



Food Assistance for Assets (FFA) for Zero Hunger and Resilient Livelihoods: **ANNEXES**

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Annexes to Chapter 1

Food Assistance for Assets (FFA)
for Zero Hunger and Resilient Livelihoods



World Food Programme

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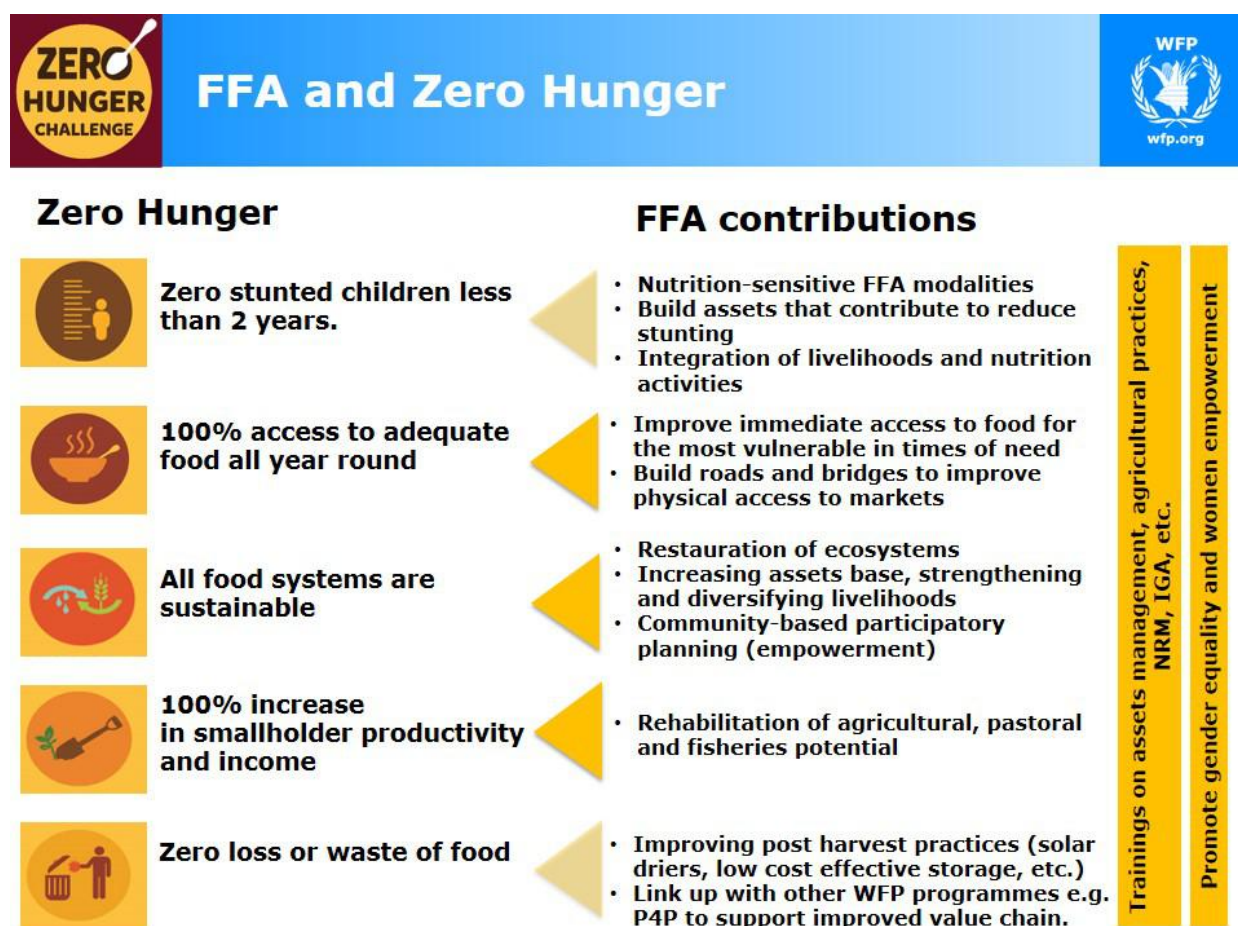
ANNEXES TO CHAPTER 1

ANNEX 1a: The Zero Hunger Challenge

The Zero Hunger Challenge was a global call-to-action aiming to build support around the vision of achieving Zero Hunger. It was launched by the UN Secretary General Ban Ki-moon in 2012 and calls on everyone – governments, the private sector, NGOs, the public – to do their part to turn the vision into a reality. It is all based on a shared conviction that hunger can be eliminated in our lifetimes.

The Zero Hunger Challenge (ZHC) set the stage and identified the broad actions to cover the transitional period until the Sustainable Development Goals (SDG) were developed. It was based on five pillars that outline the needed actions to eliminate hunger in the world.

The work of WFP contributes to each of the five elements of the Zero Hunger Challenge through its Strategic Plan. For example, WFP plays a leading role in the area of stunting and access to food – the first two elements. Our work fighting malnutrition is fundamental to the vision of zero stunting, while school meals programmes and food voucher schemes help ensure the poor have access to food even during a crisis. Work with smallholder farmers also makes important contributions to the other three parts of the zero hunger vision. FFA is a major contributor to the Zero Hunger Challenge, contributing to all five pillars as demonstrated below:



Note that the SDG's now supersede the Zero Hunger Challenge

ANNEX 1b: FFA within WFP's Policy Frameworks

A policy is an officially agreed plan, principles, and/or set of procedures to guide decision making. Each policy bringing WFP into a new area of work must be approved by the Executive Board, whilst a policy framework is the structure (or frame) which contains and brings together different policies, and for WFP serves as a governance tool for the operations of the Programme.

The [Consolidated Framework of WFP Policies: Establishing and Maintaining a Governance Tool \(WFP, 2002\)](#)¹ provides the structure – or framework – in which policies guiding WFP's work are organized, in five main policy categories:

- **Emergencies:** primarily applicable to emergency contexts, includes policies that define the criteria for emergency response and articulates programming principles.
- **Linking relief and development:** primarily applicable to protracted crises, but also relevant to emergency operations moving beyond the relief phase and into recovery.
- **Development:** primarily applicable to contexts of structural and deep-rooted food insecurity and vulnerability, with policies consistent with the Enabling Development framework.
- **Cross cutting:** includes policies that are broadly applicable to all WFP programmes, for example gender, environment, partnerships, etc.
- **Resourcing:** includes resource mobilization, cost recovery principles, funding, etc.

The [Consolidated Framework of WFP Policies of November 2010](#)² contains all of WFP's policies organized within the five main categories for easy reference. An update to all these policies can be found in the [Compendium of Policies related to the Strategic Plan \(WFP, 2015\)](#)³.

The following table presents the policies of relevance to FFA, aligned to the policy framework:

Categories of the consolidated Framework and policies of major relevance to FFA		
1. Emergencies <ul style="list-style-type: none"> • Food Aid and Livelihoods in Emergencies (WFP 2003) • Definition of Emergencies (p.1-2)(WFP 2005) • Exiting Emergencies (p. 3-4)(WFP 2005) 	2. Linking Relief and Development* <ul style="list-style-type: none"> • From Crisis to Recovery (WFP 1998) 	3. Development* <ul style="list-style-type: none"> • Enabling Development policy (WFP 1999)
4. Cross cutting		
<ul style="list-style-type: none"> • Building Resilience for Food Security and Nutrition (WFP 2015) • Disaster Risk Reduction (WFP 2011) • Update of WFP's Safety Nets Policy (WFP 2012) • WFP and the Environment (WFP 1998) 	<ul style="list-style-type: none"> • (Coordination) Mission Statement • Participatory Approaches (WFP 2000) • Partnership (WFP 2001) • Gender Policy 2015-2020 (WFP 2015) • Cash and Vouchers (WFP 2008) 	<ul style="list-style-type: none"> • WFP Humanitarian Protection Policy (WFP 2012) • Update (WFP, 2014) • WFP's Role in Peacebuilding in Transition Settings (WFP 2013) • Update (WFP, 2014) • WFP Strategic Results Framework (WFP 2010)
5. Resourcing (applicable to the financial structures of WFP)		

***Note:** Following the approval of the "Policy on Building Resilience for Food Security and Nutrition", the "WFP Policy on Capacity Development" in 2009, the "WFP Policy on Disaster Risk Reduction and Management" in 2011, the

¹ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp008130.pdf>

² Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp225108.pdf>

³ Available at: <http://documents.wfp.org/stellent/groups/public/documents/eb/wfp277488.pdf>

"Update of WFP's Safety Nets Policy" and the "WFP Nutrition Policy" in 2012, the policy on "WFP's Role in Peacebuilding and Transition Settings", and the "Revised WFP School Feeding Policy" in 2013, the following policies have now become superseded: i) "Transition from Relief to Development" (WFP/EB.A/2004/5-B); ii) "Enabling Development" (WFP/EB.A/99/4-A); and iii) "From Crisis to Recovery" (WFP/EB.A/98/4-A).

1. Policy Framework Category 1: Emergencies

The framework for using FFA during emergencies is captured in **Food Aid and Livelihoods in Emergencies: Strategies for WFP (WFP, 2003)**⁴. The policy states that 'whilst not all emergencies will be conducive to preserving assets and supporting livelihoods, livelihood-related issues should still be analyzed and assessed for opportunities to do this.'

Where emergency contexts are shown to be conducive for livelihood support, those essential assets required to meet basic needs and help those affected by crisis recover more quickly should be preserved, whilst synergies between its emergency and longer-term interventions should be built.

“
Whilst not all emergencies will be conducive to preserving assets and supporting livelihoods, livelihood-related issues should still be analyzed and assessed for opportunities to do this.
”

For FFA, this means that it is the preservation of existing or quick repair/rehabilitation of key assets that should be prioritized rather than the construction of anything new, whilst simultaneously identifying which existing assets need to be improved, or what new assets may be required, once programming moves into the recovery phase – i.e. the synergy between the short and longer-term view. Lastly, a key principle in the policy is the need for partnerships and complementary inputs and resources when engaging in livelihood responses during an emergency.

WFP responds to acute emergencies through its **Emergency Operation (EMOP) primarily using SO1: Save Lives and Protect Livelihoods in Emergencies**

There are two other policies of relevance in this category – how emergencies are defined, and how to exit from an emergency once the crisis has passed:

- (i) The **Definition of Emergencies (WFP, 2005)**⁵ states: 'For purposes of WFP emergency projects, emergencies are defined as urgent situations in which there is clear evidence that **an event or series of events has occurred** which causes human suffering or imminently threatens human lives or livelihoods and which the government concerned has not the means to remedy; and it is **a demonstrably abnormal event or series of events** which produces dislocation in the life of a community on an exceptional scale.' These emergencies can result from either a single or a series of combined events, be natural or man-made, or be rapid or slow-onset, and which threaten lives and livelihoods.

This is an important distinction as there is often confusion between what constitutes an emergency situation from contexts of regular and frequent seasonal hardships (e.g. the lean seasons before harvest) or shocks (e.g. a yearly monsoon season which damages/destroys crops) which keeps vulnerable people in a prolonged or constant state of food insecurity and recovery before the next expected hardship or shock occurs.

What is important to understand is that the shock (or combination of shocks) should have '**occurred**' and/or should be '**abnormal**'. For example a drought emergency is the complete failure of rains and loss of crops over a large area, whilst regular seasonal hardship before the rains in

⁴ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp015464.pdf>

⁵ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp043676.pdf>

pastoral areas is not. When considering the use of FFA in contexts of shocks, this definition should be used to determine whether this is in effect an emergency or not.

The following policy guides the principles of interventions in emergency contexts (as defined above):

- (ii) **Exiting Emergencies (WFP, 2005)**⁶ outlines how WFP will exit from an emergency, either through (i) the withdrawal of WFP assistance from an emergency operation or from a country, or (ii) a shift to a longer-term programme to protect and improve livelihoods and resilience. It explains the goals of an exit strategy, when to exit from an emergency, and what to consider when planning an exit emergency.

Of relevance to FFA is the exit from an emergency by shifting to longer-term programming, and in particular in those contexts where shocks are recurring and frequent rather than one-off abnormal events – although in both cases FFA can be used as part of an exit strategy tool if properly planned, sequenced, and implemented. In contexts of recurring shocks, FFA used during emergencies should be structured to address immediate needs in ways that also lay foundations for interventions that will be geared towards recovery and eventual resilience building in subsequent WFP projects.

Thus, the **Policies in Category 1: Emergencies** will **set the stage of WFP's role**. They define what constitute emergencies, guide the programming principles associated with emergency responses and saving lives, how to transition out of emergencies - and where required, to longer term programming for recovery and/or resilience building.

Of key relevance to FFA are the key principles – wherever possible and depending on context – of serving both relief and development purposes when saving lives and livelihoods, and integrating post-emergency responses into the planning processes during emergencies. This means that in certain emergency contexts FFA can be delivered in ways that contribute to building the foundations – either through the actual intervention and/or the planning approaches used – to support recovery and development efforts once the emergency has passed. Note however that the imperative is always on saving lives, and that these other principles should only be considered if they do not put at risk the timely delivery of assistance to people in crisis.

⁶ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp043683.pdf>

2. Policy Framework Category 2: Linking Relief and Development

The main policy of relevance for FFA in this category is [From Crisis to Recovery \(WFP, 1998\)](#)⁷. This policy outlines the strategic approach of WFP in those contexts after a crisis where people are recovering, or where crisis is not the result of an abnormal (refer to the policies under Emergency) but one of exposure to multiple and recurring shocks.

This context can be regarded as one of transition in which the crisis may have passed yet the situation is still unstable for long-term development efforts to take over – or, it is the period between, and that overlap on either end of, the humanitarian or development context. These will be contexts of great fluidity, where humanitarian assistance is still likely to be required in the event that a crisis occurs, whilst the most programming is geared towards helping people recover and stabilizing situations for long-term development activities; similarly, as certain areas become stable, opportunities for development exist and longer-term approaches should be taken. Working in these contexts requires a flexible programmatic tool provides the flexibility to respond to changing situations and developmental needs within the contexts of protracted relief and recovery situations. **For WFP, this tool is the Protracted Relief and Recovery (PRRO) operation.**

“ This context can be regarded as one of transition where although the crisis may have passed, the situation is still not sufficiently stable for long-term development efforts to take over – or, it is the period between, and that overlap on either end of, the humanitarian or development context. ”

Both recovery and development strategies and programmes may be part of WFP’s activities in a particular country, although in certain country situations only recovery interventions are appropriate, or only development is warranted. Although SO1: Save Lives and Protect Livelihoods in Emergencies can remain as small feature in PRRO’s for certain populations in areas that are still in crisis, **overall strategic objectives will be as follows**, although the balance of which will be determined by the context.

- **SO2: Support or restore food security and nutrition and establish or rebuild livelihoods in fragile settings and following emergencies; and/or**
- **SO3: Reduce Risk and Enable People, Communities and Countries to Meet their Own Food and Nutrition Needs**

A recovery strategy guided by this policy is needed to build the foundations of a PRRO, and should include detailed situational analyses to understand the fluidity of the context, a risk assessment of possible setbacks, programme responses to be used, and success indicators (i.e. Monitoring and Evaluation).

Amongst other aspects, the policy places emphasis on the use of FFA (referred to as FFW in the policy, see note on section on terminology) and integrating communities into the selection, planning, and implementation of activities. Furthermore, it highlights the need for the consideration of the environment, stating that *‘WFP will develop recovery interventions that incorporate community-based natural resource management activities as a mechanism for meeting the food needs of food insecure people and for simultaneously addressing issues of environmental degradation’*, which provides a major entry point for using FFA in recovery operations.

“ WFP will develop recovery interventions that incorporate community-based natural resource management activities as a mechanism for meeting the food needs of food insecure people and for simultaneously addressing issues of environmental degradation’, which provides a major entry point for using FFA in recovery operations. ”

⁷ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp000174.pdf>

3. Policy Framework Category 3: Development

The **Enabling Development policy (WFP, 1999)**⁸ provides the overall framework for WFP's policies in development. It indicates that WFP food assistance should only be provided to beneficiaries whose food consumption is inadequate for good health and productivity, and where WFP development assistance enables the poorest people to meet their short-term food needs in ways that build longer-term human and physical assets. WFP food assistance should only be provided where lasting physical assets or human capital will be created and where these assets and food consumption effects will benefit the poor, food-insecure households and communities.

This policy is relevant for FFA within the context of **Country Programmes (CP) and Development Projects (DEV)**, which are aligned to the UNDAF, One UN efforts, Poverty Reduction Strategy Papers (PRSP), and other strategic frameworks.

Consistent with this policy, WFP's FFA programmes will be community based interventions that have clear exit strategies, and benefit both community and individual households. They will be delivered primarily under:

- **SO3: Reduce Risk and Enable People, Communities and Countries to Meet their Own Food and Nutrition Needs**, whilst those populations still in - or transitioning out of - recovery will be targeted under **SO2: Support or restore food security and nutrition and establish or rebuild livelihoods in fragile settings and following emergencies** until they have stabilized sufficiently to shift into SO3.

FFA supports three of five priority areas relating to the Enabling Development policy:

- Helping poor families to gain and preserve assets.** All WFP asset creation interventions should result in a lasting asset for the household or community, and assets created should result in a permanent improvement in the beneficiaries' life or livelihoods. Targeted beneficiaries (those receiving the food assistance and undertaking the intervention) should benefit from the assets created.
- Mitigating the effects of recurring natural disasters in vulnerable areas.** In countries subject to recurring natural disasters, WFP food assistance should help prevent or mitigate disasters that pose threats to food production and livelihoods. Activities will be targeted to populations in disaster-prone areas whose coping strategies are insufficient to meet food needs when a natural disaster occurs.
- Helping households dependent on degraded natural resources to shift to more sustainable livelihoods**, improve productivity, and prevent further degradation of the natural resource base. This includes measures to support shifts from unsustainable to sustainable natural resource management practices, and to stabilize areas subject to slow resource degradation.

“Consistent with this policy, WFP's FFA programmes will be community based interventions that have clear exit strategies, and benefit both community and individual households. They will be delivered primarily under SO3: Reduce Risk and Enable People, Communities and Countries to Meet their Own Food and Nutrition Needs, whilst those populations still in - or transitioning out of - recovery will be targeted under SO2: Support or restore food security and nutrition and establish or rebuild livelihoods in fragile settings and following emergencies until they have stabilized sufficiently to shift into SO3.”

⁸ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp000029.pdf>

4. Policy Framework Category 4: Cross-Cutting

There are a number of cross-cutting policies of relevance to FFA, the principles of which are applicable to any programme irrespective of whether it is Emergency, Transition (recovery), or Development.

Beyond the resilience policy, there are an additional three policies are of particular relevance in placing FFA in the resilience agenda, and together with other cross-cutting policies outlined at the end of this section provide the principles and considerations in how to deliver FFA (and other WFP activities).

(i) **Policy on Building Resilience for Food Security and Nutrition (WFP 2015)**⁹

Released in 2015, the resilience policy outlines the way in which WFP will contribute to building resilience for food security and nutrition. Most importantly, the policy recognizes that resilience cannot be achieved through the actions of individuals alone, and therefore places great emphasis on partnerships and complementarities of WFP internal and partner's external programmes. The policy recognizes that humanitarian and development actions need to be aligned, with the former safeguarding the gains made by development during shocks and crisis, whilst the latter should aim to address underlying causes of vulnerability that cannot be tackled by humanitarian actions alone.

Whilst there are a number of definitions of resilience, the policy draws on the multi-agency Resilience Measurement Technical Working Group of the Food Security Information Network, in which WFP has played a leading role, which defines resilience as: **"the capacity to ensure that shocks and stressors do not have long-lasting adverse development consequences"**.

This definition encompasses elements found in other definitions, and places emphasis on the set of capacities required before, during, and after onsets of shocks and stressors – namely, the ability to:

- a) **absorb:** resist a shock or the eroding effects of a stressor by reducing risk and buffering its impact, which leads to endurance and continuity of livelihoods and systems;
- b) **adapt:** respond to change by making proactive and informed choices, leading to incremental improvements in managing risks; and
- c) **transform:** change the set of available choices through empowerment, improved governance and an enabling environment, leading to positive changes in systems, structures and livelihoods.

What this means is that programmes need to be identified, designed, and delivered in ways that strengthen these capacities of individuals, households, communities, and country institutions and systems responsible for the well-being of their populations, and it is this collective action at different levels that will lead to more resilient societies. As a set of capacities, resilience is not an end objective, but rather a means to achieving and sustaining desired well-being outcomes in the face of shocks and stressors.

For WFP, the targeted outcomes relate to food security and nutrition, and to do this interventions aimed at building resilience should be:

- **Multi-level and systems-based:** operating at different levels and recognizing their inter-dependence: individual, household, community, government and regional/global institutions.

“As a set of capacities, resilience is not an end objective, but rather a means to achieving and sustaining desired well-being outcomes in the face of shocks and stressors. For WFP, the targeted outcomes relate to food security and nutrition.”

”

⁹ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfpdoc063833.pdf>

- **Multi-sector:** to allow for holistic approaches that address the root causes of vulnerability due to the high range of shocks and stressors and their associated effects. Enhancing resilience requires cross-sectoral partnerships that integrate, layer and sequence interventions.
- **Multi-stakeholder:** due to the complexity of risks, the need to enhance resilience capacities concurrently, and the different levels and scales at which resilience must be built require strong partnerships among stakeholders – communities, government, external agencies, research institutions, civil society and the private sector.
- **Context-specific:** interventions should be adapted to each context on the basis of analysis of risks, vulnerabilities and resilience capacities, and designed with stakeholder involvement. Implementation should respond to changes in context and lead to sustainable improvements.

Implications for future WFP engagement in resilience are described through the following four areas:

a) Strategy and Programme Formulation

- **Systematically apply a resilience approach to strategy and programme formulation:** through the WFP Country Strategic Plans approach, planning will be more directly aligned to national and global zero hunger priorities, and provide a long-term planning framework for programmes - an essential requirement of a resilience approach.
- **Analysis and planning tools must incorporate a resilience-building approach:** planning and programme development must be based on sound situation and risk analyses, using a variety of processes and tools that use consultative, multi-stakeholder approaches to analysis and planning - the 3PA is a major WFP contribution in this regard.
- **Link early warning with early action:** strategic planning requires flexible responses to shocks - countries should be supported to develop monitoring systems that trigger early action funding.

b) Design and Implementation

- **Prioritize gender equality and women's empowerment:** shocks and stressors impact women and men, girls and boys differently, and enhancing resilience must be planned accordingly with a major focus on the protection and empowerment of women and girls.
- **Prioritize disaster risk reduction as a prerequisite for sustainable development:** through emergency preparedness, early warning and rapid response, and supporting national disaster management authorities' resilience-building efforts.
- **Prioritize the prevention of undernutrition:** adequate nutrition is both part of the resilience-building process and an outcome – from the first 1,000 days of life and during adolescence to promote lifetime health and productivity; during an immediate shock; and through nutrition-specific and -sensitive actions to prevent rather than treat acute malnutrition.
- **Increase support to social protection and safety nets:** with the aim to develop new and strengthen existing national capacity and ownership of predictable social protection and safety net programmes that can be rapidly scaled up in response to increased needs from shocks.
- **Prioritize climate resilience:** by incorporating WFP's work on climate resilience in national safety net programmes and WFP food assistance programmes.
- **Create productive assets and strengthen livelihoods, especially those related to productive safety nets:** of key relevance to FFA, the linkage between ecosystem degradation, climate change, food insecurity and undernutrition is increasingly recognized. Productive and protective asset creation through FFA, and particularly through productive safety nets, will diversify livelihood strategies and rehabilitate natural resources.
- **Mainstream innovative practices into WFP's portfolio: for example, through** weather risk insurance, Purchase for Progress (P4P), and other smallholder-friendly procurement initiatives.
- **Realistic, responsive, and flexible interventions:** guided by a resilience-building approach, with flexibility in its assistance portfolio to allow for adjustments as situations evolve.

c) Enabling Actions to Support Programming

- **Increase WFP's capacity to assess and monitor resilience** – through fostering partnerships with other stakeholders and institutions
- **Invest in staff capacity to deliver resilience-building strategies and programmes** – through training of staff at all levels (CD's, Programme, etc.
- **Promote knowledge-sharing and learning** – through lessons learnt best practices, research, and South-South cooperation.

d) Strategic Partnerships

Partnerships for resilience building can be bilateral (at country-level) and/or multi-stakeholder (at country, regional and global levels). Resilience building will require long-term relationships with communities, and depending on contexts and capacities with central and/or local level government. Partnerships with sister UN Agencies (as reflected in the RBA joint conceptual framework for resilience) and NGO's are key for multi-sectorial approaches, as well as civil society, the private sector, and through South-South cooperation.

To conclude, FFA fits squarely within the WFP Resilience Policy. Asset creation, and the consultative and planning processes required to implement FFA address almost every aspect of the policy - from **(i)** the analytical and planning stage through the 3PA; **(ii)** the programme design and implementation phase that focuses on gender issues, nutrition sensitive approaches, disaster risk reduction, ecosystem degradation and climate change, its contribution to productive safety nets, and its basis on best practices and lessons learnt; **(iii)** to the training and capacity building that is required; and finally **(iv)** through the partnerships is generates from its multi-sectorial linkages and the foundations that asset creation provides for other stakeholders on which to build on.

(ii) Disaster Risk Reduction and Management: Building Food Security and Resilience (WFP 2011)¹⁰

Central to WFP's mission is the link between food insecurity and natural disasters, and the importance of preparing for, preventing and mitigating the impact of disasters to prevent further food insecurity. In emergency, transition, and development contexts, the overall aim of WFP assistance is to build the resilience and self-reliance of the most food-insecure populations.

Disaster Risk Reduction (DRR) results from a wide range of measures aimed to prevent, mitigate or reduce the likelihood of disasters occurring, and/or to lessen their impacts when they do occur. DRR is cross-cutting and bridges emergency response, recovery and development. Considerable DRR is achieved through combinations of different actions, for example:

- field level actions, such as asset creation and environmental rehabilitation to reduce physical risk and increase community capacity to withstand the effects of shocks in disaster prone areas, and reduce household vulnerability through better adaptation to climatic variability;
- robust planning and preparedness measures (including national policies and agreements) to respond rapidly and effectively in the event of a shock; and
- preventative measures, such as monitoring and Early Warning systems which provide timely information on the likely occurrence of a disaster to communities, and actions they can take.

“
A number of interventions related to building resilience at household and/or community levels support and/or contribute to strengthening capacities for better adaptation to increased recurrences of weather variations induced by climate change.
”

DRR is cross-cutting and bridges emergency response,

¹⁰ Available at: <http://documents.wfp.org/stellent/groups/public/documents/eb/wfpdoc061382.pdf>

recovery and development. The policy also indicates that DRR is a key component of adaptation strategies to climate change, given that changes in climate can result in increased frequency and intensity of extreme and unpredictable weather events. A number of interventions related to building resilience at household and/or community levels support and/or contribute to strengthening capacities for better adaptation to increased recurrences of weather variations induced by climate change.

More on the links between food security, DRR, and climate change can be found in the discussion document [Climate Change and Hunger \(WFP, 2011\)](#)¹¹ submitted to the EB. This document also includes references to a range of new tools such as the Weather Index and Insurance Schemes pilots, and various links to papers and case studies related to WFP efforts in DRR and adaptation to climate change.

(iii) [WFP and the Environment \(WFP, 1998\)](#)¹²

This policy lays out the relationship of WFP programmes to the environment, highlighting how environmental degradation from natural disasters, soil erosion, declining soil fertility, desertification and reduction of biological diversity leads to food insecurity and vulnerability, undermines the economic and productive bases of communities, displaces millions of people, and can lead to human conflict over resources. **Women are particularly affected** as they are the main providers of water, fuel, fodder and forest products.

Recognizing that failure to reverse destructive environmental practices will continue to result in vicious cycles of poverty, loss of productive assets, food insecurity, malnutrition, displacement and social instability, the policy concludes that prevention of unsustainable natural resource management (NRM) practices is crucial for mitigating environmental impact and safeguarding food security.

FFA programmes and interventions play a major role in NRM. They are often directly related to the restoration or rehabilitation of natural assets as essential elements of livelihoods and building community resilience. NRM is closely linked to and often synonymous to Sustainable Land Management¹³ (SLM), and is directly related to the management of landscape or territorial units managed by communities and groups within communities.

FFA impacts on environmental aspects can be small or big, direct and indirect, negative and/or positive. For example, water harvesting and soil conservation efforts in degraded areas can have major positive impacts on the protection and restoration of natural resources, which in turn may support livelihoods of farmers or pastoralists - but, they may also induce health hazards, such as water-borne diseases. The policy recognizes that natural resource and asset-creation development activities pose environmental risks if not designed and implemented according to accepted technical standards, and as such measures must be taken to avoid these. A number of donors also require that at the very least preliminary or limited assessments of the environment are conducted for those programmes that have environmental risks.

“
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¹¹ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp234250.pdf>

¹² Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp000272.pdf>

¹³ SLM defined as “the use of land resources, including soils, water, animals and plants, for the production of goods to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions” (UN Earth Summit, 1992).

Findings of the [Food Assistance and Natural Resources \(WFP, 1998\)](#)¹⁴ evaluation report are of particular relevance to FFA, which summarizes WFP's experiences in supporting projects aimed at assisting food insecure people in poor and marginal degraded lands to protect, develop, or use natural resources better. The evaluation highlights that implementers and designers need to be aware of the difficulties and challenges associated with successful NRM programmes – i.e. they require investments in time, staff capacity, and participatory and holistic processes.

Implementing NRM requires a realistic understanding of what it takes to do so, and over-ambitious objectives – in terms of coverage and complexity – should be avoided. Failure to do so risks creating expectations that cannot be met in beneficiaries and Governments, as well as causing increased natural resource degradation, further loss in productive systems, and eventually further deterioration in the food security of the poorest. More details on lessons learnt, highlights of difficulties involved in planning and implementing technically sound NRM interventions, and ways of overcoming these challenges are presented in **Chapter 4**.

Lessons from this evaluation are already incorporated throughout the relevant policies that deal either with planning and/or natural resources directly (e.g. Enabling Development, Environment, etc.) or indirectly (e.g. Participatory Approaches, Partnerships, Gender, Coordination, etc. in the following section), and throughout this FFA guidance manual.

(iv) [Update of Safety Nets policy \(WFP 2012\)](#)¹⁵

WFP's [Safety Nets policy \(2004\)](#)¹⁶ was recently updated in 2012 (policy link above). The policies refer to FFA in the form of public (community) labour-intensive works that provide **conditional transfers** to unemployed beneficiaries, or people able to provide labour during specific periods of the year and create assets to benefit the community or public at large.

Community works through FFA can function as a **safety net** by providing predictable food assistance (either through food, cash, or vouchers) to vulnerable groups with surplus labour that are facing food gaps, whilst building assets that benefit households and communities.

This is a particularly relevant policy for FFA, particularly in those contexts that are exposed to regular seasonal hardships – e.g. the difficult dry seasons before the rains in pastoral areas, or the lean seasons during the rains in agrarian settings whilst farmers are waiting for their harvests.

“**FFA is likely to be most effective as a safety-net activity in settings with high unemployment and a need for labour-intensive works to address major natural resource management and basic community infrastructure problems, and where there is capacity to oversee design and implementation.**”

Safety nets can also be important in those areas where shocks and their impacts have a higher likelihood of predictability, for example during annual tropical storms and monsoon seasons that often result in flooding and landslides, etc.

FFA is likely to be most effective as a safety-net activity in settings with high unemployment and a need for labour-intensive works to address major natural resource management and basic community infrastructure problems, and where there is capacity to oversee design and implementation.

¹⁴ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp001233.pdf>

¹⁵ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfpdoc061855.pdf>

¹⁶ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp039212.pdf>

5. Other Relevant Cross-Cutting Policies to FFA

The following are a number of key cross-cutting policies of particular relevance to effective planning design, and implementation of FFA programmes:

- (i) **Coordination:** 'WFP can make progress towards eradicating hunger only through collaboration and coordination with other actors, as articulated in the [WFP Mission Statement](#).¹⁷

When FFA is **coordinated** in collaboration with programmes of other partners, additional benefits for beneficiaries and stakeholders to further resilience efforts are reached. FFA stabilizes environments and acts as a foundation on which other programmes can be built (refer: USAID policy).

FFA can also be structured to complement and support other sectors – e.g. asset creation to improve water availability can support health, nutrition, and education. It does this by providing safe water, and reducing the time spent on water collection of women and girls can improve caring practices of mothers, and school enrolment and attendance of girls.

The Seasonal Livelihood Programming approach (**Chapter 2**) is one tool that FFA uses to find the ways in which to identify, collaborate, complement, and coordinate programmes with government, partners, and communities.

- (ii) **Participatory Approaches:** 'WFP commitment to the participation of stakeholders at all stages of its programmes is captured in its Mission Statement and policies.' [Participatory Approaches \(WFP, 2000\)](#)¹⁸

FFA is based on **participation** from national through to individual levels. This is done through national level contextual analyses with multiple stakeholders (government, donors, and partners) to identify the need and role of FFA; to sub-national multi-stakeholder Seasonal Livelihood Programming consultations to identify programmatic complementarities and coordination; and finally and importantly through participatory community-based planning approaches to select and tailor asset creation to community priorities.

- (iii) **Partnerships with NGO's:** recommendations on how to pursue WFP/NGO partnerships are presented in '[WFP Working with NGOs: A Framework for Partnership](#)' (WFP, 2002).¹⁹

FFA requires robust **technical partnerships** for effective implementation and success.

Through the participatory approaches required to design FFA, and the coordination required to implement joint and complementary programmes, FFA as a tool offers major opportunities to develop new - and strengthen existing - partnerships.

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FFA can be structured to complement and support other sectors – e.g. asset creation to improve water availability can support health, nutrition, and education. It does this by providing safe water, and reducing the time spent on water collection of women and girls can improve caring practices of mothers, and school enrolment and attendance of girls.
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FFA requires robust technical partnerships for effective implementation and success.
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¹⁷ WFP. 1994. Mission statement. Available at: <http://www.wfp.org/about/mission-statement>

¹⁸ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp003920.pdf>

¹⁹ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp004638.pdf>

(iv) Gender: Gender Policy 2015-2020 (WFP, 2015)²⁰

Gender lies at the heart of FFA and is mainstreamed throughout its three guiding principles of:

- aligning to the strategic plan and WFP's objectives;
- using a livelihood-based approach that recognizes and addresses the differences in roles, equality of access to assets, and the hardships experienced by men and women, boys and girls, when designing, planning, and implementing FFA; and
- through consensus building participatory approaches that equally considers the voices of men and women on their needs and priorities.

“Women in particular carry a disproportionate burden of environmental hardships”

Women in particular carry a disproportionate burden of environmental hardships, due to their multiple-roles within the household of collecting and water and firewood, working and using the land and the natural resources they contain, and caring for the children and family. FFA's livelihood-based and consensus building approach aims particularly to reduce the hardships experienced by women through asset creation that has direct positive impacts on their lives.

An update to the Gender Policy 2009 was released in 2015. The goal of this updated policy is to enable WFP to integrate gender equality and women's empowerment into all of its work and activities, to ensure that the different food security and nutrition needs of women, men, girls and boys are met. To achieve this goal, the policy establishes four objectives:

- i)** Food assistance adapted to different needs. Women, men, girls and boys benefit from food assistance programmes and activities that are adapted to their different needs and capacities.
- ii)** Equal participation. Women and men participate equally in the design, implementation, monitoring and evaluation of gender-transformative food security and nutrition programmes and policies.
- iii)** Decision-making by women and girls. Women and girls have increased power in decision-making regarding food security and nutrition in households, communities and societies.
- iv)** Gender and protection. Food assistance does no harm to the safety, dignity and integrity of the women, men, girls and boys receiving it, and is provided in ways that respect their rights.

The relevance of this for FFA is through its participatory planning processes, which if followed will ensure that gender is represented in the identification, selection, planning, implementation, ownership, maintenance, and participation of the assets to be created through FFA.

(v) Human Rights and Protection: *‘WFP's definition of protection is centred on assistance, and means: designing and carrying out food and livelihood assistance activities that do not increase the protection risks faced by the crisis-affected populations receiving assistance. Rather, food assistance should contribute to the safety, dignity and integrity of vulnerable people. WFP Humanitarian Protection Policy (WFP, 2012)*²¹

²⁰ Available at: <http://documents.wfp.org/stellent/groups/public/documents/communications/wfp276754.pdf>

²¹ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfpdoc061670.pdf>

Sub-national and community consultations and planning approaches are entry points to ensure that FFA programmes will be identified and implemented through **a human rights and protection lens**.

These participatory processes provide forums that initiate and encourage dialogue across gender and social strata in communities and are foundations which enhance human rights approaches, particularly in contexts prone to social tensions and conflicts over scarce resources– e.g. between better-off and poorer households, between power holders and marginalized groups, etc.

They raise issues of power, mediation, ownership, and rights of access – e.g. who will own the asset or owns the land it is created on, which people can access the asset and how, who will resolve disputes over the asset, or what is the recourse if access to the asset is denied, etc. They also raise issues related to prioritization (i.e. which assets), participation and targeting in the programme (i.e. inclusion and exclusion), and the identification of concerns and related solutions that have been agreed upon by the community.

“**Sub-national and community consultations and planning approaches are entry points to ensure that FFA programmes will be identified and implemented through a human rights and protection lens.**”

In June 2014, and **Update on Implementation of the Protection Policy**²² was presented to the Executive Board. Of key relevance to FFA within the update was found in the Integration into Programme Design and Implementation section, which featured examples on how protection was integrated into FFA design and delivery to achieve greater protection outcomes.

- (vi) Peacebuilding in Transition:** *‘Conflict is a leading cause of hunger. People in conflict-affected states are up to three times more likely to be undernourished than those living in countries at peace. To a lesser extent, hunger can contribute to violence by exacerbating tensions and grievances. WFP therefore has a strong interest and a potentially important role in supporting transitions towards peace. **WFP’s Role in Peacebuilding in Transition Settings (WFP, 2013)***²³

Whilst the policy recognizes that peacebuilding is not and cannot be an overriding objective of WFP’s assistance, it does however recognize that WFP can have a major contribution to peacebuilding efforts through its programmes – if aligned and complementary to the actions, roles, and responsibilities of other stakeholders. Importantly, the policy indicates that whilst WFP does not have peacebuilding programmes per se, it will and can apply conflict-sensitive lenses to its programmes to ensure that the ‘do no harm’ principles are upheld, as well as determining how to deliver these programmes in ways that will also contribute to stabilization and peacebuilding.

The key entry points for supporting peacebuilding efforts of relevance to FFA are related to the participatory processes required for FFA that ensures the principles of ‘Do no Harm’, and promoting peace at local and national levels through ‘Restoring and Strengthening Community Assets’ in the former and ‘Restoring and Strengthening Livelihoods’ in the latter.

In November 2014, an **Update on WFP Peacebuilding Policy**²⁴ was also presented to the Executive Board to demonstrate how WFP was implementing the policy, featuring how FFA supported local level peacebuilding through bringing ethnically different communities together in community-based participatory planning processes in the Kyrgyz Republic.

²² Available at: <http://documents.wfp.org/stellent/groups/public/documents/eb/wfpdoc063203.pdf>

²³ Available at: <http://documents.wfp.org/stellent/groups/public/documents/resources/wfp259683.pdf>

²⁴ Available at: <http://documents.wfp.org/stellent/groups/public/documents/eb/wfpdoc063455.pdf>

- (vii) **Transfer modalities:** *'In line with the Strategic Plan 2008–2013, vouchers and cash transfers will allow WFP to better adapt its toolbox to context and meet identified needs in a more flexible and appropriate manner. Under appropriate circumstances, the use of vouchers and cash transfers will harness WFP's potential to provide assistance in ways that further strengthen local markets, enhance the productivity of small farmers and empower beneficiaries.'* **Vouchers and Cash Transfers as Food Assistance Instruments: Opportunities and Challenges (WFP, 2008)**²⁵

Policy on **Cash and Vouchers** is still being developed. The above paper submitted to the Executive Board in 2008 for consideration outlines WFP's plans to engage in and implement Cash and Vouchers, and will provide the experiences that will eventually lead to the formulation of a policy²⁶.

Cash, vouchers, and/or food are all relevant transfer modalities to be used in FFA.

Amongst several factors to be considered which transfer modality to use are seasonal considerations and beneficiary preferences. The planning and participatory processes required to design and implement FFA offer the opportunities to capture these elements, and where feasible and relevant FFA can be used as the vehicle to transfer cash and vouchers for added livelihood benefits. Once the policy on Cash and Vouchers has been developed by WFP and approved by the Executive Board, a review for any implications for FFA must be done.

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Cash, vouchers, and/or food are all relevant transfer modalities to be used in FFA.

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- (viii) **Measuring results:** *'The Strategic Results Framework (SRF) is a core component of WFP's performance management and accountability frameworks. It is also the basis for WFP's performance measurement system, which enables WFP to translate its mandate and strategy into tangible outcomes. The framework helps WFP to demonstrate its contributions to achieving the goals and objectives of the WFP Strategic Plan (2008–2013) and the Millennium Development Goals (MDGs) ...'* **Steps Forward: Implementation of WFP Strategic Results Framework 2008–2013 (WFP, 2010)**²⁷

This policy outlines the commitments made by WFP to corporately **measure and report** on the impacts of its programmes against the Strategic Plan, and describes how this will be done in a standard way.

There are two measurements in the SRF that are specific to FFA – the Household Asset Score (HAS) and the Community Asset Score (CAS). These are corporate measures, and any FFA activity will need to report on either one (or both) of these measurements depending on the programme objectives that the activity aims to address. More details on the use of the HAS and CAS are provided in **Chapter 8**.

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There are two measurements in the SRF that are specific to FFA – the Household Asset Score (HAS) and the Community Asset Score (CAS).

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²⁵ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp187787.pdf>

²⁶ The paper **'Update on the Implementation of WFP's Policy on Vouchers and Cash Transfers' (WFP, 2011)** (available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp234183.pdf>) was presented to the EB in June 2011, showing the progress of the 2008 paper and the lessons learnt to date as part of the formulation strategy for the eventual policy.

²⁷ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp212912.pdf>

6. The Commitments the IASC Accountability to Affected Populations

Whilst not a WFP policy in its own right, WFP has ascribed to the five Commitments on Accountability to Affected People/Populations (CAAPs) of the IASC.

The Inter-Agency Standing Committee (IASC) is a forum for inter-agency coordination, policy development, and decision making involving the key UN and non-UN humanitarian partners, and is the primary mechanism for inter-agency coordination of humanitarian assistance.

In 2011 the IASC endorsed five Commitments on Accountability to Affected People/Populations (CAAPs): 1) leadership, 2) transparency, 3) feedback and complaints, 4) participation, and 5) design, monitoring and evaluation, agreeing to incorporate and promote these CAAPs into organizational policies and operational guidelines.

Although applicable throughout WFP's work, the CAAPs are particularly relevant in FFA Principle 3. The participatory planning processes required by FFA support these commitments, most notably through **Seasonal Livelihood Programming** and **Community-Based Participatory Planning**.

See: [**IASC: Commitments the IASC Accountability to Affected Populations \(CAAP\)**](#)²⁸

²⁸ Available at: https://www.humanitarianresponse.info/en/system/files/documents/files/iasc_caap_tools_v4_12nologo.pdf

ANNEX 1c: Strategic Plan, Objectives, & Programme Categories

Key terms in this section

Food Assistance for Assets (FFA): is a use of food assistance (via one or more transfer modalities) to establish or rehabilitate a community asset (whether physical, natural and/or human). More specifically, food assistance (i.e. food, cash, voucher or a mix of transfer modalities) provided through FFA enables participants from food insecure households to contribute to meeting their households' short-term food needs while engaging in an activity that contributes to their longer-term food security or to the restoration of community services.

(FFA) rationale: outlines the reasoning behind why FFA as an activity is considered a suitable entry point for food assistance, and helps to define the specific FFA interventions to undertake; and is based on context analysis and research.

(FFA) activity: one of the WFP corporate programme tools used to provide food assistance to vulnerable and food insecure populations – in this manual, FFA is the programme activity being discussed. (Other programme activities used to provide food assistance are Supplementary Feeding, GFD, School meals etc.) An FFA activity is constituted of a sequence of FFA interventions at community level (e.g. building a pond; building half-moons; etc.)

(FFA) intervention: the physical on-site implementation of FFA (e.g. creating an asset in a community, e.g. a feeder road, a water pond, etc.)

Strategic Plan: this is WFP's framework for action, based on four Strategic Objectives.

Strategic Objectives: these set out priority areas for WFP to be pursued in line with its mandate.

1. FFA and WFP's Strategic Plan 2014 - 2017

Currently, WFP is operating through the [Strategic Plan \(2014-2017\)](#).²⁹ It is a framework for action based on four Strategic Objectives (SOs):

- **SO1** – Save Lives and Protect Livelihoods in Emergencies
- **SO2** – Support or restore food security and nutrition and establish or rebuild livelihoods in fragile settings and following emergencies
- **SO3** – Reduce Risk and Enable People, Communities and Countries to Meet their Own Food and Nutrition Needs
- **SO4** – Reduce Undernutrition and Break the Intergenerational Cycle of Hunger

FFA primarily is aligned to SO2 and SO3, and can have a specific role in SO1 during emergencies.

Although not included in SO4, FFA activities in SO3 (and to some extent SO2), can support in the objectives of SO4. Analytical and participatory planning approaches required for FFA contribute to supporting gender and capacity development streamlined throughout all four SO's.

Important Note: this guidance related to the Strategic Plan 2014-2017. A post 2017 Strategic Plan will be developed and will likely result in a change in SO's. Once this new Strategic Plan has been developed and approved by the EB, this FFA guidance will be updated to reflect any new changes.

²⁹ Available at: <http://documents.wfp.org/stellent/groups/public/documents/eb/wfpdoc062522.pdf>

2. How FFA Relates to the Strategic Objectives:

FFA relates to three of the four Strategic Objectives by:

- Improving **access** to food and protecting livelihoods during emergencies (linked to SO1)
- Improving **access** to food and **contributing to re-establishing livelihoods and resilience** of households and communities affected by shocks and in transition situations (SO2); and
- Improving **access** to food, and contributing to reducing disaster risks, and **building resilience** to future shocks for communities, through better integrated interventions and activities in partnership (SO3)

Two core elements emerge out of FFA's potential contributions to WFP's Strategic Objectives. These involve the concepts of improving **access to food** and **resilience**:



Access to food

FFA can improve access to food – both physical and/or by improving purchasing power.

For example, feeder roads and specific rehabilitation works will improve physical access to food (such as connecting people to markets) and by improving purchasing power through the transfer modality provided (cash and/or vouchers) that can be used in local or nearby markets.

Depending on context, FFA measures can be applied across all of the programme categories to meet different or multiple objectives.

For example, during an emergency the repair of feeder roads allows access to food and avoids interruptions in relief supply. During early recovery phases, feeder roads enable people to access food in poorly served markets and/or the faster delivery of food and cash transfers. For longer term recovery and development, feeder roads enable goods produced in reclaimed areas move to markets and raise income levels of farmers, or to commercially off-take livestock from drought-affected pastoral areas, etc.



Resilience

FFA can tackle specific causes of vulnerability, reduce risks, and strengthen coping capacities.

For example, by enhancing food security of households and communities in shock-prone, degraded environments. In many countries, the increased frequency and intensity of shocks caused by extreme weather events have even greater negative effects when they occur in fragile landscape settings.

The role of FFA interventions in arresting soil erosion, increasing soil moisture, harvesting water, and increasing vegetation cover etc. is directly linked to the need to improve and strengthen livelihoods whilst simultaneously reducing the causes of vulnerability, and people's exposure to environmental hardships and shocks. Eventually, a number of these interventions may increase the ability of households to diversify their sources of income.

If done at a significant scale, FFA can also contribute to reduce climatic risks or foster adaptation to climate change induced effects.

FFA's potential contribution to the SO's by improving access to food and resilience can be considered through a lens of **protecting, restoring, rehabilitating and building**, and **reclaiming** assets.

This is broadly explained based on the FFA type suitable in each context and which SO's they can address, as follows:

Livelihood Assets Protection: primarily SO1 and some SO2

During or immediately after shocks - for example, providing households with FFA supporting productive efforts such as clearing roads to improve access to emergency assistance, clearing drainage lines, repairing basic infrastructure linked to production, or reinforcing shelters, etc. These FFA interventions may also include seed protection in areas if the need for this specific activity is ascertained.

Assets Restoration: primarily SO2 and some SO1

Closely linked to the above, and occurring immediately after sudden onset or recurrent shocks - i.e. often as post-emergency repairs. This includes restoring productive and social assets, particularly those which improve access to food and social services. They may include FFA interventions requiring higher levels of capacity and support, for example repairing roads, water structures, or other social infrastructure which requires adherence to proper technical standards.

Asset Rehabilitation and Building: primarily SO2 and SO3

In areas with recurrent shocks, such activities would be geared towards rebuilding damaged, reinforcing existing, and/or building new productive assets that improve access to food, productivity, and increase resilience - under SO2 and SO3.

Note: 'Rehabilitation' requires higher quality and standards than 'Restoration' as quality and strength of the assets require quality levels higher than existed prior to the shock, and in particular on land rehabilitation and natural resources management.

Reclamation:³⁰ primarily SO2 and SO3

This intervention domain is intended to make unproductive land suitable for productive purposes through major building or re-building of assets. For example, projects that will drain swampy and waterlogged areas through canal construction and dyke systems which can then be used for cropping; converting extremely degraded land to productive use through projects such as forestry, moisture conservation, and water harvesting etc.

Note: Before doing reclamation, it is critical to define the tenure of this land

INCREASING COMPLEXITY



Important Note: there are **increasing degrees of technical complexity** when moving from 'protection to restoration' and 'rehabilitation to building and reclamation'. Differences between them are not always easy to separate - for example, a feeder road may have different levels of complexity ranging from small repairs to significant rehabilitation, or building an entirely new feeder road. It is important to determine what is required when considering the SO to select for the programme.

³⁰ The cost of reclamation, or restoration to productive use, of degraded soils is invariably less than the cost of preventing degradation before it occurs (FAO. 1994. [Land degradation in south Asia: Its severity, causes and effects upon the people](http://www.fao.org/docrep/v4360e/v4360e03.htm). Available at: <http://www.fao.org/docrep/v4360e/v4360e03.htm>).

TABLE 1: FFA's relevance and alignment to WFP's Strategic Objectives:

SO	Description of FFA's relevancy to WFP's Strategic Objectives
SO1 P	Save lives and protect livelihoods in emergencies FFA may be critical during emergencies to restore life-saving food supply lines and improve access to food, protect livelihood assets, and reduce negative coping strategies.
SO2 PP	Support or restore food security and nutrition and establish or rebuild livelihoods in fragile settings and following emergencies FFA contributes to restoring and rebuilding livelihoods in post disaster and transitional situations. It is particularly relevant after a single rapid onset shock (such as floods, earthquakes etc.) or following conflicts by using labour to restore key productive and social assets. After protracted crises (such as a drought, or a set of multiple shocks) FFA can be used to stabilize situations, by rebuilding and/or putting in place key foundational assets to promote livelihoods.
SO3 PP	Reduce Risk and Enable People, Communities and Countries to Meet their Own Food and Nutrition Needs FFA can be used to reduce food insecurity in areas that face multiple and recurring shocks. Such areas are typically characterized by severe land degradation, which in turn increases their risk to natural shocks from both normal and extreme weather events, conflicts, and economic crisis. FFA is of major relevance in these contexts to build resilience, reduce disaster risk, and where possible adapt to climate variability. FFA interventions can be implemented as key efforts to reduce environmental hardships while simultaneously restoring natural (agricultural land, forests etc.) and physical (terraces, nursery infrastructure etc.) assets. FFA can complement and be part of an integrated set of longer-term interventions (such as productive safety nets) with partners.
SO4	Reduce Undernutrition and Break the Intergenerational Cycle of Hunger The FFA link to SO4 is indirect. The design of FFA under the other SO's can complement other programmes however – for example, homestead development (such as vegetable/fruit gardens) contribute to improved dietary diversity and supports nutrition objectives; water harvesting reduces time spent collecting water by girl's, and supports school attendance and education, etc.
CROSS-CUTTING	<p>FFA's key supportive role in other areas mainstreamed throughout the Strategic Plan and SO's:</p> <p>Gender: two major consultative planning tools used in FFA support gender mainstreaming. The Seasonal Livelihood Programming (SLP) at sub-national levels align specific activities to gender roles within livelihoods, and the Community-based Participatory Planning (CBPP) that raises issues of tenure, ownership, and control of assets of specific groups and gender within the community.</p> <p>Informing national policies and strengthening Government capacity: FFA has a key role in strengthening and developing capacities of countries to reduce hunger. Building community resilience with FFA as part of a set of partner responses can be instrumental in informing policy and strategic dialogue and strengthening government capacities – for example, by incorporating livelihood assets restoration, preparedness and risk reduction efforts, and resilience building interventions into policies and strategies (such as Poverty Reduction Strategy Papers – PRSP) and in government sector plans (e.g. environment and agriculture) to reduce hunger.</p> <p>Lessons learned from FFA programmes can be adopted as part of national/sub-national policy and programme tools, such as the grass-roots participatory planning and approaches used in FFA to inform targeted programmes for the most vulnerable people. Results from FFA interventions can provide relevant inputs in designing and implementing productive safety net programmes, thereby paving the way for a gradual handover of programmes to governments.</p>

3. Linking FFA to Different Programme Categories

Key terms in this section

Project: a plan describing what it aims to achieve and how it will do so. Projects consist of a rationale, objectives and activities used to reach these objectives, the budget required, and how outputs and outcomes will be measured.

