: National Micronutrient Survey 2015-16. Zomba, Malawi, December 2017
<https://dhsprogram.com/pubs/pdf/FR319/FR319.m.final.pdf>
- Government of Malawi – National Statistical Office (NSO), 2017b: Fourth Integrated Household Survey (IHS4) 2016-2017. Household Socio-economic Characteristics Report, November 2017
http://www.nsomalawi.mw/images/stories/data_on_line/economics/ihs/IHS4/IHS4%20REPORT.pdf
- Government of Malawi – National Statistical Office (NSO) and ICF, 2017c: Malawi Demographic and Health Survey (DHS) 2015-16. Zomba, Malawi, and Rockville, Maryland, USA
<https://dhsprogram.com/pubs/pdf/FR319/FR319.pdf>
- Government of Malawi, 2017: Malawi Growth Development Strategy (MGDS) III 2017 – 2022 – Building a Productive, Competitive and Resilient Nation. August 2017
<https://cepa.rmportal.net/Library/government-publications/the-malawi-growth-and-development-strategy-mgds-iii>
- Government of Malawi, 2016: The National Resilience Plan: Breaking the Cycle of Food Insecurity in Malawi. Office of the Vice-President, Department of Disaster Management Affairs, August 2016
<http://www.massp.ifpri.info/files/2017/10/NATIONAL-RESILIENCE-PLAN-MASTER-2016.pdf>
- Government of Malawi, 1998: The National Decentralisation Policy
<https://cepa.rmportal.net/Library/government-publications/Malawi%20Decentralization%20Policy%201998.pdf/view>
- IFAD, 2018: Structural Transformation and Poverty in Malawi – Decomposing the Effects of Occupational and Spatial Mobility. By: R. Benfica, M. Squarcina, A. de la Fuente.
<http://www.indiaenvironmentportal.org.in/files/file/Structural%20transformation%20and%20poverty%20in%20Malawi.pdf>

- IFPRI, 2019: The Relationship between Forest Cover and Diet Quality: A Case Study of Rural Southern Malawi. By: C. Hall, J.I. Macdiarmid, R.B. Matthews, P. Smith, S.F. Hubbard, T.P. Dawson.
In: Food Security – The Science, Sociology and Economics of Food Production and Access to Food, June 2019, Volume 11, Issue 3, pp 635–650
<https://link.springer.com/article/10.1007/s12571-019-00923-0>
- IFPRI; 2018a: Agriculture, Food Security and Nutrition in Malawi – Leveraging the Links.
Edited by N.-L. Aberman, J. Meerman, T. Benson, March 2018
<http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/132311/filename/132515.pdf>
- IFPRI, 2018b: Examining Perceptions of Food Assistance on Household Food Security and Resilience in Malawi. By A. Margolies, K. Kalagho, C. Kazembe. Strategy Support Program, Working Paper 24, August 2018
<http://www.ifpri.org/publication/examining-perceptions-food-assistance-household-food-security-and-resilience-malawi-0>
- IFPRI / UNDP, 2019: Building Resilience to Climate Shocks in Ethiopia. Food Policy Report by J. Koo, J. Thurlow, H. ElDidi, C. Ringler, A. De Pinto.
<http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/133312/filename/133524.pdf>
- MVAC, 2018: Food Security Forecast for the 2018/2019 Consumption Year.
The Malawi Vulnerability Assessment Committee Bulletin No. 15/18 Volume 1.
<https://reliefweb.int/sites/reliefweb.int/files/resources/MVAC%20IPC%20Communication%20Brief%20-%20Final%20%282%29.pdf>
- MVAC, 2016: National Food and Nutrition Security Forecast, April 2016 to March 2017.