Programme: a set of plans or schedule of activities, procedures, to develop, improve or accomplish a specified end.

Programme category: WFP country operations are made up of a number of projects, grouped into an overall programme category which outlines WFP's focus of assistance in terms of humanitarian or development objectives – i.e. Emergency Operations (EMOPs), Protracted Relief and Recovery Operations (PRROs) and Country Programme (CP) or Development (DEV) projects.

The balance of strategic objectives and programme activities that projects contain will guide the programme category to be selected - for example, country projects mostly related to emergency response and SO1 will be EMOP's, whilst those with longer-term objectives to build government capacity to reduce chronic food insecurity are likely to be characterized as CP's or DEV's, etc.

Countries have faced difficulties translating programme activities and strategic objectives into WFP's project design and programme categories. Under FFA for example, there has been a disproportionate use of resilience building and development activities under SO2 and SO3 within short-term EMOP's.

In response to these difficulties, the Executive Board requested WFP to conduct a programme review to bring discipline into the use of WFP activities within these programme categories and ensure project design was more in line with WFP's corporate strategy as outlined in the (previous 2008-2013) Strategic Plan.

This review was presented to the Executive Board in June 2010 [Programme Category Review \(EB 2010\)](#).³¹

Currently, the development of food assistance programmes is regulated by the recommendations arising from this review, which included the outlining of what is required in terms of consultative processes that inform a better (and shared) understanding of the causes of food insecurity, and the selection of adequate programme responses and their design for quality implementation with governments and partners.

Determining where to place FFA within the programme categories is essential, and will be based on both the rationale for using the activity, and the strategic objective they will contribute to. In broad terms however, FFA will be used in relation to shocks – primarily in responding to shocks (emergencies), helping people recover from shocks, reducing risk to and mitigating the impacts of shocks, building resilience to shocks, and ultimately creating the conditions to prevent (some) shocks from occurring. The ability to do these needs to be considered realistically against the time it would take and what the programme category offers – e.g. EMOP (1-2 years), PRRO (2-3 years), and CP/DEV (5 years).

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In broad terms FFA will be used in relation to shocks – primarily in responding to shocks (emergencies), helping people recover from shocks, reducing risk to and mitigating the impacts of shocks, building resilience to shocks, and ultimately creating the conditions to prevent (some) shocks from occurring.

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³¹ Available at: <http://one.wfp.org/eb/docs/2010/wfp220540~2.pdf>

A common design challenge faced by field and programme staff is determining which programme category their FFA activity would be most appropriately located. For example, would the FFA activity be more suited to an early or an extended recovery phase, or to an enabling development setting? Overall, the criteria below should apply:

Programme Category	Where to place FFA
EMOP (1 year)	<p>EMOP's respond to sudden, slow onset and/or complex emergencies by supporting immediate access to food and protecting livelihoods at times of crisis.</p> <p>FFA will need to be targeted under SO1, and some (limited) under SO2. The emergency nature and short duration of EMOP's does not allow for medium to longer-term planning and implementation.</p>
PRRO (2-3 years)	<p>PRRO's are best adapted to situations in transition – i.e. countries emerging from crisis, or in those situations where there are combinations of some areas emerging whilst others are still experiencing crisis. They respond by protecting and enhancing livelihoods during and after protracted emergencies for early recovery, and once certain levels of stability are reached will increasingly focus on building resilience.</p> <p>FFA will be primarily targeted under SO2. The duration of PRRO's enable shifts from short to medium-term planning, so decreases in any FFA under SO1 with increases under SO2 should be expected during the PRRO, as conditions stabilize. Similarly, as recovery is reached some shifts from FFA under SO2 and into SO3 should also be expected.</p>
CP / DEV (5 years)	<p>CPs and Development projects use food assistance to create an enabling environment for development opportunities, which would invest in preventing hunger and food insecurity, offset future shocks, strengthen and build resilience, and develop Government capacities to take over these responsibilities. This implies that there needs to be a certain level of stability in the country context.</p> <p>FFA will be primarily targeted under SO3. The duration of CP's/DEV allows longer-term planning and related investments to reach these goals. A smaller component under SO2 for those populations transitioning from recovery from recent shocks and into more stable situations can be considered before they would also be shifted into SO3.</p>

Note: there are obvious linkages and context specific nuances to be taken into consideration when applying these criteria, although aspects such as **recovery from shocks** must be adhered to:

Recovery should be linked to shocks that have occurred within a reasonably recent time span (2-5 years maximum), and the food insecurity status of the affected population is still largely related to the shock(s) and not to other or subsequent causes. If this is not the case, the rationale for recovery cannot be applied.

The following tables show how to align FFA to the different programme categories and their related objectives.

4. Emergency Operations (EMOP)

A. EMOP

Objectives of FFA	Type of FFA	Additional criteria to consider
A1. Emergency situations (standard) <ul style="list-style-type: none"> Saving lives Protecting livelihoods 	a) FFA to be considered only under specific conditions: <ul style="list-style-type: none"> For urgent repairs of damaged community assets required to save lives during an emergency - such as the restoration of adequate water supply, sanitation and health installations, etc. For access roads to enable food assistance delivery, etc. 	a) The use of FFA will depend on: <ul style="list-style-type: none"> Assessed needs; and Capacity of partners. If technical capacity for the type of interventions required is not available, either a Special Operation or a partnered intervention (e.g. via the food security cluster approach, etc.) needs to be organized.
A2. EMOP in situations where Government policy requires able-bodied persons to work for transfers received <ul style="list-style-type: none"> Saving lives Protecting livelihoods 	a) To be considered only for selected FFA activities under specific conditions such as: <ul style="list-style-type: none"> For urgent repairs of damaged community assets required to save lives during an emergency - such as the restoration of adequate water supply, sanitation and health installations, etc. For access roads to enable food assistance delivery, etc. b) Implement off-the-shelf projects when minimum implementation capacity is assured (of priority to projects linked to saving lives)	a) Government policy needs to be acknowledged by donors b) Donors agree for WFP to include short term FFA activities in the EMOP c) Tools are available/pre-positioned for the work; or are made available by partners

5. Protracted Relief and Recovery Operations (PRRO)

B PRRO – with a focus on PROTRACTED RELIEF

Objectives of FFA	Type of FFA	Additional criteria to consider
<p>B1. PRRO with higher emphasis on relief (standard)</p> <ul style="list-style-type: none"> • Saving lives • Protecting livelihoods • Promotion of local level efforts and low risk/low tech FFA 	<p>a) Protracted relief situations that require Unconditional Transfers (UCT's) – i.e. GFD, relief through cash and/or vouchers - as a priority.</p> <p>GFD may be associated with FFA through activities such as food-for-training (FFT), and promotion of mutual-help efforts such as:</p> <ul style="list-style-type: none"> • Enhanced solidarity efforts and behavioural change – e.g. providing care to people that are ill, cleaning, hygiene awareness, providing child care, etc. • Promoting self-help efforts (through youth groups, etc.), the creation of women's associations, etc. 	<p>a) Same as those under A1 (Emergency Situations)</p> <p>b) UCT's can gradually shift towards conditional transfers using low tech/low risk FFA which does not require major capacity building as a prerequisite for implementation.</p> <p>c) Solidarity driven activities can be combined with FFA, if linked to the life-saving activities (i.e. in A1 and/or A2 above)</p> <p>d) Government and donors agree to support a PRRO which gradually shifts towards early recovery – for example where conflict areas become safer, where communities have relief committees capable to organize labour intensive works, where there is infrastructure needing urgent repair, where capacity is being built, etc.</p> <p>e) Where partnership with FAO or other specialized institutions (e.g. GTZ, etc.) becomes possible</p> <p>f) Putting in place seasonal livelihood analyses for complementary planning, and gender and protection measures</p>

C. PRRO – with a focus on EARLY RECOVERY

Objectives of FFA	Type of FFA -	Additional criteria to consider
C1. PRRO in rapid onset disaster areas <ul style="list-style-type: none"> Combination of protective (high emphasis) and productive (moderate emphasis) efforts aimed at reducing negative coping strategies, avoid assets depletion, and restore key livelihood assets whilst improving access to food 	<p>a) In areas with low capacity: Low tech/low risk labour intensive works dedicated to the immediate rehabilitation of key livelihood assets (e.g. FFA such as the removal of debris from schools, dwellings, streets, light repair of roads and irrigation canals, etc.). These activities will be targeted to the neediest able bodied households previously supported with GFD or other UCT's.</p> <p>b) In areas with higher capacity: Quality repair of roads and bridges by specialised agencies, NGO's, and/or Gov't, where works are done with sufficient technical capacity and complementary inputs</p>	<p>a) Shift from relief (GFD, etc) to early recovery (FFA) can occur as early as:</p> <ul style="list-style-type: none"> 15 to 30 days after the shock in areas that have pre-positioned stocks (food and tools), prepared shelf plans, and sufficient capacity 30 to 90 days after the shock in areas with accessible pre-positioned stocks, but with limited capacity and/or long cyclonic seasons/slow flood receding areas, etc. <p>Note: A seasonal livelihood analysis will inform the choice and timing of specific FFA (and complementary) measures</p>
C2. PRRO in slow onset disaster areas <ul style="list-style-type: none"> Combination of protective (high emphasis) and productive (moderate to high emphasis) efforts aimed at reducing negative coping strategies, avoid assets depletion, and restore key livelihood assets whilst improving access to food 	<p>a) In areas with low capacity: Low tech/low risk labour intensive works dedicated to the repair of community infrastructure using local knowledge (e.g. FFA for desilting and deepening water ponds/pans, collection of stones and stone shaping for future work, compost-making or collection of farm yard manure, vegetative fencing using local materials, etc.</p> <p>b) In areas with higher capacity: FFA to support community based local level plans and/or rural development plans (based on local and partners' capacity)</p> <p>c) Support the implementation of available district-level off-the-shelf projects which are able to employ people during times of need (e.g. seasonal support) to improve their access to food – for example, PRRO's can support existing Gov't employment generation schemes for early recovery</p>	<p>a) Early recovery response needs to be modest and largely protective, particularly in cases where local capacity and/or partner presence is limited.</p> <ul style="list-style-type: none"> Minimum capacity building efforts will need to be undertaken before low tech FFA interventions begin <p>b) In areas with higher capacity, FFA must be planned based on seasonal livelihood analysis (e.g. FFA should not to interfere with key periods i.e. - land preparation etc.) and provide support during lean seasons). Selected activities should ensure sufficient capacity building has been undertaken, and should only start if:</p> <ul style="list-style-type: none"> there are partners with capacity in the area tools are available and community planning has been undertaken. <p>It is suggested that early recovery activities should only begin 3 to 6 months from the start of the PRRO to allow enough time for key capacity building efforts to first be completed</p>

Objectives of FFA	Type of FFA -	Additional criteria to consider
<p>C3. PRRO in conflict affected zones</p> <ul style="list-style-type: none"> • Same objectives as C1 above, with priority on activities that re-establish livelihoods in post-conflict situations, while protecting the livelihoods of most vulnerable, and those unable to work 	<p>a) Low tech/low risk community based activities such as:</p> <ul style="list-style-type: none"> • proper land clearing and prevention of deforestation • construction materials and/or stone collection and shaping for major infrastructure repair, (re) construction of livelihood and communal assets and infrastructure • seed collection (indigenous varieties) • land preparation to establish nursery sites • de-silting of water ponds • establish vegetative fences using local materials • pastureland moisture conservation through contour stone lines • eradication of local plant invaders (e.g. <i>Prosopis juliflora</i>) from irrigation canals, pastures and settlements 	<p>a) Types of measures that are implemented should also lay the foundations for late recovery interventions and the rebuilding of major livelihood assets. These activities should normally start within the first year of the PRRO, link to late recovery, and be consolidated during the second year</p>

D. PRRO – with a focus on LATE RECOVERY

Objectives of FFA	Type of FFA	Additional criteria to consider
<p>D1. PRRO in rapid onset disaster areas</p> <ul style="list-style-type: none"> • Objectives build on C1 (previous table), with priority to complete the restoration /rebuilding of basic livelihoods assets while protecting the livelihood of the most vulnerable • Developing suitable resilience building, and transition or handover strategies 	<p>a) In areas of low capacity: Types of activities will follow low tech/low risk models, and focus on completing the restoration of access to social infrastructure, repair of housing for most vulnerable households, clearing of irrigation canals, and road repairs, etc.</p> <p>b) In areas with enhanced local capacity and/or NGOs with consolidated experience in labour intensive activities or specific initiatives linked to environmental rehabilitation, FFA can be directly linked to on-going partners' development plans. Examples could be:</p> <ul style="list-style-type: none"> • Major road construction and maintenance • Clearing drainage and irrigation canals • Community based watershed rehabilitation (soil and water conservation, flood protection, etc.) • Support expanding nursery production and reforestation efforts (e.g. tree planting pitting and re-pitting, mulching, etc.) • Windbreak plantations • Constructing shelters and strengthening/enhancing existing housing 	<p>a) In rapid onset crisis areas, these activities can normally start around 3 months after the early recovery phase</p> <p>b) Sufficient capacity and/or capacity building, and qualified partners, are a prerequisite for late recovery measures</p> <p>c) Handover strategies must be developed with local and other partners - e.g. Gov't, donors, NGOs, etc).</p>

Objectives of FFA	Type of FFA	Additional criteria to consider
<p>D2. PRRO and late recovery in conflict affected zones</p> <ul style="list-style-type: none"> • Objectives similar to C3 (previous table) with priority to the rebuilding of key livelihood assets in post conflict situations while protecting livelihoods of the most vulnerable • PRRO's that establish the basis for longer term safety nets or handover, and in areas of return (i.e. for returnee's) that continue to be highly food insecure 	<p>a) In areas of low capacity: Low tech/low risk community based activities such as:</p> <ul style="list-style-type: none"> • local housing construction • repair of social infrastructure and assets (schools, etc.) • compost preparation and distribution • traditional natural resource conservation methods <p>b) In areas with improved/enhanced capacity: Community based activities such as:</p> <ul style="list-style-type: none"> • nursery establishment • reforestation supported by moisture conservation structures • flood control structures • road construction and major maintenance • ford crossing/Irish bridges • water ponds and other water structures construction • conflict resolution workshops and training (amongst pastoral groups) 	<p>a) Identification of key livelihood assets, and the role of WFP and partners in the activity to be very clearly defined</p> <p>b) In contexts of low capacity, late recovery FFA activities need to be planned for handing over to local communities or partners by the end of the operation</p> <p>c) Partnership building and provision of capacity critical to support post conflict rehabilitation, particularly in context of low capacity (above)</p> <p>d) In context of higher capacity, late recovery FFA activities may transition into Country Programme activities at the end of the PRRO. In such cases, this must be based on consensus with stakeholders (Gov't and donors in particular) on the specific role of post-PRRO food assistance and FFA within this</p>

Objectives of FFA	Type of FFA	Additional criteria to consider
<p>D3. PRRO and late recovery in slow onset disaster affected zones</p> <ul style="list-style-type: none"> • Objectives same as D1 (above) Focus on restoration of assets and resilience building, targeting communities and households most vulnerable /affected by these shocks 	<p>a) In areas of low capacity: Low tech/low risk community based activities such as:</p> <ul style="list-style-type: none"> • local housing construction • repair of social infrastructure and assets (schools, etc.) • compost preparation and distribution • traditional natural resource conservation methods <p>b) In areas with improved/enhanced capacity: Community based activities such as:</p> <ul style="list-style-type: none"> • nursery establishment • reforestation supported by moisture conservation structures • flood control structures • road construction and major maintenance • ford crossing/Irish bridges • water ponds and other water structures construction • conflict resolution workshops and training (amongst pastoral groups) 	<p>a) Identification of key livelihood assets, and the role of WFP and partners in the activity to be very clearly defined</p> <p>b) In contexts of low capacity, late recovery FFA activities need to be planned for handing over to local communities or partners by the end of the operation</p> <p>c) Partnership building and provision of capacity critical to support post-conflict rehabilitation, particularly in context of low capacity (above)</p> <p>d) In context of higher capacity, late recovery FFA activities may transition into Country Programme activities at the end of the PRRO. In such cases, this must be based on consensus with stakeholders (Gov't and donors in particular) on the specific role of post-PRRO food assistance and FFA within this</p>

6. Country Programme (CP) and Development Projects (DEV)

E. CCP and DEV

Objectives of FFA	Type of FFA	Additional criteria to consider
E1. Slow onset shock prone areas <ul style="list-style-type: none"> Enabling development, including mitigation of the effects of catastrophic events Major capacity development of Gov't and local institutions on DRR, resilience, and adaptation 	a) FFA related to supporting households and communities to mitigate recurrent shocks, shift towards more sustainable use of the natural resource base, and increase access to development opportunities. Intervention examples include: <ul style="list-style-type: none"> Labour intensive community and household asset creation, linked to integrated watershed management or area-based participatory rehabilitation – i.e. supporting efforts on physical and biological soil and water conservation, agro-forestry and homestead development, etc. Income generation activities linked to the sustainable use of the natural resource base Complementary support to specific agencies and Gov't efforts (e.g. FAO, GTZ, WB, etc.) on sustainable land management Others (e.g. specific livelihood skills training, etc.) 	a) Shifts from PRRO's to CP's occur when conditions have reached levels of stability for longer-term investments with partners. When using FFA, assets created must be 'built back better' – i.e. in ways that strengthen peoples resilience and reduce the vulnerability that they had before the shock(s). b) Stable conditions allow for integrated programme expansion through capacity building efforts to local institutions and partners – e.g. seasonal livelihood programming and community planning approaches etc. c) Shifts from a PRRO to CPs/Dev should occur by the end of a 2-3 year PRRO cycle, in contexts where sufficient capacity exists and in close consultation and agreement with all key stakeholders involved. Alternatively, a PRRO consolidation phase coupled with a capacity building phase prior to a CP/DEV is suggested, and will need to be aligned with major development strategies and partnerships.
E2. Rapid onset shock prone areas <ul style="list-style-type: none"> Enabling development including shock mitigation 	a) Same measures as above, with a focus on context specific interventions for rapid onset shocks, such as flood control, shelters, and other preventative measures, etc.	a) Same as above but adapted to rapid onset crisis

ANNEX 1d: Placing FFA in the Country Project Document

The previous steps guide the identification of whether FFA is an appropriate programme activity in the country context, the rationales that support and position this activity, which strategic objectives will be addressed, and how they fit within the overall country project. At the project design and drafting stage, any FFA response should address the following questions:

- ✓ Is there a major **food insecurity issue** (e.g. problems in access to food) and known causes?
- ✓ Does the **context and risk analysis** indicate a role for FFA to restore and/or build household and community assets? Is there a **major depletion or lack of assets** and known causes that may require FFA as a response?
- ✓ Has a **livelihood seasonal programming exercise** taken place with stakeholders to identify and discuss broad response options, including FFA? If not, how and when will one be organized?
- ✓ Have **capacity aspects** been analyzed and FFA response options calibrated against these elements of programming? Have FFA responses been chosen accordingly and their description and design accurately done?
- ✓ Are **policies and strategies** of government conducive to programme responses that include FFA as integral part of reconstruction, resilience building or labour based productive safety net strategies and programmes? What gaps exist and how to address them?
- ✓ Are **lessons from best practices and evaluations**, including cost effectiveness and efficiency, being incorporated into the response and design of FFA?

These questions are outlined in the **Programme Design Framework**³² for further guidance. Once the potential of FFA has been rationalized, additional components that may need to be considered are the:

- ✓ **Periods** (i.e. seasonal pattern) of implementation
- ✓ **Types of FFA** (e.g. labour-based, training, etc.)
- ✓ **Transfer modalities** used (i.e. food and/or cash/voucher)
- ✓ **Capacities** of WFP and partners to design and implement specific FFA intervention

Guidance on these components is found in **Chapter 2** (understanding the context and using the 3PA) and **Chapter 4** (implementing FFA – including the types, transfer modalities, and capacity requirements, amongst others).

Once the country office has developed the project document, it undergoes a series of clearance processes through the Regional Bureaus and Headquarters for final approval. The approval authority for the project will depend on its type (e.g. EMOP, PRRO, CP/DEV etc.) and value.

³² Available at: http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp253408.pdf

1. Programme and country strategy review and approval process

The revised programme review process includes a technical review of the project document by means of an electronic programme review process (e-PRP). The Asset Creation & Livelihoods Unit (OSZPR) is responsible to provide technical comments related to assets creation & livelihoods in the System for Project Approval (SPA).

Details about the strategic programme review process (s-PRP) and e-PRP can be found in the [ED circular on “Programme and country strategy review and approval process”](#).³³

2. e-PRP: OSZPR tips for reviewers

The review of FFA and livelihoods aspects and components in project documents by the OSZPR unit through the e-PRP focuses on the following considerations:

- a) Is the context analysis and rationale for Early Recovery/Recovery and/or DRR and/or Safety Net and/or Resilience and/or Climate Change Adaptation components well developed and sufficiently robust in the document?
- b) Are the FFA activities and types of assets consistent with the intended impact and objectives?
- c) Are the FFA activities designed and programmed with an understanding of the seasonal and gender aspects, and the type/s of livelihood system (e.g. agrarian, pastoral and urban) they intend to support?
- d) Is the justification and description of FFA modalities (e.g. caseload, working days, period of implementation, technical services and cooperating partners’ capacities, work-norms etc.) and complementary activities (e.g. for resilience components) sufficiently developed in the document and consistent with the intended impact and objectives?
- e) Are the FFA activities, complementary interventions (e.g. FAO and other partners) and synergy with other sectors (e.g. nutrition, health, WASH, education, market, etc.) well developed in the document and are they designed and programmed through a participatory approach (e.g. CBPP, SLP, etc.)?

Through this review, OSZPR also aims to determine i) whether the project document (including Budget Reviews) highlights the key main recommendations from reviews and evaluations; and ii) whether, overall, the livelihood and asset creation aspects and components are reflected and designed in line with corporate policy and guidance on FFA.

More specifically:

- 1) **Context of vulnerability and exposure to shocks** – what justifies assets creation from (i) Food Security assessments and trends information, (ii) the type and trends of shocks during the last 3-5 years (especially for PRROs and CP/DEV), and (iii) other aspects such as trends in land degradation, access to productive infrastructure such as roads and markets, access to land, and other context specific indicators (i.e. population densities, etc.). Was an ICA done and used to strengthen the rationale for the geographic targeting of different programmatic strategies in the project document?

³³ WFP, 2015. Executive Director’s circular. Available at: <http://docustore.wfp.org/stellent/groups/public/documents/cd/wfp272012.pdf>

- 2) **How the FFA objectives stated in the document relate to the corporate Strategic Objectives** (for example SO1, SO2 and SO3) **and national priorities** – the FFA objectives need to be realistic and (i) related to the timeframe of the operation, (ii) linked to the overall context and exposure to shocks above, (iii) aligned with the existing capacities and policies/strategies of Government, and (iv) based on the level of capacity of partners. Specific objectives imply robust partnerships with other UN agencies, the World Bank, the Government, NGOs, but also the private sector etc., and major commitments to joint efforts. Project documents should clearly position FFA within governmental frameworks and priorities (National policies, UNDAF and others), and - whenever relevant - detail partnerships beyond government and RBAs, including the private sector and research institutes/universities.
- 3) **Rationale of the FFA activity in relation to the programme category** – e.g. building resilience through water harvesting and soil and water conservation work requires longer term planning (e.g. extended recovery through PRRO or CP/DEV), as opposed to clearing debris and quick repairs of roads (e.g. more suitable under EMOP or early recovery of PRRO).
- 4) **Caseloads and aspects of targeting versus types of measures considered** - e.g. assessments and historical trends, partners capacity, seasonality and duration of activities, M&E aspects/capacity, realistic approaches, etc.
- 5) **Type of transfers (food, cash, vouchers)** in relation to seasonal aspects, markets, capacity to deliver, cost effectiveness, and preferences by gender, and beneficiaries/participants.
- 6) **Level of technical and implementation capacity of Governmental/technical services and partners for the type and scale of FFA envisaged.** Specific programme component proposed for FFA (e.g. restoration and rehabilitation of irrigation schemes, watershed rehabilitation, etc.) require robust technical and implementation capacity from Governmental technical services and Cooperating Partners. Is this capacity in place or should it be developed first? This issue is related to the question of feasibility of FFA in a given context, and what the CO envisages to put in place to build sufficient capacity. Has the document built a strong case in relation to capacity and implementation arrangements? Is the scale of the FFA sufficient to reach the desired objectives?
- 7) **Results from evaluations** – provide lessons learned or suggestions for FFA, especially if the FFA specific evaluations suggest how to modify rationale for restoration, rehabilitation and building of assets, as well as specific suggestions for partnerships. Has the CO developed its new FFA activity and related objectives in line with evaluations and what steps are undertaken by CO to correct issues/problems? These aspects need to be considered, particularly if funding of this component has been a problem.
- 8) **Participation, targeting and gender aspects** – what reference to participatory planning is made in the project document? Is there any basic or more elaborated planning approach envisaged? What is the CO planning with regards to participatory planning at community levels? Participation of communities in FFA planning and implementation is a key aspect, particularly for sustainability. This is also important for the empowerment of women and marginalized groups. What are the targeting criteria used to this effect and for implementation? What gender considerations are part of the strategy and design of FFA? For example, which FFA could impact on women and reduce environmental hardships, such as walking hours spent in fetching water and firewood? A number of these aspects need to be succinctly summarized in the implementation arrangements or in a footnote.

- 9) Work norms and technical standards** – these aspects are related to points 6 and 8 above, and need to be highlighted in the text that they have considered and adjusted to be able to meet climatic, livelihood, or other risks associated to the context (e.g. rainfall patterns, current participant workloads, soil, topography, etc.). Specific work norms and working hours may also need to be developed for women.
- 10) Environmental safeguards** - have specific environmental safeguards been included for FFA interventions posing environmental and health risks (such as water-related works)?
- 11) Major existing or potential partnerships, and assumptions over resources** (current and past trends) in relation to building productive safety nets and asset creation programmes. Complementarity with multisectorial activities should be highlighted, especially for resilience-focused programmes.
- 12) Aspects related to terminologies** – check for use of specific concepts and how they relate to the desired objective(s) and outcome(s). For instance a productive safety net needs to have predictable base of support/funding and ownership at institutional level; resilience building need to be related to building resilience to specific shocks (prepare to, withstand and recover from) and how this can be achieved (a few trees or water ponds do not build sufficient let alone long lasting resilience, etc.). It is advised to avoid, to the extent possible, repeating the use of specific concepts in e-PRP documents.
- 13) Monitoring and Evaluation** - check for realistic project-specific and corporate indicators - feasible within the proposed timeframe. Ensure outputs and outcomes are measurable. For all programmes, make sure that M&E is budgeted for, specifically corporate indicators that are progressively being introduced (i.e. FCS, Dietary Diversity, CSI (food), CSI (livelihoods) and CAS).
- 14) Non-food/wage-items, Budget and Numbers** – check for sufficient minimum budget for NFI is included; check for consistency in standard tables and spread sheets; check that sufficient budget is also allocated for technical support at implementing partners or Government levels.

Note: the above are offered as general guidance and need to be valued as most relevant on a case-by-case manner. Considering words limit aspects, some CO should be considering attaching additional documentation on aspects such as exposure to vulnerability, trend analysis and land degradation aspects, community planning manuals and other information that strengthens the overall rationale of the FFA activity.

3. Common challenges in placing FFA in Country Project Documents

The following are lessons learnt from previous PRC's, highlighting the most common problems found in projects that contained rationales to do FFA as an activity – **and in particular when they focused on DRR/Resilience/Climate Change objectives**. These can help you check your project to ensure such issues have been addressed prior to project finalization and PRC submission and technical clearance:

- A **lack of basic understanding of what disaster risk reduction, resilience, and climate change adaptation entail**, how these concepts relate to each other, and how they fit in with WFP programming and programming categories.
- **The terms 'climate change adaptation' and 'enhancing resilience' are used in specific programme objectives without a clear link to food insecurity**, and an explanation of how proposed food security outcomes stated in the project relate to resilience outcomes and/or to possible adaptation benefits.
- **Lack of clarity between a primary objective** (e.g. reducing the risk and impact of shocks through building specific assets) **and the potential desired benefits** (e.g. better adaptation against specific climatic hazards).
- **A lack of justification for implementing specific types of FFA at specific times of the year** (i.e. rainy or dry seasons).
- Clear analysis of the **impacts of disasters on the food security of the population**, and in a recovery context the specific disaster that caused the crisis is not sufficiently presented.
- The **causes of food insecurity are not disaggregated**, and socio-economic drivers are not separated from the disaster-related drivers.
- **Undefined timelines for the implementation of handover strategies** in disaster risk reduction and resilience building project components.
- **The rationale, analysis, and justification of many projects with a climate change component lacks a strong analytical element, with specific weather shocks wrongly attributed to climate change, and often poor linkages to selected programme activities**. For example, climate science suggests an increase of floods in a country, but the proposed WFP programme targets drought risk reduction.
- Projects with a **climate change component are often not linked to national climate change plans**, and specifically the National Adaptation Plans of Action (NAPA) in those countries where they do exist.
- **Information on the targeting and implementation of FFA is often lacking**, which results in a weak link between the food security problem being addressed to disaster risk reduction, resilience, and climate change adaptation.

FFA programmes that focus on reducing disaster risk or building resilience through natural resource management activities are often not geographically-focused, or at a large enough scale, or of a long-enough duration to adequately have the proposed impacts and reach the stated outcomes. For example, it is unlikely to achieve any meaningful impact if FFA is targeted in across five scattered communities, for less than two years, and treating different parts of a watershed.

Annexes to Chapter 2

Food Assistance for Assets (FFA) for Zero Hunger and Resilient Livelihoods



ANNEXES TO CHAPTER 2

ANNEX 2a: Shocks

1. Droughts (Slow Onset Shocks)

"...well-managed land will recover from droughts with minimal adverse effects when the rains return. The deadly combination is land abuse during good periods and its continuation during periods of deficient rainfall (H.E. Dregne – 1986)".

Many parts of the world are recurrently affected by periods of drought. Proportionally, **semi-arid and subtropical countries are increasingly affected** by droughts and seasonal variations in rainfall.

Worsening climatic conditions is often taken as a reason for the occurrence of droughts in recent years. Although global warming and climatic fluctuations³⁴ in recent years have influenced levels and extent of droughts, different factors also exacerbate their occurrence, causes and effects, and droughts are often the result of a combination of adverse climatic conditions and human and animal pressure on limited resources

Mounting pressure on land by increasing populations accelerates soil erosion and land degradation. Combined with increasingly unpredictable weather patterns, **drought events now seem to be occurring more frequently and with shorter intervals between them.** For example, evidence shows that the recurrence of droughts in several countries (such as Kenya, Ethiopia, India, etc.) has increased in the last two to three decades.

This constant exposure to increasingly frequent droughts with insufficient recovery time between them for affected populations erodes their coping strategies. In response, affected populations are forced to draw on the natural resources around them, often in damaging ways, further degrading the environment and aggravating the risk to and likelihood of future droughts.

This suggests that the frequency of droughts increase more or less proportionally to the degree of poor utilization of the land.

In a number of countries already affected by decades of land degradation, droughts and consequent hunger are the direct consequence of the mismanagement of land resources as climatic conditions alone would not generate ecological disasters and food insecurity of current magnitudes.

Key points of droughts are:

- Mainly occur in dry lands, although increasingly occurring in sub-tropical and sub-humid areas;
- A rainfall deficit is always present;
- The land is often poorly managed;
- Livestock numbers (e.g. cattle) are often in excess and far beyond the soil and vegetative carrying capacity of the land; and
- Population pressure on the natural resource base is often high.

³⁴ For example, the El Niño and la Niña currents, etc.

Impact of Droughts and Relevance for FFA

Droughts have different impacts on different livelihoods. It is important to understand this in order to tailor FFA accordingly to the context. In general terms droughts will likely result in food gaps for the most vulnerable and poorest sector of the population, or those with limited capacities to cope. It is the need to provide assistance to fill these food gaps that provides WFP the entry point for a response.

- **In agrarian contexts** droughts are likely to result in crop losses, affecting household own production, consumption, and income through agricultural sales.

During droughts cereal shortages are experienced and in the absence of government policies to import stocks and/or regulate and subsidize grain prices, then cereal prices will increase.

For farmers, reduction or loss of consumption from their harvests forces them to purchase cereals from the market, at times when prices are higher and their income from crop sales is lost. Other risks are the depletion of seed stocks and the distress sale of draught animals, both extreme coping strategies that will negatively impact subsequent cultivation seasons.

During droughts, FFA geared towards water harvesting should be considered.

- **In pastoral contexts** droughts lead to reduced milk availability and distress livestock sales at low prices due to high animal supplies in the markets, leading to unfavourable terms of trade as cereal prices will be higher.

Droughts lead to extended movements by pastoralists in search of water and pastures for livestock. They are likely to move out of their typical ranges which increases the risk of conflict with others competing over water and grazing. Dry conditions and congregation of livestock at shrinking water points increases disease transfer amongst animals, in turn increasing expenditures on animal health care.

Pastoral transhumance (movement) patterns vary according to country and pastoral types – for example the Kuchi in Afghanistan migrate as an entire household; amongst the Hamar in Ethiopia it is only the young adults and men that move with the herds whilst the elderly, women, and children, stay behind at a ‘permanent’ homestead. In such a context, those left behind are the most vulnerable as they will not have the benefits of daily access to animals, and are exposed to greater risks in the absence of the male members of the community.

During droughts, FFA in pastoral areas needs to consider:

- **target group that can work in FFA** (linked to movement of people and animals)
- **timing of FFA** (e.g. implementation prior to the movement); and
- **type of activities**, such as water harvesting and fodder production around homesteads
- **In urban contexts** livelihoods are primarily income generation and employment based. If the urban area is in a drought prone rural area, direct impacts from droughts include increasing cereal prices, reduced employment and income, and possible need to purchase water.

During droughts, FFA activities in urban areas could consider skills training to increase income generation, and if appropriate urban/peri-urban kitchen gardens, small-scale agriculture, and water harvesting.

2. Tropical Cyclones and Floods (Rapid Onset Shocks)

Tropical Cyclones create massive economic loss in countries where they occur. They are classified into three main groups based on intensity:

- (i) **Tropical depressions:** these are groups of thunderstorms that come together under specific atmospheric conditions for long enough to develop into a tropical depression. They have sustained wind speeds of up to 60 km's per hour, but do not blow in an organized circular way on the earth's surface. This means they do not have an 'eye' – the area of relative calm that occurs at the centre of circular winds.
- (ii) **Tropical storms:** these are organized systems of strong thunderstorms with sustained wind speeds between 60 km's and 120 km's per hour on the ground. They start blowing in a more organized and distinctive circular way, although the 'eye' is not usually present.
- (iii) **Hurricanes and tropical cyclones:** these are tropical storms that have developed into more severe and dangerous forms. They have circular, ground winds sustained at 120 km's per hours or more (the greatest recorded wind speeds have been 315 km's per hour), and they develop an 'eye'. In addition to strong winds these events discharge massive amounts of rainfall, and can raise high and destructive waves that impact coastal lines and generate floods.

In the Northern Hemisphere these are called hurricanes, whilst in the Southern Hemisphere they are known as cyclones.

While the number of storms in the Atlantic has increased since 1995, no clear global trends have yet been determined. Some research evidence shows however that the intensity of hurricanes and high powered storms is rising. For instance, an eminent scientist from MIT (**Kerry Emanuel**) reports that:

"Records of hurricane activity worldwide show an upswing of both the maximum wind speed in and the duration of hurricanes. The energy released by the average hurricane (again considering all hurricanes worldwide) seems to have increased by around 70% in the past 30 years or so, corresponding to about a 15% increase in the maximum wind speed and a 60% increase in storm lifetime."

Impacts from such events can either be localized or widespread. The latter can be difficult to manage, as impacts can be large scale floods and destruction of urban and rural settlements. Livelihoods can be directly affected: agriculture, livestock, assets, and access to infrastructure and employment lost.

In regards to tropical cyclones and floods, countries at risk can be classified as:

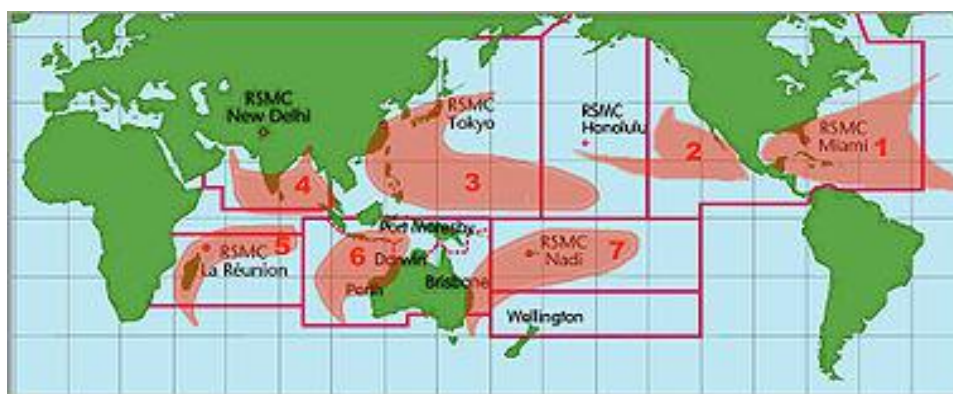
- **Geographically** at risk – where the occurrence of these shocks are high
- **Topographically** and Environmentally at risk – where the combination of topography and levels of land degradation lead to heightened impacts
- **Geologically** at risk – where specific geology and soil structure makes the land prone to landslides during rains and storms

Geographically at Risk Countries

Certain countries fall into areas at risk to tropical cyclones and storms (see map below). If these countries - or areas within them - also have topographic and geological conditions that are prone to generate floods, then the likelihood and occurrence of disasters is high. For example, upstream areas with steep and barren slopes, and downstream extended valley floors, plains, or the bottom of slopes.

Countries such as Haiti, Myanmar and Madagascar are typical examples of such landscapes:

- In Myanmar, cyclone Nargis (April 2008) caused over 100,000 deaths.
- In Haiti, three consecutive hurricanes and one tropical storm in less than three weeks (between August and September 2008) killed approximately 3,000 people and destroyed 80,000 homes.

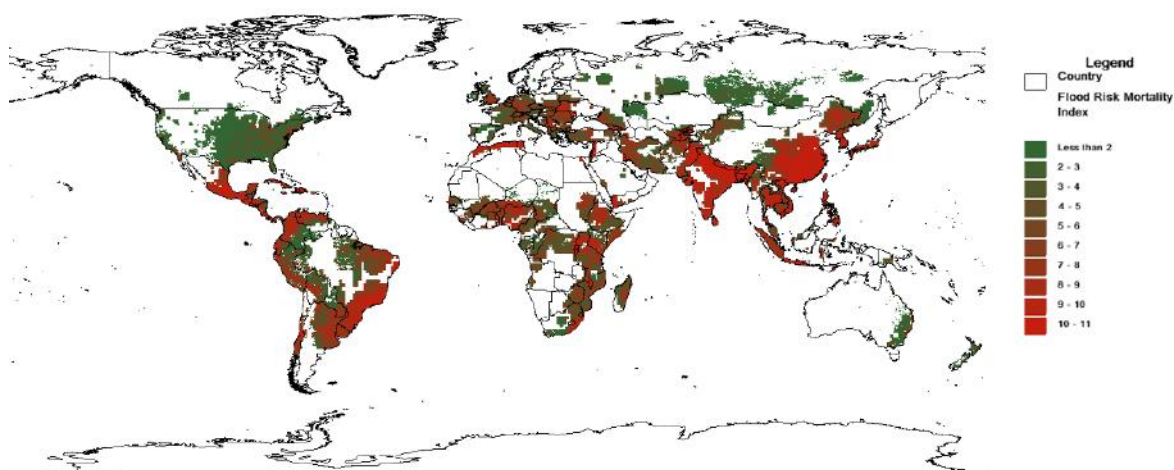


Areas at risk to tropical cyclones are divided into basins, shown in this map which indicates the regions in the world where cyclones are most frequent.

Topographically and Environmentally at Risk Countries

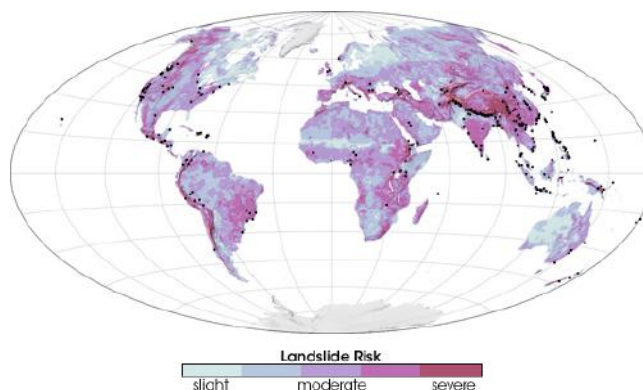
Topography is the shape of the earth's surface, and includes elevation and features of the landscape - for example the height of mountains and hills, and degrees to which they slope (i.e. steep or gentle).

Topography with slopes can generate floods, particularly if the slopes are deforested and if downstream areas have limited capacity to drain excess water runoff. In these areas, even storms of moderate intensity can lead to massive amounts of water runoff and flooding. The Global Flood Mortality Risk Distribution map (Columbia University) below shows that many of the areas prone to floods coincide with parts of the world that are affected by land degradation and/or on-going deforestation problems.



Geologically at Risk Countries

Geology is the structure of the earth's crust, which includes rock and soil types and how they are arranged to form the land. Some geological structures are more prone to landslides than others, for example, when the land is made up of layers of specific soil types that may have different levels of water absorption – i.e. when upper layers of highly permeable soils become water logged and slippery and slide off less absorbent soils where water does not penetrate, or when the lower layers are made of harder materials or rock.



Soil material that becomes saturated with water may develop into a debris or mud flow, whilst in other cases shallow landslides can result from slopes with high permeable soils on top of low permeable bottom soils. Landslide prone areas are usually stable when covered by forests but become highly unstable with disturbances such as deforestation and/or construction of houses or roads.

Impacts of Storms and Relevance for FFA

Understanding the link between landscapes, where people live (i.e. where their settlement is located), and the impact storms may have on livelihoods is critical for FFA design. For example, rainfall and storms on degraded landscapes greatly increase the risk of rapid high-speed floods and landslides, and towns located at the foothills of slopes are at greater risk (e.g. Gonaïves in Haiti); settlements in low-lying wetlands are at risk to flooding as water levels rise (e.g. villages in the flat wetlands of South Sudan; coastal cities at risk to rising sea tides during storms, etc.)

Storms (with high winds), floods, and landslides, have relatively similar impacts on different livelihood types – that is, they can lead to loss of life, damage homes and shelters, spread water borne diseases, hamper or cut-off access to food and infrastructure, and restrict employment opportunities. Generally:

- **In agrarian contexts**, agricultural fields, irrigation systems, and other assets can be lost.
- **In pastoral contexts**, flooding can swell rivers and cut-off pastoral movements, damage or waterlog pastures, and increase the spread of waterborne human and animal diseases.
- **In urban contexts** localized flooding from poor drainage and blocking of storm drains by debris and/or increased runoff typically impacts poorly planned and serviced slum areas where the most vulnerable are likely to live. Impacts of wet season flooding in lowlands and coastal cities are often aggravated by human encroachment on wetlands.

Two main FFA aspects to consider given the rapidity of these shocks:

- **Early recovery** immediately after the shock: such as debris removal, repairing of damaged infrastructure, and restoring access to food (and employment).
- **Resilience building and mitigation** programming: such as water catchment protection and environmental rehabilitation to reduce the intensity of the shock.

3. Economic Shocks

Economic shocks in a country can result from reduced foreign investment and/or commodity exports, reduced commercial credit or harsher borrowing terms, reduced development assistance, depreciating currencies, increasing unemployment, and reduced remittances. Resulting in hardships for countries and communities, it affects household food security and ability to cope with and recover from shocks.

For example, the high food and fuel prices in 2008 followed by the global financial crisis in 2009 had significant repercussions on remittances, affecting access and availability of food in the markets. This reduced dietary diversity and sufficient intake of nutritious foods, particularly for the poorest people.

- **In agrarian contexts**, whilst some better-off farmers may benefit from higher cereal prices, many of the most vulnerable households who partly depend on other income sources will be negatively affected. Decreased paid labour demand from better-off farmers, reduced seasonal labour migration, reduced level of remittances, and an overall reduction in access to food due to higher prices and lower income may have short and longer term negative impacts on food security and asset depletion. Farming communities are particularly affected by economic crisis where the majority of farmers have small farm plots and depend on other sources of income.
- **In pastoral contexts** this can also relate to livestock market systems – for example, bans on importing livestock from the Horn of Africa (HoA) by the Gulf States after the outbreak of Rift Valley Fever in HoA countries induced by El Nino in 1998, and outbreaks in Yemen and Saudi Arabia in 2000. The impacts of these bans were devastating for pastoralists who lost a major market outlet and source of income.
- **In urban contexts**, price hikes in food and non-food item due to inflation can significantly reduce household purchasing power and ability to pay for services such as rent and utilities, etc.
The loss of sources of income (e.g. remittances, employment, etc.) is also major economic shock for poor and vulnerable households.

Impacts of Economic Shocks and Relevance for FFA

Economic shocks tend to relate to either price increases and/or the ability to generate sufficient income to meet minimum food and non-food needs. For FFA, consideration should be given primarily to:

- **Activities that increase access to food**, which in turn relieves pressure on household food expenditures. Such programmes would include skills training and income generation activities.
- **Activities that improve household own food production**, in order to offset poor access to food by increasing the availability of food through own household production.
- **Transfer modality (i.e. food, cash, or vouchers) to be used** would require careful consideration. Knowing the cost benefit of food and/or cash transfers for households during times of economic crisis is critical as purchasing power has to be sufficient to ensure that food needs can be met. This can be particularly challenging when food prices continuously rise, as the cash transfer value at the start of a project may no longer be sufficient by the end.

4. Conflict

Conflict can result in large-scale displacement of populations, violence, the destruction of natural, economic, social and physical assets, and disputes over resources. Infrastructure is likely to be destroyed or damaged, including homes and shelters, markets, and services (e.g. water, power, health centres, etc.). Increases in food and other non-food prices are likely as supply chains become disrupted, transportation expenses increase, and access to markets and services become limited. It can lead to the dependency or reliance of people on others – i.e. relatives, friends, governments, and external aid.

During and often after a conflict considerable damages and destruction of existing soil conservation measures and assets, trees and forests, irrigation, water facilities, and settlements. Protracted conflicts can create major disruption in tenure and ownership of resources and assets - when situations stabilize and return to normal, returnee populations may find that new authorities have changed aspects of tenure and are unable to claim rights over formerly used or owned land.

- **In agrarian contexts** conflicts can result in the damage and/or destruction of crops, food stocks and storage, market infrastructure, and agricultural systems.

Situations exist where farmers - and women in particular – return to areas affected by conflict to cultivate a few plots of land at night or during apparent periods of calm, thereby risking their safety. Programming food assistance in such circumstances is complex, requiring special attention to gender and aspects of safety to be mitigated – for example, by verifying how many households undertake such high risk activities and identify the measures to mitigate them.

- **In pastoral contexts** conflicts can lead to the depletion of pastures and water sources, which in turn aggravates and degrades the natural environment further – this makes the resource base less sustainable, and can spark even more conflict.

During periods of stress (e.g. droughts), conflict over diminishing resources can erupt within or with other pastoral communities, or with farmers if pastoralists encroach on farmlands with their livestock. Conflicts also occur between pastoralists and governments, for example when they cross international borders in search of pastures and water.

- **In urban contexts**, conflicts will generally hinder access to employment and services – for example water, health care, transport, fuel, electricity etc. The loss or reduction of income due to constrained access to employment, combined with increasing prices of essential food and non-food items severely impacts a household's ability to cope with the crisis.

Impacts of Conflict and Relevance for FFA

Trust and confidence in investments through FFA need to be rebuilt with communities. The nature of the conflict must be understood to determine the type of FFA to be implemented – for example, areas with heightened insecurity may limit access and provision of rigorous technical expertise, monitoring, and evaluation, so programmes should not be overly complicated and technical in nature.

Issues of tenure and ownership of assets restored or created under FFA must be clearly defined and understood before beginning activities. In areas transitioning out of conflict and/or where there are a high number of returnees, FFA activities should be sequenced in ways that bring stability and more rapidly restore livelihoods – for example, restoring productive agricultural land and water, etc.

5. Earthquakes

Earthquakes can be **especially devastating in urban areas** particularly in terms of loss of human lives and infrastructure, given the high density of populations and congestion of buildings. For example:

- **Haiti, January 2010: An earthquake of 7.2 on the Richter scale** killed over 220,000 people, destroyed around 180,000 homes and left 1.5 million homeless, displaced an estimated 600,000, and overall 3 million people were affected. Around 1.5 million people moved into camps, of which 100,000 were living in camps at risk to floods and landslides in rainy seasons.

The impact of earthquakes **in rural farming areas and livelihoods** can also be very serious, particularly in areas with cold winters, in mountainous landscapes, and in areas where access to basic services is problematic or limited. Rural livelihoods and farmlands can be devastated from landslides and damage to homes, agricultural infrastructure, markets and other infrastructure (e.g. warehouses and stores, health centres, water flows, roads, etc.). They can interrupt critical seasonal farming activities, and result in an overall loss of income. Households are likely to suddenly incur major expenses to replace lost assets. For example:

- **Pakistan, October 2005: An earthquake of 7.6 on the Richter scale** killed 73,000 people, injured 79,000, left 2.8 million without shelter, assets and livelihoods, and affected approximately 3.5 million people. More than 2,700 villages were impacted, and food, livestock, and seed supplies were lost. Aftershocks and landslides cut rural roads leaving 745,000 people isolated in the mountains, relying on WFP helicopter airlifts for assistance. Another 250,000 were forced into camps.

Earthquakes occurring under the sea can lead to the sudden vertical rise of the seabed which displaces massive volumes of water and generate devastating tsunamis. This can lead to massive loss of life, destruction, and result in billions of dollars in damage and response. For example:

- **2004 Indian Ocean tsunami: An earthquake of 9.1 to 9.3 on the Richter scale** triggered a series of tsunamis that affected 14 countries, inundating coastal communities with waves up to 30 meters, and killing over 230,000 people. An estimated US\$14 billion was provided in humanitarian aid in response to one of the deadliest natural disasters recorded in history.
- **2011 Japan: An earthquake of 9.0 on the Richter scale** triggered a powerful tsunami that created waves of up to 40 meters high, and in places travelled up to 10 km's in-land. The tsunami killed over 19,300 and displaced over 340,000 people, and led to shortages of food, water, shelter, medicine and fuel for survivors. It resulted in massive damage estimated US\$122 billion, including damage to Japan's nuclear power plants.

Impacts of Earthquakes and Relevance for FFA

While recognizing the unpredictability of earthquakes, areas at higher risk can be mapped. WFP may consider specific efforts regarding better preparedness and activation of a number of awareness-creation efforts at different levels, including the pre-positioning of contingency food stocks, shelters, water containers, and tools to enable removal of debris through FFA.

6. Pests and Disease Outbreaks

Ranging from invasive plant species to insects and pathogens of different types, outbreaks can create major food insecurity problems. For instance, different types of crops viruses, pests and parasites, and alien plants (e.g. cassava virus, locusts, striga weed, etc.) may significantly reduce crop yields. Early Warning systems and early detection of problems with partners is one of WFP's contributions in this regard. FFA could consider supporting the training of vulnerable communities in integrated pest management through FAO's Farmer Field Schools, or explore other innovative forms of crop protection, storage, post-harvest losses, and multiplication of virus free varieties of cassava cuttings, etc.

7. Multiple Shocks

This is when more than one shock occurs simultaneously, and often leads to complex situations. Of particular relevance for FFA is the twinning of droughts and floods.

Sequence of Droughts and Floods

The relationship between droughts and floods is largely influenced by the combination of ecological degradation, topography, and geology, where there is a risk of floods from the rains after droughts.

This is commonly observed in semi-arid and arid lands, where a year or more of drought depletes grass and vegetative cover over vast areas, and sloping lands generate massive amounts of water runoff in a short period of time during high intensity rains or storms. The violent impact of raindrops on the ground quickly seals the pores of the upper soil layer, so most rainfall will not infiltrate the soil and be absorbed – instead, it becomes water runoff that scours and erodes the land with a destructive force. Areas with soils prone to crusting (soils rich in fine sands) and areas with shallow soils (e.g. with limited infiltration) are typical signs of a legacy of soil erosion and deforestation, and other problems such as overgrazing, compaction of soils, and a lack of erosion control and land management practices.

There are many examples within and between countries: within Ethiopia and Kenya, there are vast areas prone to flooding when rains follow a long drought and the catchments are denuded of grass cover; some areas of Northern Kenya are affected by water run-off that courses down from the south-eastern Ethiopian highlands, etc.

In other countries, a combination of conflict and drought can plunge populations in entire areas into adopting negative coping strategies that aggravates the problem further, such as the stripping of the natural resource base. As water and land becomes scarce and farmers encroach onto steep and/or marginal fragile areas prone to soil erosion, and which are unsuitable for cultivation, conditions are created that accelerate more degradation and susceptibility to droughts, higher food insecurity, and further conflict over depleting resources.

Useful references

Additional information regarding the description of the type of disasters and their effect on food security is included in the [Disaster Mitigation Guidelines for WFP Assistance](#)³⁵.

The Emergency Preparedness and Support Response Division (OSE) provides seasonal and hazards calendars and historical data on shocks in countries where WFP provides food assistance; refer to the "Country" pages on [OPweb](#), available at: <http://opweb.wfp.org>.

³⁵ WFP, 2002. WFP Disaster Mitigation Guidelines. Available at: http://home.wfp.org/manuals/pg_disastermitigation/documents/DMguide/DMguideE/DMG_E.pdf.

ANNEX 2b: Land degradation – an aggravating factor

1. Definitions

Land includes the soil and natural features on its surface. Terms such as land degradation and soil degradation are often used interchangeably. However, '**land is a broader concept than soil**' as '**land encompasses both soil and vegetation**' with soil erosion and the loss of vegetative cover being two of the most important components of land degradation. It is important however that conceptually and practically these terms are clarified and understood for what they really mean:

- **Land degradation** can be defined as the progressive reduction of the capacity of the land, and the features it contains, to sustain life and provide food security.

The vicious cycle of land degradation-food insecurity-poverty



- **Soil degradation** is a reduction in soil fertility caused by the loss of soil nutrients and water retention capacity through exploitative and unsustainable use of land by cultivation on steep slopes and/or shallow soils, tillage, overgrazing, deforestation etc. This leads to soil being more exposed to natural elements (winds, rain etc.) which in turn leads to soil erosion.

Some 20 per cent of the world's susceptible dry lands are affected by human-induced land degradation, putting the livelihoods of more than 1 billion people at risk (UNEP, 2000).

Africa alone lost 39 million hectares of tropical forest during the 1980s, and another 10 million hectares by 1995. Fourteen African countries are subject to water stress or water scarcity, and a further 11 will join them by 2025. Land degradation costs an estimated US\$40 billion annually worldwide, without taking into account hidden costs of increased fertilizer use, loss of biodiversity and loss of unique landscapes (FAO, 2009).

The circular relationship between soil erosion and the loss of vegetative cover is clear:

soil degradation is mostly responsible for the reduction of the vegetative cover, which in turn makes the soil more vulnerable to degradation by erosion:

- **Soil erosion** is the process by which soil is lost by the isolated or combined action of water and wind, which in turn is influenced by climatic conditions, topography, the soil type itself, and human activities (including livestock).
- **Impoverishment of the vegetative cover** is the reduction of the vegetative cover and biomass caused by climatic factors, over utilization of vegetation (such as the cutting of trees, overuse of crop residues for animal feed and fuel wood, overgrazing, burning, etc.), soil erosion and reduced soil fertility.

Note on Desertification

- 'Desertification' is to be understood as **the generalized expression of land degradation occurring in arid and semi-arid regions** and not as a 'marching' of desert areas.

The UN Conference on Desertification held in Nairobi in 1977 defined desertification as follows:

"Desertification is the diminution and destruction of the biological potential of the land that leads to the appearance of desert-like conditions. It is the expression of a generalized degradation of the ecosystems under the combined pressure of adverse and unreliable climatic conditions, and an excessive exploitation/misuse of the land".

Though quite broad, this definition seems to better explain the general degradation trends affecting dry zones.

2. The Dynamics of Land Degradation

Land degradation is one of the most common denominators of vulnerability and a major contributor to increasing shocks. To help in identifying, selecting, and designing FFA in food insecure areas, field staff should be able to recognize the general features, major symptoms, and causes of land degradation.

The following sections outline:

- the main causes of land degradation
- a number of effects this has on soils
- a number of considerations on types of analyses to support FFA
- a way to look at 'land vulnerability' and hunger

Once this process is well understood, decision-makers can formulate and implement sound policies, strategies and programmes to effectively address land degradation and poverty related issues. Similarly, technical staff together with farmers and/or pastoralists can identify technical areas of critical interest for research, field testing and training, and the adoption and dissemination of best practices.

Historical Exploitation of the Land

Under natural and untouched conditions, the rate of soil removal has always been generally slower than the rate of soil creation (morphogenesis). Humans first began cultivating land on a larger-scale some 10,000 years ago. The first cultivation began using hand-held digging sticks, which developed into simple tools such as hoes.

More refined tools and the first ploughs began emerging some 8,000 years ago, and began shifting from human to using animals as draught power for cultivation. The arrival of the Mouldboard plough which lifts and turns soil so that nutrients are brought to the surface, led to an expansion of agriculture which gradually moved into less fertile areas. Overall, the introduction of the plough has contributed to the acceleration of soil erosion by increasing the area under cultivation and exposing the refined and pulverized topsoil to erosion agents.

As agriculture flourished, populations increased and began expanding into new lands and territories, often contributing to large-scale degradation of the environment. For example, sophisticated land management and irrigation systems were often destroyed by herders-raiders moving into farming communities, or invading armies conquering new territories which caused large scale displacements of populations and large scale land degradation in the areas where they camped, through overgrazing by large numbers of livestock kept to supply soldiers and deforestation for firewood and construction. At times, the problem of erosion and land degradation has been so extensive that it has contributed to, if not caused, the decline of great civilizations in such places as Mesopotamia (the Middle East), Greece, Egypt, North Africa, and China ([**Lowdermilk, 1953. Conquest of the land through Seven Thousand Years**](#)³⁶).

Present day increases in populations and the pressures they place on the environment to fulfill basic needs for food, shelter, and incomes have pushed people into marginal and fragile lands, and farmers to cultivate steep slopes, encroach on natural forests, and increase the number of livestock they own, leading to changes in vegetation cover and accelerating degradation.

However farmers throughout the world have developed ingenious strategies and techniques for soil and water conservation, and soil fertility management (for example through crop rotation and the use of manure, etc.) to overcome problems of land degradation to sustain and increase agricultural production levels. It is these measures that should be expanded and built upon to stabilize degraded landscapes where the most vulnerable people live.

³⁶ Refer to Lowdermilk W. C., 1953. Conquest of the land through Seven Thousand Years. Available at: www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1043789.pdf.

Impacts of Rainfall

The combinations of excessively low or high amounts of rainfall and continuous exploitation of the natural resource base have left large areas severely degraded, including areas formerly considered productive and receiving sufficient rainfall. This progressive 'desertification' of formerly 'better-off' areas is a phenomenon commonly observed in many regions and countries in the world.

The problem is that once desertification is triggered and begins to accelerate, the trend becomes difficult to arrest. Rills and gullies carry sediments downstream and into rivers, resulting in considerable soil loss, particularly during intense storms and rainfall at the beginning of each rainy season.

There are two key concepts to understand in relation to rainfall:

- **Rainfall variations:** this is the difference in the amount of rainfall year by year, or season by season. These variations appear to be rising particularly in arid and semi-arid zones, but also in sub-tropical areas. In some years these differences in rainfall can vary by as much as 50% from the annual mean, although the variation in monthly patterns is often greater than the variation from the annual mean. This can have profound effects, for example during cropping and forestry activities and in particular at their establishment stage.
- **Rainfall intensity:** often well perceived but poorly understood, intensity relates to the physical amount of rain received within a period of time. For example, areas may have low annual precipitation yet could receive this through a few heavy storms – in such areas one storm may even account for one third of the total annual rainfall. Such intensity of rain in a short period of time causes flooding and severe erosion. This is a common pattern in the *Sahel*, and generally in all arid and semi-arid lands.

In some countries analyses of **rainfall variations and intensity** over 10 to 20 years has demonstrated the reduction of rainfall during specific rainy periods, whilst in other areas variations follow patterns of late arrival or early termination of rains, or both.

In dry lands, all forms of agriculture can be described as 'water-dependent land use' where water is often identified as the principal limiting factor in biomass production. Variable hydro-climatic conditions in these regions combined with naturally low-fertile soils, imply a high degree of environmental vulnerability, seriously complicating human activities in the landscape (Falkenmark *et al.*, 1990).

Impacts of Changes in Vegetation Cover and Land Use

Vegetation acts as a protective cover over the land. It binds soil through its root systems allowing water to infiltrate, slows down the impact of rainfall on the soil surface, protects it from extreme heat and evaporation in direct sunlight, and when vegetation decomposes it releases micronutrients into the soil to enrich and increase its fertility and productivity.

Productivity of the soil

Top soil is the most fertile layer – is usually porous, rich in organic matter, and biologically active as it contains moisture and nutrients – making it the most important element of the soil to protect. A progressive reduction in the amount of vegetative biomass on land affects the amount of organic matter in the soil, meaning that the less vegetative cover there is, the less productive the soil will be. When vegetation cover is sparse, soil is exposed to the elements (i.e. sun, water, wind) which can generate crusting or hardening of the soil surface. In turn, plant rooting systems have less penetration capacity, which results in less vegetative cover and less productivity.

Deforestation

This is often the direct result from the need of additional land for cultivation, although deforestation for firewood (i.e. energy needs) and construction is also significant. In most WFP assisted areas firewood and charcoal derived from trees account from half to most of rural people's energy needs. Firewood, charcoal, and timber for construction are also a key source of income for many of the rural poor. Trees and vegetation however are the main binding source of soils which protects croplands and villages against the destruction that can be caused by storms, heavy rains, and floods.

The lack of trees largely means lack of water, which limits production and increase environmental hardships – particularly for women and girls whose role in the household is often collecting water (and firewood).

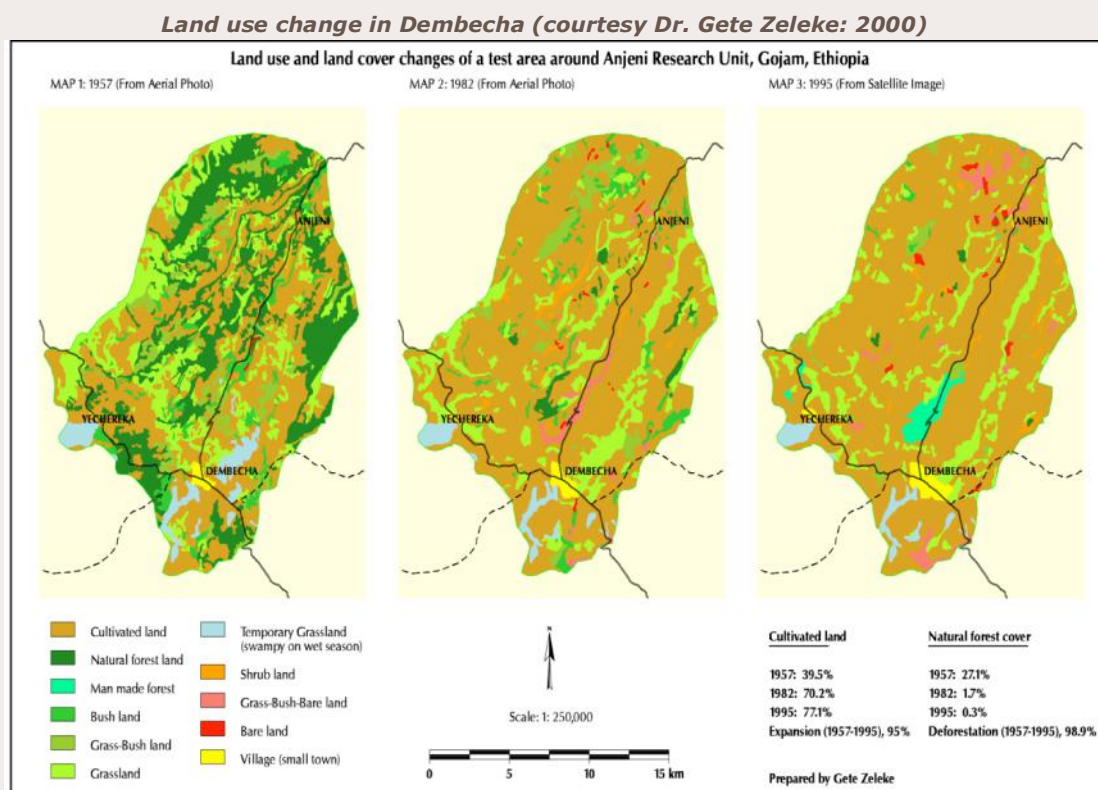
Reforestation and replanting of trees in highly degraded landscapes is a key action to stabilize the environment, reduce flood and landslide risks, and increase water availability, but they can ultimately cover basic needs for shelter, energy, and income during times of need. Which types of trees to plant and which areas to reforest must be balanced and matched between people's needs and environmental requirements.

Understanding the dynamics of **land degradation and deforestation** will help countries make strategic decisions and increase attention to this problem, and eventually embark upon major efforts in reforestation. A specific analysis that had significant impact at the level of decision makers' awareness about the problems of land degradation in one region of Ethiopia is shown in **Example 1**.

Example: Dembecha Woreda, Gojam, Ethiopia (courtesy of Dr. Gete Zeleke; 2000)

Formerly a breadbasket, this area now shows soil losses in cultivated land in the range of 110 to 170 tons/ha/year, reaching up to 300 tons/ha/years in soils with an advanced state of deterioration.

Deforestation in most of West Gojam has been dramatic, resulting from the combination of past tenure problems, increased population, and virtually no support in natural resource development in past years. This evolution is represented in the change of land use dynamics survey study of the Dembecha area shown below:



In 1957, there was 27% of natural forest (left map) **compared to 0.3% in 1995** (right map). During the same period, **the area under cultivation rose from 40% to 77%**, including cultivation on very steep (up to 450 degree gradients) with the remaining land being severely eroded and used for free grazing on now sparse grasslands. Population growth rate in the area has been and remains very high at 2.8% with population density increasing from 43.8 persons to 125.2 persons / km²).

In this example, loss of soil productivity (predicted in terms of life span required to reach critical soil depth - i.e. 25 cm- for cultivation) shows that about 5% of the area has already reached the critical stage. Furthermore, an estimated additional 11% will reach this critical stage in 0-15 years from now, while 21% will reach critical soil depth within the coming 15-47 years.

In summary, 37% of the cultivated land in Dembecha will reach critical depth in less than 50 years. Many other areas in Ethiopia are in a similar state.

Increased livestock

Livestock is part of the cause of land degradation, yet this degradation can also lead to an increase in numbers of animals, for example:

- As the need for arable land increases to expand cultivation and production, encroachment into pasture lands for agriculture occurs. As these grazing areas reduce livestock is forced to graze in marginal areas, reducing vegetative cover and creating erosion.
- Conversely, the general impoverishment of soils can lead to increasing numbers of animals that can more easily adapt to these changing environmental conditions - for instance sheep and goats, which are well-known for their contribution to worsen fragile environmental conditions.

Some exceptions do exist where livestock do not cause significant damage to environmental conditions. Thus, determining of the contribution of livestock to land degradation should be area-specific and not generalized.

Agriculture

Increasing agricultural production is usually directed to areas that have the best potential. As demand for production increases, farmers often make increasing use of land which is:

- less suitable** for agriculture (steep slopes, shallow soils, less fertile areas, etc.) or,
- located in **less favourable climates** (erratic rainfall over time, space distribution, etc.)

"Agricultural development naturally takes place first on the best land. Whether at the scale of the individual farm or a whole country, the tendency is to use the best land first".
(N. Hudson, 1997)

When land is ploughed without sustainable land management techniques, vegetation cover is likely to be reduced to 4 to 6 months a year. This leaves the soil surface exposed to higher temperatures for longer, and results in the mineralization of organic matter and soil infertility. In drier areas porosity of soil collapses after some years, reducing its infiltration capacity. The soil becomes compacted with no spatial continuity, such as crust layers at topsoil layers and a hard pan under ploughed layers. Limited moisture storage capacity of soils further diminishes biological activities, reducing soil nutrients and increasing the likelihood of crop moisture stress.

Pastoralism

Pastoral livelihoods by definition largely depend on livestock. The concept of 'land' includes pasture and water required for livestock rearing, and the expression of a cultural belonging and association to a territorial identity. For decades, pastoral livelihoods have been severely stressed by increasingly recurrent shocks and environmental degradation.

As a result, there is a significant tendency for pastoralists to increasingly establish semi-permanent and permanent settlements in areas where basic services and relief support are accessible. These tend to be closer to towns, roads, rivers, and other areas they can rely upon to find wild foods and attempt small scale irrigation.

For example in the pastoral areas of Northern Kenya:

- In Isiolo District an estimated 90% of the population now practices some kind of farming, with women and young children settling permanently in small settlements whilst the remaining adults seasonally move with the herds in search of pastures. The proportion of entire pastoral households moving together for extended periods of time appears to be decreasing in other districts.
- On the other hand, in Garissa District pastoral movements in search of water and pastures for extended periods of time during both typical and crisis years remains a common practice, including movements to neighbouring districts and countries (e.g. Somalia).

The use of rangelands is now assuming different patterns when compared to the past. This can create potential new problems, such as pastoralists increasingly coming into contact with each other as they compete for resources, or resorting to farming practices with which they have little experience etc. However, the use of rangelands can also lead to new opportunities, such as developing investments around these settlements and along transhumance routes.

Urban

The last decade has seen a large influx into urban settlements found in arid and semi-arid lands of pastoralists who have lost their livelihoods due to repeated droughts and increasing levels of poverty. Given the livelihood skill-sets of pastoralists, one of the first and most common coping strategies for these people is to draw down on the natural environment around them – such as cutting trees for firewood and charcoal making. Limited attempts at cultivation are made on the outskirts of these urban settlements, yet the lack of understanding of agricultural land management leads to and aggravates land degradation – which in turn places the urban settlement at risk.

In other urban settings (i.e. in those found in tropical and sub-tropical agro-ecological zones) land degradation leads to an overall deterioration of living standards, health, and bio-physical conditions. It is common to find most of the food insecure people residing in those parts of towns that are the first to be affected by floods, landslides, cyclones, diseases and pollution, and where water is contaminated. Coping strategies to deal with these crises include the exploitation of natural resources and the land surrounding these areas, further aggravating land degradation and heightening the impacts of shocks.

People

Population growth

High population growth (sometimes up to 3% per year) reduces the water and soil resources available for individual land users, whilst at the same time increases the demand for food, timber, fuel, and fodder. As a consequence, people tend to shift towards extensive and unsustainable uses of natural resources – for example by shortening or abandoning fallow periods and sound crop rotation, decreasing vegetation cover such as firewood and charcoal making, etc. In this manner, land use turns into a 'nutrient mining' system (Pichot *et al*, 1981) which ultimately develops into a permanent productivity crisis, as soil and land degradation accelerates.

In the last several decades the delicate balance between the land and its users has become fragile due to population growth, social rearrangements that often clashed with traditional set-ups, and sound management of natural resources including land legislation, agriculture policies, etc. Nowadays most of the best land is already occupied, pushing farmers to open up new agricultural land by either ploughing steeper slopes or expanding their fields into marginal areas, including semi-arid and arid lands.

Conflict

Conflicts and war exacerbate land degradation. Such degradation is often not limited only to the area in which a conflict is active, but also to other parts of the country and/or to neighbouring states as well. Displaced populations, particularly if they move in large numbers, rapidly degrade the land around them as they cut trees to build shelters and cover fuel needs. This often brings them into conflict with host communities, who are already using the same resources. The same can apply when large numbers of returnees come back to their places of origin, drawing on the land around them to rebuild homes (e.g. by cutting trees for timber) and opening up new farmland without broader community and environmental planning.

Traditional systems that regulate the use of natural resources breaks down, leading to uncontrolled use of environmental assets. Similarly, environmental laws and regulations of governments cannot be upheld by local authorities during conflicts. Land degradation can run unchecked for years, leading to the need for massive rehabilitation measures to be made once stability has returned, although these are often seldom made.

Effect on Soils by Loss of Vegetation and Poor Land Management Practices

Loss of top soil through erosion results in less production, less feed for livestock, longer distances to walk to collect water, more firewood burnt, and a reduced ability of ecosystems to function. Broadly:

- The less vegetation cover there is, the greater the risk of soil erosion by water, wind, and exposure to high temperatures.
- Erosion by water can rapidly increase, with high levels of sheet and inter-rill erosion removing humus and available nutrients from the soil (selective erosion). This leads to a progressive *skeletonization* and relative increase of sand gravel in soil surface layers, the formation of soil crusts, and high amounts of water run-off through the splashing effect of intensive rainfall.
- Concentrated water run-off creates rills and gullies, which dissect landscapes and affect the regime of main rivers (overflow and/or changing direction), cause flooding, sedimentation of water reservoirs, increased salinity, mudflows, and other forms of destruction.
- Vegetation loss reduces the replenishment/recharging of water tables, which also negatively impacts on the possibility of utilizing underground water for irrigation and domestic purposes.

Water erosion – rills



Water erosion – gullies



Wind erosion



Deforestation and landslides



Soil crusting and compaction



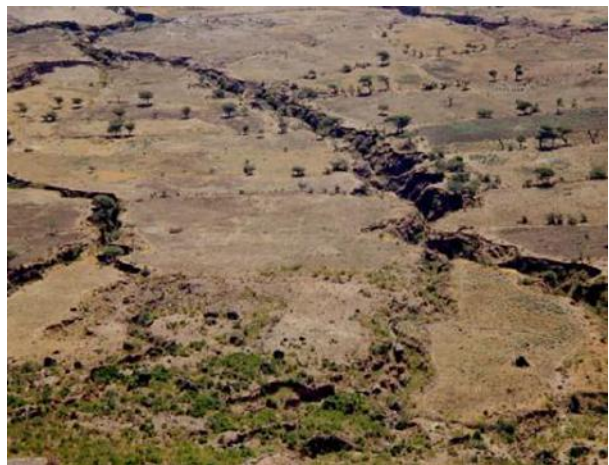
Sand dunes



Dry land tree cutting



Overgrazing



Some Supporting Analyses for FFA

Land degradation is exacerbated by an increased incidence of shocks and climate change effects. With an increase of extreme weather events worldwide and considering that these events have a much higher effect on already degraded environments, a proper rainfall and runoff analysis is important to better understand the impacts that rainfall may have on land degradation.

Some of the WFP CO VAM units may have the capacity to undertake at least part of a similar analysis, for example looking back at over 20 years of satellite imagery. Where CO capacity does not exist, assistance can possibly be provided WFP HQ (i.e. ODEP) or outsourced to specific research institutes or universities. The potential implications of such efforts are many, as they will contribute to raising awareness about fast paced destructive trends of deforestation and soil loss (or the contrary – they may show improvements in specific areas).

To the extent possible, identifying and tracking land degradation trends – and/or their causes - and understanding their impact on livelihoods and vulnerability is an important contribution to building rationales for specific FFA interventions that reduce risks caused by both low and high intensity rainfall, and to identify the measures suitable to withstand these patterns. Thus:

- Failure to understand rainfall patterns has often led to poor performance of FFA, particularly in arid and semi-arid lands where the rule of design systems able to collect and store all possible rainfall and evacuate safely any excess runoff has not been applied correctly.

A number of water harvesting and soil and water conservation measures included in **Chapter 4** are calibrated to accommodate high intensity rainfall and can be taken as a basis to design various interventions.

WFP staff should ensure that technically competent NGOs or Government partners with robust experience in FFA develop technical standards calibrated to withstand the amount of runoff generated from high intensity rainstorms. This is an essential factor in the design of most water harvesting and conservation structures which have to accommodate or divert excess run-off from destructive rainfall showers.

Similar considerations need to be made when selecting FFA interventions to conserve or stabilize steep slopes, particularly those with degraded and shallow soils where runoff generated from heavy rains can have devastating effects on fields, and people located downstream. Thus:

- **A rainfall and runoff analysis often needs to be undertaken, and agronomists and/or water engineers are required to develop and oversee FFA activities.** In some countries considerable experience already exists and different structures can be designed to resist high powered rains and runoff peaks.

When this is not the case however, extreme caution in selecting measures and technical standards needs to be taken. It is important to always think of FFA as creating quality assets where high technical standards should be applied, regardless of the complexity of the asset that is to be created (which is a capacity issue).

Conclusion: Environmental Vulnerability and Hunger

The extreme level of fragility of many ecosystems where WFP operates is becoming a 'levelling factor' of vulnerability, gradually affecting both food insecure and food secure alike - particularly in areas highly prone to droughts and floods.

The impact of high climatic variability and increased likelihood of destructive storms is multiplied several fold by the poor status of many degraded ecosystems, dry lands and sub-tropical deforested watersheds.

Consider the following example from Haiti

Only about 30% of Haiti's surface area of 27,000 Km² has gentle sloping terrains (i.e. less than 10% gradients) and over 60% of the land has steep slopes.

This means only 7-11% of the country is considered suitable for permanent cultivation without major investments.

In reality approximately 40% of Haiti's land surface is cultivated and another 30% is used as mixed grazing and farm land. The final 30% is either degraded scrub and few sparsely forested areas or non-cultivated land.

Forest cover today is estimated around between 1-2% (from approximately 6.7% in 1978).

It is evident that a form of 'tropical desertification' is taking place in Haiti, with erosion rates peaking over 1000 tons/ha/year³⁷ in specific cultivated areas following high powered storms, while in other areas averages are estimated to range between 50 to 500 tons/ha/year (empirical field estimates using adapted USLE – Universal Soil Loss Equation) depending on the type of soil management practices and vegetative cover.

Soil loss caused by rain water erosion in the country is enormous, with major implications on future agriculture productivity and a relentless decrease of water sources. Consequently, the frequency and intensity of floods increases not only as a result of high powered climatic events, but largely because of the water runoff from scoured and eroded watersheds with depleted vegetation cover.

Thus, in economic and social terms, damage and costs to infrastructure and socio-economic assets is and will be extremely high.

This results in increased vulnerability, food insecurity, and unsustainable coping strategies that further degrades land – such as charcoal making, cutting of wood for building materials, and expanding agricultural lands in an attempt to increase income, **further contributing to the stripping of vegetative cover and degradation of watersheds.**

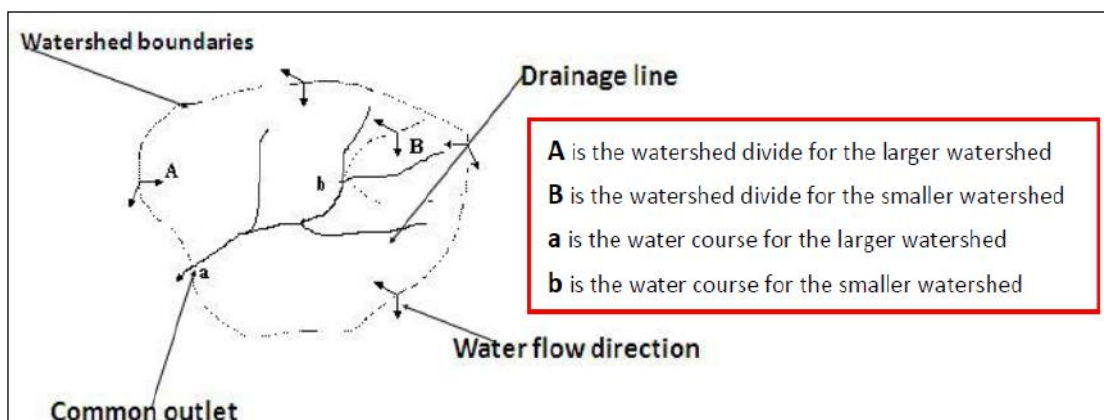
It is a vicious trap leading towards hunger which currently affects millions of Haitians.

³⁷ Poverty Reduction Strategy Paper (PRSP) 2008-2010 for Haiti

Concept: Banking-in resilience - viewing watersheds as bank accounts

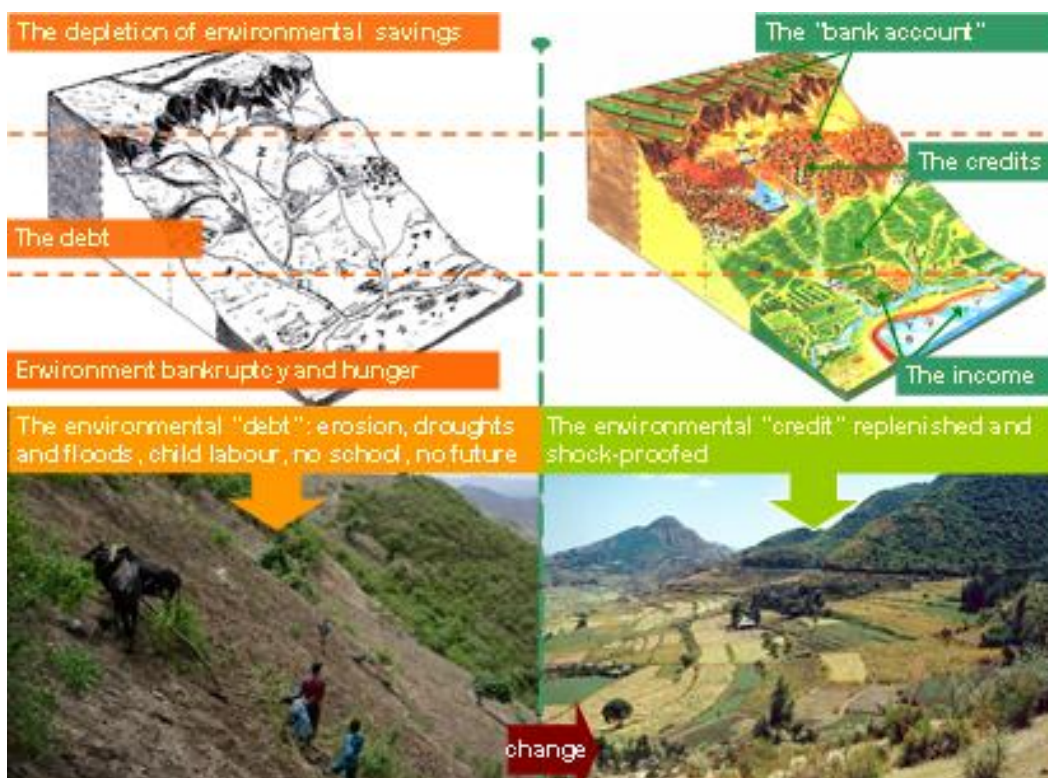
A watershed is defined as any surface area from which runoff resulting from rainfall is collected and drained through a common point. The term is synonymous with a drainage basin or catchment area. From the hydrological perspective, a watershed can be defined as an area from which the runoff drains through a particular point in the drainage system (figure below). A watershed consists of the natural resources found in the basin, especially water, soil, and vegetative factors. At the socio-economic level a watershed includes people, their farming system (including livestock) and interactions with land resources, coping strategies, social and economic activities, and cultural aspects:

A watershed unit



The watershed and catchments surrounding communities can be viewed as a savings account to be filled with rainfall, with slopes representing the generation of credits, and the lowlands and plains the income that is generated from the system. It works like this³⁸:

Visual of the Environmental Banking concept



³⁸ **This figure** is an actual representation that this has been done – in Ethiopia – through a WFP and Ministry of Agriculture FFA supported participatory watershed rehabilitation programme

Currently, degraded watersheds represent a depletion of environmental savings (the images on the left of the figure above). The lack of vegetative cover at the top of the watershed due to overgrazing and deforestation means that rainfall is not captured and simply runs away in the form of runoff. Thus, the bank account is quickly depleted and becomes empty.



Farmers move onto the slope and engage in subsistence farming, using poor and unsustainable land practices which further aggravate soil erosion and raise infertility. As rainfall washes over the watershed and runs down the slopes, it carries away the top soil, accelerates soil erosion, scours out deep gullies and ravines, and results in floods and landslides – this is the environmental debt.



For the communities living at the bottom of the watersheds and the lowland plains, the lack of underground water for agriculture and grazing means no income, limited trade and associated livelihood opportunities, which pushes them into poverty.



The frequency, intensity, and the risk of floods and landslides caused by the environmental debt due to the degraded watershed means that populations have become environmentally bankrupt, and they spiral further and deeper into poverty and hunger.

New life needs to be breathed into the '*bank*'. Accounts can be opened (the images on the right of the figure above) through trenches and micro-catchments along the tops of the watersheds and on the slopes. By simply depositing a seedling in a well-designed trench, the investment into a green future can start. As with any savings account, the investment needs to be protected – the area can be closed to grazing and firewood collection for a few years for example, seen as a fixed deposit to let the interest grow.



Rainfall will begin to feed the bank account, no longer running off the slopes but percolating into underground systems and filling up the aquifers. Stabilizing crops can be planted along the terraces to provide credits. Gullies can be reshaped and softened, planted and turned into productive check-dams.



Erosion will be halted, floods will be less frequent, and the risk of landslides will fade. In the lowlands, water tables begin to rise and agricultural production will improve. Beekeeping and other land-based income generating activities can be established, providing diversified livelihood practices to better manage shocks, whilst at the same time the watershed above the lowlands begins to pose less of a risk as the rain falls.



Rain will ultimately turn from being a source of danger, to a source of income and safety, steering the population away from shocks, poverty, and hunger. All that is required is a collective effort to open an account, to make a deposit, and protect the investment.

ANNEX 2c: Livelihoods and FFA

1. Definition of livelihoods

"A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base" (DFID, 1999).

Thus, a livelihood comprises a household's capabilities, assets and activities required to secure basic needs - food, shelter, health, education and income. Briefly:

Household livelihood assets relate to 5 different types of capital:

- **Physical capital:** livestock; agricultural tools and draught power; infrastructure such as roads, schools, and health centres, etc.
- **Natural capital:** land size and quality of the plots such as their fertility and productivity; the availability of livestock, grazing land, pastures and/or fodder sources; the sufficient source of energy and construction materials (woodlots, trees, subsidized means, etc.); the availability of water for domestic and productive use such as irrigation, etc.
- **Economic or Financial capital:** cash, savings, credit and debt, and other economic assets, etc.
- **Human capital:** skills and knowledge; the capability to work; good health and physical capability, etc.
- **Social capital:** the social resources (networks, social claims, social relations, affiliations, associations) upon which people draw when pursuing different livelihood strategies requiring coordinated actions.

Household capabilities relate to farming and/or herding skills, access to market information and technology, ability to manage credit, status and propensity to innovation.

Extensive literature on livelihoods – what they are, how they work, and approaches as to how analyses and programmes can be structured to better understand and support them – can be found on the Internet. Some useful links, providing both general information and country specific livelihood descriptions, can be found at:

WFP Food assistance for Assets, available at: <http://www.wfp.org/food-assets>

FEWSNET: www.fews.net

Oxfam: www.oxfam.org.uk

WFP, 2005. Food Aid and Livelihood in Emergencies, available at:
<http://docustore.wfp.org/stellent/groups/public/documents/eb/wfp015464.pdf>

UNCCD et al, 2007. Climate and Land Degradation. Available at:
<http://catalogue.nla.gov.au/Record/4276879>

2. The Relevance of Understanding Livelihoods for FFA

Livelihoods result from adaptation to the context in which people live in - and in turn the context can be influenced either positively or negatively through the livelihood strategies that people adopt. Thus, livelihoods are complex and multi-faceted – particularly in food insecure and vulnerable areas.

The IDS Working Paper 72³⁹ states

'The ability of people's livelihood to be able to cope with and recover from stresses and shocks is central to the definition of sustainable livelihoods. Such resilience in the face of stresses and shocks is key to both livelihood adaptation and coping.

A livelihood is sustainable if it can successfully manage and mitigate the effects of external stresses and shocks, maintain or enhance its capabilities and assets, and provide for future generations.

Those who are unable to cope (temporary adjustments in the face of change) or adapt (longer term shifts in livelihood strategies) are inevitably vulnerable and unlikely to achieve sustainable livelihoods. Assessing resilience and the ability to positively adapt or successfully cope requires an analysis of a range of factors, including an evaluation of historical experiences of responses to various shocks and stresses. Different types of shocks or stresses, in turn, result in different responses.'

As FFA would be eventually selected to assist needy food insecure populations in these areas, understanding livelihood contexts and some of the key elements that play a major role in influencing these livelihoods is critical for the selection of FFA – and in particular as an overall goal is to strengthen **'sustainable'** livelihoods for the poorest – given that **FFA are intended to restore, rehabilitate, create or promote livelihood assets**.

It therefore becomes essential to know the livelihoods of the people being considered for FFA, the survival (or coping) strategies that they use in times of crisis, and the impacts that such coping strategies may have on the natural resource base (land) in which they live. This further guides the selection of appropriate FFA that would support coping strategies whilst reducing negative impacts on the land, which in turn strengthens resilience to shocks.

Note: the understanding of coping strategies and their impact on the land, or resource base, should be combined with information on the kind of shocks and risks are people being exposed to, and the aggravating factors which could heighten the impact of these shocks (**Annexes 2a** and **Annex 2b**).

³⁹ Sustainable rural livelihoods: a framework for analysis; Institute of Development Studies (IDS); Working Paper 72; Ian Scoones, 2005.

3. Relevance of the Natural Resource Base for Livelihoods

To a large extent most rural livelihoods are reliant on the natural resource base, and knowing **what this 'base' includes, and how these elements are used** guides the selection of FFA activities.

About 75% of the world's poorest 1 billion, i.e. smallholder farmers and pastoralists, depend on the natural resource base for their cropping or livestock based activities. These areas are largely fragile, climate shock prone and degraded environments. They *"are the backbone of the rural economy and on the frontline of managing natural resources and climate impacts, relying directly on climate-affected natural resources for their livelihoods and being especially vulnerable to health and nutrition challenges"* (IFAD – 2011).

The possibility to generate productive employment to improve the natural resources base becomes increasingly important both in agrarian and pastoral regions. **The role of FFA can be of enormous relevance and a major entry point for broad based partnerships for sustainable food security efforts.**

In most of the livelihood contexts where WFP operates, *the ability of livelihood systems to maintain productivity, when subject to disturbing forces, whether a 'stress' or a 'shock', is highly diminished⁴⁰. This implies avoiding depleting natural resources stocks to a level which results in a permanent decline.... Furthermore, the ability of a particular combination of livelihood strategies to create employment for a certain portion of the year is critical in agrarian and subsistence agriculture contexts. This may be on or off-farm, part of a wage labour system or subsistence production. In terms of income and production aspects, various target levels have been suggested, but 200 days a year appears to be widely used as a minimum level to create a livelihood (Lipton 1991; 1993). In other instances this is much lower, depending on the season and income sources (excerpts - IDS, Working Paper 72, Ian Scoones, 2005).*

⁴⁰ A large infrequent, unpredictable disturbance with immediate impact

4. Factors that Negatively Impact on the Natural Resource Base

Pressure on land resources:

The link between poverty, population pressure and the resulting increase in land degradation has been made through a number of studies. When lacking sufficient income and access to food, many of the poor turn towards the only resource available – land – which is then overused through poor land management practices – i.e. population pressure and competition over scarce resources is often a major trigger of land degradation, particularly when the population is largely composed by poor or ultra-poor. Poorest communities and people begin overexploiting soils, stripping vegetation and tree cover, overgrazing pastures, and causing accelerated erosion and degradation with severe negative consequences on water regimes, community infrastructure (landslides, mudflows, etc.) and productivity. This generates an increased exposure to shocks, higher levels of debt, distress migration, destitution and hunger.

Land tenure:

Tenure issues and social tensions related to aspect of tenure (see also **Chapter 3, section 4.2**) are common and need to be considered with care, particularly in areas affected by land degradation and land shortage. Intergenerational conflict between the owners of plantations (e.g. coffee or cocoa, etc.) and landless/jobless youth, who are exploited by plantation owners, is one of the most difficult signs of conflict to identify. In some countries these forms of traditional pressure have been a major source of discontent and social disruption, contributing to aggravating social tensions and conflict (e.g. in Sierra Leone, etc.).

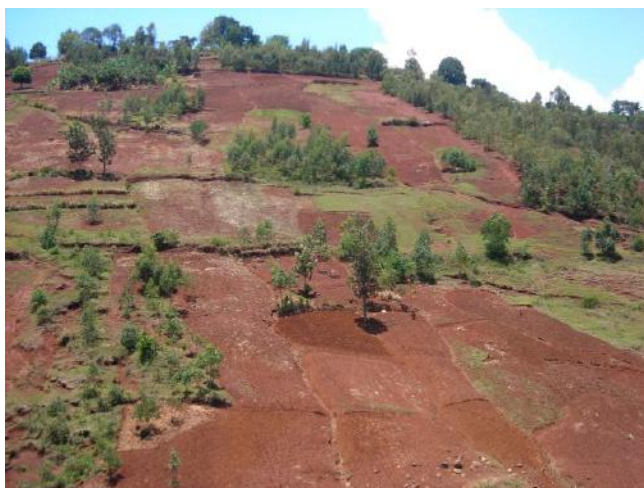
Unsustainable land management practices:

Caused or exacerbated by one of the above factors, these practices range from encroaching and cultivating upper ranges, slash and burn for shifting cultivation, reduction of rotation systems, lack of conservation measures, and overexploitation of pastures due to overgrazing, etc.

Conflict:

WFP beneficiaries are often land-poor or are owners of marginal land, usually depending on other farmers to access draught power, labour support and inputs. Farming in marginal lands without strong land management skills to prevent erosion and water-run-off onto neighbouring lands tends to lead to disputes between farmers.

Several conflicts have erupted between settlers and pastoralists, and between pastoralists themselves, especially during times of drought. Pastoralists may attempt to encroach on cultivated areas during droughts to feed and water their livestock, whilst settlers encroach on land unsuitable for cultivation or land occupied by pastoralists as a coping strategy during times of stress, or as a result of population pressure. Competition over water and pastures during droughts between different pastoral groups can be fierce, and can often turn violent. Different pastoral group, tribes and clans, will come into contact with each other as they congregate around diminishing water points and pastures, with such proximity leading to hostilities and the increased likelihood of conflicts, particularly if historical animosity exists between these pastoral groups. Additionally, pastoralists may encroach on the traditional rangelands of others, further sparking the potential for conflict.



Political and civil strife and conflict have also been massively disruptive on traditional land management systems. For example, the conflict in DR Congo has largely destroyed farming systems in the North East (Kivu) and triggered massive erosion problems. Similar problems occurred in parts of Burundi.

The photograph shows degraded hillsides near Bukavu (DRC). These areas used to be much better managed by communities some 2 decades ago (some sign of old terraces and woodlots are visible). Since the mid-90's, these areas have been ravaged by conflict and cultivation shifted to intermittent/opportunistic cultivation which shows lack of land caring practices.

Economic crisis and unemployment:

The global financial crisis, preceded by the food and fuel crisis of 2008, may reduce the flow of remittances to specific countries with high dependence on such revenues. Similarly, in many parts of the developing world, prices of agricultural inputs have increased, making those inputs unaffordable to many small subsistence farmers and pastoralists (e.g. vaccines, drugs, etc.), with implications on production, or having other consequences such as indebtedness and seasonal market disruptions. This can result in unwanted seasonal migrations, increased burden on women, seasonal hunger, greater exposure to shocks, and accelerated land degradation as people try to cope.

Combination of factors:

These points (above) and others can all occur simultaneously and in an interrelated manner, triggering a number of complex emergencies particularly difficult to handle. These contexts would require a robust causal analysis of food insecurity, to understand which vulnerable groups are most at risk but also which group will require support from other partners in order to prevent major social tensions and conflict.

5. Rural Livelihoods - Agrarian

Overview:

Agrarian livelihoods relate to those settled populations that engage in agriculture. They will be found in tropical and sub-tropical lands, where rainfall under normal conditions allows for land cultivation growing food and cash crops. Depending on the agro-ecological zone and rainfall patterns (and/or possibility of irrigation), agricultural cycles and harvests can occur one to three times a year. Broadly, agriculture is used for own household consumption and for sales and barter when there are surpluses. Some livelihoods will also have cash crops – i.e. crops specifically produced as a source of income, such as legumes, fruits and vegetables, cocoa, coffee etc., or non-edible crops such as cotton and *kaat*, etc.

Agrarian livelihoods are mostly based on agricultural production for consumption and income. Seasonal labour (usually for the poorest) on lands of other farmers (i.e. the better-off) and seasonal labour migrations to highly intensified agricultural areas are a source of income for many people.

Shocks and risks:

The main natural shocks found in agrarian livelihood zones that can be planned in advance for resilience building and early recovery activities with FFA are storms, floods, and landslides (rapid-onset shocks), as well as droughts (slow-onset). There are other shocks (**Annex 2a**) but these may be less predictable. Aggravating factors that heighten risk of shocks are levels of land degradation (**Annex 2b**) and can be tackled with FFA activities to stabilize and rehabilitate the natural resource (land) base.

Impacts and coping strategies:

Drought (and other shocks) increases levels of indebtedness of land users, forcing vulnerable households to sell part if not all of their standing crops and/or livestock. This further reduces income levels, increases negative coping strategies, widens food gaps, and other dramatic consequences such as limiting capacity to respond to future needs and hampering the very existence of farming activities as well as rebuilding the purchasing power of the poor and the local economy as a whole.

As a consequence of drought and food insecurity, cutting and burning of trees increases as people try to generate more income. Furthermore, more people begin resorting to this as a coping strategy, and as supply increases (e.g. of firewood, charcoal etc.) prices go down. Besides, over time:

".... Drought tends to reduce demands for nonessential foods and fuel products because the cash is conserved for the purchase of staple foods. This sharply reduces the earning options for many people, but particularly for women⁴¹."

Drought pushes vulnerable farmers to expand cultivation into marginal areas and/or lands unsuitable for agriculture to decrease the risks of not producing anything. The spatial distribution of cultivated land therefore increases into fragile areas, and often with little conservation planning and good land management practices, which in turn increases the risk of and accelerates land degradation.

Other coping strategies include the stripping of productive household assets, beginning with small livestock and expanding to draught animals and farm tools (ploughs, etc.), clothes and homes, for

⁴¹ *Famine and Food Security in Ethiopia: Lessons for Africa*. Webb, Patrick and Von Braun, Joachim; 1994.

meeting basic needs. It is important to note that this is also progressive - whilst only a small number of households are usually forced to sell draught oxen for food in a first year of drought, the carryover of distress and a second drought multiplies the adoption of these coping mechanisms tenfold.

"... long term implications of such asset stripping are considerable. Fewer oxen (and ploughs) are available for the next farm season, income from animal products disappears, and sales of fuel products suffer ..."⁴²

Continuous exposure to droughts (and other shocks) erodes coping strategies when there is insufficient time to recover. Over time this leads to the shift from transitory food insecurity during the shock and into chronic food insecurity, vulnerability, and poverty.

In many hoe-based farming systems, similar coping strategies are adopted by many people – e.g. in many parts of the Sahel countries in West Africa seasonal migration will be done, mostly by men and youth, and during periods of prolonged drought this migration can extend to over a year before they return home. In other instances, households revert to the selling of animals and incur significant debt by pledging future crops, land, and assets.

Linked to the above, remittances and other employment or income generation opportunities available within and outside the communities affected by drought (and/or other shocks) will have a role.

Some considerations for FFA planning in agrarian livelihoods:

People with agriculturally-based livelihoods tend to be settled in one area, although in some cases seasonal labour migration (mostly of men) occurs. It is easier to plan for, access, and conduct programmes in settled communities - activities will be in or near where people reside all year round, generally with the entire household being together at all times.

Agrarian livelihoods follow specific seasonal activities, linked to rainfall patterns and agricultural cycles. A seasonal livelihood programming approach finds the times and cultivation activities that people (by gender roles) are engaged in - i.e. men and women may prepare the land preparation and plant crops, women may do the weeding, men may do the harvesting, etc. This allows FFA to be tailored in ways that will not negatively impact normal livelihood activities, such as implementing lower labour-intensive FFA at the times people are preparing and planting their fields, etc.

Generally, the time during and post-harvests are the best periods in terms of food availability and when people have the least workloads. Although food assistance is unlikely to be required at this time, if FFA needs to be implemented then food as a transfer modality may affect market prices. Cash or vouchers may be more appropriate, particularly as they can be used to purchase inputs for the subsequent cultivation season.

The lean season occurs during the cultivation period and harvests. This generally coincides with the rainy periods and high on-farm activities, so opportunities for FFA may either be limited (i.e. to rainy season activities) or should be structured so they do not impact on the time needed for preparing land, planting, and protecting crops during the maturing stages, etc.

⁴² *Famine and Food Security in Ethiopia: Lessons for Africa*. Webb, Patrick and Von Braun, Joachim; 1994

6. Rural Livelihoods - Pastoralists and Agro-Pastoralists

Overview:

Pastoral livelihoods are characterized by a reliance on livestock for most of their consumption and income needs, and the movement of livestock across arid/semi-arid lands in search of water and pastures. By definition they depend on livestock, and the concept of 'land' is intended as the key medium for livestock rearing and access to water, the main source on which to draw coping strategies, and the expression of cultural belonging and association to a territorial identity.

There are a number of variations in pastoral livelihoods, related to the types of livestock held and herd composition - e.g. more drought resistant animals such as camels and goats in arid lands, cattle and sheep in semi-arid and more temperate environments etc.; whether seasonal migrations are short - e.g. within a district or region of the same country, or spanning across international borders; whether the whole household or just some members migrate - e.g. just the men and/or the youth; and whether people stay in permanent and semi-permanent homesteads (such as in the Horn of Africa) or whether the household is always on the move (e.g. the Kuchi of Afghanistan). All these factors have implications on selecting the time, types, and appropriateness of using FFA.

Pastoralists can be divided into three broad groups: **pastoralists** who rely primarily on their livestock, **agro-pastoralists** that also practice some agriculture; and **'ex-pastoralists'**, which are those whose pastoral livelihood is no longer viable and have been forced to adopt other livelihood strategies, and typically settle around urban areas.

Pastoralists rely on livestock production for own consumption and sale as a source of income. For agro-pastoralists this is supplemented with agricultural production, whilst ex-pastoralists tend to rely more on urban labour opportunities and the sales of firewood, charcoal, and petty trading. Labour as a source of income is not typical in pastoral livelihoods, and livestock markets and trade are key sources of income for this livelihood group.

Shocks and risks:

Droughts (slow-onset) and their twinning with floods (rapid-onset) are the main natural shocks experienced. Other major shocks for this group are increasing/reducing livestock prices, animal diseases and the risk of livestock import/export bans by countries which affect markets, and conflict with other pastoral groups over water, pastures, and depleting natural resources. Other relevant shocks are described in **Annex 2a**, and main aggravating factors that heighten risks in **Annex 2b**.

Impacts and coping strategies:

In pastoralist settings, periods of collapse after severe droughts are followed by periods of accumulation, and pastoralism is described as one of the most efficient livelihood systems within drought prone contexts. Recently however, the periods of collapse appear disproportionately longer compared to the periods of rebuilding and accumulation - not only caused by droughts and their increasing frequency but also by other concomitant or external factors such as conflicts, trade restrictions, and diseases outbreaks.

Adapting to shocks is increasingly difficult for pastoralists and more people are falling out of the livelihood due to the hardships faced. Pastoralism is evolving and becoming more complex, and in some countries a shift into farming may provide the wrong impression of a gradual abandonment of pastoralism. This is incorrect as livelihoods are multi-faceted and ties with pastoralism remains strong even when some households settle in and around. Original transhumance (movement and/or migration) patterns are changing however, and agro-pastoralism is increasing.