The Malawi Vulnerability Assessment Committee Bulletin No. 12/16 Volume 1.
https://documents.wfp.org/stellent/groups/public/documents/ena/wfp285528.pdf?_ga=2.107117442.1893870159.1566664281-1139803133.1566664281
- MVAC / FEWS NET, 2016: Malawi Livelihood Baseline Profiles. National Overview Report 2015
<https://fewsn.net/sites/default/files/documents/reports/Malawi-livelihood-baseline-profiles.pdf>
- OCHA, 2019: Malawi Country Profile. Last updated: February 2019
<https://www.unocha.org/southern-and-eastern-africa-rosea/malawi>
- ODI, 2016: Analysis of Resilience Measurement and Approaches. Overseas Development Institute (ODI) & The Resilience Evidence and Learning Community of Practice (CoP), October 2016
https://www.fsnnetwork.org/sites/default/files/analysis_of_resilience_measurement_frameworks_and_approaches.pdf
- ODI, 2014: Fragmented Governance and Local Service Delivery in Malawi. By T. O’Neil, D. Cammack with E. Kanyongolo, M.W. Mkandawire, T. Mwalyambwire, B. Welham, L. Wild
<https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8943.pdf>
- ODI / BRACED, 2016: How Can Social Protection Build Resilience? Insights from Ethiopia, Kenya and Uganda. BRACED (Building Resilience and Adaptation to Climate Extremes and Disasters) Working Paper by M. Ulrichs and R. Slater. December 2016
www.odi.org/sites/odi.org.uk/files/resource-documents/11123.pdf

- ODI / BRACED, 2015: The 3 As: Tracking Resilience Across BRACED. BRACED (Building Resilience and Adaptation to Climate Extremes and Disasters) Working Paper by A.V. Bahadur, K. Peters, E. Wilkinson, F. Pichon, K. Gray, T. Tanner. August 2015
<https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/9812.pdf>
- OECD, 2019: Social Institutions & Gender Index (SIGI) 2019: Malawi.
<https://www.genderindex.org/wp-content/uploads/files/datasheets/2019/MW.pdf>
- OECD, 2018: Youth Well-being Policy Review of Malawi. OECD Development Centre
<http://www.oecd.org/countries/malawi/Youth-well-being-policy-review-Malawi.pdf>
- OECD, 2014: Guidelines for Resilience Systems Analysis – How to Analyse Risk and Build a Roadmap to Resilience. OECD Publishing
<https://www.oecd.org/dac/Resilience%20Systems%20Analysis%20FINAL.pdf>
- Oxfam, 2017: The Future is a Choice – Absorb, Adapt, Transform – Resilience Capacities. By H. Jeans, G.E. Castillo, S. Thomas. Oxfam International, January 2017
<https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620178/gd-resilience-capacities-absorb-adapt-transform-250117-en.pdf?sequence=4&isAllowed=y>
- Perry, H., M. Morrow, S. Borger, J. Weiss, M. DeCoster, T. Davis, P. Ernst, 2015: Care Groups I: An Innovative Community-Based Strategy for Improving Maternal, Neonatal, and Child Health in Resource-Constrained Settings. *Glob Health Sci Pract.* 2015;3(3): 358-369.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4570011/#b25>
- Prost A., T. Colbourn, N. Seward, K. Azad, A. Coomarasamy, A. Copas et al., 2013: Women's Groups Practising Participatory Learning and Action to Improve Maternal and New-born Health in Low-Resource Settings: A Systematic Review and Meta-analysis. *Lancet.* 2013; 381(9879): 1736-1746
- Sachs, J., G. Schmidt-Traub, C. Kroll, D. Durand-Delacore, K. Teksoz, 2017: SDG Index and Dashboards Report 2017: Global Responsibilities. New York, NY: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN)
https://s3.amazonaws.com/sustainabledevelopment.report/2017/2017_sdg_index_and_dashboards_report.pdf
- Samuels, Fiona et al., 2009: People in Planning in Malawi: Lessons from the APAC Programme in Eastern and Southern Africa. ODI Project Briefing No 18, January 2009
<https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/3463.pdf>
- The Lancet, 2018: Prevalence of Obesity, Hypertension, and Diabetes, and Cascade of Care in Sub-Saharan Africa: A Cross-Sectional, Population-Based Study in Rural and Urban Malawi by AJ Price et al., *Lancet Diabetes Endocrinol*, January 19, 2018
<https://www.practiceupdate.com/content/prevalence-of-obesity-hypertension-and-diabetes-and-cascade-of-care-in-sub-saharan-africa/63439>
- Transparency International, 2018: Malawi Country Profile – Corruption Perceptions Index 2018.