For decades pastoral livelihoods have been placed under severe stress by increasingly recurrent shocks, environmental degradation and limited longer term development investments. As a result, there is a significant tendency for pastoralists to increase the pattern of establishing semi-permanent and permanent settlements in areas where basic services and humanitarian assistance support is accessible, closer to and sometimes around towns, roads and rivers. At times of severe shock and crisis, pastoral communities try to cope by searching for wild foods or attempt small scale irrigation.

For example: in Isiolo District, Kenya, an estimated 90% of the pastoral population practices some kind of farming, women and young children stay permanently in small settlements, and teenagers and adults move in search of pastures with the livestock during specific periods of the year.

In other areas the proportion of households moving together with the herds for extended periods of time appears to be decreasing. In other instances, even when moving as an entire group the periods of transhumance outside a designated area is becoming shorter due to pressure from other pastoral clans, security concerns, and competition. The availability of water and basic services created through various programme interventions, coupled with the need to stay close to relief distribution centre at times of food scarcity, are factors which will influence permanence around settlements.

Some considerations for FFA planning in pastoral livelihoods:

Despite these challenges, pastoralism overall still remains a highly efficient system within arid lands in many areas. The role of FFA however needs to be explored closely with partners, and pastoral representatives and communities themselves. A seasonal livelihood programming exercises provides a robust entry point for ascertaining the relevance of FFA in different pastoral contexts.

Rainy periods are generally better times for pastoralists as water and pasture is more abundant, whilst the dry seasons are more difficult as water and pasture disappear and pastoralists begin to move with their animals in search of these resources.

The most critical seasons where food assistance is generally required are the dry season (i.e. the period of time between the short and long rains), and where 'long' refers to the intensity of the heat and hardships rather than the duration of the season. At this time, pastoralist men and young adults are generally on the move with their animals, leaving the women, children, sick and elderly behind at the permanent homestead with a few milking animals. At this time, it is easier to reach women as they will be near the homesteads, yet their workloads are greatly increased given the need to spend more time collecting water.

Thus, from a practical point of view FFA may be appropriate in the long dry season as women will be around homesteads and can access programmes, yet careful consideration needs to be given as to the impact this will have and the added burden on women to participate in FFA whilst still needing to conduct regular and daily household activities. This situation becomes more acute during bad or drought years, where the implementation of FFA may no longer be feasible as a response if negative impacts on women and other livelihood activities occur as a result of their need to participate in programmes to get food assistance.

There are two key dimensions in pastoral settings that are not found in other livelihood zones, which will pose challenges for FFA (and other programme responses) – the mobility and spatial dimensions:

Mobility and spatial dimensions:

In this context it will refer to the movement over space (i.e. areas) of people with their livestock. This means that not only the timing but the type of FFA becomes critical – for example, consider that a 3 month intervention is required, yet it coincides with the time that people will move along transhumance route. The planning, implementation, monitoring, and evaluation of potentially 'mobile' FFA project could be challenging. Consideration could be given to conduct and complete the FFA project before the pastoral movement begins, yet this would require strong rationales and justifications, and agreements with authorities and partners. In this regard, seasonal livelihood programme consultations would assist.

Pastoral communities and settlements are often spread out, and households do not typically live in close proximity to each – for example households from the same community could be living within a stretch of a few of kilometres along a river. Implementing projects and reaching FFA sites in such cases could also be difficult. 'Community assets' can be difficult to define, and consideration to household asset creation could be given and FFA could be implemented around settlements. Although more difficult and requiring strong partnerships, FFA along transhumance routes in specific areas and contexts is possible, and could include activities such as planting trees (e.g. *Acacia senegal* and *Acacia seyal*) for dyes and gum collection or area closures – although strong agreements between various pastoral groups that would be moving along the same areas will need to be negotiated to avoid conflicts.

Opportunities:

Given the complexity that mobility and spatial dimensions bring to programme implementation, together with the added nuances of livelihood activities and 'who is doing what' within pastoral transhumance and over different areas, the feasibility of FFA to reach intended beneficiaries, at the right time and the right place, needs to be carefully determined and if it is felt that this is not possible then FFA may not be the most appropriate response. This is not to say that FFA should not be considered for pastoral livelihoods – on the contrary, there are a number of asset creation activities that can be drawn from agrarian livelihood programmes - that are appropriate in these settings, can be contextualised to pastoral livelihoods and arid/semi-arid lands, and which have been implemented in the past.

There are also a number of opportunities to bring together the three overall pastoral livelihoods into complementary FFA programming – that is, exploring those activities that could support and/or offer alternative livelihoods to ex-pastoralists around urban settlements and which are also linked to and support interventions to pastoralists and agro-pastoralists. For example, the establishment of nurseries or fodder banks by ex-pastoralists, and which in turn will provide the trees for land stabilization or animal feed for agro-pastoral and pastoral FFA programmes, etc. Such actions though would require strong partnerships at the field level to ensure their success.

7. Arid & Semi-Arid Lands: Considering Shocks and Livelihoods in this Context

Broadly, arid and semi-arid lands can be described as follows:

- (i) **Arid lands (200-400 mm rainfall/year) with valley bottoms cultivated under specific land and water management schemes by specialized agriculturalists or agro-pastoralists** (e.g. irrigation schemes resulting from water development schemes, etc.); **or with rangelands used for livestock production by pastoralists**, and characterized by seasonal transhumance movements in search of pastures and water to maintain animal herds.
- (ii) **Semi-arid lands (rainfall usually 400-600 mm rainfall/year) cultivated by settlers and/or by agro-pastoralists** (pure agriculturalists in semi-arid and arid lands are rare as all depend in one way or another on livestock). **Rangelands for pasture are also used by pastoralists.**
- (iii) **Semi-arid or arid lands with agriculture around rivers and lakes.** These riverine and lake dependent communities are often critical elements of pastoral livelihood systems albeit maintaining a typical agricultural system mixed with fisheries. It is also possible to find households only specializing in fisheries and trade within these contexts.
- (iv) **Depending on altitude and proximity to coastlines**, arid and semi-arid lands can have hot summers and mild, wet winters (higher altitudes and close to coastlines) or hot summers and cold winters (higher altitudes and continental interiors).

Main natural shocks experienced in this agro-ecological zone that can be 'predicted or anticipated' with which to use FFA to build resilience (SO3) will be related to droughts (slow-onset), and in some areas twinned with floods (rapid-onset) once rains start. Programmes with SO1 and SO2 objectives can be used during and after all shocks, be they natural, man-made, or economic.

Depending on the level of environmental degradation, the severity of the impacts of the shock can be heightened. Highly eroded areas will have less vegetation cover and ability to capture water, resulting in even less natural resources to sustain animals and peoples livelihoods during crises. This leads to increased congregation of people and animals around limited water points and pastures, further eroding the environment and raising the risk of conflict. In lands with slopes or steep topographies, the risk of floods is accentuated once rains start.

Pastoral livelihoods are characterized by seasonal transhumance movements, so understanding 'who' is 'where' and 'when' and doing 'what' is essential in project design and implementation. Urban settlements - and as such more 'urban-based' livelihoods reliant on income - are found in arid and semi-arid lands. In particular, many pastoralists that have lost their animals due to repeated shocks (i.e. lost their livelihoods) settle around urban areas, and numbers of such 'ex-pastoralists' is increasing in this agro-ecological zone.

In summary, in arid and semi-arid lands, a range of land rehabilitation and water harvesting measures should be considered the essential and foremost important factor able to reduce pressure on scarce land resources, increase productivity, improve resilience to shocks, stimulate employment and prevent further environmental degradation.

8. Tropical & Sub-Tropical Lands: Considering Shocks and Livelihoods in this Context

These are mainly humid and sub-humid tropics, known for their year round high temperatures and large amounts of rain. In this agro-ecological zone, the following subgroups can be found:

- i) Rainforest climate in spite of short, dry season in monsoon type cycle
- ii) There may be a dry season in the summer of the respective hemispheres
- iii) Areas where there is no significant dry season and it is wet all year around

A subset of the above would be the wet-moist highlands. Highland climates are cool to cold, found in mountains and high plateaus. Climate changes rapidly on mountains, becoming colder the higher the altitude gets. These areas are important as water storage areas. In drier mountainous areas, snow is kept back until spring and summer when it is released slowly as water through melting.

Annual rainfall is usually sufficient, but the zones can be affected by the following factors:

- steep and/or deforested and degraded slopes
- occurrence of cyclones and hurricanes
- significant seasonal variations and dry spells
- a combination of these three which influence the stability of such ecosystems

Main natural shocks that can be 'predicted or anticipated' with which to use FFA to build resilience (SO3) will be related to droughts (slow-onset) and tropical storms such as cyclones (rapid-onset). Accompanying these storms are floods and landslides, especially in those heavily degraded lands with slopes. Programmes with SO1 and SO2 objectives can be used during and after all shocks, be they natural, man-made, or economic.

Levels of environmental degradation can greatly aggravate the impacts of shocks in these zones. Loss of vegetation and high erosion, particularly on sloping lands, can lead to devastating results with flash-flooding and landslides often occurring even with moderate rainfall. Mountainous and hilly terrains are usually problematic when increased population pressure, high frequency of cyclones and fragile soils push farmers to cut trees and cultivate areas previously covered by forests or high vegetation. The continuous use of slash and burn (shifting cultivation) and the modification of this practice are responsible for significant changes regarding reduction of vegetation cover, and decrease of crop production, soil acidification and loss of nutrients.

“ Programmes with SO1 and SO2 objectives can be used during and after all shocks, be they natural, man-made, or economic. ”

Overall, livelihoods in this agro-ecological zone relates to farming, although some populations also rely on fisheries and other off-season activities that can range from hunting gathering, logging, mining and migration to commercial farms as well as other sources of employment.

In summary, in tropical and sub-tropical zones, a range of land rehabilitation and stabilization measures should be considered the essential and foremost important factor able to reduce risk and increase agricultural productivity, improve resilience to shocks, and prevent further environmental degradation.

Annexes to Chapter 3

Food Assistance for Assets (FFA) for Zero Hunger and Resilient Livelihoods



ANNEXES TO CHAPTER 3

ANNEX 3a: Community-based Participatory Planning (CBPP) for Food Assistance for Assets and Complementary Interventions - An annotated template for WFP staff and partners



- The annotated template aims at providing CBPP trainers and facilitators with basic guidance on how to facilitate and document CBPP sessions in selected communities.
- **IMPORTANT NOTE:** It shouldn't be seen as a structured questionnaire (in which all questions have to be addressed), but rather it represents an indicative guide to generate discussions among villagers, WFP, technical services and partners. As such, CBPP trainers and facilitators are free to expand and adjust the level of detail of the discussions as required.
- This template is particularly relevant for rural communities in low- to medium- capacity contexts, but it can be further adapted and adjusted to different contexts and capacities, building on existing approaches available at the country level.
- For more information on CBPP, please refer to Chapter 3 of WFP FFA Programme Guidance Manual (PGM).

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APPENDIX: CHECKLIST OF NUTRITION- AND GENDER-SENSITIVE ASPECTS IN THE CBPP.....	105

Additional CBPP guidelines and related formats:

WFP, 2016. CBPP annotated template (**in English**; pdf/Word formats). Available at:

http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp283040.pdf

WFP, 2016. CBPP template, without annotations (**in English**; pdf/Word formats). Available at:

http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp283041.docx

PAM, 2016. Format annoté pour la Planification Communautaire Participative (PCP) (**en français**; formats pdf/Word). Available at :

http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp282778.pdf

WFP, 2016. Format PCP, sans annotations (**en français**; formats pdf/Word). Available at:

http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp283043.docx

WFP and MoA, 1999. Local Level Participatory Planning Approach. A Trainers' Manual. Available at:

http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp238079.zip

WFP Zimbabwe, 2012. Community-level participatory planning approach - Facilitation guidelines. Available at:

http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp261389.pdf

Examples of CBPP reports/community-based plans:

WFP Zimbabwe, 2012. Community-level participatory planning approach - Action plan template. Available at:

http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp261391.pdf

WFP Zimbabwe, 2012. Community-level participatory planning approach - Action plan example. Available at:

http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp261390.pdf

WFP Kenya, 2012. Participatory community-based plan in Sabor. Available at:

http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp261396.pdf

PAM Niger, 2012. Planification Participative Communautaire à Tolkoboye-Mallokoira-Gormey. Available at:

http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp261397.pdf

PAM Burundi, 2016. Planification Communautaire Participative dans la Colline de Rushanga. Available at:

http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp282783.pdf

Prerequisites

Prior to starting any CBPP planning session, it is useful to review the set of fundamental prerequisites below. These prerequisites determine the quality of the CBPP and the success of the subsequent implementation of the community-based plan. It is essential to make sure that all prerequisites have been addressed, and to take action on any prerequisite which remains "unfulfilled":

Local Government and authorities are sensitized and engaged into the CBPP process.	<input type="radio"/>
The selection of the community results from close consultations with Local Government, authorities and partners, as well as insights gained from the Integrated Context Analysis or ICA (whenever available), food and nutrition security assessments, vulnerability and risk analyses, etc.	<input type="radio"/>
If the selected community includes more than a village, the rationale to cluster a group of villages is clearly defined and well-accepted among the various villages (e.g. shared interests, resources or problems; technical logic, for instance villages share the same sub-watershed; etc.); the size of the villages cluster should be meaningful from a planning perspective (e.g. several thousands of hectares generally call for the subdivision of the village cluster into smaller, more manageable planning units).	<input type="radio"/>
Local Government technical services staff - particularly in the fields of agriculture, livestock, irrigation, forestry - are mobilized and closely involved in the planned CBPP session; their presence is fundamental to share technical expertise and advice on specific interventions.	<input type="radio"/>
CBPP stakeholders - which include WFP and an alliance of partners - are committed to implement at least part of the community-based plan produced during the CBPP; as much as possible, sufficient resources should be available beforehand, and commitments should be ensured on a multi-year basis.	<input type="radio"/>
Village chiefs, traditional authorities and other key community stakeholders are sensitized on the CBPP through preparatory visits, and CBPP-related arrangements (timing, venue and logistics, meals, community contributions, etc.) are well-defined with them.	<input type="radio"/>
The period chosen to conduct the CBPP session doesn't interfere with peak periods of on-farm activities and with celebrations or public holiday periods.	<input type="radio"/>
The CBPP team is familiar with basic facilitation skills, and know how to use the present annotated template; it also know how to document the planning session and how to produce a CBPP report.	<input type="radio"/>
The CBPP team reviewed secondary sources of information (such as maps, socio-economic and administrative data, Seasonal Livelihood Programming reports, food security and nutrition assessments, local development plans, land use plans, etc.), so that to get increasingly familiar with the targeted community.	<input type="radio"/>

PART I - ASSEMBLING A COMMUNITY PLANNING TEAM

1. Assembling a representative and inclusive community

Objectives:

- To identify the different livelihoods groups and the vulnerability groups present in the community.
- To assemble a representative and inclusive community planning team.

Approach and tools:

- The head(s) of the targeted village(s) and traditional authorities calls for a **village(s) meeting**, and **mobilize representatives** of the different sections of the community, including men, women and youth; different livelihoods and vulnerability groups; marginalized/vulnerable people; etc.
- During the meeting with villagers, **the CBPP team members introduce the community-based participatory planning approach**, including its objective, process and expected outputs.
- **The CBPP team maps out the different livelihood and vulnerability groups** present in the village(s).
- **The villagers elect a community planning team, by selecting men, women and youth** from the community in each of the livelihood and vulnerability groups; the most vulnerable and marginalized people should be included in the community planning team.

planning team

What are the **main livelihood groups** present in the community - such as farmers, transhumant pastoralists, fishermen, etc.? What is their relative importance in the community (e.g. ~ 80% farmers and 20% fishermen)?

.....

.....

.....

Tip: If relationships between livelihood groups living or coexisting in the selected community are a bit complex or tense (e.g. it can happen between farmers and pastoralists), it might be preferable to initiate the planning process with each group separately, and bring people together at a later stage, so that to understand issues faced by each group beforehand and build trust progressively.

Vulnerability profiling exercise:

This exercise intends to identify and describe **different groups of vulnerability** in the community. Use the following questions to prompt discussion:

- ☒ What are the **main vulnerability/ wealth groups** in the community?
- ☒ Can you describe these groups, using a set of **criteria** defined by the villagers?
- ☒ What is the **relative importance** of these groups in the community?
- ☒ What are the **main problems** of each group?

Vulnerability profiling:

Group Criteria (*)	Group A = Ratio: %	Group B = Ratio: %	Group C = Ratio: %	Group D = Ratio: %
Criteria 1: ...				
Criteria 2: ...				
Criteria 3: ...				
Criteria 4: ...				
Criteria 5: ...				
Main problems experienced by people in this group?				

(*) Criteria can include or be related to: the sex/age of the household (HH) head; the size of the HH; the cultivated land size; the ownership of agricultural equipment; livestock ownership; the number of months with food access problems; access to education, especially among girls; the prevalence of malnutrition among children; the presence of Orphans and Vulnerable Children (OVC) or People Living With HIV/AIDS (PLWHA) in the community; etc.

Community planning team:

The community planning team should include:

- ☑ **12-24 members**, including women, men and youth;
- ☑ Representatives from the **different villages**, whenever the selected community is a cluster of villages;
- ☑ Representatives from the **different vulnerability groups**, including the most vulnerable;
- ☑ Representatives from the **different livelihood groups**;
- ☑ **At least 50% women**, including influential, highly respected and outspoken women; pregnant and lactating women (PLW), or women of reproductive age; women with a certain level of education, or who received some training; a trained mid-wife or “sage-femme”, the community health worker (if any) and other women knowledgeable on health and nutrition.

#	Name of the community planning team member	Women, men, “youth”?	Group (livelihoods, socio-economic)	Name of village
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				

Tip: Before starting the CBPP session, review whether people included in the table above are present or whether team composition has evolved. Throughout the CBPP process, ensure the participation of all members of the community planning team - especially the women and the most vulnerable, and make sure that all voices are heard.

PART II - UNDERSTANDING LIVELIHOODS

Objective:

- To gather **basic planning information and data on the community**, including its location (by recording the GPS coordinates); population figures; food and nutrition security information; community land areas; climatic, agro-ecological and environmental variables; and markets.

Approach and tools:

- As much as possible, make use of secondary data and information** to address the questions below; in particular, look for information available at the level of district (or other administrative unit) authorities, technical services, traditional authorities or implementing partners.
- Discuss with the head(s) of village(s), other key informants or the community planning team** to collect additional pieces of information.

2. Basic information and data on the community

Location of the village or the village cluster:

Region (or equivalent unit):

District (or equivalent unit):

Municipality (or equivalent unit):

GPS coordinates of the village(s):

Name of the village(s):

(a)

(b)

(c)

(d)

(e)

Population figures:

Name of villages	Number of HHs	Number of people	Average HH size
(a)			
(b)			
(c)			
(d)			
(e)			
Total			

Food and nutrition security information (e.g. food security situations, main nutritional problems, etc.):

.....

.....

.....

.....

Community land areas:

Village name	Total estimated area (ha)	Estimated area of agricultural land (ha)	Estimated area of irrigated land (ha)
(a)			
(b)			
(c)			
(d)			
(e)			
Total			

Climatic, watershed, agro-ecological and environmental variables:

.....

.....

.....

.....

Markets (e.g. main markets, location, size and distance to the markets, etc.):

.....

.....

.....

.....

Other relevant information:

.....

.....

.....

.....

Objectives:

- To identify **the main hardships, shocks, stressors, etc.** experienced in the community, and to describe **the main adaptation and coping strategies** mobilized in face of these problems.

Approach and tools:

- Conduct a **discussion in plenary** with the community planning team, or alternatively, carry out **focus group discussions** with groups of women, men and youth.
- Make use of a **shock timeline** to recall past shocks.

3. Problem identification and exposure to shocks

Problem identification and ranking:

What are the major problems faced in the community according to women, men and the youth? Focus on the 5 most important problems, i.e. those that have substantial effects on the lives and livelihoods of people. Rank them in order of importance (from 1 = most important activity to 5 = less important activity):

Problems reported by women	Problems reported by men	Problems reported by youth
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	5.

Shock timeline:

Produce a **"shock timeline"**, or in other words, a calendar of negative events that occurred in the community in past 20 or more years; shocks can include droughts, floods, pests, locust invasion, epidemics, conflicts, etc.

Year	Local name	Shock(s) and major impacts
Example: 2005	Agama	Major drought, hunger, peaks in diseases and disputes with pastoralists

Among the shocks listed in the timeline above, what are the **most severe shocks? Compared to 10-20 years ago**, are they becoming more/less severe? More/less frequent? Describe how things have changed, and why.

.....

.....

.....

Are there any **alerts, early warning systems or seasonal forecasts** in place in the community, which allow villagers to take appropriate actions to reduce the effects of shocks (droughts, floods...)? If yes, describe them:

Severe shocks	Alerts, early warning and forecasts, and how is the information communicated
Example: Drought	Seasonal climate outlooks through radio broadcasting, just before planting season
1.	
2.	

Adaptation and coping strategies:

What do people generally do during difficult times to meet household food needs and other needs? Do these strategies or responses generate “positive” or “negative” effects in the short- and long-term? “Positive strategies” include, for instance, finding new sources of income, strengthening solidarity mechanisms (e.g. traditional ways to support the weak. “Negative strategies” include reducing food intakes among young children, pulling children out of schools, intensifying charcoal sales, etc.

Key adaptation or coping strategy	In face of ...	Effects in the short-/long-term in the community?
Example: Intensifying charcoal sales	Droughts	Negative effects (environmental degradation)
1.		
2.		
3.		
4.		
5.		

Tip: “Positive strategies” can represent specific ready-to-use, locally-appropriate responses; as such, they could be promoted and possibly supported by external stakeholders and measures.

Objectives:

- To describe **seasonal cycles and fluctuations** taking place during a typical year, which have a major influence on livelihoods, food security and nutrition.
- To describe **a set of livelihoods activities that are central in rural economies**, including agriculture and livestock, other sources of income, credit, water collection and collection of cooking fuel.
- To highlight **how livelihood activities compare among women, men and youth**.

Approach and tools:

- **Consult Seasonal Livelihood Programming (SLP)** carried out at the region, district or municipality level, or alternatively develop a **simple seasonal calendar** such as the one presented below.
- Conduct a **discussion in plenary** with the community planning team, or alternatively, carry out **focus group discussions** with groups of women, men and youth; **interviews with key informants** - selected based on their skills, knowledge and experiences - can also be used to enrich the discussions.
- Discussion points suggested in this section **can also be addressed using other tools**, such as the community transect (section 7).

4. Seasonality and livelihoods activities

Main livelihood activities:

What are the **4-5 most important livelihood activities or “sources of food or income”** according to women, men and youth in the community? Fill in the table below, ranking livelihood activities in order of importance (from 1 = most important activity to 5 = less important activity):

Women' livelihood activities	Men' livelihood activities	Youth' livelihood activities
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	5.

Tip: If there are distinct livelihood groups in the community (e.g. farmers and pastoralists), you can also identify the most important livelihood activities for each livelihood group.

Seasonality:

Develop a simple seasonal calendar with the community planning team for a typical year, focusing on the main seasonal cycles and fluctuations, making use of the suggested calendar on the next page; possibly, highlight changes in seasonality that might have occurred in recent past (e.g. in the past 10-15 years):

Tip: Understanding seasonality is fundamental to strengthen programming, for instance by supporting people when they need it the most (e.g. the case of seasonal safety nets/ transfers) or by avoiding to implement time-demanding resilience/ development activities when people are busy, etc.

Seasonal cycles and fluctuations	Indicator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Example:	Wasting/ acute malnutrition					High		Very high					
Seasons													
Climate-related shocks													
Tensions or conflicts													
Other: ...													
Crop production (e.g. planting and harvesting periods for key crops)													
Animal production (e.g. most difficult periods, transhumance)													
Other income sources (e.g. charcoal-making, casual labour, migration, etc.)													
Credit cycles (loans, reimbursements)													
Food access	Household food shortages												
	Child food shortages												
Main human diseases or epidemic outbreaks	Diarrhoea												
	Malaria												
Malnutrition	Wasting												
	Stunting												
Busiest/ less busy times of the year	According to women												
	According to men												
Better off/ worst times of the year	According to women												
	According to men												

Crops, vegetables and fruits production:

Carry out a discussion on **crops, vegetables and fruits production** with groups of women, men and youth or in plenary with the community planning team; issues covered might include, but are not limited to:

- ☑ The **size of the agricultural land area owned and cultivated** per household;
- ☑ The presence and size of the **irrigated land**, people who can access irrigated land, and existing options to extend irrigated land in the community;
- ☑ The **most important crops** cultivated in the community, along with their yields;
- ☑ The **production of vegetable and fruits** in the community, and **consumption habits**, in particular among pregnant and lactating women, infants and young children (frequency, barriers, etc.);
- ☑ The **major constraints** to crop, vegetable and fruit production channels (e.g. access to land/ inputs, diseases, shocks, land degradation, storage, marketing, etc.).

Animal production:

Carry out a discussion on **animal production**; issues might include, but are not limited to:

- ☑ The **most important animal bred** in the community, along with the people who generally own them;
- ☑ The production **milk, milk products** and **other animal products** (eggs, meat, etc.), and consumption habits, in particular among pregnant and lactating women, infants and young children (frequency, barriers, etc.);
- ☑ The main **sources of water and fodder** for livestock (availability, shortages, quality, etc.);
- ☑ Patterns of movements with animals (what, where, who, when?) and occurrence of tensions or conflicts;
- ☑ The **veterinarian assistance** in the area and other ways to solve problems related to **animal health**;
- ☑ The major constraints to animal production channels (e.g. access to water and fodder, conflicts, animal diseases, access to markets, etc.).

Other sources of income, and credit:

Carry out a discussion on **other sources of income, and credit**; issues might include, but are not limited to:

- ☑ **Fishing** (what, where, who, when?) and consumption habits, in particular among pregnant and lactating women, infants and young children (frequency, barriers, etc.);
- ☑ **Wild products collection** - e.g. fruits, medicinal plants, firewood, timber, etc. (what, where, when, who?);
- ☑ **Casual labour** inside or close to the community (what, where, when, who?), along with **daily labour costs**;
- ☑ **Economic migration** (what, where, when, how long, who?), along with the daily labour costs, and the importance of **remittances** in the community (i.e. money sent by relatives who work outside community);
- ☑ Access to credit (what, what for, where, when, who?);
- ☑ **The major constraints related to other sources of income** (e.g. skills, access to credit, marketing, etc.).

Water collection:

Carry out a discussion on **water collection**; issues might include, but are not limited to:

- ☑ The main sources of water for drinking and domestic uses, water availability and seasonal shortages;
- ☑ The persons in charge of fetching water, along with the average time devoted per day to fetch water;
- ☑ Existing **options to reduce the time devoted to fetch water**, or to make water collection quicker/easier.

Collection of cooking fuel:

Carry out a discussion on the **collection of cooking fuel**; issues might include, but are not limited to:

- ☑ The **main types** of cooking fuels used by households in the community;
- ☑ The **persons in charge** of collecting cooking fuels, along with the **average collection time** per day;
- ☑ The **availability** of cooking fuels now compared to 10 years ago, and reasons explaining potential changes;
- ☑ **Options to reduce the time** devoted to collect cooking fuels in the community.

Division of labour:

Describe the **division of labour for key domestic tasks and livelihood activities**:

Domestic tasks and livelihood activities	Responsibilities (*)			
	Girls	Women	Boys	Men
1. Making decisions on the household expenses				
2. Making decisions on the on household sources of income				
3. Fetching water for drinking and domestic uses				
4. Collecting cooking fuel				
5. Clearing and preparing land				
6. Planting crops				
7. Weeding crops				
8. Harvesting crops				
9. Growing vegetable				
8. Grazing livestock in and around the community				
9. Leaving the community for transhumance				
10. Making charcoal				
11. Engaging in casual labour opportunities				
12. Leaving the community in search of work				
13. ...				
14. ...				
15. ...				

(*) Add a “++” when common, a “+” when occasional; a “0” when not common; and “NA” if not applicable.

Tip: Describing the division of labour is important from a programming perspective, because it helps understanding who should be involved or who is likely to benefit from specific activities. As such, it can inform targeting discussions and the design of the monitoring & evaluation system.

Objectives:

- To identify and describe **key community-based and external institutions** involved in the community, and to highlight **existing gaps and barriers** to access essential services.

Approach and tools:

- Conduct a **discussion in plenary** with the community planning team, or alternatively, carry out **focus group discussions** with groups of women, men and youth.

5. Community-based and external institutions

Community-based institutions and stakeholders:

According to women, men and youth, what are the **most important institutions and stakeholders present in the community**? Why are they important?

Community-based institutions (*)	Why are they important?
Example: Women saving and credit group	Support the development of new income generating activities
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

(*) e.g. traditional or religious authorities, women or youth' groups, elders, producers' groups or cooperatives, solidarity groups, community health staff, water users associations, conflict resolution bodies, etc.

Tip: Community-based institutions generally have important roles and influences in rural communities, in particular regarding decision-making and access to resources, management of resources and conflict resolution. They can greatly contribute to the success and sustainability of external initiatives. As much as possible, these community-based institutions should be mobilized and involved in the design, implementation and monitoring of services, projects and activities.

External institutions, services, projects and activities:

What **key external institutions** - including government technical services, NGOs, UN agencies, private sector – are involved in the community? What **key services, projects or activities do they deliver** to villagers?

External institutions	Current services, projects and activities (*)
Example: Gvt partner and/or NGO support	1. Agriculture extension Office (weekly visits) 2. Health Service (health extension post with one nurse) 3. NGO YY involved in WaSH (ongoing work)
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

(*) e.g. related to livelihoods strengthening, natural resource management, food security, nutrition, education, water and sanitation, health care, education, safety nets, technical support and extension services, climate/weather related services, trainings, etc.

Carry out a discussion on **external institutions, services, projects and activities** with groups of women, men and youth or in plenary; issues covered might include, but are not limited to:

- ☒ **Essential services** that are lacking in the community, or **improvements** to be brought to specific services;
- ☒ **Barriers** that prevent specific groups to access or benefit from existing **health care and nutrition services**;
- ☒ **Girls' and boys' access to primary/ secondary education**, and women' access to training.

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Tip: The identification of services, projects and activities delivered by external institutions can also help drawing attention to specific gaps in terms of services or highlighting potential complementarities among initiatives.

PART III - INTERPRETING LANDSCAPES

Objectives:

- To **map the community, its land use and its mosaic of landscapes, and specific features of interest**, such as resources, infrastructures, areas prone to shocks, areas with high levels of degradation, etc.
- To discuss the **availability/ status of and access to specific assets or resources** in the community.
- To identify any **prevailing tensions or conflicts** over assets or resources in the community.

Approach and tools:

- Ahead of the CBPP session, look for existing maps and geographic information at district/ regional levels and at the community/ies level (using the collected GPS coordinates), **or on [Google Map](#), [Google Earth](#) or similar software**; if possible, produce and print a copy of the community map using spatial imagery to trigger discussions with the community planning team.
- Make use of a **community mapping exercise**, for which details are provided below; this mapping exercise can also be conducted at the start of the CBPP session (for instance following section 2), and serve as a basis to trigger specific discussions (e.g. on shocks, on livelihood activities, etc.).
- Carry out **discussions in plenary** and/or **focus group discussions** with groups of women/ men/ youth.

6. Community mapping

Community mapping exercise:

Ask members of the community planning team to **produce a map of their community**, drawing on flip charts or a black board, assembling various material found on the site on the ground or producing more elaborated representations (such as 3-dimensional maps, such as in Ethiopia; an exposure and risk map, a map of degraded areas, etc.). **Produce a reproduction of the community map or take a picture of it for the CBPP report. The community map should represent:**

- ☒ Community boundaries, orientations (where is the North?) and indicative size of the community territory;
- ☒ Topography, agro-ecological zones and land use (e.g. settlements, fields, grazing land, forests, hills, etc.);
- ☒ Water resources, hydrology and sub-watershed systems;
- ☒ Schools, health centres and other social services;
- ☒ Markets, religious centres, shops, irrigation facilities and other community assets or infrastructures;
- ☒ Areas particularly exposed to shocks (e.g. floods, droughts, landslides, etc.);
- ☒ Areas with high levels of degradation (e.g. areas that stop producing or produce little; areas with high erosion; areas where deforestation is important; etc.);
- ☒ Optional: areas located outside the community territory but that are important for their livelihoods (e.g. agricultural fields, firewood collection and charcoal-making areas, animal grazing areas, etc.).

Resource availability and status:

Using the community map, initiate a discussion on resource availability and status, e.g. what resources are **at-risk or exposed** to specific shocks? What resources are **abundant**? What resources are **scarce or getting scarce**? What resources are **degraded or getting degraded**? What resources are **developing or improving**?

Ownership of and access to land and natural resources:

Using the community map, initiate a discussion on resources ownership and access, e.g.:

- ☑ Does everyone in the community have **access to** agricultural land? Irrigated land? Grazing land? Water points? Forests? Other resources? **Who cannot access** to these resources? What about women, the poor?
- ☑ Do particular groups have to cultivate **marginal areas**, which are little productive (e.g. fields on the hills or steep slopes)? If yes, which groups? Which marginal areas?
- ☑ Are specific **areas** protected in the community, which cannot be used for specific purposes or which fall under specific restrictions (e.g. top-hill forests, where tree cutting is not allowed)?
- ☑ **Who makes decisions** about who can use land, water, pasture or other important resources? Who decides how these resources are used or managed?

The table below can also help you documenting these discussions:

Land and natural resources	Overall access modalities (e.g. private, common, for specific groups)	Who can access them?	Who cannot access them?	Who makes decisions on resource access, use and management?
Example: Irrigated land	Private	Men from better-off HHs	Women; poor households	District authorities and heads of village

Tensions or conflicts over assets or resources:

To the extent possible, discuss with the community planning team or specific groups whether there are some **tensions or conflict over specific assets or resources** in the community. If yes, over which assets or resources? Between whom (e.g. between 2 livelihood groups, between community members and groups from outside the community, etc.)? Which community-based institutions or stakeholders have important roles when disputes or conflicts occur in the community? How are conflicts and disputes over resources settled?

Objectives:

- To better understand the **mosaic of landscapes** in the community, the **relationships between livelihoods and landscapes** (e.g. how landscapes determine and influence livelihoods, how people's livelihoods shape landscape) and **existing connections between distinct landscape units**.
- To identify **key land degradation problems** in the community, their causes and consequences.
- To **observe and discuss any traditional or innovative land rehabilitation & management practices**
- To **suggest and discuss a set technical measures** which can address specific problems experienced in the community, with a particular focus on shocks, natural resources and land degradation issues.

Approach and tools:

- **Identify a walking itinerary that cuts across different landscape units** of the community, making use of the community map and consultations with the community planning team (e.g. settlement ⇒ river and irrigated land ⇒ rainfed agriculture fields ⇒ grazing land ⇒ forested hills).
- **Carry out a transect walk along the identified itinerary** with the community planning team, technical services, partners, and additional knowledgeable people/ experts from the community.
- **Take pictures and videos** of the different landscape units, the problems identified, the management measures and farmer-led innovations during the transect walk. Pictures and videos are essential to illustrate in the CBPP report land degradation issues and past or current measures to respond to land degradation. Pictures and videos are also an integral part of well-documented good practices to make sure that achievements are documented at different stages (before, during, and after implementation).

7. Community transect

Transect walk:

The information collected during the transect walk, which cuts across the main landscape units of the community, can be synthesised in the matrix suggested on the next page.

Tip: The transect walk is a fundamental building block of WFP and partners' CBPP approach, requiring in-depth observations and "land literacy" skills: it should be systematically carried out, except in special circumstances that do not allow it. A community transect is generally carried out in half a day, but its duration can be adjusted. Start the transect walk early in the morning to avoid the hottest hours of the day, particularly in semi-arid and arid areas. Make sure that drinking water is available for all people.

Complementary information on land degradation and on past/current response measures:

Provide complementary information on the following issues, and illustrate them with pictures:

- ☒ Major land degradation problems occurring in the community, along with their causes and consequences;
- ☒ Past/ current measures to respond to land degradation, and provide a technical analysis of these responses, e.g. considering their pertinence, design and technical quality, potential improvements, etc.:

Community transect:

- ☑ Participants from the community should act as **“guides” to their community**, while “outsiders” should help them enriching their perspectives over the landscapes;
- ☑ **Stop in and describe each distinct landscape unit**, considering a set of variables (e.g. relief; soils; land use; etc.);
- ☑ **Stop also in key stand points where major problems can be seen, or where some measures** have been implemented to face some problems (e.g. reforestation projects, soil and water conservation infrastructures, etc.); discuss the pertinence and technical quality of these measures, and potential improvements;
- ☑ **Discuss in detail the set of responses required to face major problems observed**; illustrate these responses in practical terms or show to the community planning team how to develop specific assets and other measures (e.g. digging half-moons, producing compost, etc.);
- ☑ **Try to visit areas where local ‘champions’ or specific innovations are observed**, for instance in homesteads, agricultural fields, vegetable gardens or orchards; discuss with model farmers and take note of the specific innovations;
- ☑ **Encourage the technicians to provide their views** and share their expertise on all what is above, without dominating the discussion.

Landscape unit Variables	1: ...	2: ...	3: ...	4: ...
Draw or picture				
Agro-ecological systems/ land-use				
Relief/topography				
Soils				
Tenure aspects				
Main problems (e.g. risks, land degradation, poorly designed assets, etc.)				
Main opportunities				

Tip: Pictures and videos

- Record a GPS coordinate at the time of shooting to identify the site for follow up visits, maps and identified photo-points.
- When taking a picture or video, ensure that the frame includes a skyline. Significant landmarks such as rock outcrops, mountain slopes or other geographic features that will remain the same over long periods of time can also be used if there is difficulty in showing a skyline in the horizon. The photo should include a landmark that can be detected over time. It will also help to identify the same site.
- Make sure to include a person within the photo which will provide scale to a context. Some areas are so vast that it becomes difficult to understand how big a particular structure is, thus misrepresenting the amount of work that a structure of that size requires.
- Stand at the bottom of large structures to show height.
- Try different angles when capturing the pictures. Check the background, remove any distraction. Take several pictures of the same subject, in order to have a choice of the best picture.
- Include in the picture or video a beneficiary, partner and/or government representative and include their names when you save the file(s).
- Maintain a well-organized, easily accessible filing system for photos and videos. The files may consist of a series of folders and/or CDs or DVDs containing digital photographs. Organize and manage your files and folders in a computer database and maintain an archive at a separate location for back-up.

PART IV - IDENTIFYING PRIORITIES AND DEVELOPING A COMMUNITY-BASED ACTION PLAN

Objectives:

- To define the **vision and goals of the community in the short- and medium-term** (~ next 3-5 years) to address food insecurity and undernutrition, strengthen livelihoods and build resilience.
- To prioritize **interventions that bring change and help realizing the community's vision and goals.**

Approach and tools:

- Carry out a **visioning exercise, focus group discussions and/or discussions in plenary**, making sure all voices are heard, including the ones of the women and the most vulnerable.
- If available, **review programming orientations included in the Seasonal Livelihood Programming (SLP)** carried out at the region, district or municipality level, to feed discussions as appropriate.
- **Important:** The CBPP facilitator needs to **make sure that the discussions on the vision, goals and priorities consider insights and observations that took place in other CBPP sessions** (e.g. problem identification; community transect, etc.); in other terms, **make sure that the actions proposed here are consistent the issues, needs and opportunities evoked earlier.**

8. Community's shared vision, goals and priorities

Community's shared vision and goals:

Describe here the **shared vision and goals of the community planning team for the community in the short- to medium-term** to address food insecurity and undernutrition, strengthen livelihoods and build resilience (e.g. how do people see the community in 3-5 years from now?):

Identification and prioritization of interventions:

Identify a set of **priority interventions**, together with the community planning team, technicians and partners, which shall:

- ☒ Be **consistent** with the issues, needs and opportunities evoked earlier;
- ☒ Help **realizing community's vision and goals;**
- ☒ Consider the **voices and needs of the women and the most vulnerable;**
- ☒ Be **realistic and feasible**, considering existing capacities and resources;
- ☒ **Generate considerable and lasting changes.**

Interventions	Priority levels according to (*):			
	All	Women	Men	Youth
Example: Develop micro-irrigation facilities for vegetable farming	High	High	Low	High
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				

(*) Indicate here if the intervention has a “low”/“medium” or “high” priority, or specify the rank for each intervention according to the community planning team as a whole (“all”) and to women, men and youth.

Tips: If the members of the community planning team are not convinced by an intervention proposed by a person external to the community (technician, partner, etc.), do not push them: try again! The use of participatory ranking can be useful to prioritize interventions: distribute 3-4 matches or stones to each participant, representing 3-4 “votes”; go through each option one after another, asking participants to share their vote accordingly; and count the number of votes per option.

9. Community-based plan of action and related support for FFA and complementary interventions

Objectives:

- To produce **an indicative - and realistic - work plan for priority FFA and complementary interventions** (not a “shopping list” with unrealistic activities!).
- To trigger **additional programming discussions with the community planning team, technicians and partners** for these priority interventions, including discussions focused on targeting; mapping of interventions in the community; risks attached to priority interventions, and measures to mitigate these risks; **partnerships, capacity-building and inputs required** to implement priority interventions.

Approach and tools:

- **This session should focus exclusively on these interventions that fall under WFP and/or CBPP partners’ mandates and capacities;** in other words, it doesn’t encompass the whole set of priority interventions required to realize community’s vision and goals.
- **Start this session by identifying which FFA and complementary interventions will be considered here,** and which ones will require the involvement of additional, complementary stakeholders.
- Carry out **focus group discussions and/or discussions in plenary, making sure all voices are represented,** including the ones of the women and the most vulnerable.
- **Important: It is essential that the CBPP facilitator manages community’s expectations** and remain within the range of feasible interventions by WFP, partners and the community members themselves.

Interventions under focus, and indicative work plan:

Highlight the set of priority Food Assistance for Assets (FFA) or complementary interventions that will be considered in this section with the community planning team, technicians and partners; reject or postpone interventions that are unlikely or impossible for WFP and/or CBPP partners to implement. **Produce an indicative and realistic work plan for FFA and complementary interventions, along with detailed planning information,** using the table on the next page.

Mapping of priority FFA and complementary interventions:

Identify **potential locations of priority FFA and complementary interventions** with the community planning team, technicians and partners. **Make use of the community map to highlight** where FFA and complementary interventions could be implemented. Take a picture of the updated map for the CBPP report.

Tips: FFA activities should be implemented according to a logical technical sequence of implementation; refer to [WFP FFA PGM, Chapter 3](#), for more information. FFA activities and complementary interventions should be integrated a reach a sufficient scale to build resilience, restore the asset base and/or match problems faced in the community; also refer to [WFP FFA PGM, Chapter 3](#). If needed, adjust the work plan above and the mapping of FFA sites as required.

Indicative work plan for priority FFA and complementary interventions:

Priority FFA and complementary interventions (including training)	Related activities	Priority level	Implementation level (HH, group, community, inter-community)	Targeted people or group (optional)	Implementation unit	Number of implementation units (provisional number; adjust targets based on experience and resource availability)				Implementation period (see section 4 of the CBPP)
						Total	Year 1	Year 2	Year 3	
Example: Develop micro-irrigation facilities for vegetable farming	Excavation activities; stone collection and shaping; shading; small cut-off drains/ waterways	High	Group	Women groups	100-m ³ pond	12	6	3	3	Feb - May
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										

Targeting of FFA and complementary interventions:

To the extent possible, initiate a discussion with the community planning team, technicians and partners on the targeting of **FFA and complementary interventions**. Emphasize that these discussions are preliminary: **targeting will need to be further elaborated**. Make sure that **women and most vulnerable** benefit from the priority interventions. Document these discussions in the above table and/or below:

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Tips: When designing FFA interventions, it is essential to think about who will benefit from the transfers on one hand, and who will benefit from the assets (or both) on the other hand. It is also essential to make sure that women and the most vulnerable also control and benefit from assets created or rehabilitated through FFA, e.g. by sensitizing the community, clarifying tenure-related arrangements and by formalizing these arrangements with authorities beforehand; refer also to [WFP FFA PGM, Chapter 3](#).

Risks attached to priority interventions, and measures to prevent or reduce these risks:

Screen the priority FFA and complementary interventions with the community planning team, technicians and partners, and **foresee potential risks** attached to these interventions. Identify a set of potential **measures that could help preventing or reducing these risks**. Pay particular attention to the following issues:

- ☒ Potential effects on the nutrition and well-being of children, pregnant women and new mothers;
- ☒ Potential impact of specific shocks on interventions and assets (see section 3);
- ☒ The risks of fuelling tensions over resources or exposing beneficiaries to violence (see section 6);
- ☒ The risk of generating negative environmental effects;
- ☒ Other problems.

Priority interventions	Most important risks	Measures to prevent or reduce risks
Example: FFA interventions requiring hard manual labour	The involvement of pregnant and lactating women (PLW) into hard manual labour can compound the difficulty in meeting their nutrient requirements.	Avoid involving PLW in hard manual labour; provide lighter work norms and activities for PLW (e.g. baby-sitting or nurseries, catering, etc.); etc.
1.		
2.		
3.		
4.		
5.		

Collaborations, partnerships and capacity strengthening:

Identify with the community planning team, technicians and partners, **potential collaborations and partnerships required with community-based and external institutions to design, implement and follow-up** the priority FFA and complementary interventions:

Community-based and external institutions	Potential role(s)	Mobilized?	
		Yes	Not yet
Example: District-level irrigation department	Feasibility and technical studies on micro-dams and other small-scale irrigation schemes; supervision and follow-up of irrigation management work	X	
1.			
2.			
3.			
4.			
5.			
6.			
7.			

Tip: Technical services have central roles to play here: they should be systematically considered in the design, implement and follow-up the priority FFA and complementary interventions.

Discuss who **should be involved in the management and maintenance of assets** created or rehabilitated through FFA - which groups or which institutions? Refer to the section 5 of the CBPP, focusing on community-based and external institutions:

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Tip: It is essential to clarify the roles and responsibilities regarding asset maintenance and management on one hand, and to involve influential community-based institutions in performing these tasks on the other hand, to contribute to the success and long-term impact of FFA initiatives.

Identify with the community planning team, technicians and partners **a set of priority training to support community-based and external institutions** in the implementation and follow-up of priority interventions; consider technical, administrative skills, awareness-building or other capacity strengthening sessions:

Training	No of days	Potential participants or institutions	Indicative no of participants	Indicative period
Example: Training on FFA work norms/technical design	2-3	Community leaders, technical services and implementing partners	20-25	January or February
1.				
2.				
3.				
4.				
5.				

Required inputs and contributions:

To the extent possible, initiate discussions **on different inputs (labour, material and equipment, other resources)** required to implement specific interventions, **along with related contributions**. Emphasize that these discussions are preliminary: **resourcing will need to be further elaborated:**

Priority FFA and complementary interventions	Indicative target	Inputs			Contributions		
		Labour	Material & equipment	Other resources	Community (self-help...)	Local authorities	Other external
1.							
2.							
3.							
4.							
5.							

Additional comments or observations:

Include here any additional comment or observation, which are important for programming and operational aspects, based on the CBPP exercise experience, community visits or discussion with other key informants:

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Objectives:

- To the extent possible, highlight a **range of follow-up planning discussions**, which further detail the community-based plan and pave the way for quality programme implementation.

Approach and tools:

- Carry out **additional consultations** with the community planning team, a broader community, technicians and partners to get refine the community-based plan.
- Once the community-based action plan is further elaborated, carry out a **broader community feedback meeting**, and get additional contributions and validation from the broader community on this refined plan.
- **Produce a short report that documents the CBPP report and the community-based plan**, and diffuse it among the community, authorities, WFP, CBPP partners and/or other relevant stakeholders.

10. Follow-up planning discussions

Follow-up planning discussions can be related to:

Technical survey and feasibility study: How feasible are specific asset creation interventions? What are technical recommendations and specificities regarding specific assets?	<input type="radio"/>
Targeting: Who will benefit from FFA and complementary interventions? Who will benefit from the assets created or rehabilitated?	<input type="radio"/>
Self-help and solidarity driven efforts: How will the community contribute to future efforts?	<input type="radio"/>
Risks and do not harm: What are potential negative effects of specific interventions? What measures could help preventing or reducing these risks? Which partners can assist in doing this?	<input type="radio"/>
Tenure: Who will access and benefit from created and rehabilitated assets? What about the women and vulnerable groups? What are tenure-related arrangements for created or rehabilitated assets?	<input type="radio"/>
Maintenance and management: Who/ which groups or institutions should be involved in the maintenance and management of created or rehabilitated assets?	<input type="radio"/>
Capacity-building: How to strengthen the capacities of community-based management committees, government technical services and local and government institutions?	<input type="radio"/>
Resourcing: Which food- and/or cash-based transfers will be required? Which equipment, materials and tools are needed? What is the estimated budget?	<input type="radio"/>
Additional synergies and partnerships: What additional interventions are required in the community? Which partners could be involved?	<input type="radio"/>

Important note: Any CBPP should be followed by the implementation of (part of) the community-based plan, as soon as possible. In other words, a CBPP **MUST** translate into field operations and concrete actions.

APPENDIX: Checklist of nutrition- and gender-sensitive aspects in the CBPP annotated template

- This checklist identifies a set of options for CBPP facilitators and teams to strengthen the nutrition and gender focus of the CBPP. All these options below are already embedded in the CBPP annotated template.
- The CBPP is also an excellent opportunity to contribute to women' empowerment and strengthen their participation in planning, decision-making and implementation. Throughout the CBPP, ensure equal participation of women, men and youth and make sure that women speak out their mind and participate in the decisions on the range of FFA and complementary interventions to implement. Asking women to speak first (ahead of men) and/or carrying focus group discussions with women and men separately can often be useful to help women expressing their views more freely.

Sections	Options for CBPP facilitators to strengthen the nutrition- and gender-focus of the CBPP
1. Assembling the community planning team	<ul style="list-style-type: none"> ☑ Ensure the participation of influential women and women knowledgeable on nutrition, care practices and health into the community planning team, e.g. highly respected and outspoken women; pregnant and lactating women (PLW), or women of reproductive age; women with a certain level of education, or who received some training; a trained mid-wife or "sage-femme"; and/or the community health worker (if any). ☑ Make sure that the community planning team includes at least 50% women.
2. Basic information and data	<ul style="list-style-type: none"> ☑ Provide basic secondary information on nutrition and on gender disparities in the area if available, such as related to the incidence of undernutrition in the community; the main health problems; the quality and effectiveness of health/ nutrition services in the area; data related to the access to land and other resources; labour division; income; etc.
3. Problem identification and exposure to shocks	<ul style="list-style-type: none"> ☑ Sensitize the community planning team on undernutrition and stunting, for instance by calling on any health worker present to share its knowledge. This sensitization is essential, because stunting often goes unnoticed: people don't realize it is happening. ☑ Discuss which adaptation or coping strategies may generate positive/ negative effects on nutrition, particularly among infants, young children and women. ☑ Highlight women, men and youth' perspectives during the problem ranking exercise.
4. Seasonality and livelihoods activities	<ul style="list-style-type: none"> ☑ Highlight specific seasonal cycles and fluctuations that closely relate to nutrition, e.g. peaks of labour and human diseases; food shortages; peaks of wasting; etc. ☑ Identify times of hardships and the busiest times during the year according to women and men; it is essential to avoid further overloading women and men when planning! ☑ Highlight how livelihood activities compare among women, men and youth, e.g. regarding sources of food or income, constraints, daily labour costs, labour division, etc. ☑ Discuss and describe the consumption of vegetable, fruits, milk, meat and other animal products in the community, particularly among infants, young children and women. As a reminder, the consumption of these products can help preventing undernutrition. ☑ Identify activities that can help reducing the time devoted by girls/ boys and women to fetch water and collect cooking fuel, so that more time is available for other activities (e.g. to engage in other livelihood activities, to dedicate to child care and other tasks, etc.).

Sections	Options for CBPP facilitators to strengthen the nutrition- and gender-focus of the CBPP
5. Community-based and external institutions	<ul style="list-style-type: none"> ☑ Identify a set of key services, project and institutions focused on nutrition or closely related to it, e.g. nutrition, health care, water and sanitation, food security and livelihoods, safety nets, education; highlight gaps in terms of essential services. ☑ Collect information on women and girls' access to education; as a reminder, increasing this access can generate very positive effects on child nutrition. ☑ Identify a set of institutions that are important respectively for the women, the men and the youth; identify existing gender awareness rising and women empowerment projects. ☑ Highlights specific barriers that prevent some people or particular groups to access or benefit from existing health care and nutrition services. ☑ Highlights gender disparities regarding access to basic services (education, health, nutrition, etc.) and barriers that prevent girls/women to access or benefit from them.
6 & 7. Mapping and transect	<ul style="list-style-type: none"> ☑ Identify potential zones in the community where there appear to have higher number of food insecure households, and look for potential reasons justifying these patterns. ☑ Highlight gender-related disparities in terms of access to land and other resources (e.g. agricultural/ irrigated/ grazing land, water points, forest and other natural resources), and in terms of decision-making over resource use and management.
8. Vision, goals and priorities	<ul style="list-style-type: none"> ☑ If it doesn't come up, suggest the use of the words "healthy and active, growing children" in the vision; this is key to bring up the 'hidden' problem of stunting and undernutrition. ☑ Identify how priorities compare among women, men and youth, and make sure that the perspectives of women are adequately reflected in community's defined priorities.
9. Community-based plan of action and related support for FFA and complementary interventions	<ul style="list-style-type: none"> ☑ Identify and integrate pertinent asset creation activities which can contribute to improved nutrition, directly and indirectly: <ul style="list-style-type: none"> → By enhancing the availability and diversity of food produced and consumed locally, and by decreasing post-harvest losses. → By improving physical access to markets, and by strengthening and diversifying livelihoods and incomes, which can be used for covering various expenditures having a direct or indirect positive effect on nutrition. → By protecting livelihoods from shocks, and thus maintaining local food production and/or income in risk prone areas. → By reducing hardships, and in turn increase the time allocated by women to livelihood activities, social and care activities. → By improving access to basic social, WaSH or health services. ☑ Pay particular attention to women and most vulnerable during initial exchanges on targeting, making sure that they will benefit from and control over developed assets, in the long-term. ☑ Screen the priority FFA and complementary interventions and foresee potential negative effects of some interventions on the nutrition and well-being of children, pregnant women and new mothers and more largely, on girls and women; identify a set of measures that could help preventing or reducing these risks. ☑ Promote synergies and complementarities between FFA and other WFP and partners' food and nutrition security activities, in particular with nutrition, school feeding and livelihoods programmes.
10. Follow-up planning discussions	<ul style="list-style-type: none"> ☑ Make sure that women remain closely involved in follow-up planning discussions. ☑ Broaden alliances and seek commitments from additional stakeholders (including donors) to take forward specific interventions related to nutrition, agriculture, health, social protection, girls' education and women' empowerment.

ANNEX 3b: Complementary information

1. References for Participatory Planning Tools

WFP corporate guidance on participation can be found in the [WFP's PGM website](#)⁴³.

Amongst a number of useful references, the following main levels of participation, as identified below, are key stages in a participatory process and are important to retain:

- i) Information sharing;
- ii) Consultation (two-way flow of information);
- iii) Collaboration (shared control over decision-making);
- iv) Empowerment (transfer of control over decisions and resources).

This [IFPRI/WFP brief](#)⁴⁴ (2008) explains the **relevance of community participation and capacity development** aspects – this reference further supports the rationale for pursuing local level planning in FFA design and implementation.

Regarding participatory tools and toolkits, [WFP's PGM website](#)⁴⁵ offers a number of instruments which may be useful to field staff, including a generic description of various participatory techniques and tools, and references to approaches used in different countries. Some of these can support CO to develop context specific guidelines – others to refine a planning approach which already exists and is implemented through WFP partners such as government and NGOs

⁴³ WFP, sa. WFP Wiki – Programme Guidance Manual. Available at: <http://goo.gl/3KlIs8>.

⁴⁴ IFPRI and WFP, 2008. Strengthening Capacity for Participatory Development – Brief. Available at: <http://goo.gl/qEvsk3>.

⁴⁵ WFP, sa. WFP Wiki – Programme Guidance Manual. Available at: <http://goo.gl/bbMVxm>.

2. Terminologies Related to Mobility

A note on terminology:

There are a number of terms used for pastoral mobility – migration, movements, transhumance, etc. This can lead to different interpretations amongst practitioners – e.g. during SLP's in Ethiopia, people felt that if pastoralists move cross country or regional borders they are migrating, but if they stay within the region they are only moving, etc. There are no such clear distinctions however, and terminology used is likely to be county-specific amongst the partners working in pastoral livelihoods.

Consider the following definitions from a number of dictionaries:

- **Mobility** is the ability to travel from one place to another (Macmillan). This is a key characteristic of pastoral livelihoods, as people will move with their livestock in search of water and pastures at specific times of the year.
- **Movement** is 'the act, process, or result of moving; an instance of moving; or the manner of moving' (Collins). It is also the 'process of moving things from one place to another' (Macmillan)
- **Migrate** means 'to go from one region, country, or place of abode to settle in another, especially in a foreign country; or (of birds, fishes, etc.) to journey between different areas at specific times of the year' (Collins).

Therefore, **Migration** is

'the process by which people or animals migrate to another place or country' (Collins). Also, it is 'to move from one country, place, or locality to another' (Merriam-Webster). Furthermore, **Migration** can be used for the journey from one place to another or for the act of movement. With animals, it's almost always in reference to a seasonal change in location.

Migration will relate to a wider range of movements – for example, there can be labour migrations of people in search of work (both within a country, and to different countries).

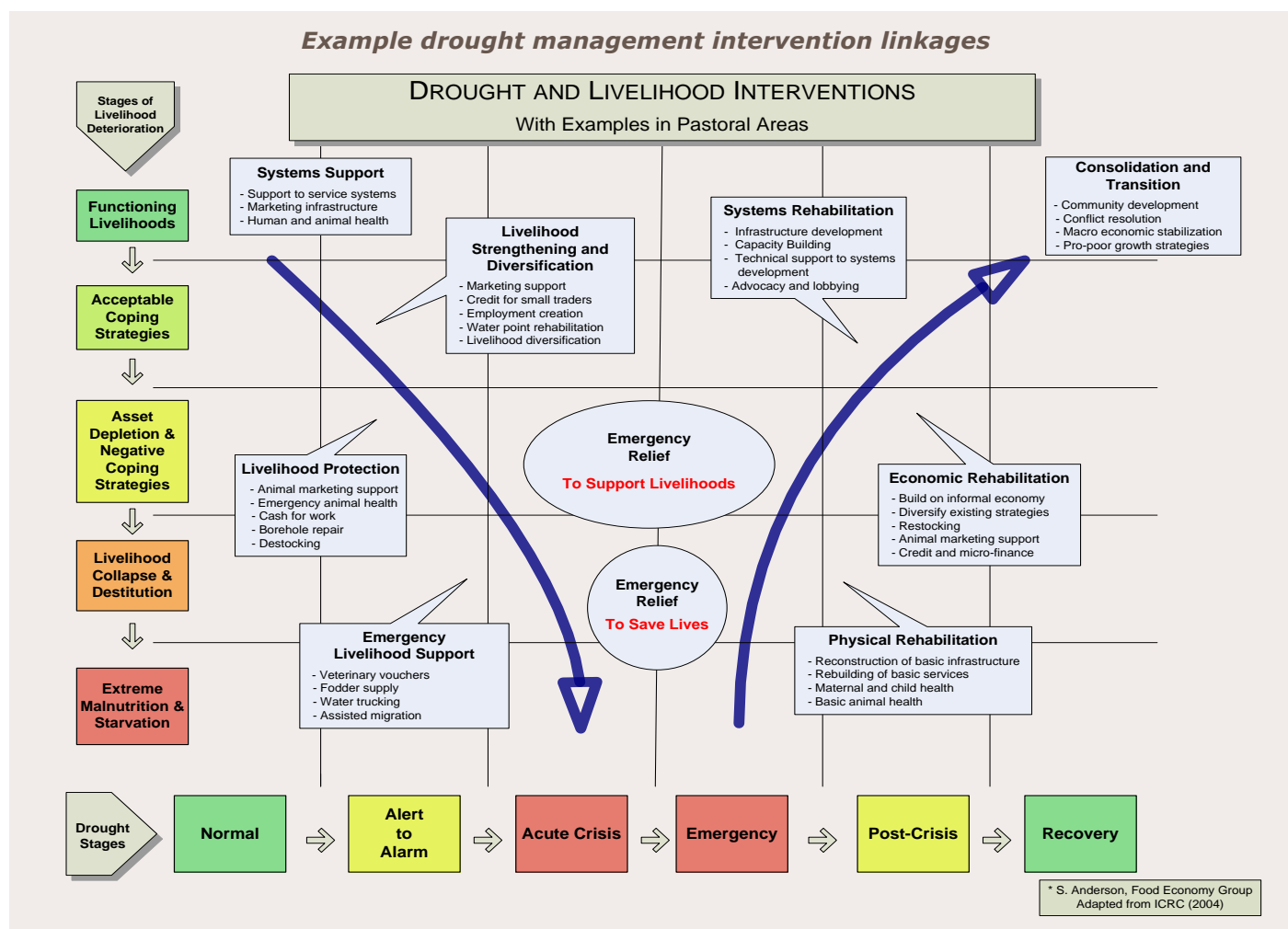
- **Transhumance** is 'the seasonal migration of livestock to suitable grazing grounds' (Collins).

As can be seen, there are no 'right or wrong' terms to be used, although the most specific (although less commonly used) is transhumance. It is important though when discussing movements/mobility/migration etc. with partners, that initially time is taken to ensure that everyone is talking about the same thing – i.e. the movement of pastoralists from one place to another.

3. The Drought Cycle Management Approach

As droughts become increasingly predictable, a **Drought Management Cycle (DMC)** approach may be taken as a basis to discuss how WFP and partners may be more effective and proactive in programme response for enhanced food security in pastoral areas.

The Figure below on DCM offers an interesting breakdown of stages which illustrates different phases of interventions, some of which may require FFA.



Sequencing in the Figure above should be seen as one approach for overall guidance in planning interventions, and which would need to be adjusted to match real case scenarios - for example, where different target groups could be at different stages of livelihood deterioration, yet all living in the same area. What the Figure above does highlight however is the need to link together a number of interventions that can range from (i) emergency relief, (ii) to physical rehabilitation, and finally (iii) to consolidation of programmes that transition from one to the other.

Similarly, in several areas the whole sequence may start from a much lower level (e.g. most households have already been in asset depletion or collapse mode for several years), and which may demand more focus on physical and economic rehabilitation at first – yet, these interventions could simultaneously be going hand in hand with seasonal emergency relief and livelihood support, etc.

Annexes to Chapter 4

Food Assistance for Assets (FFA)
for Zero Hunger and Resilient Livelihoods



World Food Programme

ANNEXES TO CHAPTER 4

ANNEX 4a: Rapid Technical Reference & Toolkit for FFA

The following kits include a selection of activities that can be implemented through FFA. These kits are developed as “info-techs” to provide WFP and partners’ field staff with:

- Simple and essential information about technical requirements
- A visual representation of the assets and their purpose
- A sequence of minimum design and standard requirements, including tentative work norms.
- A tool that CO can use to prepare additional materials and disseminate information.

The info-techs below are simplified flyers **that assume sufficient training and technical capacity amongst users**. These 1-pagers can also be used by field staff and technicians from cooperating partners and/or government to explain to local communities the basics of some of these techniques. Similar formats, including a 2 or 4 pager format, may be developed for a number of the same or additional activities that require greater detail description.

Most of these interventions are elaborated in greater detail in specific guidelines and related links as indicated in various sections of Chapter 4. To this effect, detail technical information from specialized sources is necessary, combined with the support of specialized experts from other organizations. For example, expertise and guidance from agencies such as FAO, ILO, NGOs, GIZ and local institutions (MOA, etc.).

These tools can be modified and include an extra page (s) with additional and more accurate descriptions base on context specific experience. This is often necessary when these tools are used for training purposes and need to describe activities in greater detail.

1	TRENCHES (TR)	12	HILLSIDE TERRACES + TRENCHES (HTT)	23	COMPOST MAKING (CM)
2	EYEBROW BASINS (EB)	13	BENCH TERRACES (BT)	24	GRASS STRIPS (GS)
3	HERRING BONES (HB)	14	RUNOFF/RUNON SYSTEMS FOR SOIL AND MOISTURE CONSERVATION (RRSC)	25	MULTI-STORY GARDENING AND HOMESTEAD PRODUCTIVITY INTENSIFICATION (HPI)
4	IMPROVED PITS (IP)	15	SOIL SEDIMENTATION DAMS (SSD)	26	WATER POND (WP)
5	MICRO-TRENCHES (MT)	16	CHECK DAMS (CKD)	27	SHALLOW WELL (SW)
6	AREA CLOSURE (AC)	17	BRUSHWOOD CHECKS (BW)	28	PERCOLATION POND (PRP)
7	LEVEL SOIL BUNDS (LSB)	18	WATERWAYS (WT)	29	LARGE HALF MOONS (LHM) FOR CROP AND FODDER PRODUCTION
8	STONE FACED SOIL BUNDS (SFB)	19	MICRO-PONDS (MP)	30	TIE RIDGES (TR) AND INTERROW WATER HARVESTING
9	LEVEL FANYA JUUS (LFJ)	20	STABILIZATION OF STRUCTURES (STB) AND FARM BOUNDARIES WITH TREES & SHRUBS	31	ZAI PITS (ZP)
10	STONE BUNDS (STB)	21	INFILTRATION PITS (IFP)	32	CUTOFF DRAIN (COD)
11	HILLSIDE TERRACES (HT)	22	VEGETATIVE FENCING (VF)	33	DIVERSION & WATER SPREADING WEIRS (DW)

A FEW IMPORTANT REFERENCES TO ASSIST IN DEVELOPING INFOTECHS

1. Ministry of Agriculture and Rural Development - Ethiopia, 2005. **Community Based Participatory Watershed Development Guidelines - Part 1 and Part 2**⁴⁶ (Refer to InfoTechs for technical specifications – pages 64-167)
2. Ministry of Arid Lands Kenya and WFP, 2009. **Rainwater Harvesting and Management Technologies for arid and semi-arid lands of Kenya**⁴⁷
3. Netherlands Water Partnership, Aqua for All, Agromisa et al, 2007. **Smart Water harvesting Solutions**⁴⁸ – these guidelines include a number of additional complementary water harvesting techniques (e.g. construction of water cisterns, micro-ponds, infiltration pits, spate irrigation, etc.)
4. WOCAT et al, 2013. **Water Harvesting - Guidelines to Good Practice (2013)**⁴⁹ a manual that provides a number of water harvesting techniques applicable in dry lands
5. Bo Tegnäs, 1994. **Agroforestry extension manual for Kenya**.⁵⁰ Tree nurseries establishment for multipurpose tree planting– this handbook from Kenya developed for extension workers and farmers helps in guiding staff through the major steps required for the establishment of a nursery. Major principles apply to all contexts and need to take into consideration species selection, farmer's preferences, market issues and seasonal requirements.
6. ILO, 2004. **Contractor's Handbook for Labour-Based Road Works**⁵¹
7. TE Jones and JO Parry, 1993. **Design of Irish bridges and causeways in developing countries**.⁵²
8. ILO, 2005. **Manual for the supervision of labour based road rehabilitation works**.⁵³
9. WFP Nepal. 2011. **Small Rural Infrastructures - Technical Guidelines for Project Management and Design (Foot Trail – Unit 10)**⁵⁴
10. FAO, 2011. **Famer's Irrigation Systems Improvement (English and French)**.⁵⁵ These guidelines offer a wide spectrum of technical references that cooperating partners and technical staff can use.
11. WFP Haiti, 2010. **Homestead Development Initiative and the Rehabilitation of Degraded Ecosystems in Haiti (Technical Note for Training of Trainers - ToT)**⁵⁶
12. **FAO main portal on forestry activities**⁵⁷ a main source of information and links regarding forestry.
13. FAO. 2009. **FAO - ADCP/REP/89/43 - Aquaculture Systems and Practices: A Selected Review**.⁵⁸
14. Ministry of Water Resources, Irrigation and Electricity - Sudan, 2015. **Community Watershed Management Guidelines**.⁵⁹

⁴⁶ Available at: http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp239381.pdf

⁴⁷ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/communications/wfp237792.pdf>

⁴⁸ Available at: www.sswm.info/sites/default/files/reference_attachments/NWP%202007%20Smart%20Water%20Harvesting.pdf

⁴⁹ Available at: www.wocat.net/fileadmin/user_upload/documents/Books/WaterHarvesting_lowresolution.pdf

⁵⁰ Available at: www.worldagroforestry.org/downloads/Publications/PDFS/B06821.pdf

⁵¹ Available at: www.ilo.org/emppolicy/pubs/WCMS_ASIST_8075/lang--en/index.htm

⁵² Available at: www.transport-links.org/transport_links/filearea/publications/1_471_PA1290_1993.pdf

⁵³ Available at: www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_policy/---invest/documents/instructionalmaterial/wcms_asist_8051.pdf

⁵⁴ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/webfragments/wfp246289.pdf>

⁵⁵ Available at: <http://docustore.wfp.org/stellent/groups/public/documents/webfragments/wfp246290.pdf>

⁵⁶ Available at: http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp238164.pdf

⁵⁷ Available at: www.fao.org/forestry/en/

⁵⁸ Available at: www.fao.org/docrep/T8598E/t8598e00.htm

⁵⁹ Available at: http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp282745.pdf

1. TRENCHES (TR): RUNOFF/RUNON SYSTEMS FOR FORESTRY - AGROFORESTRY

Trenches are large and deep pits constructed along the contours with the main purpose of collecting & storing rainfall water to support the growth of trees, shrubs, cash crops and grass or various combinations of those species in moisture stressed areas (350-900 mm rainfall). Trenches (TR) can have FLEXIBLE DESIGN, to accommodate the requirements of different species. Therefore they can suit what the farmer want to grow. TRs can integrate with area closure, terraces, watershed & landscape rehabilitation, etc. Proper management of planted trenches (e.g. mulching and manuring) can lead to significant production & rehabilitation of degraded lands. TRs also play major role in replenishment of water tables (e.g. springs – shallow wells).

Design (Dimensions)

- . After layout dig soil to reach 20-25cm depth x 50cm width x 2,5-3m length (1).
- . Keep the good topsoil aside for filling planting pit (s).
- . Dig a 50 x 50 cm wide x 40cm deep pit in the middle of the trench (2).
- . Bottom of the pit (3) 10-15 cm deeper than bottom of trench. Side ditches may slope towards ties for max. utilisation of runoff.

Trenches in the landscape

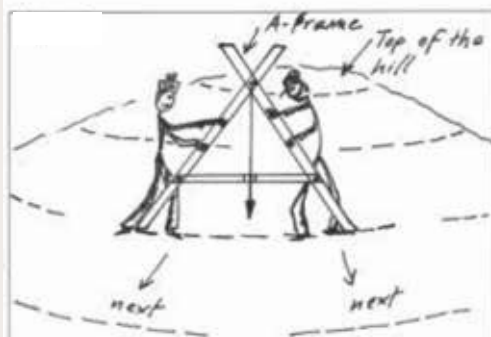


Limitations & environmental risks:

- . Need soil depth \geq 50cm, and not suitable above 50% slope gradient.
- . Low env. risks

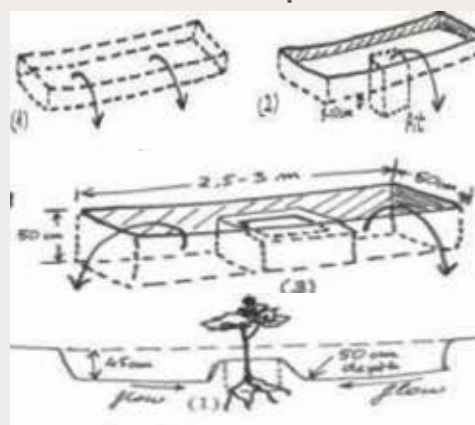
Design standards

Work norm for standard trench: 2 person days per 3 trenches

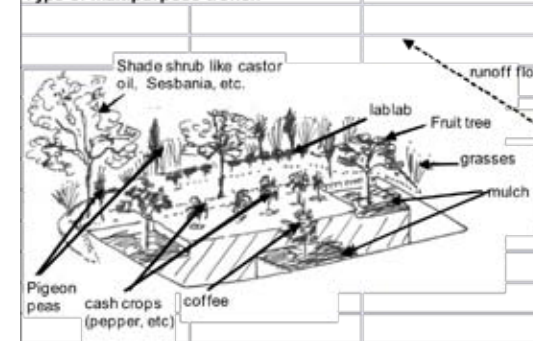


Layout: along contours using A-frame (T. are dug in a staggered position)

Excavation sequence



Type of multipurpose trench



Example of modified design

Trenches in pictures

- ① Water collection effect
- ② TR construction
- ③ Stone-faced reinforced TR (unstable soils)



2. EYEBROW BASINS (EB): RUNOFF/RUNON SYTEMS FOR FORESTRY - AGROFORESTRY

EB are larger circular and stone-faced (occasionally sodded) structures for tree and other species planting. They are effective in low rainfall areas, shallow soils and stony areas to grow trees, enable grass growth and harvest water that percolates and replenishes water tables. EB can be constructed in wide range of slopes, including above 50% gradient for spot planting. EB can also be planted with a mix of trees, shrubs and cash crops. On steeper slopes (>15%) integrate with hillside terraces or stone bunds placed along the contours every 10-20 metres depending on slope range.

Limitations & environmental risks:

- . In areas without stones only in slopes < 30% and with closer spacing (CA:C ratio 4:1max)
- . Low env. risks

Design standards

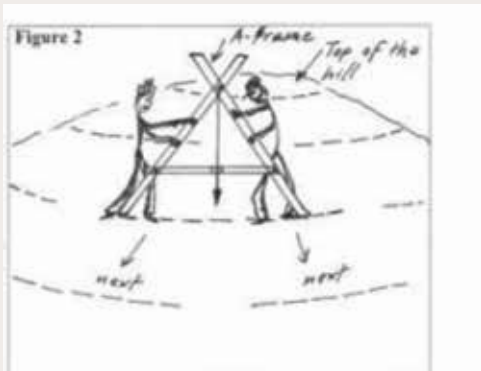
Work norm for standard EB:
2 EB/person day

Eyebrows in pictures

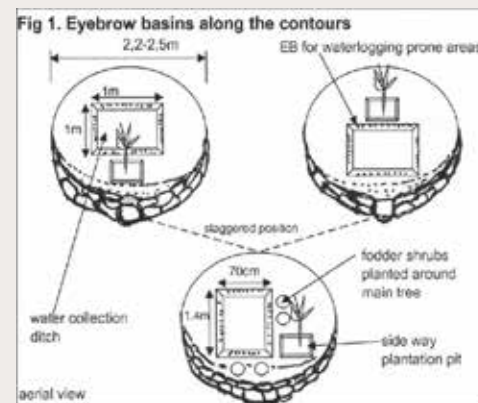
- ① EB in very steep slopes
- ② Large EB
- ③ EB with 3 pits

Design (Dimensions)

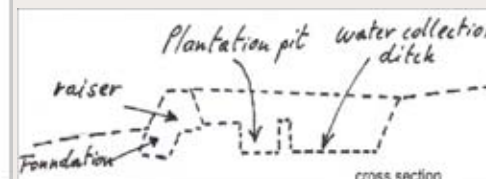
1. Size: 2.2-2.5 m diameter;
2. Stone riser (or stabilized by brushwood or life fence): with 0.2 m depth of the foundation, height 0.4-0.6 m;
3. Stone riser sealed with soil excavated from water collection area;
4. Water collection area: dug behind the plantation pit: 1 m width x 1 m length x 20-25 cm depth (lower side);
5. Plantation pit (s) of 50cm depth x 40cm diameter dug between riser and water collection area. Water collection ditch can be placed sideways or in front of plantation pits depending on soil type.



Layout: along contours using A-frame (EB. are built in a staggered position)



Aerial view (with different positions for planting pit)



1



2



3

3. HERRING BONES (HB): RUNOFF/RUNON SYSTEMS FOR FORESTRY - AGROFORESTRY

HBs are small trapezoidal structures (called also A-structures) for tree and other species planting. HBs are suitable for both dry and medium rainfall areas, and medium soil depth. Based upon experience HBs are most effective in medium/low rainfall areas (500-900 mm) – less or not effective with rainfall lower than 400mm. HB can be constructed only on slopes < 5% and soils > 30-50 cm depth. In areas with crusting soils, place HB in between soil or stone bunds along the contours (at 1-1.5 m vertical interval) will help regulate water runoff and reduce risks of potential breakages.

Limitations & environmental risks:

- May lead to series of breakages/erosion without proper layout
- Low env. risks

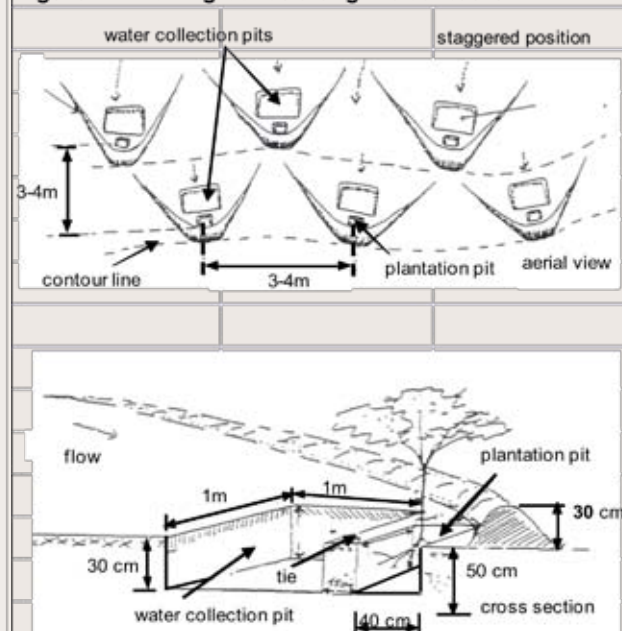
Design standards

Work norm for standard HB: 4 HB/person day

Design (Layout and Dimensions)

- Spacing: HB are placed 3 m apart (max 4m in very dry places) along the contours and have extended arms conveying water towards the planting area.
- A water collection ditch (1m x 1m x 0.3 m depth at lower side) is dug behind the planting pit (40 cm diameter x 50 cm depth). The tips of the extended arms are 2.5-3 m apart.
- Embankment: max. height downslope (0.4-0.5 m) and decreases to 20 cm at the end of the side arms.

Figure 1 Herring bones along the contours

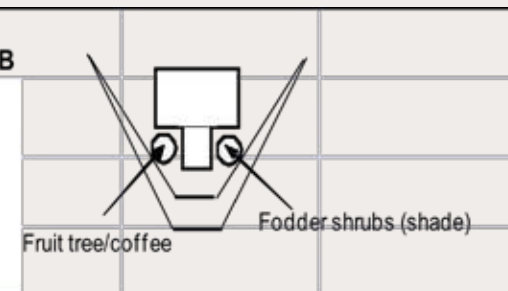


Aerial view

Side view

Figure 2 Double pitting and HB

Double pits are placed sideways to the water collection trench. One pit can be planted with fodder trees (Sesbania, etc.) and the second pit with fruit trees, coffee and other valuable trees.



HBs in pictures

- ① Water collection effect
- ② HB in slopes up 5% and soils depth min 30-50 cm
- ③ Soil based – can be vegetated-stabilized



1



2



3

4. IMPROVED PITS (IP): RUNOFF/RUNON SYSTEMS FOR FORESTRY - AGROFORESTRY

IPs are square shaped water collection pits constructed along the contours with a plantation pit in front of the main water storage pit - main purpose as micro-trenches. IP support the growth of trees and fodder shrubs, and can be used for cash crops like coffee. They are effective in medium & low-medium rainfall areas (> 600-700 mm). Applicable on slopes up to 8% gradient and soils with 50 cm depth on degraded hillsides, and within homesteads for planting trees and fodder species along fences and backyards.

Limitations & environmental risks:

- . May lead to series of breakages/erosion without proper layout or when not integrated with hillside terraces on steeper slopes (8-30%)
- . Low env. risks

Design standards

Work norm for standard IP:
5 IP/person day

IPs in pictures

① Pits in gentle slopes and well drained soils

Design (Layout and Dimensions)

- **Spacing:** distance between pits 30-40cm along the contour and 1.5-2m along the slope
- 3-5 series of staggered lines of IPs can be dug between soil/stone bunds placed at intervals of 8-10m in areas with up to 15% slopes
- **Dimension:** 0.60m length x 0.6m width x 0.3-0.5 m depth (downside) or other shapes equivalent to the pit volume are also possible
- A 40cm x 40cm x 50cm deep or wider plantation pit is planted in front of the pit in the middle of a shallow platform
- The distance between planting pits should be 2-3 times denser as for trenches
- IP size can be bigger (1 m wide) in drier areas and mix of IP and trenches also possible



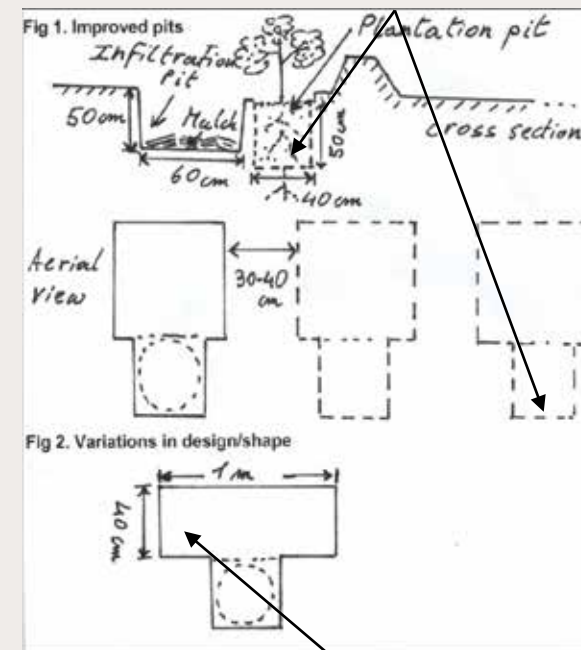
1

Improved pits in the landscape



Design

Cross section and aerial view of the planting pit



5. MICRO-TRENCHES (MT): RUNOFF/RUNON SYSTEMS FOR FORESTRY - AGROFORESTRY

MTs are rectangular and deep pits constructed along the contours - Suitable mostly in semi-arid and medium rainfall areas (600-900 mm). MT can support the growth of trees, shrubs, and cash crops and constructed on slopes 3-30% max. gradient and soils at least 30-50 cm depth. Applicable in a broad range of soils and slopes (<30%), on degraded lands (widespread gullies, etc.), hillsides, and within homesteads for planting trees and fodder species along fences and backyards. In slopes 8-30% integrate with hillside terraces at Vertical Interval 1-1.5.

Limitations & environmental risks:

- May lead to series of breakages/erosion without proper layout or when not integrated with hillside terraces on steeper slopes (8-30%)
- Low env. risks

Design standards

Work norm for standard MT:
4 MT/person day

MT in pictures

- ① Water collected effect in micro-trenches (2 pits each)
- ② MT with U shaped embankment for grass growth
- ③ Growth of trees + grasses

Design (Layout and Dimensions)

- Spacing apart: along the slope spacing is 1.5-2 m and lateral distance is 30-50 cm.
- Plantation pit 50cm depth x 40 cm width (larger pits also possible). Apply compost/manure to pits.
- Average size of the trench: 1.5 length x 0.4 m width x 0.5 m depth (downside). Except for very permeable soils, trenches are provided with a small and low tie in the middle to regulate water flow (15 cm width). In this type of design trees are not planted in the middle of the trench but in the front of it.

Main design

Figure 1 Microtrench

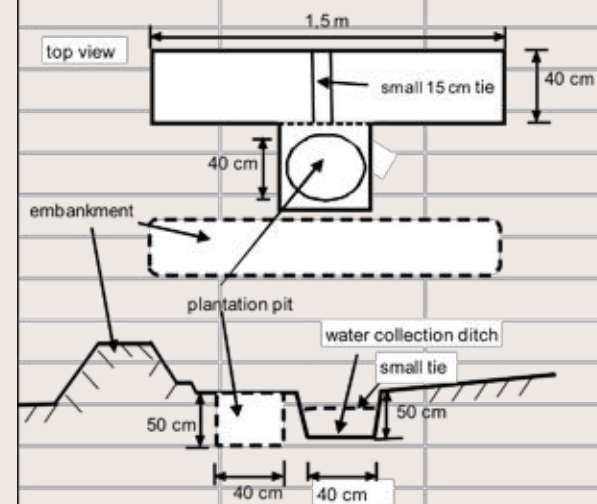
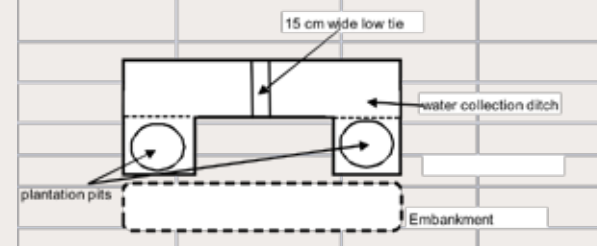


Figure 2 Double pit MTRs (fodder plants, fodder and cash crops, etc.)



6. AREA CLOSURE (AC): INTEGRATED SYSTEMS FOR THE BIO-PHYSICAL REHABILITATION OF DEGRADED LANDS

Area closure is a protection system against livestock and human interference able to improve and rehabilitate degraded lands (e.g. eroded hillsides and gullies). AC is usually supplemented by various physical and biological conservation measures. Enriched closures allow the regeneration or growth of natural species previously severely affected, control erosion and runoff and contribute to recharge water tables and prevent flooding. Closed areas can become productive units and shared amongst groups and individuals. When properly managed AC can provide significant income to poorest households (enables beekeeping, fodder banks, forest products, etc.).

Limitations & environmental risks:

- Limits access to specific groups (e.g. free grazing) who may not perceive overall medium-long term benefits
- Low env. risks except forest fires (large AC need firebreaks)

Design standards

Work norm: site managers (protection): 4 person days/ha/year.
For complementary measures see other infotechs.

AC in pictures

- ① Early treatment with SWC
- ② Results from protection & planting
- ③ Integration with water

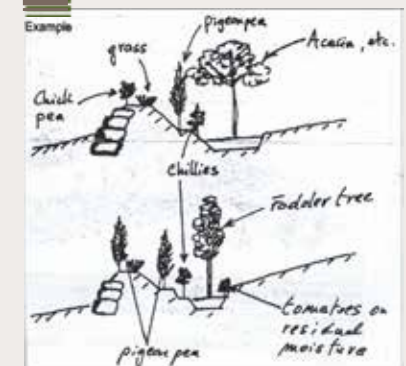
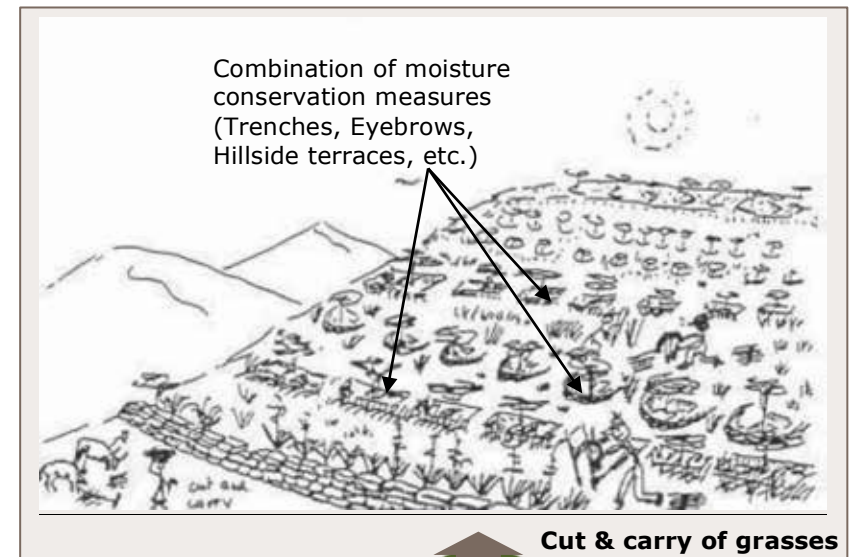
Main land use: Mostly degraded hillsides and large gully networks

Main Core Measures:

- Guarding: No livestock is allowed to graze for 3-5 years, and no or limited human interference is tolerated until 80% grass cover is obtained, +/-
- Hillside terraces + trenches; or Multipurpose trenches or eyebrows (trees, fodder, cash crops);
- Plantation of drought resistant trees, fodder shrubs, cash crops, or combinations.
- Firebreaks, land use/produce sharing arrangements (e.g. land certification by community, groups or households, etc.).

Other possible (and often required) complementary measures:

- Checkdams and brushwood checks in gullies dissecting the closure;
- Vegetative fencing and dry fencing if encroachment is difficult to control;
- Cut-off drains and waterways for excess runoff control in sensitive parts of closure;
- Mulching and manuring of planting pits/trenches/etc. by cutting grass & weeds around each structure.



1

Treatment of degraded areas (terraces and trenches)



2

Plantations and grasses growing and protected



3

Small water ponds in a rehabilitated area closure

AC generates biomass and controls

AC integrated with water harvesting

7. LEVEL SOIL BUNDS (LSB)

The LSB reduces and stops the velocity of runoff and consequently reduces soil erosion and the steady decline of crop yields – conserves moisture and improves water availability to plants, and increase the efficiency of fertilizer applications if any. LSB is suitable mostly in semi-arid and arid areas but also in medium rainfall areas. Applied generally on cultivated lands with slopes above 3% and below 15% - LSB are integrated with vegetative stabilization, compost applications, etc. There are several modifications to this design applied based on soil type and land use (ref to technical guidelines needed).

Limitations & environmental risks:

- May create waterlogging in heavy soils (e.g. crop failure near bund)
- Low/medium env. risks (may lead to series of breakages/erosion without proper layout or when not stabilized).

Design standards

Work norm for standard LSB:
150/person day/km

LSB in pictures

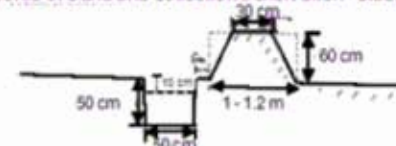
- ❶ LSB stabilized with elephant grass
- ❷ Soil bunds in the landscape
- ❸ Soil bunds evolved into a stabilized bench terrace (note the accumulated soil – around 1.3 meters)

Design (Layout and Dimensions)

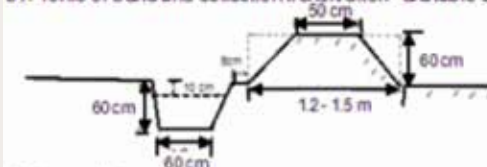
- Layout along the contours with Vertical Interval (VI) that follows a flexible & quality oriented approach:
 - Slope 3-8% VI = 1-1.5 m
 - Slope 8-15% VI = 1-2 m
 - Slope 15-20% VI = 1.5-2.5 m (only exceptional cases - reinforced)
- Height: min. 60 cm after compaction.
- Base width: 1-1.2m in stable soils (1 horiz: 2 vertical) and 1.2-1.5m in unstable soils (1 horiz: 1 vertical).
- Top width: 30 cm (stable soil) - 50 cm (unstable soil).
- Channel: shape, depth and width vary with soil, climate and farming system.
- Ties (recommended): tie width dimension as required, placed every 3-6 m interval along channel.
- Length of bund: 30-60 m in most cases, higher (max 80m) on slopes 3-5% - need to be spaced staggered for animals to cross.
- Integration: with contour ploughing, fertility management (e.g. compost, mulching, plantations). LSB need upgrading to form bench terraces (e.g. by using fanya juu method in year 2-3)



a) Profile of bund and collection trench/ditch - stable soil



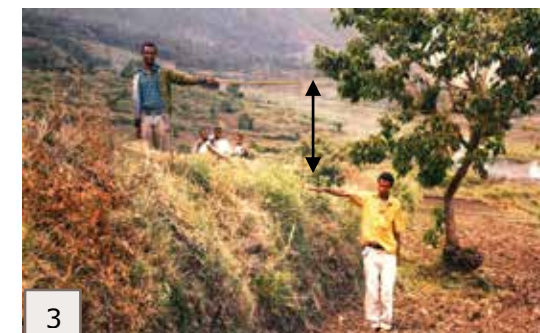
b) Profile of bund and collection trench/ditch - unstable soil



c) Trapezoidal wings (end of bund) Cross view



d) Rectangular



8. STONE FACED SOIL BUNDS (SFB)

The stone-faced soil bunds are reinforced soil bunds in one or both their sides. SFB offer strong resistance against runoff. Stone faced bunds are suitable in areas with high stoniness and stable soils, and can be combined with trenches and vegetative stabilization. Suitable in most agroclimatic areas, including dry lands when combined with other moisture conservation measures like tie-ridging and compost applications above bund or benched area. Stone faced bunds can be upgraded to become level terraces provided with a retention wall - the upgrading occurs through raising the stone raiser after 1-2 years.

Limitations & environmental risks:

- Waterlogging in heavy soils
- Dependent on availability of stones
- Low/medium env. risks (may lead to series of breakages and erosion without proper layout)
- May harbor rodents

Design standards

Work norm for standard SFB:
250/person
day/km

SFB in pictures

- ① SFB
- ② SFB + trenches
- ③ SFB converted into bench terraces & stabilized

Design (Dimensions)

- Grade of lower stone wall: 1 horiz. to 3 vert.
- Grade of soil: 1 horiz. to 1.5 vertical on stable soils and 1 horiz. to 2 vertical on unstable soil;
 - Lower stone face riser foundation: 0.3m depth x 0.2-0.3m width;
 - Stone face riser foundation: 0.2x0.2m
 - Stone size: 20 cm x 20 cm stones (small stones only for filling);
 - Top width: 0.4-0.5m;
 - Height: min 0.7 and max 1 m (lower wall);
 - Channel or trench along bund;
 - Ties required every 3-6 m along channel.

Layout

- a) Slope range: 3-35% max
- b) Follow vertical interval (VI) as for soil bunds. However, between slopes 5-15% add 10% to distance between bunds as stability of SFB is higher.
 - Slope 3-8% VI = 1-1.5 m
 - Slope 8-15% VI = 1-2 m
 - Slope 15-30% VI = 1.5-2.5 m
- c) Soil depth 50-100 cm
- d) Use line levels and follow contours
In gentle slopes (< 8%) avoid sharp curving along depression points and filled in by plowing.

Fig 1. Design of stone-faced soil bunds

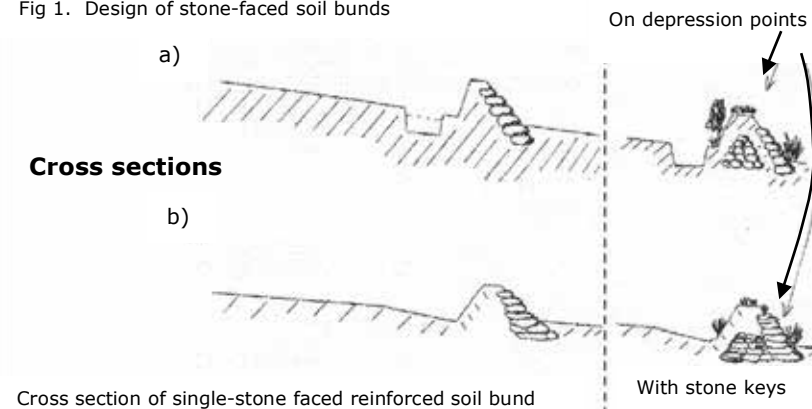
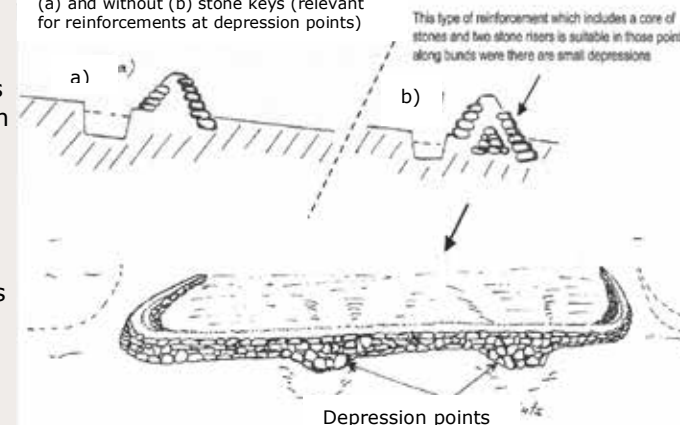


Fig 2. Double stone-faced soil bunds with (a) and without (b) stone keys (relevant for reinforcements at depression points)



1 Stone faced soil bunds with stable walls



2 Stone faced terraces upgraded with



3 Stone faced terraces forming benched plots

9. LEVEL FANYA JUUS (LFJ)

The LFJ reduces the velocity of runoff and soil erosion. They are impermeable structures built by digging a contour trench/channel and lifting soil upwards to form an embankment (see Fig). LFJ retains rainfall, increases soil moisture and water availability to plants, and the efficiency of inputs application if any. LFJ bench quicker than soil bunds but are less efficient in moisture conservation than LSB and more prone to breakages & overtopping. Suitable mostly in medium rainfall areas but can be practiced in semi-arid conditions, particularly on gentle slopes and well drained deep soils. LFJ are applied on cultivated lands with slopes between 3% to 15% gradient. LFJ are best constructed in uniform terrains that do not have traverse slopes (depressions).

Limitations & environmental risks:

- Needs deep soils (>75cm)
- Easily overtopped by runoff
- Requires regular upgrading
- Low/medium env. risks (may lead to series of breakages and erosion without proper layout)

Design standards

Work norm for standard LFJ:
200person day/Km

LFJ in pictures

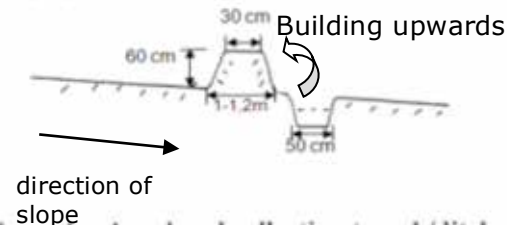
- ① LFJ in the landscape
- ② LFJ being planted with fodder shrubs
- ③ Stabilized LFJ with pigeon peas

Design (Dimensions and Layout)

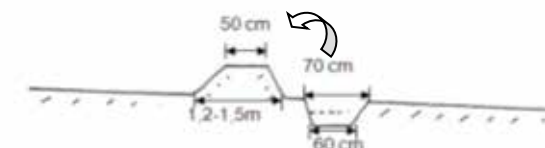
- Height:** min. 60 cm after compaction.
- Base width:** 1-1.2m in stable soils (1 horiz: 2 vertical) and 1.2-1.5m in unstable soils (1 horiz: 1 vertical).
- Top width:** 30 cm (stable soil) - 50 cm (unstable soil).
- Collection ditch:** 60cm W x 50cm D.
- Ties:** placed every 3-6 m interval along channel.
- Length of bund:** up to 60 m in most cases, max 80 m. FJ need to be staggered to allow animals to cross fields as required.
- Vertical intervals:** (VI) flexible and quality oriented approach.
 - Slope 3-8% VI = 1-1.5 m
 - Slope 8-15% VI = 1-2 m
- Layout along the contours using line level - discuss spacing with farmers and in case of lateral slopes shift to soil bunds for higher water accumulation and apply reinforcements and keys.

Design of Fanya Juu bunds

Profile of fanya juu bund and collection trench/ditch - stable soil



Profile of fanya juu bund and collection trench/ditch - unstable soil

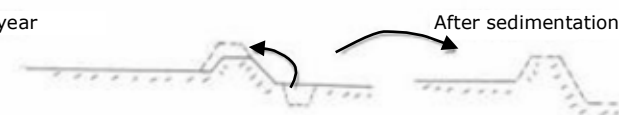


Combination of Fanya Juus alternated with soil bunds along the slope. This method is to allow some excess runoff not captured by the fanya juu to get trapped by the upper trench of the soil bund. Fanya Juus need the embankment stabilized in the upper side to allow excess water to overtop without creating damage. Grass planted with legume shrubs is most suitable.

- First year



- Second year



10. STONE BUNDS (STB)

The stone bunds are widely practiced in many parts of the world under traditional systems and designs vary. STB reduces the velocity of runoff and soil erosion. They are semi-permeable structures unless sealed with soil in their upper side. They increase soil moisture retention capacity and water availability to plants, and increase the efficiency of inputs applications if any. STB are suitable mostly in semi-arid and arid areas but also in medium rainfall areas with deep and well drained soils. Stone bunds are entry points for application of organic residues or compost, especially 2-3 meters behind the bund where soil is deeper.

Limitations & environmental risks:

- Applicable only in stony areas
- Requires regular maintenance and upgrading
- Low/medium. env. risks (breakages of upgraded bunds)

Design standards

Work norm for standard STB:
250person
day/Km

STB in pictures

- ① STB well constructed
- ② STB upgraded
- ③ STB in the landscape with crops

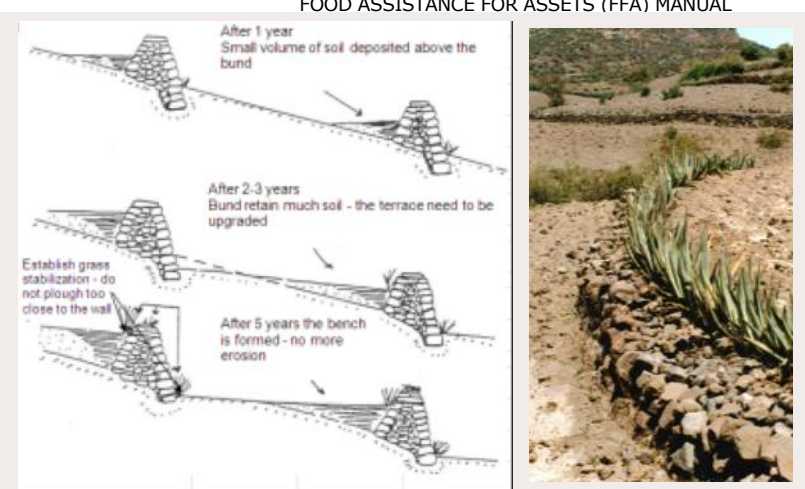
Layout: Vertical Interval (table)

Ground slope %	Height of bund (m)	Vertical Interval (m)	Distance apart (m)
5	0,50	1,00	20
10	0,50	1,50	15
15	0,75	2,20	12
20	0,75	2,40	10
25	1,00	2,50	8
30	1,00	2,60	8
35	1,00	2,80	6
40	1,00	2,80	5
50	1,15	2,80	4

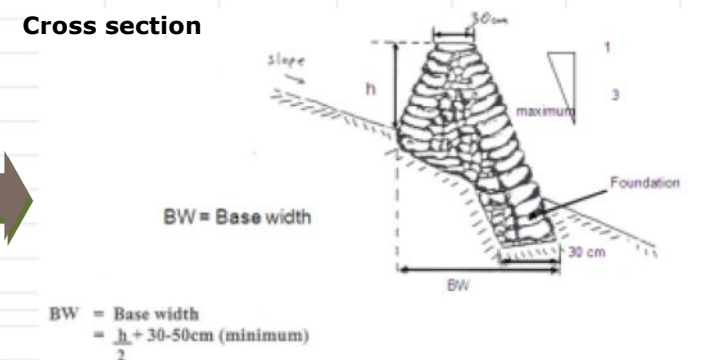
Caution: Stone bunds should not be constructed above 35% slope under most conditions. Discuss spacing with farmers and in case of lateral slopes try to maintain lines as straight as possible by applying reinforcements on depression points.

Design (Dimensions):

- Height: 60-70cm up to 100 cm (lower side)
- Total Base width: (height/2) + (0.3-0.5 m).
- Top width: 30-40 cm
- Foundation: 0.3x0.3m
- Grade downside wall: 1 horiz : 3 vert.
- Grade of upper side wall: 1 horiz : 4 vert.
- Grade of soil bank (seal) on upper side: 1 horiz : 1.5-2 vert.