<https://www.transparency.org/country/MWI>
- UNECA / WFP, 2015: The Cost of Hunger in Malawi – Social and Economic Impacts of Child Under-nutrition in Malawi – Implications on National Development and Vision 2020. United Nations Economic Commission for Africa (UNECA), United Nations World Food Programme (WFP), May 2015
<https://documents.wfp.org/stellent/groups/public/documents/newsroom/wfp274603.pdf>

- UNICEF, 2019: Malawi 2018/19 Nutrition Budget Brief: Investing in Nutrition – Building Resilience and Achieving Development for All in Malawi. January 2019
<https://www.unicef.org/esa/sites/unicef.org.esa/files/2019-04/UNICEF-Malawi-2018-Nutrition-Budget-Brief.pdf>
- UNICEF, 2018: Nutrition Statistics in Malawi. Factsheet.
https://www.unicef.org/malawi/sites/unicef.org.malawi/files/2018-09/UNICEF_Nutrition_Factsheet_2018.pdf
- USAID, 2018: Sustaining Poverty Escapes in Malawi – Policy Implications Brief.
 By L. Scott and B. Chinsing, December 2018
https://www.agrilinks.org/sites/default/files/resources/final_pib-malawi_dec_508.pdf
- USAID, 2018: Resilience and Sustainable Poverty Escapes in Malawi.
 Report by L. da Corta, L. Scott, M. Eichsteller, A. Gondwe. December 2018
https://www.agrilinks.org/sites/default/files/resources/final_casestudy_malawi_dec_508.pdf
- USAID, 2013: The Impact of Maternal Education on Child Nutrition: Evidence from Malawi, Tanzania, and Zimbabwe. DHS Working Paper by D. Makoka, February 2013
- World Bank, 2019: Charting a New Course: Priorities for a Vibrant Economy and Jobs. Policy Choices for Malawi 2019. June 2019
<http://documents.worldbank.org/curated/en/890181562234818453/pdf/Policy-Choices-for-Malawi-2019.pdf>
- World Bank, 2017a: Malawi’s Fourth Integrated Household Survey 2016-2017 & Integrated Household Panel Survey 2016. World Bank Blog by H. Moylan and T. Kilic. December 2017
<https://blogs.worldbank.org/opendata/malawi-s-fourth-integrated-household-survey-2016-2017-integrated-household-panel-survey-2016-data>
- World Bank, 2017b: The Impacts of Safety Nets in Africa – What Are We Learning? Social Protection and Labour Global Practice Group & Africa Region Office of the Chief Economist, Policy Research Working Paper by L. Ralston, C. Andrews, A. Hsiao, November 2017
<https://openknowledge.worldbank.org/bitstream/handle/10986/28916/WPS8255.pdf?sequence=5&isAllowed=y>
- World Bank, 2017c: Is Poverty in Africa Mostly Chronic or Transient? Evidence from Synthetic Panel Data. Poverty and Equity Global Practice Group & Development Data Group, Policy Research Working Paper by H.-A.H. Dang, A.L. Dabalén, April 2017
<http://documents.worldbank.org/curated/en/172891492703250779/Is-Poverty-in-Africa-mostly-chronic-or-transient-evidence-from-synthetic-panel-data>
- World Bank, 2015: How Much of the Labour in African Agriculture is Provided by Women? Policy Research Working Paper by A. Palacios-Lopez, L. Christiaensen, T. Kilic. June 2015
<http://documents.worldbank.org/curated/en/979671468189858347/pdf/WPS7282.pdf>