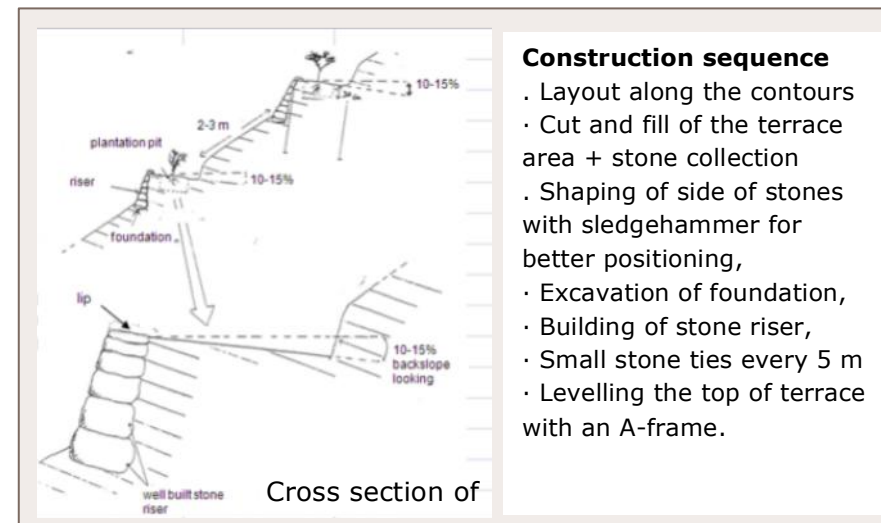


Cross section



11. HILLSIDE TERRACES (HT)

- Hillside terraces are physical structures constructed along the contours, generally suitable in steep degraded slopes and shallow soils (although common in other type of soils), suitable for tree planting and rather effective in controlling runoff and erosion. The complement reforestation and area closure plantation, and protect downstream fields from flooding. Suitable in semi-arid and arid areas but also in medium rainfall areas.
- Hillside terraces, like stone bunds, can be stabilized by drought resistant plants such as Sisal, Aloes, Euphorbia, etc., placed on the lower side of the stone wall. Fodder, legume and cash crops can be planted at the top of the stone raiser or at its toe: using grasses + legume shrubs (pigeon peas, Sebania, Acacia saligna, Trilucerne etc.).



Construction sequence

- Layout along the contours
- Cut and fill of the terrace area + stone collection
- Shaping of side of stones with sledgehammer for better positioning,
- Excavation of foundation,
- Building of stone riser,
- Small stone ties every 5 m
- Levelling the top of terrace with an A-frame.

Limitations & environmental risks:

- Applicable only in stony areas
- Requires regular maintenance, control grazing and upgrading
- Low/medium env. risks (breakages of upgraded bunds)

Design standards

Work norm for standard HT:
250person day/Km

Design

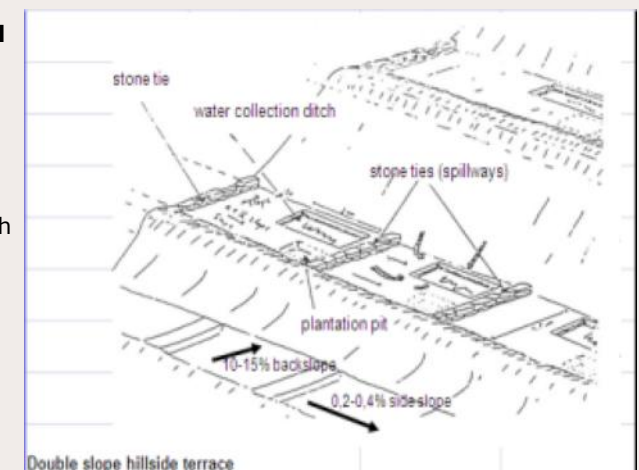
- Slope range: 20-50%
- Vertical Interval (VI): 2-3 meters
- Height or stone riser: min 0.5m (range 0.5-0,75m)
- Width of terrace: min 1.5 m (range 1.5-2m)
- Foundation: 0.3m depth x 0.3 m width foundation
- Grade of stone riser: well placed stone wall (grade 1 horiz to 3 vert.)
- In lower rainfall areas (most cases) hillside terrace have 5-10% gradient backslope

Modification to the standard design

- The HT can be constructed with 10-15% of backslope and a 0.2-0.4% side slope (see figure on the right). Ties every 2 m to regulate water movement and a shallow trench can also be dug to support the growth of trees planted.

Management

- Controlled grazing is a precondition for hillside terraces.



HT in pictures

- ① HT stone risers and construction on hillsides
- ② HT and area closure with microponds
- ③ HT and forestry



12. HILLSIDE TERRACES + TRENCHES (HTT)

HTTs is highly labour intensive - generally suitable for steep slopes (up to 50%) and shallow-medium depth soils (although common in other type of soils). Suitable for tree/shrubs planting and very effective in controlling runoff and erosion. HHTs adapt to moisture stressed conditions and many other areas (with high stoniness, HTT ensure protection of downstream fields, and play a significant role in replenishing water tables, complement area closure and tree planting.

Limitations & environmental risks:

- . Applicable in stony areas
- . Requires regular maintenance & control grazing
- . Low/medium. env. risks (breakages of upgraded bunds)

Design standards

Work norm for standard HTT:
330persons
day/Km

HTT in pictures

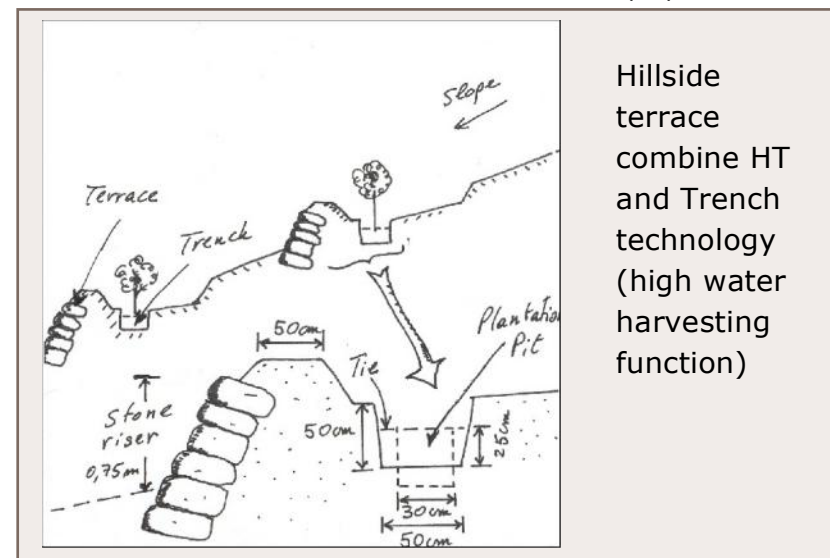
- ① HTT constructed
- ② HTT in degraded areas with trees

Design

Layout: as per HT and TR

Dimensions:

- . **Stone riser height:** 0.75-1 m from ground level
- . **Stone riser foundation:** 0.3-0.4 mD x 0.3 mW
- . **Top width:** 0.5 m (0.25 m stone riser and 0.25 m soil),
- . **Grade of stone riser:** 1 horiz: 3-4 vertical
- . **Grade of soil bank:** 1 horiz: 1.5 (unstable soils) to 2 vert. (stable soil)
- . **Base width:** based upon slope
- . **Size/place of trench:** 50 W x 50 cm D x terrace length - placed 0,75-1m above stone wall.
- . **Size/place of ties:** within trenches ties are placed at 2-3m intervals and half way the depth of the trench (0.25 m) with 0.6m horiz. length x 0.5 cm width for planting seedlings.
- . **A 30x30x30 cm plantation pit** is placed in the middle of the tie or in front of the trench (between berm and embankment) with lateral spacing depending on tree and shrubs planted (1-3 metres).
- . **Max length of HTTs:** 50-80m. HTTs should wing up laterally, before depression points.



Hillside terrace combine HT and Trench technology (high water harvesting function)



Hillsides with a mix of fodder and multipurpose trees



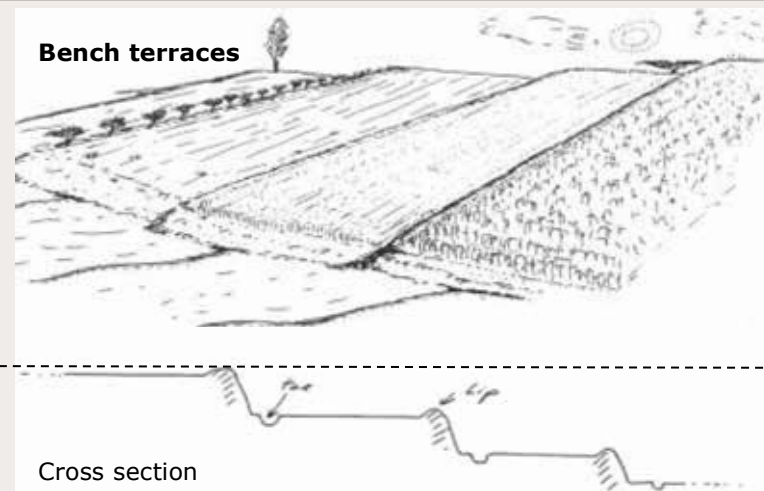
Management & Integration

- . Control grazing is required.
- . Terraces should be stabilized with drought resistant species. Fodder and crops growing on terraces should not be uprooted but cut and carried.
- . Integration with strong check dams along depression points and small gullies also required.

13. BENCH TERRACES (BT)

. The bench terrace converts a steep slope into a series of steps, with nearly horizontal benches formed to reduce velocity of runoff and control soil erosion. Suitable in semi-arid and arid areas but also in medium rainfall areas that have deep (>1 m) and well drained soils. Can be applied on cultivated lands and unused steep hillsides with slopes of average 10 to 50% considering the various agro-climatic conditions. Construction of BT starts with the removal of the top soil, then put aside before proceeding with the cut and fill process. Cutting starts from the upslope above the contour peg line and start filling the strip below the peg line. Precise layout along contour with line levels is required. Reinforced riser with stones or vegetative stabilization is paramount, together with strict control grazing. Fodder crops growing on terraces should not be uprooted but cut & carried.

Bench terraces



Limitations & environmental risks:

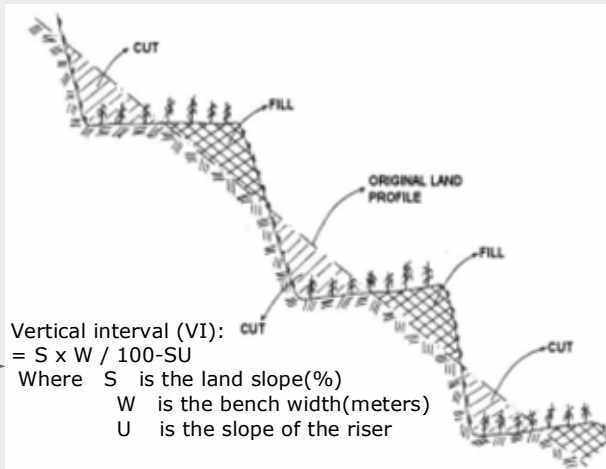
- . Applicable in deep soils
- . Requires regular maintenance & control grazing
- . Medium/high env. risks (breakages can lead to severe erosion)

Design standards

WORK NORM:
500-1000 Person
days/Km

BTs in pictures

- ① Intermittent BTs
- ② Continuous BTs
- ③ BTs with runoff systems (dry zones)



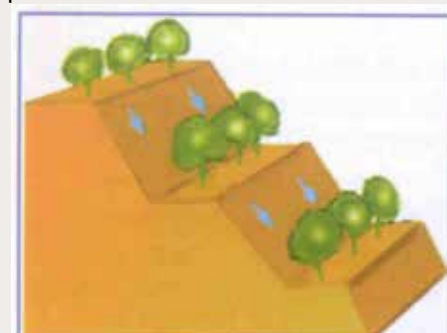
Design

Width: For areas of cultivation by hand: 2-5m is suitable; wider for animal driven cultivation (10-30m). The more the depth of soil and the less the slope, the wider the bench terrace.

Height: The height of the riser (terrace) is the vertical interval (for a reverse slope the change in elevation across the terrace is subtracted).

A Riser has a slope expressed as a ratio of horizontal distance to vertical rise. Can be stone faced, vegetated or grassed. Brushwood can also be applied along BTs.

Several BT designs are possible – the one below is a conservation BT that has a small runoff area above the plantation zone to increase moisture to plants.



14. RUNOFF/RUNON SYSTEMS FOR SOIL AND MOISTURE CONSERVATION (RRSC)

This is a rainfall multiplier system for reclaiming and rehabilitating marginal areas in dry lands (250-600mm), with low productivity, shallow soils, often affected by surface crusts and low water infiltration rates, with slope ranging between 1 to 3-5%. Both runoff and runon areas are included within the bunds.

The runoff area is intended to serve as a micro-catchment to supply additional water into a runon area (cultivated area) to increase production levels in one portion of the total area, or to introduce crops with higher water requirements that otherwise would not grow in such areas without additional moisture.

Limitations & environmental risks:

- . Requires mechanization to rip hard pans
- . Requires significant conditioning (manure, mulch, tie – ridging, etc.)
- . Low/medium env. risks (breakages can lead to erosion)

Design standards

Work norm for standard RRSC:
300person day/Km
(incl. stone bunds and land preparation with tie ridges)

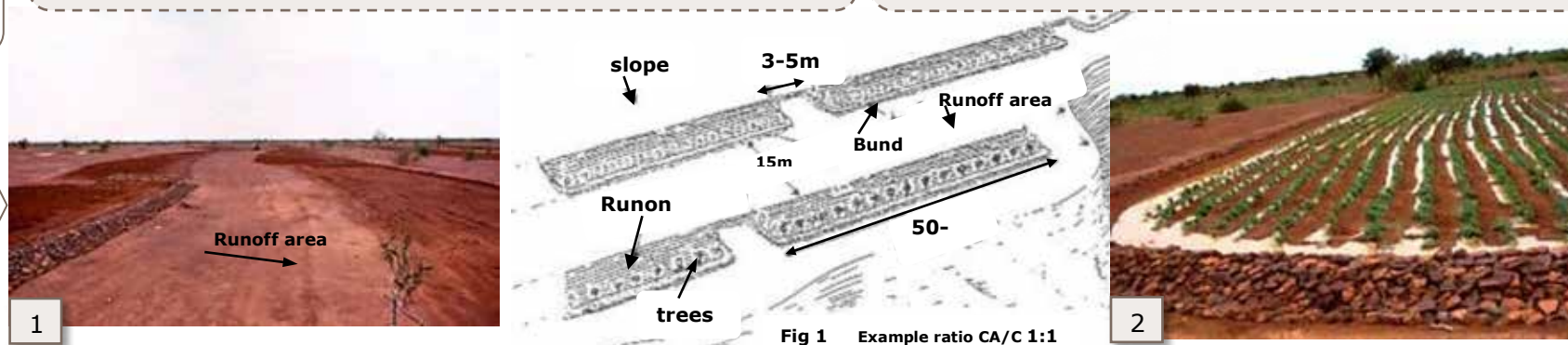
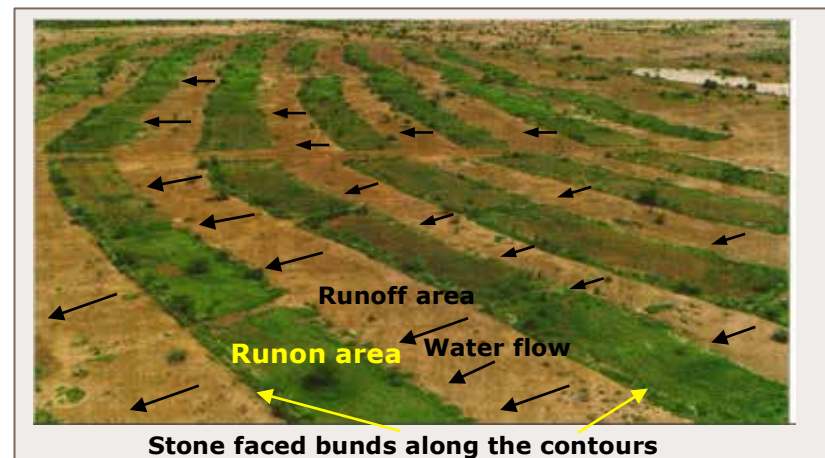
RRSC in pictures
 ① Runoff and runon areas between stone faced bunds
 ② Water collection effect inside plot

Design (Layout and Dimensions)

- (1) Layout of bunds: bunds precisely level along the contours and to wing up laterally to evacuate excess water. Lateral distance 3-5 meters and protected with lines of stones to evacuate excess runoff (lateral wings should have a decreasing height in order to be the first to evacuate excess runoff). Depression points to be avoided and/or bunds reduced in size and oriented in different directions based on slope.
- (2) Slope range and type of soils: for slopes < 3-5% and soil depth above hardpan/rocky area of 50 cm or more.
- (3) Runoff/runon ratio = ratio of the area yielding runoff (catchment area or CA) and the area receiving runoff (cultivated area or C) range 0.5-1:1 and 1.5:1 (0.5-1.5 run-off/catchment area and 1 run-on/cultivated areas) for stone faced/soil bunds and stone bunds.
- (4) Size of the area delimited by two bunds: small catchments will harvest runoff even from shorter storms. Each cultivated area may be delimited by 20-80m long bunds provided with lateral wings of 5-15m width (Fig.1).

(5) Construction criteria:

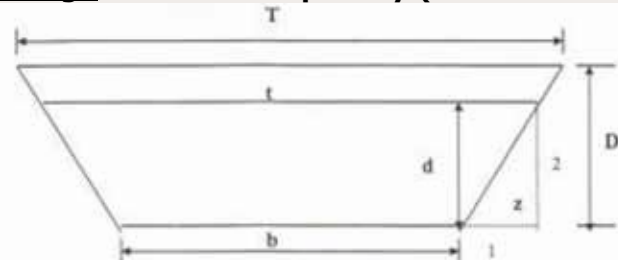
- **Stone bunds**: up to 5% slopes, with strong and large foundation, sealing of the stones is important to reduce the flow of runoff through the bund and facilitate the growth of grass;
- Mechanized ripping of cultivated area required before placing the bunds;
- **Stone faced soil bunds**: slope <3% - very well compacted and double stone walls placed on both sides of the bund with stable angle. The top and bottom of the bund is also planted with dry resistant fodder and tree species (e.g. Acacia sp);
- Height of the bunds: at least 60-75 cm, length from 25 to 100 m, bottom width 1.5-2 m and top width 30-50cm. The bund has wings as long as the width of the cultivated area (10-15 meters in the example);
- Distance between two consecutive bunds: not exceed 15 to 20 meters within this range of slopes and staggered alternatively;
- Develop the runon/cultivated areas with tie-ridges.



15. SOIL SEDIMENTATION DAMS (SSD)

SSD dams are water harvesting systems that convert largely unproductive and active gullies into productive areas (fertile cultivated or fodder producing areas, mixed plantations, and fruit tree orchards). SSD dams are stone-faced earth filled and compacted dams, constructed across medium/large size gullies to trap sediments, collect water and divert excess runoff. Gully sides are reshaped upstream to create new cropped fields behind SSD when water recedes. They are often constructed in series.

Design: Size of the spillway (cross section)



CATCHMENT AREA (hectares)	BASE WIDTH (b)		DEPTH OF FLOW (d)	TOTAL DEPTH (D)
	medium/low runoff coefficient (0,4)	high runoff coefficient (0,7)		
2	0,8	1,1	0,30	0,70
3	0,9	1,4	0,30	0,70
4	0,9	1,4	0,35	0,75
5	1,0	1,6	0,35	0,80
6	1,0	1,6	0,40	0,90
8	1,0	1,8	0,50	1,00
10	1,0	2,1	0,55	1,05
12	1,0	2,2	0,60	1,10
14	1,1	2,5	0,60	1,20
16	1,1	2,7	0,60	1,20
18	1,1	2,8	0,60	1,20
20	1,2	3,2	0,60	1,20
24	1,6	3,6	0,60	1,20
28	2,0	4,4	0,65	1,25
32	2,3	5,1	0,70	1,30
36	2,7	5,5	0,70	1,30
40	3,2	6,1	0,75	1,35
45	3,7	7,0	0,75	1,35
50	4,2	7,8	0,75	1,35
60	5,1	9,6	0,75	1,35
70	6,1	11,3	0,75	1,40
80	7,1	13,0	0,75	1,45
89	8,1	14,8	0,75	1,50
100	9,1	16,5	0,75	1,50

. Total depth (in mt) of the spillway = maximum permissible depth of the flow (d) + free board). The length of the spillway is equivalent to base width of the SSD or more. Gradient of the spillway is 0.4-0.8%

Work norm for SSD:

. SSD embankment is 0.75 m³ of volume work (earth & stone fill) per person/day.
 . The work norm for the spillway is 0.5 m³ of spillway excavated soil & stone work (including drop structure and rip rap) per person/day.
 . The work norm for cut&fill/reshaping/levelling: 1PD/1m³/day

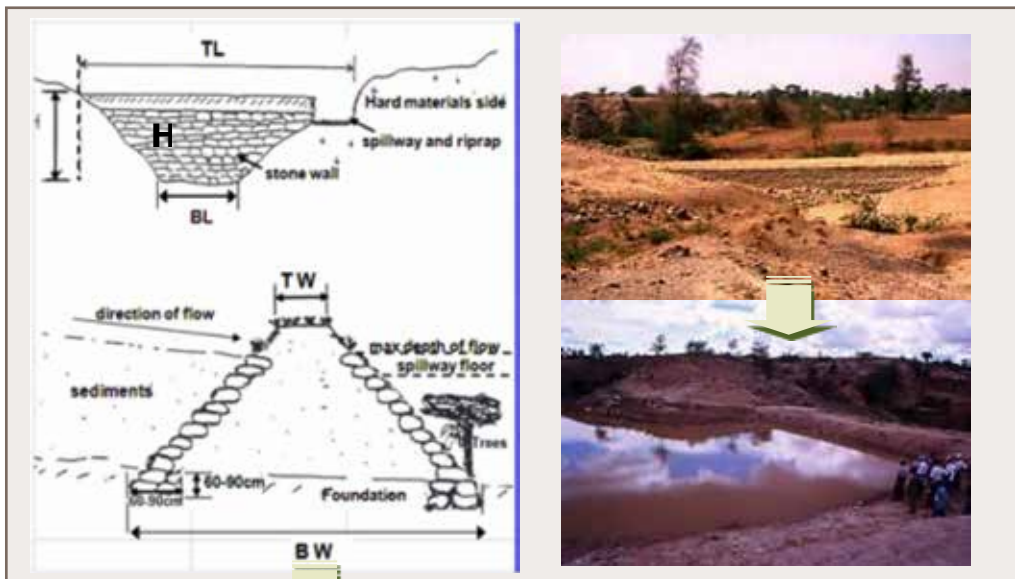
Design standards

Limitations & environmental risks:

. Requires basic engineering skills
 . Not suitable in sandy and sodic soils
 . Low env. risks (e.g breakages making investment ineffective + erosion)

SSD in pictures

- ① SSD under construction
- ② SSD with water and grasses



Design: Dimensions of the SSD

Height = H,
 Base width = BW, H < 2m H:BW is 1:2-2,5 TW = 1,5m
 Top width = TW, H = 2-3,5m H:BW is 1: 2,5-3 TW = 1,5m
 Top length = TL, H = 3,5-5m H:BW is 1: 3 TW = 3 m
 Bottom length = BL

(4) $V1 = \text{Volume of embankment earth/stone work (m}^3\text{)} = \frac{H \times (TW+BW) \times (TL+BL)}{4}$

$V2 = \text{Volume of spillway (SP) earth work} = \text{Length SP (equivalent to BW)} \times \text{base width of SP (see table)} \times \text{total depth of channel (see table)}$

$V1 + V2 = \text{Total volume of earth work (including foundation)}$

. The size of the spillway is determined by the catchment area and runoff estimations.

. The side of the spillway looking towards the dam should be stone



16. CHECK DAMS (CKD)

A stone checkdam is a structure across the bottom of a gully or a small stream, which reduces the velocity of runoff and prevents the deepening and widening of the gully.

Sediments accumulated behind a checkdam could be planted with crops or trees/shrubs grass and thus provide additional income to the farmer. Gullies with CKD conserve moisture in the soil that may give rise for springs at downstream sites. CKD protect water ponds from excessive sedimentation and are essential to complement road construction.

Limitations & environmental risks:

- . For small/medium size gullies
- . Only in stony areas
- . Low env. risks (e.g breakages making investment ineffective + erosion)

Design standards

Work norm for standard CK (involves stone collection, foundation, excavation of the keys and proper placement of check dams and drop/apron structures): 0.5 m³/Person/day

CKD in pictures
 ① CKD in series on a gully
 ② CKD re-vegetated and used for water and fodder collection

Design

Checkdams can be constructed in a wide range of conditions: (1) small gullies serving a large one, (2) as outlets for traditional or newly constructed bunds or terraces unable to accommodate all runoff and, (3) to trap silt before a water pond.

Side key: 0.7-1m per side;

Bottom key and foundation: 0.5m deep;

Height: 1-1.5m excluding foundation;

Base width: 1.5-3.5m;

Stone face vert/horiz. ratio = 1:3/1:4 to increase stability;

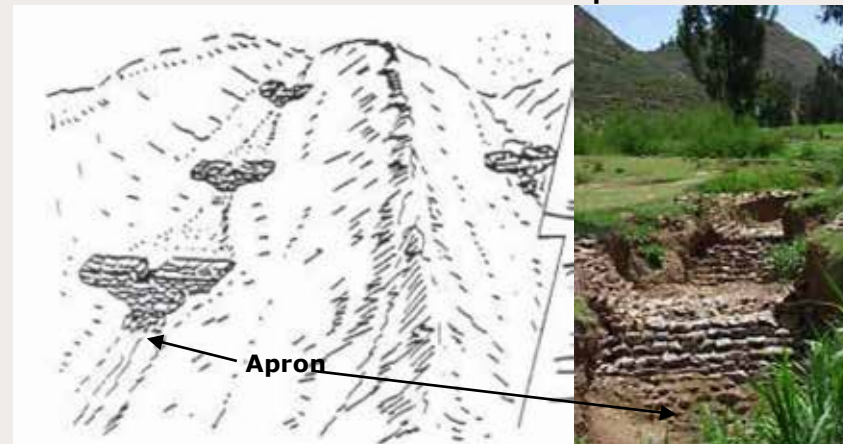
Spillway (trapezoidal): 0.25-0.30m permissible depth and 0.25m free board; and width 0.75-1.2m;

Drop structures: on steeper slopes (above 3-5%) ladder-placed stones before the apron and sill;

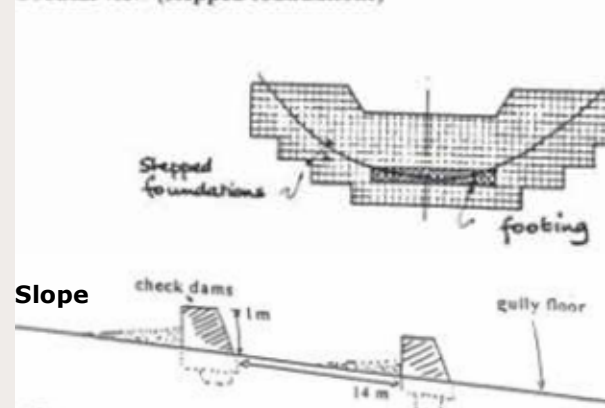
Apron: at least 50 cm wide on both sides of spillway fall (1.5 -3m wide) and 1m long.

Gully sides reshaping: gully sides ladder shaped for plantation (see photo 1 below)

Checkdams in the landscape



Frontal view (stepped foundations)



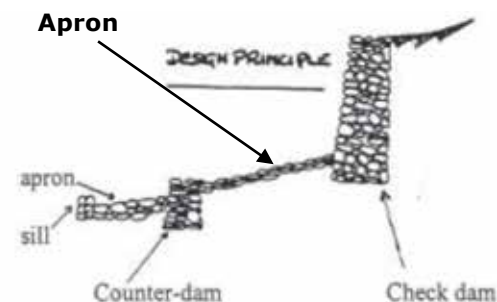
. Spacing estimated on the safe side S (spacing) = $\frac{\text{Height(m)} \times 1.2}{\text{Slope of gully bed (in decimals)}}$
 In this example:

$$G = \text{slope} = 12\% = 0,12 \text{ (in decimals)}$$

$$H = 1\text{m}$$

$$S = 1,2 \times 1/0,12 = 14 \text{ meters}$$

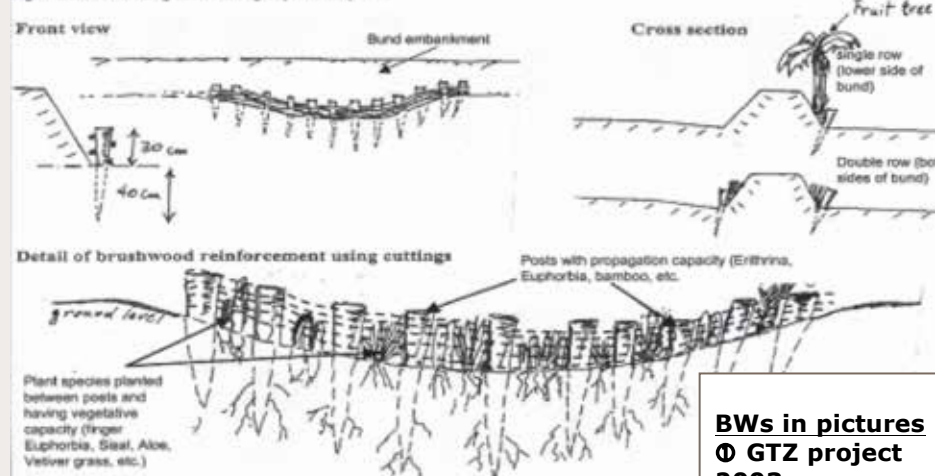
In the figure below an extra counter check is placed at



17. BRUSHWOOD CHECKS (BW)

Brushwood checkdams are vegetative measures constructed with branches, poles/posts and twigs. Plant species which can easily grow through shoot cuttings are ideal for this purpose. The objective of BWs is to retain sediments and slowdown runoff, and enhance the re-vegetation of gully areas. They are constructed either in single or double row. Some of the vegetation can be used for fodder. BWs are also ideal to stabilize conservation structures such as soil and stone bunds (along depression points), check dams, bench terraces, road sides, etc (see examples below).

Fig. 4 BWs reinforcing bunds along depression points



BWs in pictures
 ① GTZ project
 2003
 ② Same site in
 2004

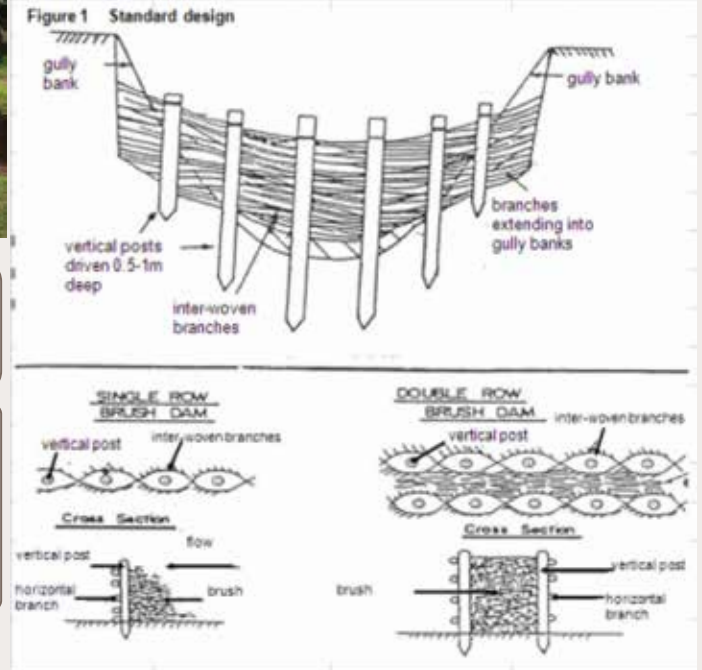


Work norm for BW:
 3 linear mt/
 person/day

Limitations & environmental risks:

- For relative small gullies and dependent on vegetative materials
- Control grazing needed
- Low/no env. risks

Design standards



Design

- Brushwood checkdams are suitable only for small gullies of less than 1.5-2 m depth and 2-3 meters wide.
- Posts with vegetative propagation capacity (bamboo, sisal, etc.) are best suited for BW and should be used wherever available.
- Thicker branches (6-10cm) will be used as vertical posts. Their height depends from the height of the gully but should not be more than one meter above the ground. The vertical posts should be driven into the soil at least at 50-60 cm depth, spaced apart 30-50 cm. They should also gently lean backslope for better resistance against runoff. After the posts are driven into the soil, the thinner branches or limbs are interwoven through the posts, to form a wall. Each branch should be pushed into the side banks, up to 30-50 cm inside. If vegetative materials are used, these branches will strike roots into the banks and strengthen the BW. The soil at both ends of the dam is carefully patched down with feet. Some roughage can be placed on a 20 cm layer on the upper side mixed with soil. Water should percolate through the brushwood check.
- Spacing:** Use the same calculation for stone checkdams and divide the distance by two or three.
- The BW should be reinforced with plants such as Sisal, finger Euphorbia and Aloe placed along the upper + lower side of the check.
- Not suitable in areas with limited vegetation and larger gullies.



18. WATERWAYS (WT)

A waterway is a natural or artificial drainage channel constructed along the steepest slope or in a valley to receive/accommodate runoff from cut-off drains and graded terraces/bunds. The waterway carries the excess runoff to rivers, reservoirs or gullies safely without creating erosion. Paved waterways are suitable in steeper terrains and areas with large amount of stones. Vegetative waterways require devices to slow down runoff. Applicable in all agro-climatic conditions, particularly in moist and high rainfall areas and with soils prone to waterlogging.

Design

A) Vegetative waterways (VW)

Slope: < 10%

Size: small waterways preferred (1-5 ha drainage area).

Shape: Choose parabolic cross section as this tends to resemble natural waterway.

Design steps:

1. Determine the drainage area.
2. Determine the width in meters of water way from Table 1/A having measured slope of the waterway.
3. From the table showing relationship between depth and width(table 1/B), determine depth in mtr.

Checks-drop-aprons (CDAs): place stone or brushwood CDAs every 20m (slope <5%), 10 m (slope 5-10%) and 5 m (slopes 10-25%) (see Fig. 2).

Excavation: soil piled and compacted on one or both sides of waterway (see Fig. 1).

Stabilization: local grass - sods - dry straws lines dug into the ground during first year.

B) Paved Waterways (PW)

Slope: < 20-25% slope

Size: same as above

Shape: Choose parabolic cross section

Design steps: same as VW (see Fig. 3)

Excavation and stone paving: place flat heavy stones at the bottom - fill with smaller stones in between large ones

Stone checks-drop-aprons (CDAs): at 1 meter vertical interval. The apron length = to height of drop. Built using stones or wooden pegs + stones. Height of CDAs 0.3-0.5m

Work norm for standard WT:

1. The worknorm for vegetative waterway is:
1 person/day/1m² which includes layout, straw lines and scour checks and outlet improvement.
2. The worknorm for stone paved waterway is:
1 person/day/0.75m³ of earth/stone movement and construction of

Limitations & environmental risks:

- Basic water engineering skills required + veget. and/or stones
- Regular maintenance needed
- Medium/high envir. risks (can generate gullies if poorly designed or maintained)

Design standards

Table 1/A: Relationship between drainage area and width of waterway

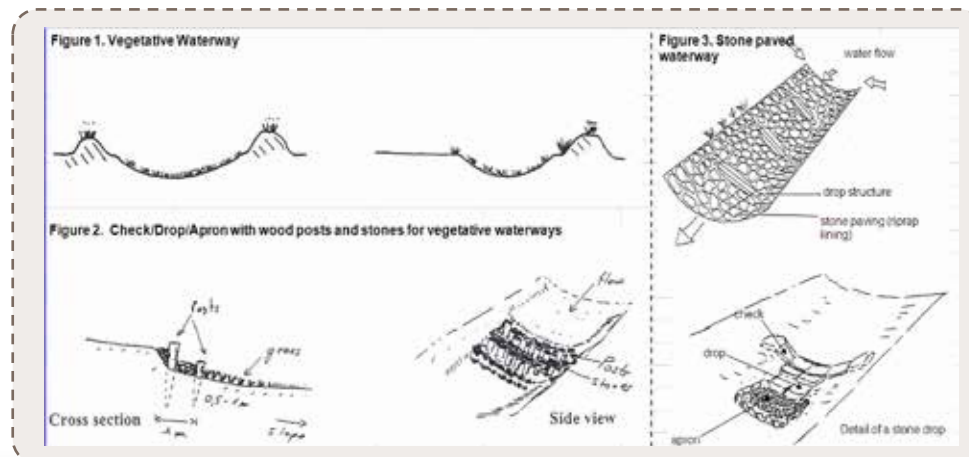
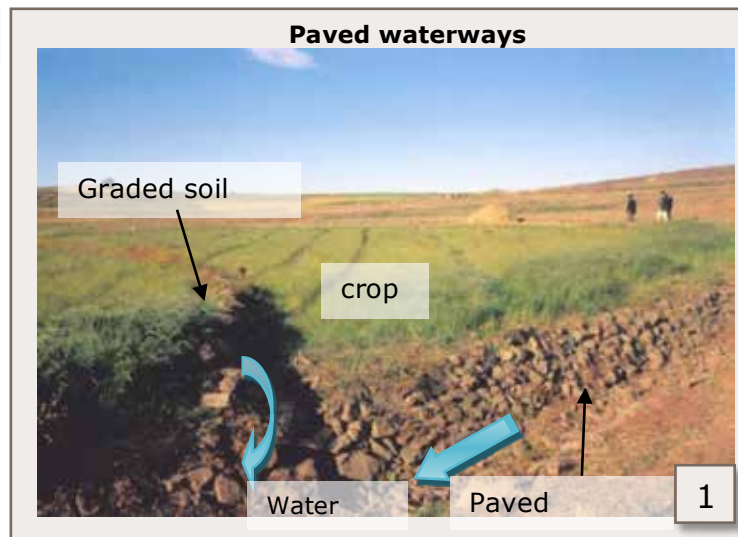
Runoff Area (Ha)	Width of the waterway(m)		
	Slope (0-5%)	Slope (6-12%)	Slope (13-25%)
1	1.5	1.5	1.5
2	1.5	2	2.5
5	2	3	4.5
10	3	6	9
15	3.5	8	12
20	4.5	12	18

Table 1/B: Relationship between depth (m) of waterway and width (m)

Width in meters	Depth in meters
0-3	0.3
4.0-6.0	0.4
more than 6	0.5

WT in pictures

① + ② Paved WT
③ Vegetated WT

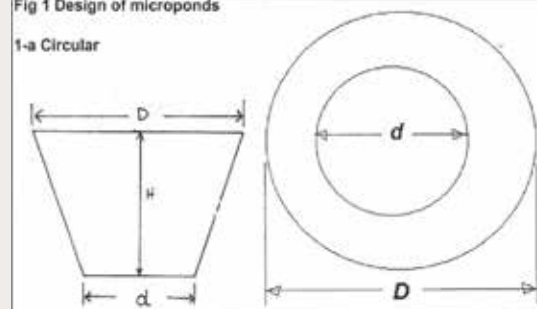


19. MICRO-PONDS (MP)

MPs are circular or rectangular water harvesting structures to supplement irrigation to high value crops (horticulture, fruit trees, etc.). MPs allow the use of surface runoff from small catchment areas within and between homesteads (e.g. foot paths, small grazing land areas, rocky areas, etc.). MPs can also collect water from feeder roads, graded bunds, spillways, etc. The water collected can be used during the rainy season as supplementary irrigation (during dry spells) or after (1-2 months max) for additional support to horticulture crops, fruit trees, small livestock, beekeeping, etc.

Fig 1 Design of microponds

1-a Circular



$$A_p = \frac{\pi D^2 + \pi d^2}{4} = \frac{\pi (D^2 + d^2)}{4}$$

$$V_p = A_p H = \frac{\pi (D^2 + d^2) H}{4}$$

1-b Rectangular



$$A_1 = WL$$

Figure showing sectional view of rectangular pond

$$A_{av} = \frac{(A_1 + A_2)}{2} = \frac{(WL + wl)}{2}$$

$$A_2 = wl$$

$$V = A_{av} d = \frac{(WL + wl)}{2} d$$

A_{av} = Average area of the pond, m^2
 V = Volume of the pond, m^3

Design standards

Limitations & environmental risks:

- Basic water engineering skills needed
- Medium/low Env. Risks (e.g. safety aspects, pest vectors)

Design:

A) Round shaped micro-ponds (cemented) --> Usually 4-6 meters radius and 3-4 meters deep. The cone of the pond is truncated at its bottom, allowing for 2-3 meters diameter flat bottom. Volume 90-120 m^3 provided by **small micro-catchments** (400-1000 m^2). Use pole and string with knots placed at different diameters based on size of pond to facilitate excavation. The bottom and sides of ponds should be tightly stone paved/faced using mortar (cement/sand 1:4), reinforced with mesh and plastered (cement/sand ratio 1:2-3).

B) Rectangular MP: depth (2.5m to 3.5m) - may be larger in size. Side slope 1:1. Volume as above. Rectangular ponds are usually cheaper, not cemented and used mostly to supplement water during rainy season (during dry spells). To reduce seepage a system of stone paving + a clay blanket (10-15cm layer) and/or plastic geo-membrane can be used. Side walls (faced or stone stepped can also be built) to increase stability and reduce lateral seepage + shaded with mats to prevent malaria

MPs in pictures

- ① rectangular (plastic lined) and rectangular MPs
- ② Stone lined MP and veg. garden
- ③ Circular MP with shade



1

Work norm for standard MP

- (1) Excavation (1PD/0.5 m^3)
- (2) Stone collection and shaping (1PD/0.5 m^3) for stone stepping/facing of walls
- (3) Shading (thatched roof, etc) effective to avert malaria vectors' breeding
- (4) Others as required (such as small cutoff drains and waterways see other infotechs).



2



3

20. STABILIZATION OF STRUCTURES (STB) AND FARM BOUNDARIES WITH TREES & SHRUBS: FODDER, TIMBER AND OTHER BIO-PRODUCTS

Stabilization refers to the planting of crops, grass, shrubs and trees in different combinations in order to strengthen the resistance and stability of physical structures such as bunds, trenches, checkdams, SS dams, etc., against rain drops splash effect, runoff and cattle trampling. At the same time, stabilization has the purpose of making productive the surface area occupied by the structure. Stabilized structures would need less maintenance and damages are less likely to occur during heavy rainstorms. Trees or shrubs help to demarcate farm and homestead boundaries, thus provide additional sense of ownership. Particular plants are also hosts for insects able to control pest incidence. Stabilized areas can be an additional source of timber, firewood, fibre, food and forage, palatable grasses and legumes, fruits and other products (dyes, gum, medicinal, etc.).

Design:

- Tree/shrubs should be planted at close spacing: 30 to 100cm apart depending on species, on single or staggered double rows (e.g. one on the berm and the other at the lower side of the embankment).
- In drier areas plant the trees/shrubs using seedlings instead of direct sowing. Seedlings grow faster and by the end of the rainy season have a rooting system able to explore wider and deeper portions of the soil profile and thus have a better chance to withstand the long dry spell.
- For forage production preferably select nitrogen-fixing trees/shrubs such as *Leucaena leucocephala*, Pigeon peas and *Sesbania sesban*. *Acacia* sp can also be introduced and planted at 5-10 m intervals (positive effect on soil fertility).
- Plant grass and legumes between tree/shrubs in different proportions based upon needs (2 rows of grass+1 row legume, 2 rows legumes+1 row grass, etc).
- At the onset of the rainy season plant the seeds not deeper than 2cm, preferably 1cm depth. Use a sharp stick to open a shallow row and drill inside the grass seeds. Then press the soil back to the row so that to ensure a good contact between soil and seeds. After 1 or 2 months from planting, weeding of other spontaneous aggressive vegetation may be necessary. Apply "farmland closure activity" as a form of control grazing (blocks of farmland areas are closed from cattle interference).
- Fruit trees can be planted along bunds and terraces, trenches, etc. Depending on context, species may include mango, guava, citrus and other species. Some other drought resistant perishable and non-perishable fruit trees species can be carefully introduced (cashew nut, custard, apple, pistachios, apricots, jackfruit, tamarind, etc.). Highland fruits such as apples, plums, and peaches can grow at higher altitudes, including in terraces/trenches. It is recommended to plant fruit trees in combination with other multipurpose species at various intervals (for ex: 1 fruit tree - 3 fodder trees, 1 firewood tree - 3 fodder trees - 1 fruit tree, etc).

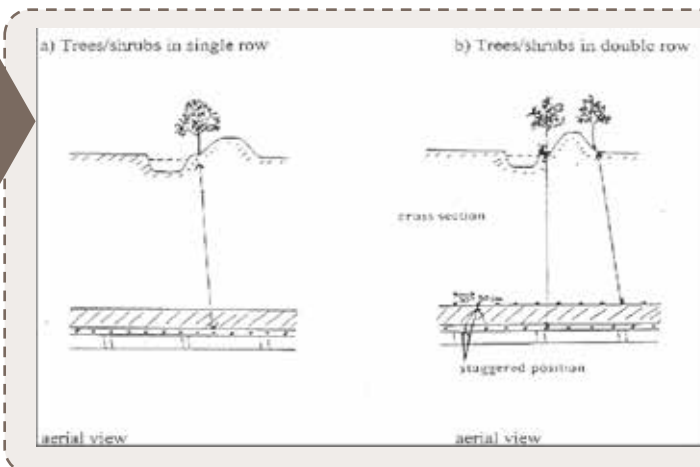
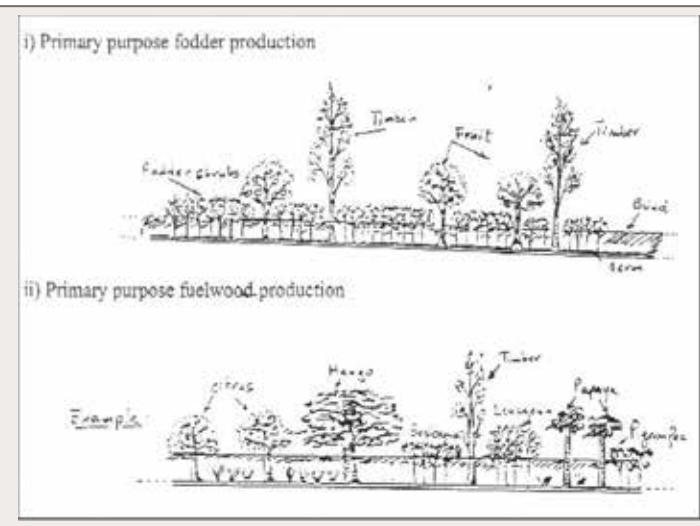
Design standards

Work Norm for STB:
Not applicable (country specific & based on planting density)

Limitations & environmental risks:

- . Need significant vegetative materials – conditional to control grazing
- . Low/no env. risks (may propagate encroaching species into cropped fields)

STB in pictures:
① Soil bund with fodder shrubs and local grasses



21. INFILTRATION PITS (IFP)

A percolation pit is a structure, constructed on any marginal land with pervious soil, with the following objectives: 1) Recharge the ground water; 2) Enhance biomass production through improved water availability into the soil profile; and 3) Reduce runoff and subsequently erosion and land degradation. Spacing between two pits shall be about 50 meter. Silt deposited in the pit prevents water from percolation. Thus, it has to be removed 3 to 4 times during the rainy season.

Work norm for standard IFP:

- 1 m³ /Person/day for the first 1m depth; 0.5 m³ /PD thereafter.
 - Gravel and stone collection 0.5 m³ /Person/day
- The work norm involves digging, disposing of spoil, excavation of diversion canal, filling of stones.

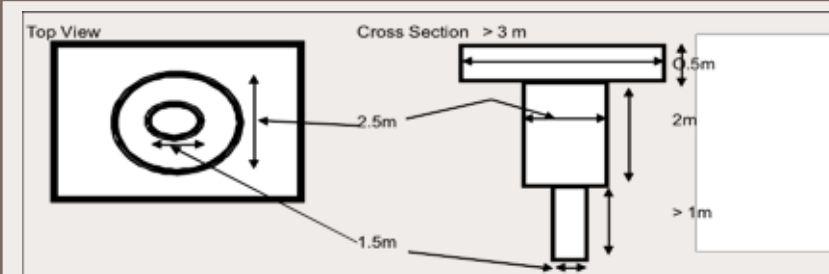
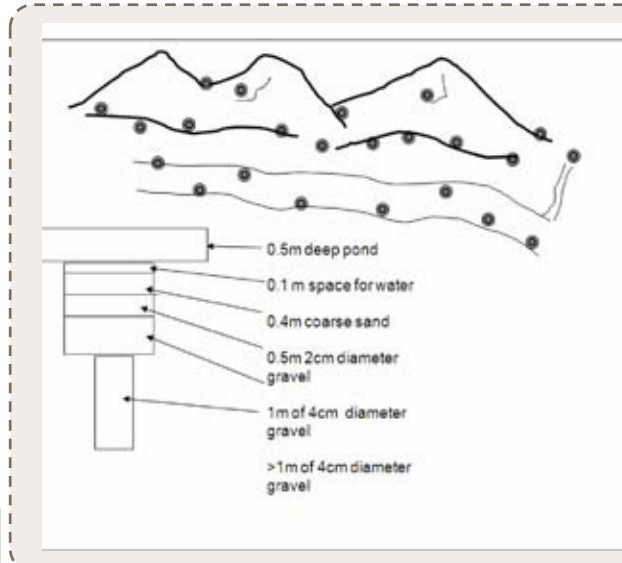
Design standards

Limitations & environmental risks:

- . Engineering capacity required
- . Availability of stones
- . Maintenance (silt removal)
- . Low/no env. risks

IFPs in pictures

- ① Excavation
- ② Filling with large stones
- ③ Filter construction



Systems to control runoff and recharge water tables

Percolation pits could be constructed in a wide range of conditions; (1) at any marginal land (2) at outlets of cutoff drains/water ways (3) at abandoned quarries and depressions. There should be ample runoff that is free from pollution.

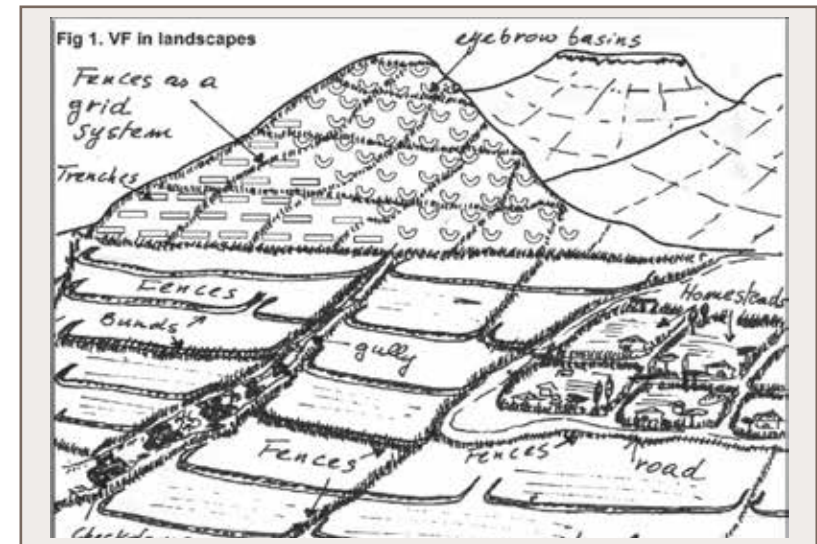
- 1) Excavate a 50 cm deep pond of any shape with either sides ranging from 2.5 to 10 meter.
- 2) Inside the 0.5m pond, excavate a pit with a diameter of 2.5m and depth of 2 m.
- 3) Inside the pit excavate another pit with a dia. of 1.5m to a minimum depth of 1m or more.
- 4) The upper most portion of the pit is covered with an artificial filter to prevent suspended materials from entering in to the aquifer with recharged water.

The filter consists of 0.4m thick coarse sand, 0.5 m thick gravel (diameter 20mm) and stones 40 mm size starting from 1m below the surface up to the bottom end.



22. VEGETATIVE FENCING (VF)

- Vegetative fencing (VF) is a conservation practice which consists of a combination of vegetative planting materials resistant to cattle grazing planted in rows and with grass/legume plant species sowed behind these rows.
- Used to protect and enrich reclaimed areas like closures and gullies, farm boundaries and specific community assets like ponds. By doing so it also helps controlling runoff and erosion. It is the "first level of defence" against animal interference that allows other valuable trees to be planted after the fence is established.
- VF can be exercised as a "grid system" for community areas shared amongst households, like closures and gullies. VF is also recommended along group of farm boundaries and to divide grazing land areas into controlled grazing paddocks. Suitable also around community ponds combined with planting of trees belts behind the VF.



Limitations & environmental risks:

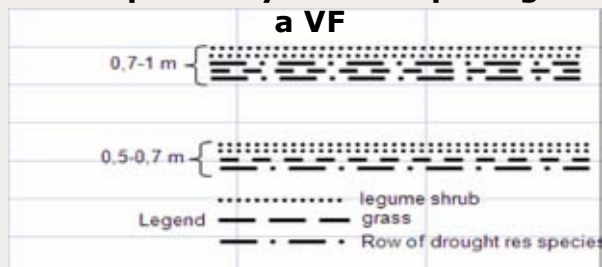
- . Need vegetative materials + Control grazing
- . Low/no enviro. risks.

Design standards

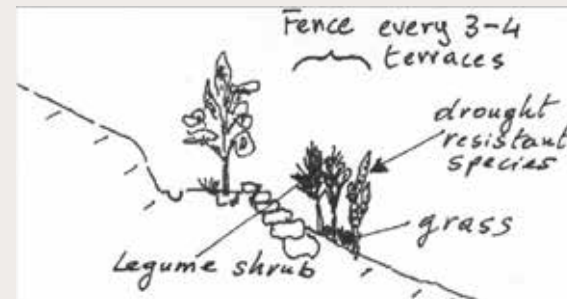
Work norm for standard VF:
40 person days/km

VF in pictures
① VF with trees and shrubs
② Aerial view of homestead green grids (Ethiopia)

Example of layout and spacing of a VF



VF made 2 rows of species planted staggered such as Euphorbia candelabra (tall Euphorbia) and finger Euphorbia, Erithrina, Aloe, Sisal and other grazing resistant plants. Spacing of plants in main fence: 50 cm between rows and 20 cm within row, possibly using a combination of the above species. Single row also possible - plants 10-20 cm or very close apart based upon local knowledge (necessary to obtain a tight and continuous vegetative fence). Plantation of grass/legumes behind the main fence: this is to further support and make the fence thicker and more productive. Direct sowing of Sesbania sp, Pigeon peas, Acacia sp, Treelucerne and local grass strips is recommended. Plant 1 line of grass as close as possible to the fence or between the two rows. Plant 1-2 rows of legume shrubs by opening a furrow of 20cm behind the fence. Can also place bananas/cash crops.



VF in degraded areas with terraces

In areas already treated with hillside terraces place single row of VF along lower part of stone raiser (see figure left). For measures like trenches, eyebrows and similar structures, place single row VF in between series of those structures based on the size of plots.



1

2

23. COMPOST MAKING (CM)

CM is commonly practiced will improve soil fertility, increase water storage within the soil profile and reduce surface runoff, thus reduce soil erosion. **It is one of the best "hidden" water harvesting methods** available (compost absorbs water 4-7 times its own weight). CM can be undertaken at very large scale and linked to area closure management and the **upgrading of terraces into "cash crop production belts"**. CM can become a business: groups of households (landless, etc.) can decide to become compost makers and provide "fertilization" services to other farmers. In terraced fields apply compost along the first 2-3 meters of cultivated land above bunds/terraces during the first year (**see Fig.4**) – then expand in following years. CM can create a re-cycling zone where soils are deeper and moisture is higher. Plant cash or high value crops along those strips.

Design/preparation:

The pit method: is recommended in (1) moisture deficit areas, (2) in very cold areas, (3) in windy areas and (4) in nurseries. Steps for CM are:

- Select the site for CM under a shelter (boundaries, trees, etc.).
- Collect organic waste, animal manure and ash (from kitchens).
- Demarcate the pit. The pits should not be more than 2 m wide, 4 m long and 1.2-1.5 m deep. Start with digging 2 pits, one next to the other as shown in **Fig. 1**. Make a drain to protect the pit from excess rains.
- Prepare compost in the 1st pit (**Fig. 2**) by making layers of:
 - Crop residues and waste of about 20 cm thick. Compact lightly and apply water (moist all layer).
 - Sprinkling of ash over the layer of plant waste: 0.5 kgs/m²/layer will be enough.
 - Apply farmyard manure (FMY): 3-5 full spade/square meter/layer.
 - Some soil should be also spread (1-2 cm) on top of each layer.
- Repeat the same procedure till you reach the top of the pit.
- To improve the aeration in the pit, bamboo or other sticks should be placed standing in the middle of the pit at every 2 m. Cover with dry grasses.
- The pit is now left for one month. During this period check the moisture and add some water to keep the pit moist, never dry or wet. Usually undertake this task once/week.
- After a month turn and mix the compost into the second pit.
- Compost ready after 3-5 months - keep under shade and covered.

The heap method (Fig. 3): not suitable in very dry or cold areas. Follow a) and b) as above pit method. The size of the heap should not be wider than 2 m and 1.5 m high, and as long as necessary. A shallow pit (30cm deep) is dug for collection of leached nutrients and moisture. Follow all the same steps from d) up to i) for the heap method. The sides of the heap can be covered or plastered with soil to some height to keep the heap warm and to avoid drying by wind.

Limitations/Env.risks/hazards: Not applicable in areas with very limited access to water. Can not expand to proper scale without proper watershed rehabilitation. Composting specific weeds may not lead to the destruction of potentially invasive species, hence the need to avoid using such plants.

Work norm for

standard CM:
Pit: 10 PD/pit
(4mL x 2mW
x1.5mD)

Heap: 1
PD/linear meter
(2mW x1.5m
Height)

Design standards

Figure 1: Dimensions of pits

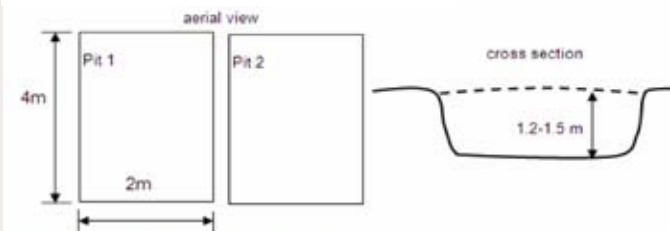


Figure 2: Cross section of pit showing layers

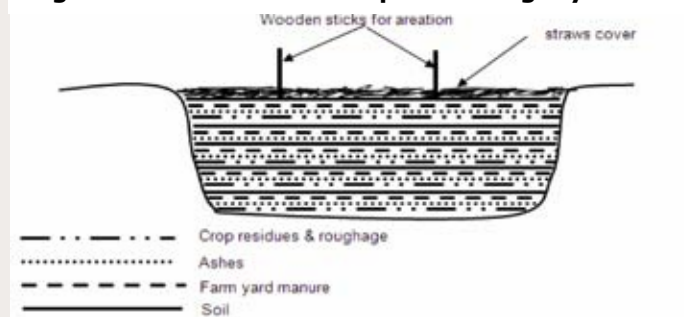
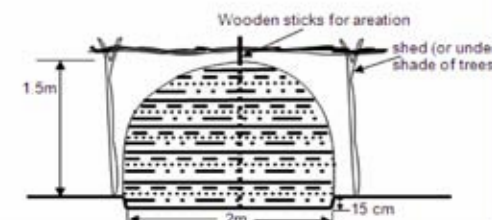


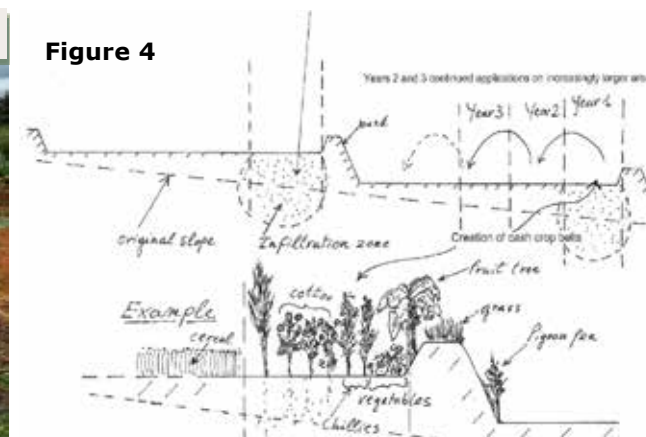
Figure 3: Cross section of compost heap



Compost heap ready to use



Figure 4



24. GRASS STRIPS (GS)



Grass strips (GS) are vegetative barriers made out of grasses planted in narrow strips of 0.5 to 1.5 meters width laid out along the contours. GS control erosion rather effectively in gentle slopes but above 5-8% slope their effect decreases. While contributing to protect soils against erosion they also provide valuable biomass meant to increase animal feed or used for different purposes (eg. roofing, etc.). GS cause less interference than other measures as they can easily be crossed by oxen and plough. Moreover, GS take out little amount of arable land. Cost of construction is much lower than physical structures. GS are suitable for cultivated land, mostly in medium and high rainfall areas. GS can be also applied in semi-arid areas with drought resistant species and often with the support of small bunds. GS can be integrated with lines of legume shrubs such as pigeon peas, Sesbania, Treelucerne and Acacia saligna planted in dense rows.

Design

Layout: GS are established along the contours on a 1m vertical interval, i.e. at 3% slope the distance apart two strips is 33 m and decrease to 7 m at 15% slope. The width varies from 0.5 m to 1 m, depending on the density of the plants in the strip, established by broadcasting or sowing/planting seeds/splits/cuttings in 2 or 3 lines. The middle row can be sown with a legume to improve the nutritive value of grasses.

Planting technique: For direct sowing a fine seedbed preparation is required. Plant seeds 0.5-1.5 cm depth (optimum for most species). Seeds are covered with a thin layer of soil and pressed hard to the soil. Before planting, seeds should be checked for germination.

For improved efficiency and rapid cover use splits and/or grass cuttings or seedlings planted in lines/rows without discontinuity. Spacing between the seedlings/splits should not be wider than 5 cm to guarantee effective grass strip. The grass clump (in nurseries) is cut at about 12 cm above the ground, then the clump is uprooted and split into pieces including 2 to 3 tillers each to ensure a good establishment (**Fig. 1**). Legume seeds planted in the middle row should be sown by using seeds. Planting should be carried out at the onset of rainfall, when the soil is not too wet or too dry. First grass harvest is after 3-4 months from establishment, before flowering and cutting grass 10-15 cm above the ground. Can be integrated with rows of legume shrubs.

**Work norm
for standard
GS:**
30 person
days/km

Design standards

Limitations & environmental risks:

- Control grazing for min 2 years
- Low/no envir. risks, e.g. erosion when not well designed and effective + wrong species selection may lead to weeds infestation into cropland.

GS in pictures

- Local grass strips between farm plots
- Phalaris grass and legumes
- Vetiver strips + legume row

Figure 1. Splitting grass from clumps

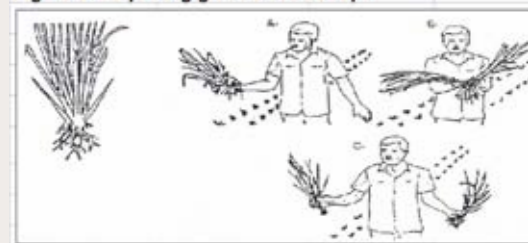
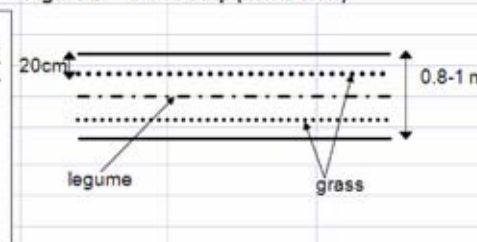


Figure 2. Grass strip (aerial view)



Type of species: should not be aggressive on adjacent crops and act as weeds. There are number of grass species that can be effective in grass strips, such as Rhodes, Andropogon, Setaria, Phalaris, Vetiver, etc. Native grasses may be more adaptable to local conditions and drought tolerant. Regarding legumes, species such as Stylo, Sirato, Desmodium, etc, are suitable for drier areas. Consult forage specialist and discuss with farmers on potential native species in each context for best species selection.



1



2



3

25. MULTI-STORY GARDENING AND HOMESTEAD PRODUCTIVITY INTENSIFICATION (HPI)

Multi-storey gardening is a way of planting a mixture of crops, shrubs and trees of different heights and different uses: food crops, cash crops, fruit trees, woody perennials, and forage plants. It makes the land more productive and improves soil fertility, reduces temperature, provides shade, and increase family income, particularly during a period of drought. The homestead productivity intensification will also include activities such as water harvesting (micro-ponds, drip irrigation, others), conservation measures, fertility enhancement (compost, farm yard manure) and others such as zero grazing and stall feeding, and fuel efficient stoves for cooking, among others. The objective is to increase and maximise the production in small spaces while conserving the environment and providing extra sources of income to poorest farmers. Multi-storey systems rely on multiple crops and responding to various market demands. Such systems drastically reduce the need to use natural forests. Highly suitable for partnered efforts (e.g. FAO, GIZ, NGOs, etc.).

Work norm for standard HPI:

constituted by a combination of tree planting and other interventions (high level of self-help contribution expected) work norms

Design standards

(see table for trees and shrubs spacing + ref to other work norms for additional HST assets)

Species	Examples	Spacing	Remark
Major cash crop	-	Closer	As normally practised or improved
Major fruit tree	Mango, avocado, coffee, orange, etc.	8-10m x 8-10m	Planted in rows
Interplanted fruit tree	Lime, guava, papaya, annona, etc.	3-4m x 3-4m 5m x 5m	Planted in rows between major fruit trees
Multi-purpose tree	Leucaena, cassia, Grevillea, etc.	4m x 4m for woody trees 0.5-1m x 0.5-1m for fodder species	Planted around the edges of the farm
Mixed species	Sesbania, pigeon pea, Napier grass, bamboo, Dovalis, Euphorbia	1.5-2m x 1.5-2m or varied as required	Planted in suitable places in the cash crop or in gaps

Limitations & environmental risks:

. None or limited to specific lack of mgt. skills and poor integration with water harv.

HPI in pictures

- ① Recently developed homestead
- ② Microponds and horticulture + trees
- ③ Cash crops (pepper) and fruit trees + beehives



1



2

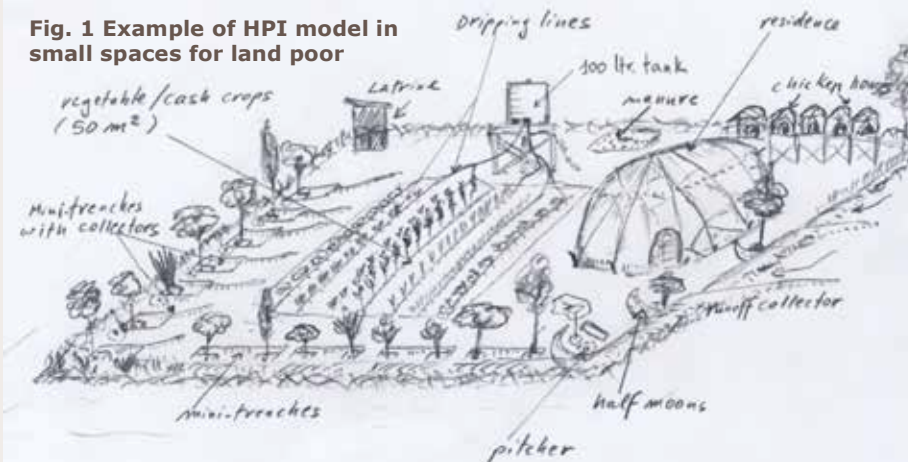


3

HPI and moisture conservation



Fig. 1 Example of HPI model in small spaces for land poor



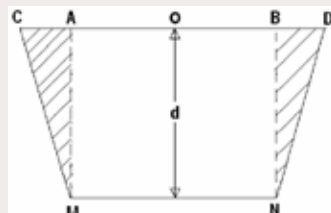
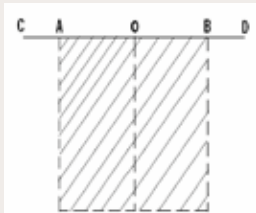
26. WATER POND (WP)

Purpose: WP store surface water for use during dry seasons for the purpose of domestic use, human consumption, irrigation or for fish production. Ponds are excavated structures (approx. 1000-10,00m³) provided with a silt trap and fenced. Ponds should be located at a point where maximum volume of water can be collected with least digging or earth fill. The catchment area should be sufficient to provide adequate runoff. Before digging a WP check through testing pits the type of soil layers. If you meet a sand layer the pond should not be constructed as percolation losses will make it ineffective.

Environmental risks/hazards: To avoid pollution, the site should be away from farm drainage and sewage lines. WP to be placed at least 250m from residences and fenced to avoid health hazards. Avoid creation puddles and shallow water to reduce malaria breeding towards end of extraction period. Filter water with cloth and boil for domestic consumption. Separate ponds for domestic and livestock uses or use cattle troughs outside pond perimeter accessible through conduits.

Construction sequence:

1. Mark the pond on the ground
2. Start digging the pond and keep the soil 3 m away from the edge of the pond
3. Consider point **O** as the center of the pond
4. If the side slopes are considered to be same in both sides, the distance of points **AC** and **BD** are equal. Similarly, distances of points **OA** and **OB** are as well equal. Start excavating or digging **AMNB** first and then shape **CAM** and **DBN** as shown above.
5. Excavate similar dimensions on the width wise direction



Design standards

Work norm for standard WP: 0.5 m³ /person day (average for all depths)

WP in pictures

- ① WP for crop irrigation
- ② WP for domestic uses and fenced
- ③ WP supporting a nursery and livestock



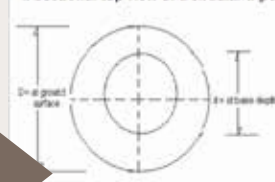
Design of circular (left) and rectangular ponds (right)

To determine the volume of water to be stored in the pond, the volume of expected water use should be calculated.

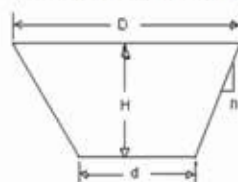
Volume of a pond is calculated based on the shape of the pond.

(a) Volume of a **circular pond** can be calculated by multiplying the average area of the pond by its depth. (1) To avoid collapsing or sliding of the sides of ponds, it should have a certain permissible side slope. (2) The volume of the sloping sides therefore should be deducted from the total volume of the pond.

i. Sectional top view of a circular pond



ii. Sectional view of a circular pond



The average area of a circular pond is calculated using the following formula

$$A_s = \frac{\pi D^2}{4} \quad A_b = \frac{\pi d^2}{4}$$

$$\pi = 22/7 = 3.1428$$

Where, A_s = Area at the surface of the pond, m²

A_b = Area at the base of the pond, m²

$$A_{av} = \frac{A_s + A_b}{2} = \frac{\pi(D^2 + d^2)}{8}$$

Where, A_{av} = Average area of the pond, m²

The average volume or capacity of a pond can be calculated by using the following formula.

$$V_{av} = A_{av} \times H = \left\{ \frac{\pi(D^2 + d^2)}{8} \right\} \times H$$

Where,

V_{av} = Volume or capacity of the pond, m³

H = Depth of the pond, m

D = Diameter of the pond at the surface, m

d = Diameter of the pond at the bed of the pond, m

(b) Volume of a **rectangular pond** can be calculated by multiplying the average area of the pond by its depth.

The surface area (A_1) and area at the bottom of the pond (A_2) is calculated as follows:

$$A_1 = W_1 \times L_1$$

$$A_2 = W_2 \times L_2$$

$$A_{av} = \frac{(A_1 + A_2)}{2} = \frac{(W_1 \times L_1) + (W_2 \times L_2)}{2}$$

Where,

A_{av} = is the average area of the rectangular pond, m²

A_1 = Area at the surface of the pond, m²

A_2 = Area at the base of the pond, m²

W_1 = Width of the pond at the surface, m

W_2 = Width of the pond at the base, m

L_1 = Length of the pond at the surface, m

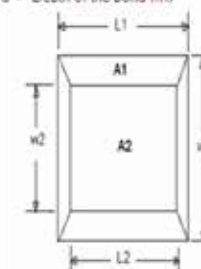
L_2 = Length of the pond at the base, m

Volume of a rectangular pond can be calculated by using the following formula.

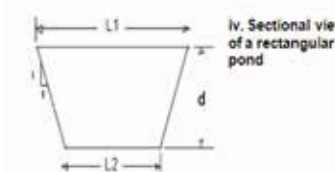
$$V_{av} = A_{av} \times d = \left\{ \frac{(W_1 \times L_1 + W_2 \times L_2)}{2} \right\} \times d$$

Where, V_{av} = average volume or capacity of the rectangular pond, m³

d = Depth of the pond (m)



iii. Sectional top view of a rectangular pond



iv. Sectional view of a rectangular pond

27. SHALLOW WELL (SW)

Purpose: Hand dug wells are used to irrigate small plots or to supply drinking water for human and livestock. Productive and reliable wells can be obtained in areas with permeable geologic formation and good potential for ground water recharge. Robust watershed rehabilitation with tree planting and moisture conservation works (trenches, etc) greatly assists in recharging depleted water tables. High yielding wells are anticipated in alluvial deposit along the main watercourse. Areas with highly fractured geologic formation are also suitable for shallow wells. The well site should have to be on a relatively high spot to prevent surface water from entering in to the well.

Environmental risks/hazards: SW can be hazardous for people, including during construction (slides) and during water extraction, especially if not fenced. Can also breed malaria and other vectors. Shading and fencing of shallow wells is required near homesteads. Awareness creation on possible accidents required, including for children.

Work norm for standard SW:

Includes digging, disposing of spoil, lining, etc

. Soil excavation 1 m³ / Person day for the first 1m depth; 0.5 m³ /PD thereafter.

. Stone Excavation 3PD/0.3m³

. Gravel and stone collection 0.5 m³ / Person day

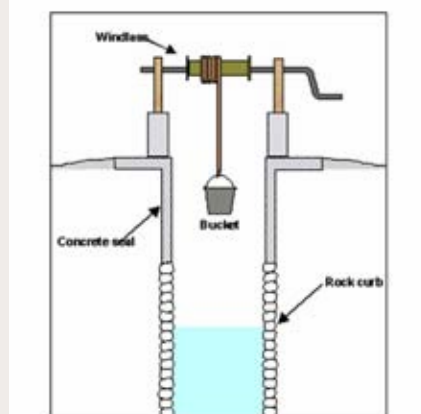
Design

Layout: It should be at least 30 meters from a stream or open water hole. Water is usually found 3-10 meters max deep.

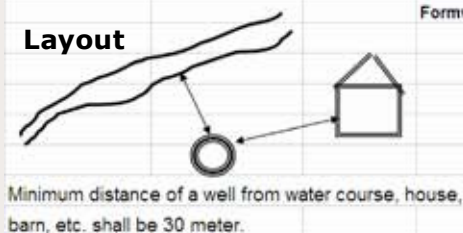
Work: Hand-dug wells should be dug during the dry season when the water table is likely to be at or near its lowest point. In hard formation, the diameter of open wells could be 1.5 - 3 meters. In unstable soils, the diameter could be wider (5 - 7m) at the top and 1.5 m starting from the point where hard/stable formation is encountered. Once the water-bearing layer is reached, it should be dug in as far as possible. Digging a well in an unstable formation requires either:

a. Supporting the sides of the well and prevent them from collapsing, or b. Increasing the diameter of the well by as much as twice the depth of the well.

Water lifting: mostly by windlass hand, traditional systems or treadle pump – SW need also to be protected for safety purposes.



Layout



Formwork to line wells in unstable formation



Lining is required if the side walls are unstable. Minimum Spacing between two wells shall be about 50m to avoid overexploitation of the ground water. SW is recommended for irrigation of small plots and not to be directly used for human consumption. The sides of an unlined well may collapse when wet if adequate slope and protection is not provided.

Design standards

SW in pictures

- ① Stone lined and earth SWs
- ② Stone lined WS and treadle pump
- ③ Traditional "shadouf" lifting device



28. PERCOLATION POND (PRP)

Purpose: A percolation pond is a structure, constructed on any marginal land with pervious soil, with the following objectives:

1. Recharge the ground water
2. Enhance biomass production through improved moisture in the soil profile.
3. Reduce runoff and subsequently erosion and land degradation.

Can be constructed on any topography with adequate runoff, and should be considered only as an element of an integrated watershed development.

Limitations/Environmental risks/hazards: PRP only work when integrated with watershed rehabilitation. Potential risks related to the rapid siltation of structures, and potential breeding of diseases vectors. The latter is limited as percolation ponds do not harbor water for long periods.

Design

Layout and construction: Place at break of slopes along (1) at any marginal land; (2) at outlets of cutoff drains/water ways; and (3) around depressions. There should be ample runoff that is free from pollution.

The pond can be trapezoidal or take the shape of the available land. Mark the top and bottom edges by pegs. Dig vertically following the mark of the bottom edge. Then trim the earth to join the bottom and top edges.

Percolation ponds shall not be excavated under the following conditions: 1) Little or no runoff; 2) Weathered limestone/alkaline soils - as it would increase PH of the water; 3) Catchment with high concentration of manure or animal wastes - as it would increase the nitrate content of the groundwater; 4) Close to deep gorges - as the recharged water becomes easily unavailable; 5) Clay or impermeable geological formation - as it does not allow fast percolation of water.

Work norm for standard PRP:
1 m³ / Personday for the first 1m depth; 0.5 m³ / PD thereafter. Work norm involves digging, disposing of spoil, excavation of diversion canal and at a later stage removal of silt deposition.

Design standards

PRP in pictures

- ① PRP stone lined for > stability
- ② PRP at the foot of a catchment
- ③ PRC in stable soils

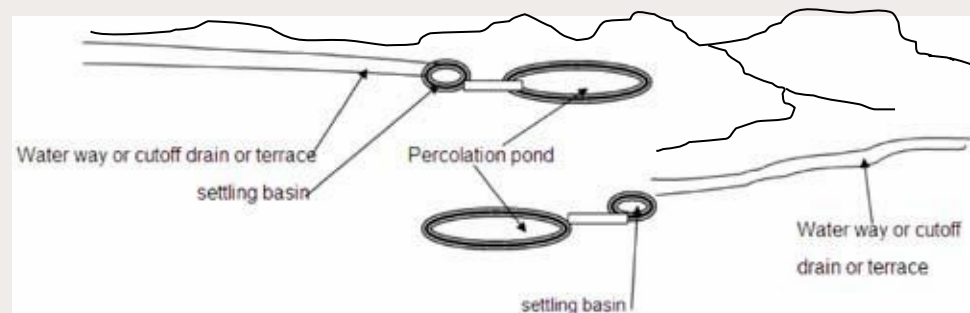


Fig 1 Cutoff drains linked to percolation ponds



29. LARGE HALF MOONS (LHM) FOR CROP AND FODDER PRODUCTION

LHM is a rainfall multiplier system that allows cultivation of crops in low rainfall areas. It is applied in areas with sandy and sandy loamy soils affected by low fertility levels and thin surface crusts that inhibit infiltration and increase runoff. Large half moons are suitable structures to enable cultivation of drought resistant crops in areas with very low rainfall. They intercept all runoff and stop erosion. It is also a measure suitable for rangelands and degraded grazing lands in dry areas (forage crops). This technology is also applied in dry areas (below 600 mm rainfall) for the cultivation of food and/or forage crops in previously abandoned terrains with gentle or almost flat slopes. These areas are common in pastoral and agro-pastoral setups and can be reclaimed using these and other similar techniques (e.g. stone-faced bunds using runoff-runon systems).

LHM planted with millet

1

Layout and Design:

. LHM structures are semi-circular bunds 5 -15 meters large, 50-75 cm high and with a decreasing height at their tips to evacuate excess water although soils are often permeable enough. Slopes should not exceed 5% and soil depth should be not less than 30-50 cm.

. The runon-runoff ratio should be 1:1 to max 1:3 as more runoff can break the embankment. This means a 5 meter diameter half moon (has 2.5 meters width of cultivated area) will be distant from the next one 5 meters; with 1: 1 ratio (see figure 2), 7.5 m with 1:2 ratio and 10 m with 1:3 ratio. Bund can be reinforced with stones (see photo 2)

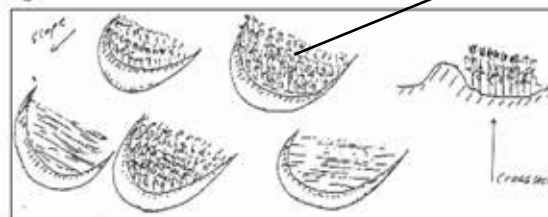
. Half-moons can be placed one attached to the other (1:1 ratio) as a continuous system. However, the drier the area the higher the ratio between runoff-runon areas.

. Low moisture demanding crops should be planted such as millet and specific varieties of sorghum. Pulses such as specific drought resistant varieties of beans but also chick peas can be used.

. Half-moons can also be planted with pure stands of pigeon peas and other fodder crops mixed with grasses (see ley pasture infotech).

. Can be integrated with tree planting on bunds. They need control grazing and regular maintenance.

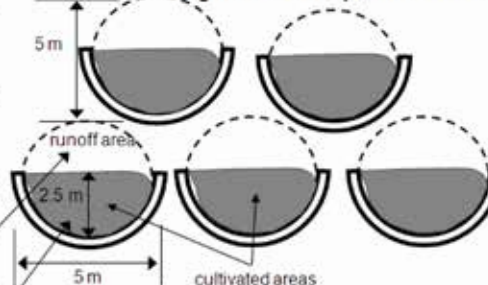
Figure 1. Half moons structures



2



Figure 2. Example of 1: 1 ratio



Work norm for standard LHM:
15person day/100m of bunds

Limitations & environmental risks:

- . Limited water collection capacity
- . Low env. risks, e.g. may lead to series of breakages/erosion without proper layout

Design standards

LHM in pictures

① LHM with crops

② LHM 1:1 CA/C ratio and with stone lines

30. TIE RIDGES (TR) AND INTERROW WATER HARVESTING

. Tie ridges are small rectangular series of basins formed within the furrow of cultivated fields, mainly to increase surface storage and to allow more time for rainfall to infiltrate the soil. Making tied ridges manually is time and labour consuming. Suitable mostly in semi-arid and medium rainfall areas with deep soils and gentle slopes. Commonly practiced in dry areas for the cultivation of annual crops.

Design

Tie ridges: Height of the tie ridge can be 15-20 cm within a furrow depth of 20-30cm.

- . Ties are placed in a staggered position along neighbouring furrows.
- . Row spacing and tying interval could range between 1 and 3m along furrows and up to 10 m in inter-row runoff farming.
- . The cross-ties are usually lower than the ridge so that if overflow, runoff will be along each ridge and not down the slope. TR are more appropriate with row crops (such as maize, sorghum, beans, etc). TR are often practiced between terraced fields to maximize water distribution within plots. Manuring and mulching to decrease evaporation and enhance growth are also needed.

Inter-row farming: In case of inter-row runoff farming (see below) ties are placed at larger regular intervals, depending on distance of trees/shrubs planted (less commonly used for crops).

Design standards

RWH constructed by tie-ridger (level), Zimbabwe



Interrow Runoff Farming

CONSTRUCTION :

- (by hand), rollers or tractors

ADVANTAGES :

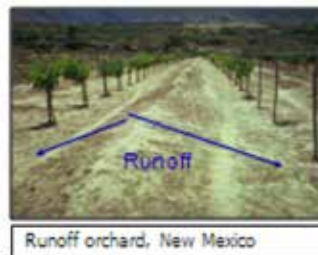
- can be fully mechanized

LABOUR DEMAND :

- high (if manually implemented)

DISADVANTAGES :

- high rainfall intensities may cause erosion on the cropped strips



Work norm for standard TR:

- . TR is usually an activity to be performed as a normal cultivation practice. TR has to be done by hand it will take 20 person days per ha on average.
- . Inter-row farming (left) requires greater labour inputs as bunds need to be reshaped and conditioned (compacted) – often using machinery.

Limitations & environmental risks:

- . Labour intensive – only in terraced or flat/very gently slopes
- . Low/no env. risks except poor layout may lead to breakages/erosion

TR in pictures

① TR in between stone terraces

② TR with planted crops

1



2

31. ZAI PITS (ZP)

Purpose: Zaï pits are systems of small pits dug along approximate contours which allow the cultivation of crops on degraded lands. The ZP restore degraded lands (crusted, hard, compacted and poorly structured soils), thus increasing the land available for cultivation. It is a simple technique that, amongst others, landless or oxenless can practice because it requires only manual labour. Suitable to restore degraded lands, particularly crusted and compacted gentle slopes with shallow soils (usually areas temporarily grazed, out of use, etc.). ZP can assist rehabilitate degraded gentle sloping lands near gully sides and to make productive small plateaus on top of degraded hillsides.

Limitations/Env risks: very labour intensive. Low env. risks except breakages along zai lines may create erosion. Hence ZP are best placed in between soil/stone bunds.

Layout, Dimensions and Construction phases (example Sahel cycle):

→ Start from the top of the field. The zaï are series of pits dug following approximate contours. However, for better orientation mark few contour lines at regular intervals of 1m with the line level. Construction starts after the rainy season, by the end of October - November (1st cycle) when some residual moisture facilitates the workability of the soil. Use hoe, pick axe, shovel and occasionally crow bars to dig the pits. Start by digging the first line of pits following approximate contours between the marked contour lines. The pit may have various sizes, 30-50cm diameter x 15-20cm deep. Spacing apart 2 zaï pits within each line is 30-50cm. Pile the excavated soil downwards. Proceed downwards the slope and dig the second line of zaï & pits staggered against the first line. Spacing between the zaï & pit lines is 60-75cm.

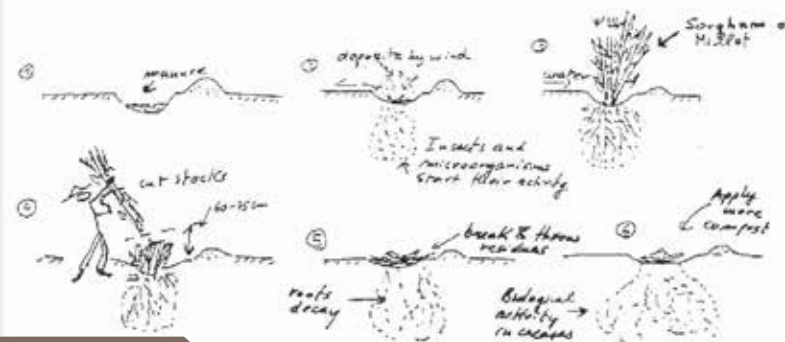
→ After construction, apply one full spade of farm yard manure (FYM) or compost to each pit. During the dry season, the wind will bring leaves and residues into the pits. Different micro-organisms, ants or termites will recycle organic matter up and down into the soil profile, improving the structure.

→ After the first rains, zaï pits are sown with sorghum or millet (first season). Soil moisture in ZP further improves the biological life and conditioning of the soil structure. At the end of the growing season, sorghum & millet stocks are harvested by cutting them 60-90cm high from the ground level. The remaining stock is manually broken and thrown into the pit. During the second dry season the stalks will be decomposed and pulverized by the insects and other organisms.

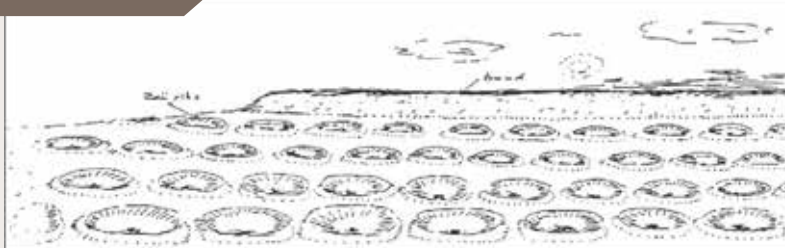
→ During the 2nd dry season, a second round of zaï pits can be dug in between the first year lines following the same procedures as above (2nd cycle). During the 2nd rainy season, plant legumes inside the pits dug on the 1st cycle. The second cycle pits are sown with sorghum or millet. By the end of the 2nd rainy season, the whole area is expected to be rehabilitated.



Work norm: number of ZP/ha range from max. 33,000 to minimum 16,000 pits based upon spacing and size. The work norm is 50 pits/day.



Design standards



ZP are better placed between soil/stone bunds to > stability

1st CYCLE

Oct-Nov

Dig Zaï
Apply
manure &
compost
into pits

Nov-Dec

Sowing
sorghum
millet

2nd CYCLE

June-Aug

Harvest
+
stalks mulched
into pits

Oct-Dec

Dig zaï
between
lines

Nov-Jan

Apply
compost &
manure

Jan

Sowing
sorghum
millet

June-Aug

Harvest
+
stalks mulched
into second line pits

Oct-Dec

32. CUTOFF DRAINS (COD)

A cut-off drain is a graded channel constructed to intercept and divert the surface runoff from higher ground/slopes and protect downstream cultivated land or village. This safely diverts the runoff to a waterway, river, gully, pond, etc. COD are integrated with waterways and flood protection efforts, including initial stages of reforestation/re-vegetation of degraded lands.

Design: The first step is to estimate a probable maximum rate of surface run-off to design a channel or ditch which will carry this amount.

Step 1: For a given area, compute the **peak discharge rate Q_{pt}** by multiplying the corresponding Q_p (m³/sec/ha) taken from Table 1 by the catchment area (Ca). $Q_{pt} = Q_p \times Ca$

Step 2: Compute the required flow cross sectional area (A) using the corresponding **maximum permissible velocity (V)**. $A = Q_{pt}/V$

Step 3: Shape of the channel. Trapezoidal or Parabolic is recommended.

Step 4: Use Depth from Table 1/A using V and Channel gradient. Gradient: 1-10ha = 0.8-1%; 10-30ha = 0.5%; 30-50ha = 0.25%

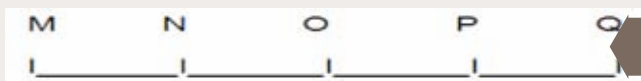
Step 5: Find the channel discharge per unit of depth using Table 1/B attached. Then find top width of the cut-off drain. For trapezoidal and parabolic cross-section: runoff from the catchment divided by Discharge from the cut-off drain (table 1/B).

Layout: Make graded contour and put pegs at an interval of 10 meters. Use this as the center of the channel to be excavated.

- Take additional pegs and string. **O** indicates the central peg. The other four pegs indicate the top dimension of the channel.

NO + OP = Bottom depth - and - **MNOPQ** = Top Width

- Construction starts digging out NRSP first and then shaping the channel by digging **MNR** and **PQS**



Design

WORK NORM (Volume): 0.7 Meter cubes (M3)/Person Day

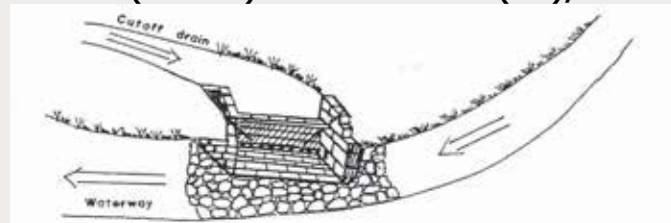
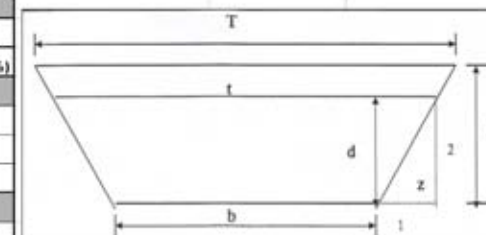


Table 1. Values of Runoff Coefficient

Land Use/Cover	Runoff Coefficient		
	Slope (0-5%)	Slope (5-10%)	Slope (10-30%)
CULTIVATED LAND			
Open Sandy loam	0.25-0.30	0.4	0.52
Clay and silt loam	0.5	0.6	0.72
Tight Clay	0.6	0.7	0.82
PASTURES			
Dense cover	0.1	0.16	0.22
Medium cover	0.3	0.36	0.42
Open pastures	0.4	0.55	0.6
FOREST/WOODLAND			
Dense cover	0.1	0.25	0.3
Medium cover	0.3	0.35	0.5
Scattered	0.4	0.5	0.6



$$\text{Cross Section Area (A)} = bd + Zd^2$$

$$\text{Wetted Perimeter (P)} = b + 2d\sqrt{Z^2 + 1}$$

$$\text{Hydraulic Radius (R)} = A/P = \frac{bd + Zd^2}{b + 2d\sqrt{Z^2 + 1}}$$

Table 2/A: Depth of a channel in meters

Channel Slope	Maximum allowable velocity (m/sec)					
% Slope	0.6	0.9	1.2	1.5	1.8	2.1
1					0.4	0.5
0.5				0.5	0.7	0.9
0.25	0.3	0.4	0.6	0.9		

Table 2/B: Discharge in m³/sec/meter width

Depth of Channel	Slope (%)		
	0.8-1	0.5	0.25
0.3	0.6	0.4	0.25
0.4	0.9	0.65	0.45
0.5	1.3	0.95	0.65
0.6	1.8	1.3	0.95
0.7	2.25	1.7	1.2
0.8	2.8	2.15	1.5
0.9	3.4	2.65	1.8

Example: Find the size of a channel (cut-off drain) to be constructed at the foot on a hilly grassland with 20% slope. Soils of the catchment are clay. The runoff area is 6 ha. The grassland has medium cover.

Step 1: Find the corresponding run-off using rational method (table 1):

$Q = K IA/36$, where Q = the peak run-off rate (m³/sec); K = the run-off coefficient; I = the rainfall intensity (cm/hour); A = the runoff producing area. Thus, $K = 0.82$, $I = 15\text{cm/hr}$, $A = 6\text{ ha}$, then $Q = 0.82 \times 15 \times 6\text{ ha}/36 = 2.05\text{m}^3/\text{sec}$.

Step 2: Find the maximum allowable velocity using table 2/A above. In this case, Velocity = 1.8 m/sec for clay surface.

Step 3: Determine the gradient and depth of channel. For a catchment of 6 ha, a 1% slope selected.

Following this determine channel depth from table 2/A against 1.8 velocity and 1% slope, which is = 0.4 m.

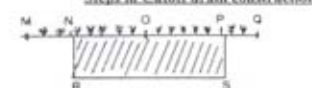
Step 4: Find channel discharge rate per unit width from Table 2/B. Accordingly, for gradient of 1% and depth 0.4, the discharge is 0.9m³/sec.

Find the top width of the cutoff drain by dividing the catchment run-off by the channel discharge rate per unit width = $1.6/0.9 = 1.8\text{ m}$

Limitations & environmental risks:

- Basic water engineering skills required
- Regular maintenance needed
- Medium/high enviro. risks (can generate silt if poorly designed or maintained)

Steps in Cutoff drain construction



Shape the channel by digging MNR & PQS

33. Diversion/Water Spreading Weir (DW) Design and Construction

A DW is a water spreading structure constructed across a stream to raise the water level and to divert the water flow to the required direction. When a river has an adequate and assured flow, storage is NOT necessary. Diversion weirs are overflow weirs where spillways are constructed as part of the main structure. To divert stream flow for use during dry seasons for the purpose of small scale irrigation and for any

Design:

Site selection: A river where a dam can be constructed at a narrow pass is a good example. Site selection depend from catchment area water runoff and river flow.

A suitable site for river diversion are: (1) minimum length of the main supply canal to the irrigation areas; (2) a preferable location immediately down stream by a river bend where there are stable banks; (3) must be a room for a desiltation basin; (4) geological properties of the river bottom and the bank must have sufficient bearing capacity and low permeability; (5) topography of the upstream river valley should allow the damming up of backwater; (6) required hydraulic head for the gravity flow between the off take at the weir and the irrigation area below. In very flat valleys, the minimum required head may not be available, and pumping may have to be resorted.

Work norm for DW: The worknorm includes surface clearing, leveling, removing of foundation materials, stone masonry works, stone collection, backfilling and offtake structure and other excavation works. Skilled masons are needed for masonry works. Each work norm element to be estimated based on standard requirements used for engineering structures.



Limitations & environmental risks:

- Engineering skills essential
- Low env. risks related to stability of structure and irrigation capacity.

Required parameters for design and construction

The required parameters that should be considered in the design and construction of a diversion weir are:

1. Peak discharge (using the Triangular hydrograph)
2. Length of the weir (using the Broad-crested formula)
3. Length of the apron (using the Bligh's formula)
4. Spillway section
5. Construction materials required

Design formulae: Peak discharge can be calculated by using several design formulae. The total discharge over the spillway can be calculated by using the Broad Crested Weir Formula, or Triangular Hydrograph Concept.

$$q = CLH^{3/2} \Rightarrow L = \frac{q}{CH^{3/2}} \quad (1)$$

(Broad Crested Weir Formula)

Where;

- q = Total discharge through the weir in m³/sec
- C = Coefficient of discharge (and C=1.6-1.8 for Broad Crested Weir Formula);
- L = Effective length of the weir crest in m;
- H = Head above the crest in m.

Peak discharge of the stream can be calculated by using Triangular Hydrograph Concept.

$$q_p = \frac{0.749 QA}{T_p} \quad (\text{Triangular Hydrograph Concept}) \quad (2)$$

Where;

- q_p = peak discharge in m³/sec
- Q = Depth of runoff in m;
- A = Discharge area in m²
- T_p = time from start of rise of runoff to peak rate in minutes.

The time from the start of rise of runoff to peak rate can be calculated by using the following formula:

$$T_p = \frac{D}{2} + 0.6 T_c = 0.6 T_c + \sqrt{T_c} \quad (3)$$

Where, T_p = time from start of rise of runoff to peak rate in minute.

D = rainfall excess period in hours

T_c = Time of concentration in hours

L = Length of stream in km (see Fig 1)

H = Elevation difference between the upper extreme end and the weir site in m (see Fig 1).

Time of concentration (T_c) can be calculated by using the following formula:

$$T_c = \frac{(0.87 L^{0.385})}{H} \quad (4)$$

Fig 1. Catchments area for water harvesting



Fig 2. Front view of a stream diversion

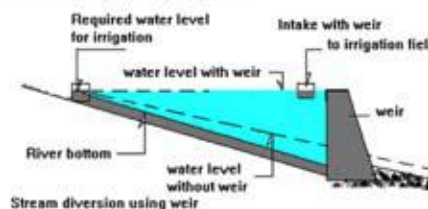
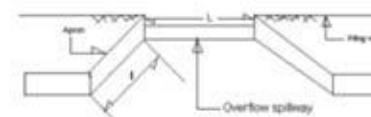


Fig 3. Front view of overflow spillway



$$l = 2.2 C_b \sqrt{\frac{h}{13}} = 0.61 C_b \sqrt{h} \quad (5)$$

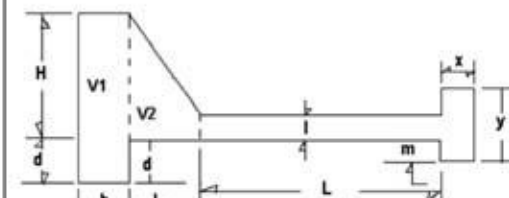
C_b = Bligh's constant.

h = height from apron to weir crest.

The value of C_b depends on the type of foundation material. For different types of soils, the following C_b values can be used.

- For the sand and muddy soil, C_b = 18
- For fine sand soil, C_b = 15
- For coarse sand, C_b = 12
- For gravelly sand, C_b = 9
- For clay soil, C_b = 4 - 6.

Fig 4. Sectional view of the weir



Under Development

Annexes to Chapter 5

Food Assistance for Assets (FFA)
for Zero Hunger and Resilient Livelihoods



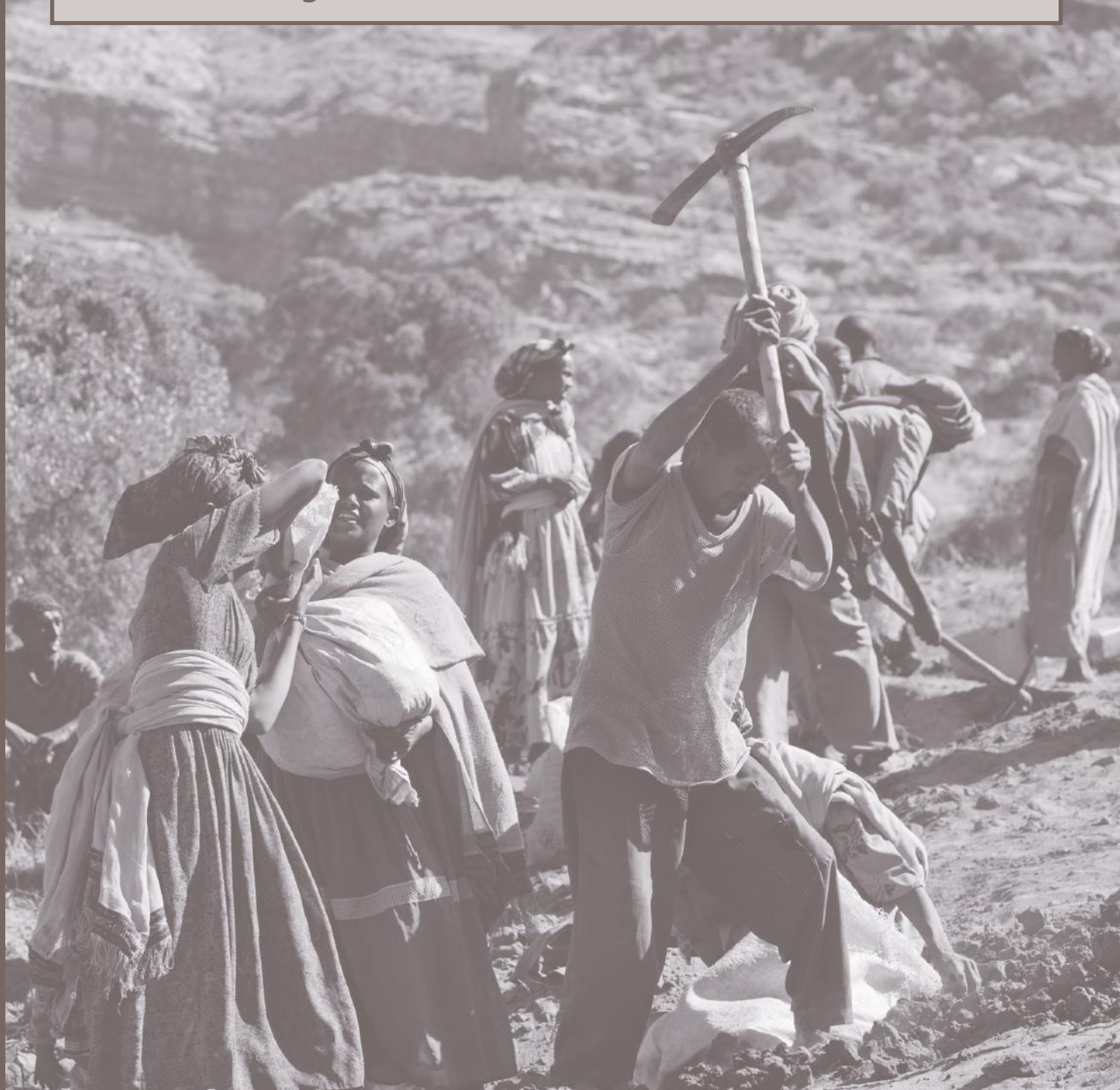
World Food Programme

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Under Development

Annexes to Chapter 6

Food Assistance for Assets (FFA)
for Zero Hunger and Resilient Livelihoods



World Food Programme

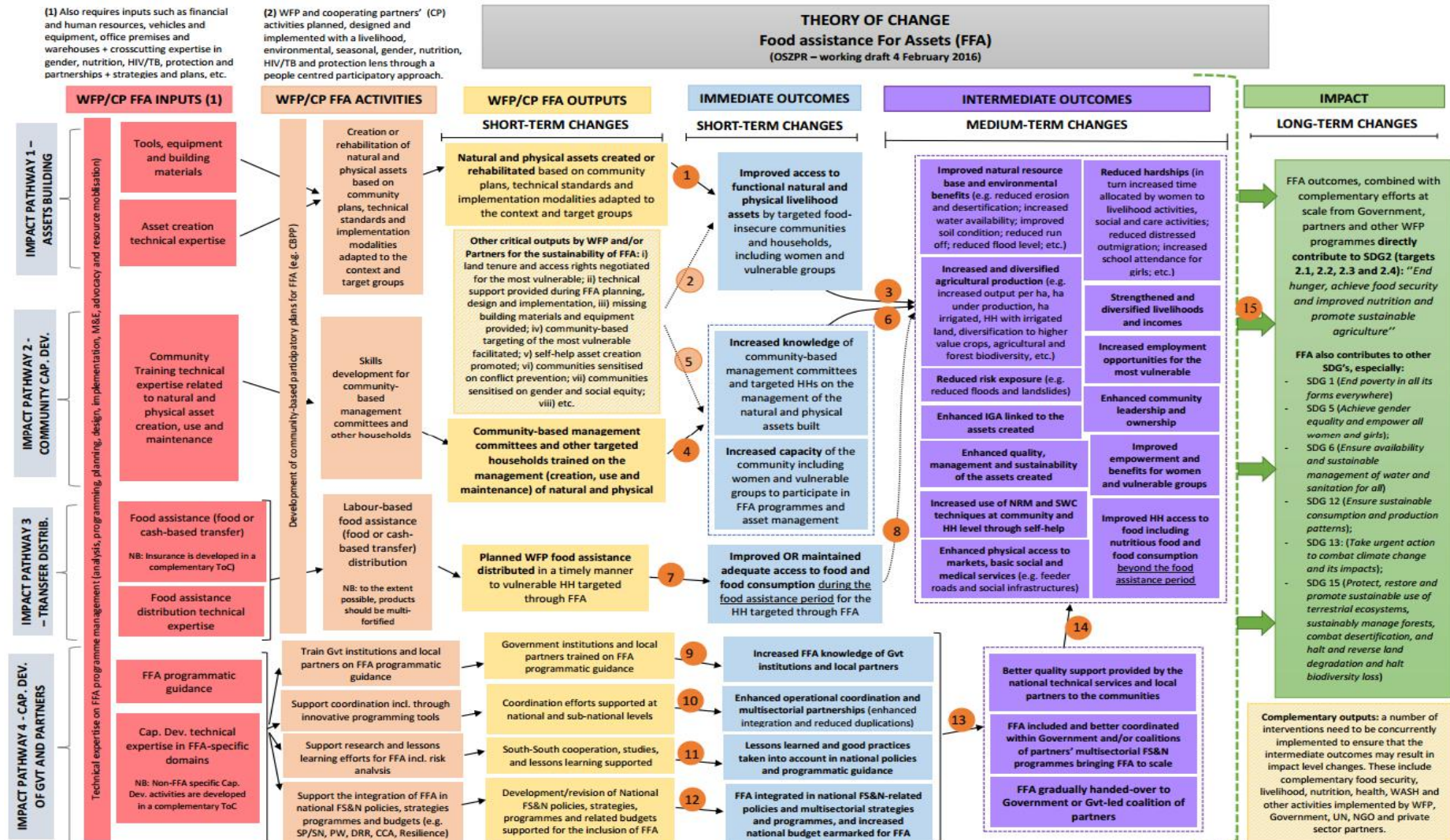
Annexes to Chapter 7

Food Assistance for Assets (FFA) for Zero Hunger and Resilient Livelihoods



ANNEXES TO CHAPTER 7

ANNEX 7a: Theory of Change (ToC)



#	EXPLANATION OF THE CAUSAL LINKAGE	UNDERLYING ASSUMPTIONS & RISKS	STRENGTH OF THE AVAILABLE EVIDENCE
Impact pathway 1 (TRANSFER-BASED ASSET CREATION)			
1	The creation and rehabilitation of community and/or household livelihood assets leads to an increased asset base and consequently to an improved access to livelihood assets by community members including women and vulnerable groups (NB: vulnerable groups may represent PLHIV and TB patients; disabled people; elderly; etc.)	<p>A clear FFA strategy and positioning is available. FFA programme was designed taking into account the context (e.g. recurrence and type of shocks; livelihoods; seasonality; etc.) and the specific strategic priorities it aims to address e.g. early recovery, DRR, resilience, SN/SP, CCA, etc.</p> <p>Contextual constraints (including land degradation; eventual disruption of social fabric by violent and/or long-standing conflict; recurrent disasters; often with incomplete funding and resources, including technical assistance; etc.) was well taken into account when positioning and designing the FFA programme, including the setting of realistic objectives with Gvt and partners.</p> <p>FFA activities were designed based on a people-centred approach.</p> <p>Physical and natural assets were prioritised through a community-based participatory planning approach including livelihood, seasonal, natural environment, gender* , nutritional** and protection*** lenses, making the assets highly relevant to the targeted community/HH and addressing the root causes of food insecurity and nutrition in the local context:</p> <p>*Gender lens includes FFA activities designed with a clear gender objective; gender-sensitive FFA modalities (e.g. work norms; adapted tools and equipment; timing of implementation; women's participation in all stages of design and implementation of the FFA activity; key role for women in management committees; lessons learned and results analysed by gender); prioritise and build assets that contribute to reduce women's hardship, help strengthen and diversify their livelihoods to increase their incomes and empowerment (social, economic, political) on an intermediate and long term basis.</p> <p>**Nutrition lens. There are obviously different causality channels which – when combined together in ways that are context-specific – can ensure that FFA programmes are contributing to improved nutrition:</p> <ul style="list-style-type: none"> - By providing a food or cash-based transfer during the period of the year for which a food gap has been 	Clearly evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators

		<p>identified. For instance, the provision of a transfer during the lean season or an early recovery phase contributes to maintaining nutrition levels over the short-term (by avoiding negative food coping strategies) and longer-term (by avoiding negative livelihood coping strategies).</p> <ul style="list-style-type: none"> - By enhancing the availability and diversity of food produced and consumed locally. This can include land reclamation for enhanced agricultural or pastoral production (grazing land), water harvesting techniques for agricultural or pastoral purposes, reforestation with trees producing nutritious fruits/leaves, backyard or collective gardens, or trainings on asset management (creation, maintenance, utilization), etc. - By strengthening and diversifying livelihoods and incomes, which can be used for covering various expenditures having a direct or indirect positive effect on nutrition – including but not limited to expenses on nutritious food, clean drinking water, better cooking equipment, education or health services. Examples are the same as above (since food production can be monetized), but may also include other activities such as the construction of access infrastructure (feeder roads, etc.), or trainings on the strengthening and diversification of livelihoods that rely on the community's natural and physical assets base. - By protecting livelihoods from shocks, and thus maintaining local food production and/or income in risk prone areas. This may be achieved through the stabilization of fragile landscapes or the raising of embankments that can protect crops and other livelihoods from landslides or floods, but also water harvesting techniques that can allow communities to better deal with droughts. Rehabilitated watersheds can also increase the rate of recharge of the aquifer in drought-prone areas. - By reducing hardships, and in turn increase the time allocated by women to livelihood activities, social and care activities. This may include reforestation schemes with woodlots close to villages, backyard gardens that 	
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		<p>minimize the distance to the field, water points for human consumption which, for example, help reducing the time needed by women and young girls to collect water and firewood.</p> <ul style="list-style-type: none"> - By improving physical access to basic social, WASH or health services. Examples such as the construction of feeder roads or of other small infrastructure like water points suitable for human consumption belong to this causality channel. - By integrating FFA interventions with other nutrition-specific and nutrition-sensitive activities, including behavioural change communication (BCC) targeting both men and women. BCC is a critical element that is frequently required to complement those FFA interventions aiming for a nutrition outcome. It may be focused on nutrition messaging specifically, or on improving other behavioural practises related to the basic and underlying causes of undernutrition (water and sanitation, gender, health, education, etc.). - By ensuring that FFA processes are used to promote women's socioeconomic empowerment in a way that can enhance their ability to make informed decisions with regards to livelihoods strategies and care practices (both being ultimately correlated to better nutrition). Examples can include the setting up of trained women committees that can engage in the local governance system and influence decision-making, or the selection of assets that reflect women's specific preferences and remain under their control. <p>***Protection lens includes – to the extent possible - security and safety standards; Decent Work agenda and prevent possible compounding negative effects (especially on nutrition and health) of physical labour (e.g. work norms; ration value; safety of participants guidelines and measures; etc.); specific modalities for HH with less or no labour capacity (e.g. specific works and work norms; etc.); and Accountability to Affected Populations (e.g. strong participation of the community in the planning, design and implementation).</p>	
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		<p>In order to ensure that the most vulnerable will benefit from the assets, land tenure and other issues related to access rights for the most vulnerable, including women and vulnerable groups have been addressed at the programming/planning, design and implementation stages;</p> <p>Measures are in place to ensure that the assets built meet technical standards to produce the intended effects;</p> <p>Government and/or cooperating partners have technical capacities at central and decentralised levels especially for high-tech/high-risk assets</p> <p>Partners provide complementary inputs and/or implement complementary interventions that could not be covered by WFP (e.g. building materials and irrigation equipment, etc.) to ensure that the assets are functional;</p> <p>Communities also contribute through self-help activities (to increase the scale of the intervention; maintenance; etc.)</p> <p>Cooperating partners with relevant staffing and technical capacities to design, implement and supervise FFA activities were available;</p> <p>Ideally, predictable and flexible funding is required for WFP and partners implementing complementary interventions to ensure the implementation of multiyear interventions identified through the community-based participatory planning process and plans;</p> <p>Physical access and security: access conditions do not prevent beneficiaries from participating in the activities, and WFP and partners from undertaking necessary planning, supervision and monitoring activities.</p>	
2	Any activity/output identified as critical through the planning and design process to guarantee WFP's intended results at immediate outcome levels but that cannot be provided by WFP FFA programme, should be provided and implemented by Gvt and/or partners, or through synergies with other WFP activities.	<p>Coordination of activities is enhanced and partnerships fostered through innovative programming and planning tools e.g. SLP and CBPP to sequence, layer and integrate multisectorial complementary interventions.</p> <p>Convergence of interventions is ensured. WFP and partners intervene in the same communes and communities through a joint targeting approach.</p>	Clearly evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators
3	Different types of community and household assets can be created or rehabilitated through FFA: 1. Soil and water conservation (physical and fertility management measures, gully control, etc.)	Assets had sufficient time to mature to produce the intended intermediate outcomes, for example before the next shock occurred;	Evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators.

<p>2. Land clearing restoring agricultural potential (cutting of overgrown vegetation in abandoned and previously cultivated areas; removal of debris from agricultural areas after landslides/floods; etc.)</p> <p>3. Physical access (community access roads, bridges, trails, removal of debris, etc.)</p> <p>4. Irrigation schemes and water development for domestic, livestock and aquaculture utilization (irrigation canals; ponds; spring; shallow wells; etc.)</p> <p>5. Forestry and agroforestry development (afforestation, nurseries, seed collection, etc.)</p> <p>6. Flood control (embankment, raising grounds, cleaning canals, diversion weirs, etc.)</p> <p>7. Community and social infrastructure (latrines, schools, canteens, small grain stores, etc.)</p> <p>8. Alternative energy development (building fuel efficient stoves, etc.)</p> <p>9. Community-level food reserves (Cereal Banks and other Security food stocks at community level)</p> <p>10. Natural and physical assets management related trainings and community plans (training communities on assets technical standards and work norms; training communities on the maintenance of assets; training specific groups e.g. women, on the management of assets; developing CBPP's; etc.)</p> <p>It is expected that an improved access to assets will lead to one or more of the intended intermediate outcomes.</p> <p>The increased asset base (arrow 3) and new knowledge (arrow 6) and related outcomes and impacts, contribute to strengthen livelihoods and develop new livelihood options for the most vulnerable, incl. the development of new employment opportunities, and contribute to reach more sustainable outcomes and impacts at a higher scale</p>	<p>Thanks to the training they received, communities meet their commitments to properly manage the assets so that they remain functional and (help) produce the intended intermediate outcomes;</p> <p>No economic or security barriers to maintain the assets or to undertake self-help interventions to increase scale and impact;</p> <p>Land tenure issues and access rights have been discussed and negotiated before building the assets to ensure that the most vulnerable including women can access and benefit from the assets. Such discussions need to continue, agreements need to be extended and enforced. Partners and Government are investing in this sector;</p> <p>Complementary interventions (e.g. provision of agricultural inputs such as seeds, equipment and tools; training on agricultural technics, food storage and conservation, access to market, IGA and diversification of livelihoods; etc.) were implemented in order to capitalise on the assets built;</p> <p>Coordination of activities was ensured between WFP and partners through programming and planning tools e.g. SLP and CBPP to sequence, layer and integrate multisectorial interventions</p> <p>Follow up support is provided by decentralised technical services extension workers</p> <p>Well targeted food assistance (food or cash-based transfers), conditional or unconditional, provided at time of needs e.g. during shocks and stresses, allow to protect livelihoods, prevent abusive use of natural resources, and development gains so far</p>	<p>This requires stronger monitoring systems at CO levels. Monitoring the progress made through FFA to longer term resilience requires historical household and community data, extending a few years beyond the completion of the FFA project in question.</p>
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Impact pathway 2 (TRANSFER-BASED AND NON-TRANSFER BASED COMMUNITY CAPACITY DEVELOPMENT)			
4	<p>Trainings are context-specific and delivered in a way that they can be well understood by the targeted people and community-based management committees.</p> <p>The role of different groups and men and women in asset management are well defined and accepted by all in the community</p>	<p>Row 1 above applies here as well</p> <p>Capacity development activities are in line with the findings and priorities identified through a participatory programming and planning process (e.g. SLP and CBPP);</p> <p>No economic or security barriers to use the knowledge;</p>	Clearly evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators.
5	<p>Not all essential trainings can be provided through the WFP FFA programme. Any activity/output identified as critical through the planning and design process to guarantee WFP's intended results at immediate outcome levels but that cannot be provided by WFP FFA programme, should be provided and implemented by Gvt and/or partners, or through synergies with other WFP activities.</p>	<p>Coordination of activities is enhanced and partnerships fostered through innovative programming and planning tools e.g. SLP and CBPP to sequence, layer and integrate multisectorial complementary interventions.</p> <p>Convergence of interventions is ensured. WFP and partners intervene in the same communes and communities through a joint targeting approach.</p>	Clearly evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators.
6	<p>Knowledge is used by the targeted people:</p> <p>Targeted people and community management committees have acquired the required knowledge to manage (create, use and maintain) the assets built or restored through FFA and other skills related to Natural Resource Management (NRM), Soil and Water Conservation (SWC), Income Generating Activities (IGA) and livelihood diversification related to the assets built.</p> <p>All trainings are designed and delivered with gender and social equity, nutrition and protection lenses.</p> <p>Socio-economic and security conditions-permitting, communities are able to apply their new skills.</p> <p>Combination of new skills, adequate FFA implementation modalities (e.g. participatory planning and monitoring at community and HH level; land access rights; etc.) are contributing to improve community leadership and ownership. This is also contributing to improve empowerment and benefits for women and vulnerable groups.</p>	<p>Communities understand the advantages (e.g. economic benefits) of maintaining and properly managing the assets</p> <p>There is no major social or economic barriers to maintain/manage the assets. Any barrier has been addressed during the planning process and through complementary interventions by partners.</p> <p>Well targeted food assistance (food or cash-based transfers), conditional or unconditional, provided at time of needs e.g. during shocks and stresses, allow to tackle potential economic barriers.</p> <p>Follow up support is provided by decentralised technical services extension workers</p> <p>Benefits generated by the assets created through FFA help the targeted communities/HH to understand the added value of applying the good practices and approaches conveyed through the trainings including those related to gender and social equity and nutrition.</p>	<p>Clearly evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators.</p> <p>This requires stronger monitoring systems at CO levels. Monitoring the progress made through FFA to longer term resilience requires historical household and community data, extending a few years beyond the completion of the FFA project in question.</p>

Impact pathway 2 (TRANSFER-BASED AND NON-TRANSFER BASED COMMUNITY CAPACITY DEVELOPMENT)			
4	<p>Trainings are context-specific and delivered in a way that they can be well understood by the targeted people and community-based management committees.</p> <p>The role of different groups and men and women in asset management are well defined and accepted by all in the community</p>	<p>Row 1 above applies here as well</p> <p>Capacity development activities are in line with the findings and priorities identified through a participatory programming and planning process (e.g. SLP and CBPP);</p> <p>No economic or security barriers to use the knowledge;</p>	Clearly evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators.
5	<p>Not all essential trainings can be provided through the WFP FFA programme. Any activity/output identified as critical through the planning and design process to guarantee WFP's intended results at immediate outcome levels but that cannot be provided by WFP FFA programme, should be provided and implemented by Gvt and/or partners, or through synergies with other WFP activities.</p>	<p>Coordination of activities is enhanced and partnerships fostered through innovative programming and planning tools e.g. SLP and CBPP to sequence, layer and integrate multisectorial complementary interventions.</p> <p>Convergence of interventions is ensured. WFP and partners intervene in the same communes and communities through a joint targeting approach.</p>	Clearly evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators.
6	<p>Knowledge is used by the targeted people:</p> <p>Targeted people and community management committees have acquired the required knowledge to manage (create, use and maintain) the assets built or restored through FFA and other skills related to Natural Resource Management (NRM), Soil and Water Conservation (SWC), Income Generating Activities (IGA) and livelihood diversification related to the assets built.</p> <p>All trainings are designed and delivered with gender and social equity, nutrition and protection lenses.</p> <p>Socio-economic and security conditions-permitting, communities are able to apply their new skills.</p> <p>Combination of new skills, adequate FFA implementation modalities (e.g. participatory planning and monitoring at community and HH level; land access rights; etc.) are contributing to improve community leadership and ownership. This is also contributing to improve empowerment and benefits for women and vulnerable groups.</p>	<p>Communities understand the advantages (e.g. economic benefits) of maintaining and properly managing the assets</p> <p>There is no major social or economic barriers to maintain/manage the assets. Any barrier has been addressed during the planning process and through complementary interventions by partners.</p> <p>Well targeted food assistance (food or cash-based transfers), conditional or unconditional, provided at time of needs e.g. during shocks and stresses, allow to tackle potential economic barriers.</p> <p>Follow up support is provided by decentralised technical services extension workers</p> <p>Benefits generated by the assets created through FFA help the targeted communities/HH to understand the added value of applying the good practices and approaches conveyed through the trainings including those related to gender and social equity and nutrition.</p>	<p>Clearly evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators.</p> <p>This requires stronger monitoring systems at CO levels. Monitoring the progress made through FFA to longer term resilience requires historical household and community data, extending a few years beyond the completion of the FFA project in question.</p>

	The increased asset base (arrow 3) and new knowledge (arrow 6) and related outcomes and impacts, contribute to strengthen livelihoods and develop new livelihood options for the most vulnerable, incl. the development of new employment opportunities, and contribute to reach more sustainable outcomes and impacts at a higher scale.		
Impact pathway 3 (TRANSFER)			
7	The transfer targeted vulnerable food insecure HH and was provided during a critical time with the aim to cover an identified food gap. It allowed to improve/maintain HH food consumption during the assistance period.	Adequate selection of transfer modality and value Adequate geographical and household targeting The transfer was consumed by the targeted HH, not damaged, stolen, or mostly exchanged especially if at an unfavourable rate for the vulnerable HH in terms of economic and nutritional value	Clearly evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators.
8	The transfer was well targeted, dimensioned and provided during a period of need. It allowed to boost asset creation and skills development through FFA activities, enable positive coping strategies (food- and livelihood-related), and prevent further abusive use of natural resources or other negative coping strategies	Adequate selection of transfer modality and value Adequate geographical and household targeting The transfer was consumed by the targeted HH, not damaged, stolen, or mostly exchanged especially if at an unfavourable rate for the vulnerable HH in terms of economic and nutritional value	Evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators. This requires stronger monitoring systems at CO levels. Monitoring the progress made through FFA to longer term resilience requires historical household and community data, extending a few years beyond the completion of the FFA project in question.
Impact pathway 4 (CAPACITY DEVELOPMENT OF GOVERNMENT AND LOCAL PARTNERS)			
9	Trainings provided by WFP met the needs and priorities of Gvt institutions (e.g. line ministries, sub-national technical services, etc.) and local partners.	A clear WFP strategy for Gvt capacity development is available and context-specific, based on participatory approach with Gvt and others capacity development partners to avoid duplication and promote joint efforts. Political and security conditions are conducive to develop FFA/Asset Creation capacities at national and decentralised levels. Gvt recognises WFP as a relevant partner in the identified domain requiring national capacity development.	Evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators. In line with the capacity development policy. This is a priority area of work that requires more attention.

		Analysis, programming, planning, implementation, monitoring and measurement activities and processes related to FFA and complementary interventions helped inform the capacity development process through a bottom-up approach	
10	WFP played a proactive role in coordination mechanisms, including by rolling out innovative programming/planning tools such as 3PA (ICA, SLP, CBPP)	<p>A clear WFP strategy for Gvt capacity development is available and context-specific, based on participatory approach with Gvt and others capacity development partners to avoid duplication and promote joint efforts.</p> <p>Political and security conditions are conducive to develop FFA/Asset Creation capacities at national and decentralised levels.</p> <p>Gvt recognises WFP as a relevant partner in the identified domain requiring national capacity development.</p> <p>Analysis, programming, planning, implementation, monitoring and measurement activities and processes related to FFA and complementary interventions helped inform the capacity development process through a bottom-up approach</p>	<p>Evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators. In line with the capacity development policy.</p> <p>This is a priority area of work that requires more attention.</p>
11	Activities supported by WFP met the needs and priorities of the Gvt and were highly relevant to support the national agenda both in terms of timing and content	<p>A clear WFP strategy for Gvt capacity development is available and context-specific, based on participatory approach with Gvt and others capacity development partners to avoid duplication and promote joint efforts.</p> <p>Political and security conditions are conducive to develop FFA/Asset Creation capacities at national and decentralised levels.</p> <p>Gvt recognises WFP as a relevant partner in the identified domain requiring national capacity development.</p> <p>Analysis, programming, planning, implementation, monitoring and measurement activities and processes related to FFA and complementary interventions helped inform the capacity development process through a bottom-up approach</p>	<p>Evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators. In line with the capacity development policy.</p> <p>This is a priority area of work that requires more attention.</p>
12	Activities supported by WFP met the needs and priorities of the Gvt and were highly relevant to support the national agenda both in terms of timing and content	<p>A clear WFP strategy for Gvt capacity development is available and context-specific, based on participatory approach with Gvt and others capacity development partners to avoid duplication and promote joint efforts.</p> <p>Political and security conditions are conducive to develop FFA/Asset Creation capacities at national and decentralised levels.</p> <p>Gvt recognises WFP as a relevant partner in the identified domain requiring national capacity development.</p>	<p>Evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators. In line with the capacity development policy.</p> <p>This is a priority area of work that requires more attention.</p>

		Analysis, programming, planning, implementation, monitoring and measurement activities and processes related to FFA and complementary interventions helped inform the capacity development process through a bottom-up approach	
13	<p>Gvt Institutions and local partner's staff have acquired the required FFA knowledge that can be used in their context and they are using it. Extension workers have a better capacity to provide technical support to communities to manage (creation, utilisation and maintenance) their assets and apply/replicate good practices.</p> <p>Programme monitoring will help inform national agendas through a bottom-up approach.</p> <p>An enhanced operational coordination, efficient lessons learning exercise, and better reference to FFA in national policies, strategies and programmes provide an enabling environment for the development of strategic partnerships and converging efforts including FFA.</p> <p>Efforts at national level can lead to a gradual hand-over of the FFA programme to Gvt and local partners</p>	<p>Financial support (e.g. transportation) provided by WFP and other partners to technical services to contribute to the planning, design and oversight of FFA and complementary activities</p> <p>Political and security conditions are still conducive to develop Gvt/Coalition of partners' multisectorial (incl. FFA) programmes</p> <p>A bottom-up and top-down communication and programming/planning approach is in place and functional</p>	<p>Evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators. In line with the capacity development policy.</p> <p>This is a priority area of work that requires more attention.</p>
14	National support and vision will contribute to reach a higher scale and more sustainable outcomes and impacts.	Good governance allows Gvt to mobilise and earmark resources for FFA programmes and complementary interventions and to implement activities in line with the required standards	<p>Evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators. In line with the capacity development policy.</p> <p>This is a priority area of work that requires more attention.</p>

Main FFA impacts			
15	<p>Contributes to ending hunger, achieving food security and improving nutrition and promoting sustainable agriculture through the following main contributions:</p> <p>a) Enhanced geophysical conditions and environmental benefits including reduced environmental vulnerability</p> <p>Assets have anticipated geophysical impact (e.g. increased water availability; reduced erosion and desertification; improved soil condition; reduced run-off; reduced flood level or improved flood course; reduced landslides; reduced drought occurrence; etc.)</p> <p>b) Increased productivity and livelihoods benefits and promoted sustainable agriculture</p> <p>Geophysical changes have positive impacts on productivity and livelihoods diversification (e.g. increased output per hectare; increased hectares under production; increased hectares irrigated; increased HH with irrigated land; increased diversification to higher value crops; increased agricultural and forest biodiversity; increased physical access to market; etc.)</p>	<p>Long-term sustainability and scale ensured working with communities, governments and partners through a people-centred and multisectorial approach, and better governance of FS/N programmes</p> <p>A number of complementary interventions need to be concurrently implemented to ensure that the intermediate outcomes may result in impact level changes. These include complementary food security, livelihood, nutrition, health, WASH and other activities implemented by WFP, Government, UN, NGO and private sector partners.</p> <p>Contextual constraints (including land degradation; eventual disruption of social fabric by violent and/or long-standing conflict; recurrent disasters; often with incomplete funding and resources, including technical assistance; etc.) was well taken into account when positioning and designing the FFA programme, including the setting of realistic objectives with Gvt and partners.</p>	<p>Evidenced by FFA Evaluations and CO analysis/reports based on corporate and project-specific indicators.</p> <p>This requires stronger monitoring systems at CO levels. Monitoring the progress made through FFA to longer term resilience requires historical household and community data, extending a few years beyond the completion of the FFA project in question.</p> <p>More studies need to be conducted to strengthen these statements.</p>

c) Reduced vulnerability (of people/households/communities)

Assets have contributed to enhance livelihoods options and employment opportunities which improve the independence of vulnerable people including women and vulnerable groups and increase their influence;

Contributed to improve food security and nutrition by enhancing the availability and diversity of food produced and consumed locally; strengthening and diversifying livelihoods and incomes, which can be used for covering various expenditures including on food/nutrition and health; protecting livelihoods from shocks, and thus maintaining local food production and/or income in risk prone areas; reducing hardships, and in turn increase the time allocated by women to livelihood activities, social and care activities; improving physical access to basic social services and medical services; ensuring that FFA processes can be used as channel to convey health and nutrition messages and promote women empowerment; etc.;

Local communities, including women and other vulnerable groups, empowered and better equipped to find their own way out of hunger;

Improved social cohesion (e.g. bringing all vulnerability groups together around a common objective for the benefit of the whole community).

d) Strengthened households' resilience to shocks for food security and nutrition (ensured early recovery, reduced disaster risks and built long-term resilience to shocks)

Increase in household production and consumption, livelihoods diversification, labor demand and asset accumulation and empowerment of most vulnerable;

Maintained development gains through the reduction of negative coping strategies (e.g. distress early migration; depletion of productive assets; reduction of the number and quality of meals; unbearable debts; abusive use of natural resources; etc.) during times of shocks and stressors;

Reduction in negative impacts of recurrent disasters;

Contributed to improve food security and nutrition by enhancing the availability and diversity of food produced and consumed locally; strengthening and diversifying livelihoods and incomes, which can be used for covering various expenditures including on food/nutrition and health; protecting livelihoods from shocks, and thus maintaining local food production and/or income in risk prone areas; reducing hardships, and in turn increase the time allocated by women to livelihood activities, social and care activities; improving physical access to basic social services and medical services; ensuring that FFA processes can be used as channel to convey health and nutrition messages and promote women empowerment; etc.;

e) Improved government capacity

Improved government capacity to operationalise and manage FS/N policies, strategies and programmes, reach scale, and show greater and more sustainable FS/N impacts at community and HH levels.

Annexes to Chapter 8

Food Assistance for Assets (FFA) for Zero Hunger and Resilient Livelihoods

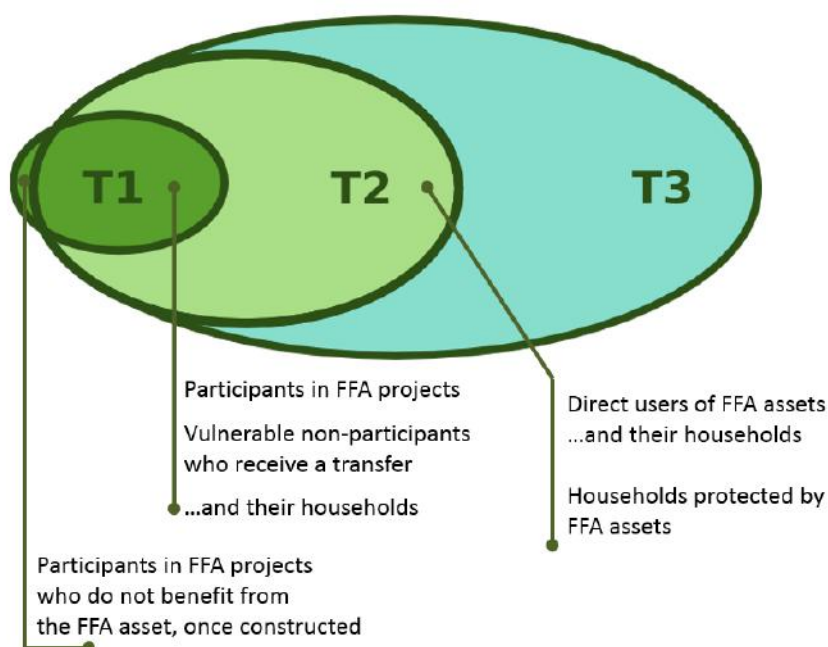


ANNEXES TO CHAPTER 8

ANNEX 8a: Estimating the number of Tier-2 Beneficiaries

The change from Food for Work (FFW) to Food Assistance for Assets (FFA) presents a shift from using conditionality for beneficiaries to access assistance towards a greater focus of using time and labour to develop quality assets for the most vulnerable and food-insecure.

This change of approach increases the number of people that benefit from assets built through FFA. For instance, those vulnerable and food insecure households who participate in FFA and receive a transfer are direct, or **Tier-1 beneficiaries (T1B)**, whilst those people who benefit from or are protected by these assets are **Tier-2 beneficiaries (T2B)** which include T1B.



WFP is already systematically collecting T1B FFA beneficiaries through projects, however T2B need to be considered for each project in isolation, and – where multiple projects or beneficiary groups exist – in combination.

The process to estimate T2B usually requires the analysis at two separate levels: the locality, and the household. The final numbers will be reported as people, not households, using the standard multiplier used locally to convert from households to individuals.

The methodology provided in the **Guidance on estimating the number of tier 2 beneficiaries of assets created through FFA activities**⁶⁰ is directly linked to an efficient community-based participatory planning (CBPP) process. Moreover, the methodology needs to be applied to each FFA site; whether this methodology could be applicable to a sample of FFA sites for extrapolation is very unlikely but would need to be clarified.

Tier-2 Beneficiaries (T2B)

T2B are those people and households that directly benefit from, or are protected by the assets created through FFA activities. The benefit relates to the primary purpose of the asset constructed. The number of beneficiaries is estimated just once, in the year that the works on the asset are completed – even if those benefits will not be realised immediately.

⁶⁰ WFP, 2014. FFA Guidance on Estimating Tier 2 beneficiaries of assets created through FFA activities. Available at: http://docustore.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp281695.pdf

Annexes to Chapter 9

Food Assistance for Assets (FFA) for Zero Hunger and Resilient Livelihoods



ANNEXES TO CHAPTER 9

ANNEX 9a: Good practices, lessons learned, and success stories

The table below provides an overview of good practices, lessons learned, and success stories' focus, objectives, key content, target audiences, roles and responsibilities, work processes, and formats.

Tool	Focus	Objective	Content	Audience	Roles & work process	Formats & templates
Good practices	Share experiences on FFA planning and technical design aspects in a specific contexts	<ul style="list-style-type: none"> Strengthen technical capacities to design and implement quality programmes; Foster replication of good practices throughout WFP and partners' operations and facilitate continuous improvement. 	<ul style="list-style-type: none"> Document main technical features and aspects of specific or integrated FFA activities in a given context – their performance and impact, the approach and steps undertaken, and the partners involved. Document successful planning approaches 	WFP and partner programme staff at RB, CO and SO level	Identified and documented by WFP, partners and government technical staff at SO and CO levels (with RB and HQ involved in the review process)	Written document, photos, videos Good practice template available: <u>ENGLISH</u> / <u>FRENCH</u>
Lessons learned		<ul style="list-style-type: none"> Capitalize and learn from areas requiring improvement; Avoid duplication and ensure that inappropriate methods are avoided, and learn from others' experiences. 	<ul style="list-style-type: none"> Document unyielding efforts and identify actions to address systemic problems - taking into account inputs of staff involved in the FFA programme and feedback from experts at corporate level. 	WFP and partner programme staff at RB, CO and SO level	Identified and documented by WFP, partners and government technical staff at SO and CO levels (with RB and HQ involved in the review process)	Written document photos, videos <u>Lessons learned template available</u>
Success stories	Showcase a successful FFA implementation	<ul style="list-style-type: none"> Support external communication, advocacy and fundraising efforts 	<ul style="list-style-type: none"> Based on key elements from a good practice (with less details on technical elements) 	Government, donors, UN and NGOs	WFP technical staff involved in the good practice documentation can flag this to the PI officer and can develop this together at SO and CO levels (with RB and HQ involved in the review process)	Written document, photos, videos <u>Success stories template available</u>

ANNEX 9b: Tips for filling in the Good Practice template

1. Good practice on single FFA activity or integrated FFA and complementary programmes

This guidance aims to support field monitors/ Programme Officers/ Technical Experts through the documentation of good practices (using the standard **FFA template**), focusing on one specific FFA activity or on FFA interventions that are integrated with other complementary activities - more emphasis should be placed on some of the aspects presented below depending on the type of good practice to be developed.

Once a good practice has been identified, based on the **criteria for identifying FFA good practices**, CO staff and partners can focus on gathering the following information for the documentation of the good practice – the points below provide tips on key sections of the **good practice template**.

The story

- Context: describe the geographical context of the area (type of soil, shocks, seasonality) and its food insecurity and vulnerability settings, the main categories of the target population including demographics (men, women, boys, girls), number of beneficiaries, main livelihood types, etc.;
- Programme Rationale and planning approaches: describe why the specific activity was selected and which participatory programming and planning tools (3PA tools for example or other tools) were used;
- Transfer modalities: which were the preferred transfer modalities identified and how were these selected?;
- Timeline: the intervention timeline, i.e. when did the intervention start, when were they implemented during the year, when did FFA programmes phase out, etc.;
- The story: Describe what happened before and after the intervention, what are the key overall results, such as soil situation, food security and nutrition statuses, major impacts on beneficiary population. Highlight complementarities with other activities; successful coordination and partnered efforts; explain how the activity (ies) contributed to reduce negative coping strategies such as cutting of trees, selling productive assets, distressed migration; indicate capacity development efforts, etc.

Key achievements

A number of good practices related to FFA will need to capture aspects that are not commonly recorded under routine M&E processes, for example those that relate to environmental changes, gender and empowerment, and decent work. The documentation of some of these aspects may however provide important information to enable governments, WFP and partners to increase the effectiveness of their programmes, cover specific gaps, and trigger the replication of asset-building efforts by local communities. Key achievements can include benefits and impacts on people, as outlined in the list of criteria to be used to identify a good practice:

- Improvements in food security and nutrition,
- Strengthened livelihoods and resilience, i.e. people are less affected by recurrent shocks,
- Environmental changes, i.e. improvement of soil, etc.,
- Capacity development, i.e. people have been trained on specific activities, etc.,
- Increased income and local employment (self or through other community members) of vulnerable households,
- Reduced negative coping strategies such as distressed outmigration and selling of productive assets, cutting of trees, etc.,
- Reduced women and girls hardships,
- How households with limited labour but willing to participate in FFA were assisted, i.e. what norms and specific local arrangements have been made,
- What innovation has FFA assisted in creating in relation to creative employment and sound use of the natural resources base,

→ Overall, it is recommended to include key quantitative information, if available.

Main challenges

Describe the main challenges encountered and possibly how you overcame them. For example:

- Recurring shocks such as floods, drought and others,
- Emergency operations that tend to pull resources from FFA activities,
- Limited technical capacities, etc.

The intervention, its implemented characteristics, and key technical features

This part, the 'how', is the backbone of a Good practice as it details the technical implementation steps carried out in a specific context that were successful and can be replicated in other countries.

When focusing on **one FFA activity**, describe:

- Which FFA intervention was selected,
- The essential technical steps from the planning, design, and implementation stages,
- What kind of expertise was required (external/ internal),
- What, if any, were the necessary Non-Food Items used,
- Tips on technical implementation methods that need to be considered for successful results,
- Why specific techniques worked in the area and, in particular, which ones have contributed to multiple benefits, including those that were not planned initially (planned vs. actual results),
- Include pictures and visuals to show the situation before and after the intervention and for each step described.

When focusing on **integrated FFA and complementary programmes** (WFP or partners), describe:

- The various integrated FFA interventions and WFP or partners' complementary programmes,
- How these programmes strengthened each other's impact,
- The essential technical steps from planning, layering and implementation of the interventions,
- Why this set of programmes have worked in the area and, in particular, which ones have contributed to multiple benefits, including those that were not planned initially, and why,
- Include pictures on each intervention and show the situation before and after the interventions.

Partnerships & complementarities

- Strengthened or new partnerships,
- Successful coordination efforts with partners and government,
- Successful alignment and integration with other complementary programmes.

Replicability

- What are the key points to keep in mind when replicating this Good Practice - cannot apply one-size-fits-all approach to other countries so need to specify commonalities (type of soils, composition of households, etc.) that would allow for replication.

Sustainability

Describe if:

- The sense of ownership of the assets created is high (not just formally but in practice);
- The assets have been realized thanks to community / self-help efforts;
- The assets created have been productive/functioning for xx years and are regularly maintained by community members beyond WFP assistance;
- Activities continue beyond WFP assistance allowing for a smooth transition during WFP handover.

Cost-effectiveness

Tips:

- Consider including here the information on the cost-effectiveness of the program or a cost-benefit analysis, if available.
- Consider calculating a basic estimation of costs and benefits (see table below).

How to conduct a basic estimation of the costs and benefits

This is a simple technique to estimate and compare the (expected) costs and benefits of a specific asset creation activity over an exact period of time. The basic estimation of costs and benefits can be carried out before, during or after the implementation of a project.

Five main steps are required to estimate costs and benefits:

- **Select a small set of asset creation activities** for which you would like to carry out a basic estimation of the costs and benefits.
- **Map the expected costs, and estimate its' monetary value:** Brainstorm all the costs associated with selected asset creation activity/ies, and make a list of these, e.g. staff costs, training costs, equipment and material, food and cash transfers, etc. Think also about costs that will continue to be incurred once the project is finished, e.g. maintenance costs. Assign a monetary value to all costs previously identified.
- **Map the benefits, and estimate their monetary value over one year:** Brainstorm all of the tangible and direct benefits associated with selected asset creation activity/ies (e.g. related to agricultural or horticultural production). Estimate the monetary value of all these benefits over one year. Note: whenever possible, consider – as a proxy – that generated benefits are comparable from one year to another; if this is not the case, proceed with the required adjustments.
- **Determine how long the benefits will last, and estimate their monetary value over this specific period:** Determine the period during which the benefits generated by asset creation activity/ies will last, referred to as “the calculation period”. Good quality assets will last for a minimum of 5, 10, 20 years or more and the more the assets last, the more economic benefits they will deliver. Asset quality is therefore related to financial gain. Be as realistic as possible with taking into account the local context. Estimate the benefits of the selected asset creation activity/ies over this period of time (i.e. by multiplying the monetary value of the benefits over one year by the calculation period).
- **Compare the estimated costs and benefits:** Compare the total project costs (second step above) with the total benefits over a specific period of time (previous step above).
 - **Example 1:** USD **X** invested in the asset creation activity/ies generated USD **Y** over the calculation period (i.e. one year).
 - **Example 2:** Each USD invested in the selected asset creation activity/ies resulted in USD **Z** over the calculation period (i.e. one year). **Z** can be calculated by dividing **Y** by **X**.
 - **Example 3:** The “pay-back period” or time it takes for benefits to repay costs can be estimated on the basis of the above steps.

Important note: as indicated by the name, the basic estimation of the costs and benefits does not represent a rigorous method to assess project benefits. The presented method is different from the Cost-Benefit Analysis (or CBA), which calls for a more thorough, rigorous and complex approach.

Useful links:

- DFID, 2013. The Economics of Early Response and Disaster Resilience: Lessons from Niger. www.gov.uk/government/uploads/system/uploads/attachment_data/file/226160/TEERR_Niger_Report.pdf (note: this study assess a range of WFP interventions in Niger).
- Tearfund, 2010. Investing in communities: The benefits and costs of building resilience for food security in Malawi. <http://tilz.tearfund.org/~media/Files/TILZ/Research/Investing%20in%20communities%20web.pdf>

Gathering FFA good practices – an example

In order to make sure that good practices are properly and systematically identified and documented, a simple process is proposed below, involving WFP staff (and partners) at the SO, CO, RB and HQ levels. It is suggested to build on the CO's standard practice like information gathering, field visits, site supervision, etc., to inform the good practices documentation process.

At the office

- Country Office staff consult with the head of monitors on which FFA sites, if any, are performing exceptionally well with unique approaches. Field monitors are consulted and the selected sites are mapped out for follow-up.
- Programme officers, in consultation with field monitors, prioritize sites based on the most successful results.
- The field monitors are then advised to prepare to document good practices on the selected sites.
- Field monitors contact partner organizations and government counterparts to inform them about the Best Practice process. Partners are encouraged to develop good practices with WFP field staff.
- Monitors gather all the available information on the sites before carrying out the on-site visit. *Tip: M&E systems will usually have a good amount of data on food security, assets built, capacity building, etc.*
- During the initial (technical) stage of good practice gathering, a representative from the local planning team and a local counterpart supervisor should be able to provide all the technical information.
- After the initial meeting, monitors contact the local representative and counterpart technical support staff, to organize an on-site visit with the community, telling them what WFP intends to achieve from this visit (following the guidance on 'Documenting best practices'). This allows the supporting team to plan a visit that will help answer the good practice questions.

At the site

- Monitors explain to community members what good practices are and why they are important for the community.
- Monitors and counterpart support staff examine the site, focusing on the before and after picture. Questions should always refer to what extent things are better or worse and why. Questions to consider can include, for example:
 - When was the shallow well built?
 - How many people were involved in building this well?
 - For how long did the participants receive food assistance for the project? Were they receiving relief assistance before?
 - Have they increased the number of meals they eat per day?
 - How deep do they have to dig to find water? What about before?
 - How long did it take for water to dry up before? What about now?
 - How many households are benefitting from the well and the wells around it?
 - What about the other activities supporting the well?
 - Has the well reduced the daily time spent to fetch water?
- In order to keep your good practice focused while also tied to strategic WFP goals, try to visualize the intervention as part of a larger operation. A small technique is always part of something bigger. Frame your questions based on this. If the gully has been rehabilitated and people are reaping the benefits of this, is there a watershed intervention in place? If there is, is this part of a regional strategy? Is the regional strategy also a national strategy? You will be able to summarize this information in a digestible format for other countries to understand the impact of your FFA project.
- After understanding the overall strategy of the site, the team can focus on the technical aspects. These will be reinforced with information from the community members. Come up with questions that are relevant to the community and the work that WFP is doing.
- If data is not available from M&E indicators and or other sources, it is always possible to acquire the information directly from the community. Consider triangulating information received from the community to acquire a solid understanding based on reliable information. It is important to make sure that people understand that this is a qualitative study and should not be taken as definitive research.

2. Good practice on how 3PA tool(s) inform FFA programmes

This section aims to guide monitors/ Programme Officers/ Technical Experts through the documentation of the third type of good practices, i.e. those focusing on how the 3PA tools – either one of them or the full range from ICA, SLP to CBPP - have been carried out and used to inform the planning and implementation of FFA and complementary programmes.

First, in order to identify this type of good practice, it is crucial to consider the following aspects:

1. Identifying a 3PA good practice: Why is this flagship/good practice?

- Was the 3PA used to identify priority areas of intervention for FFA?
- Did the 3PA inform programme strategies that include FFA?
- Did the 3PA help design integrated multi-year, multi-sectorial plans?
- Was the 3PA used to design FFA programmes taking into account seasonal, gender, and nutrition aspects?
- Was the 3PA used to identify programmes complementary to FFA?
- Did the 3PA help strengthen existing partnerships or build new ones?
- Did the 3PA enhance coordination among partners?
- Did the Government embed the 3PA as its planning and programming tool?
- Were there successful results of the integrated FFA programme designed through the 3PA?

Once these aspects are covered, the CO staff and partners can focus on gathering the following information for the documentation of the good practice. The points below provide tips on key sections of the good practice template.

2. Documenting an 3PA good practice

Background

- 3PA tools: describe which 3PA tools were used, why they were used for planning and programming in the country, i.e. in the frame of government strategy, and if these tools have complemented existing approaches;
- Describe how the 3PA helped having a better understanding of the context, through:
 - Food insecurity trends,
 - Recurrence of shocks,
 - Levels of land degradation,
 - Main vulnerable groups including demographics (men, women, boys, girls),
 - Main livelihoods and their activities including negative coping strategies such as cutting off trees, selling productive assets, distressed migration, etc.

Key achievements

- FFA programmes: have 3PA tools helped identify context specific programmatic strategies and the selection of new FFA programmes required? Have the 3PA tools helped identify integrated FFA programmes required in a community?
- FFA and complementary programmes: have the 3PA tools helped align FFA to other multi-sectorial partner programmes, identifying the most relevant activities depending on livelihoods and local context?
- Timeframe: have the 3PA helped identify the most appropriate time for intervention in the area, taking into account seasonality aspects or identifying the times when people are available to work on FFA without disrupting their livelihood activities?
- Transfer modalities: have the 3PA tool helped identify preferred transfer modalities?
- Gender & nutrition aspects: have the 3PA helped design gender-sensitive and nutrition-sensitive programmes?
- Ownership: Have the 3PA contributed to identify needs and tailor FFA and complementary responses to local requirements by ensuring prioritisation and ownership by communities?

- Empowerment: Did the 3PA contribute to empower the most vulnerable and women in particular through their equal representation in decision making and the selection of activities that benefit the most vulnerable?

Main challenges

Describe the main challenges encountered and possibly how you overcame them. For example:

- Low engagement from partners working in a specific area,
- Limited capacities,
- Difficulties in engaging the most vulnerable groups, including women, etc.

Partnerships & complementarities

- Did the 3PA help strengthen partnerships or build new ones? How?
- Did the 3PA strengthen coordination efforts with partners and government? How?
- Did the 3PA contribute to successful alignment and integration with other complementary programmes? How? Can you provide examples?

Cost-effectiveness

- Did the 3PA contribute to the maintenance and replication of assets as communities were engaged from the start?
- Did the 3PA tools provide a major platform for more integrated and efficiently layered activities from a number of partners (e.g. FFA from WFP, livestock vaccinations and improved seeds from FAO, and agricultural credit from IFAD, etc.), making interventions more cost-effective?

Annexes to Chapter 10

Food Assistance for Assets (FFA) for Zero Hunger and Resilient Livelihoods



ANNEXES TO CHAPTER 10

ANNEX 10a. Group Formation for the Management of FFA

1. Template of an Assets Management and IGA Memorandum of Understanding (MOU)

	ITEM	Consensus elements
1	Title IGA	Clear objective stated & described
2	Main activities to be undertaken by the group	Main type of measures and their sequence. Schedule, responsibilities, etc.
3	Membership	Names, status, duration and responsibilities
4	Committee (if applicable)	Number and function of the management committee, duties, how long elected for, etc.
5	Meeting schedule	Place, time, day. Number of members needed for decisions, unanimous or majority decision making, reporting absence representation for absentees allowed? Can representatives work?
6	External resources	Required or not? If required, amount and mode of utilisation. Request preparation and follow-up of available resources, prioritisation of activities, labour division, reporting, etc.
7	Contributions	How much (cash, labour, others) and when to pay & provide. Purpose of the contributions. Where to keep the money (if any) and how to use it. Record keeping.
8	Finance (if applicable)	The administration of the groups' bank account (if any). Who can sign cheques/receipts? Can the group money be used for private loans? How?
9	Savings (if applicable)	Purpose; where to keep the money (bank, association office, etc.); how to save; record keeping
10	Record keeping	What to be recorded and by whom. Materials needed.
11	Profit	Use of profits; sharing; when and who; what to do in case of death; drop out absence or negligence at work
12	Loans (if applicable)	Rules for lending, interest rates, terms of repayment, penalties for non-repayment
13	Disciplinary actions against members	For absence, late arrivals, accepted excuses, fines. When to pay, what to do for contributions not paid, for dishonesty, etc.
14	Capacity building	What are the main elements (skills, experience sharing, etc.) to be considered? Who needs the most, on what aspects? Steps and priorities, etc.

Example: Nursery-based Management and Income Generation Activity Group MOU

	ITEM	Consensus elements for selected IGA
1	Title IGA (assumed in a semi-arid unimodal rainy season (June-Sept))	<p>Title: Nursery development as "green factory" for women led IGAs</p> <p>Objective: Nursery-based multiple IGAs led by women groups for high valued cash crops using a community nursery free space (net of seedlings for reforestation programme under FFA). The free space will be used by the IGA group to grow high value fruit trees, use of nursery vegetated fence for beekeeping; the establishment of a selling point; compost making; and fertility enhancement through growing legume crops during the rainy season.</p> <p>Name of the location for nursery (as applicable): _____</p> <p>Village: _____</p> <p>Community/ward: _____</p>
2	<p>Main activities to be undertaken by the group</p> <p>1. Identification of nursery workers and election of women leaders by sub-group, chair, and composition of the sub-groups <i>e.g. 20 members (15 women and 5 men) with one man in each group and leadership by most educated and/or active women in the group. The group leader in the group is also the treasurer.</i></p> <p>2. Free space for growing high value cash crops net of seedlings needed for overall community reforestation estimated and divided and each sub-group allocated specific section of the areas. <i>e.g. 0.2 ha of free space identified – each member will grow cash crops in 100 square meters of seedbeds</i></p> <p>3. Seedbeds pegged and measured for each subgroup – water usage discussed and turns agreed <i>e.g. 4 seedbeds of 25 square meters each individual – two watering cans each group, tools used from nursery pool. Water periods after regular nursery work completed.</i></p> <p>4. Compost making for each subgroup identified and started <i>e.g. compost making undertaken by the whole 20 members of the IGA as a common activity</i></p> <p>5. Identification of horticulture crops, fruit trees and other high value seedlings by type and market conditions <i>e.g. → four main cash crops (garlic, onions, chillies and) identified, → fruit trees (grafted mangoes and avocados) → additional 5 based upon each sub-group preference (carrots, tomatoes, etc.).</i></p> <p>5. Seeds and planting materials purchasing plan prepared (if applicable) and purchased: Type: _____ Cost _____ Type: _____ Cost _____ Type: _____ Cost _____ Type: _____ Cost _____ Type: _____ Cost _____ Birr</p> <p>6. Nursery space agreed to cultivate with fertility enhancement crop <i>e.g three months cultivation of clovers or chick peas starting with agreement to remove only grains (in case of chick peas) and leave mulched residues</i></p> <p>7. Four beehives purchased on credit (one for each sub-group) Cost _____ Repayment _____</p> <p>8. Construction of shelter as selling point near the entrance of the nursery and determine selling days and hours – specify materials and construction <i>e.g. agree to build a shelter using poles and mats, including a display area for products and shelves for canned/bottled produce</i></p>	<p>Date</p> <p>June xxxx</p> <p>June xxxx</p> <p>June xxxx</p> <p>June xxxx</p> <p>June xxxx</p> <p>June-July xxxx</p> <p>July-Oct xxxx</p> <p>August xxxx</p> <p>Sept xxxx</p> <p>June xxxx</p>

	<i>Furthermore, the IGA agrees that it does not have any right to claim ownership rights over the nursery space, but only rights to usage based on a 5 year agreement, renewable based upon performance. A performance committee chaired by the CP/CBPP planning team will be established and include IGA members and CP (or Gvt) staff – the committee will meet bi-annually to discuss plans, training needs, performance of the scheme and agree on improvements.</i>		
4	Membership (can also make an attachment)	List names of each member by sub-group, gender, status/wealth 1 _____ F M Age _____ Status _____ Signature: _____ 2 _____ F M Age _____ Status _____ Signature: _____ 3. _____ 4. _____ Group established for 2 years period – renewable Mutual guarantee agreed in each sub-group Yes - No – Other (specify) _____	
5	Committee (if applicable)	<ul style="list-style-type: none"> One of the sub-group leaders elected as overall IGA chairperson and/or secretary - elected by consensus to represent the whole IGA – to be evaluated every three months and rotated after 1 year. 	
6	Meeting schedule with extension worker/CP expert	<ul style="list-style-type: none"> Meeting at nursery every month last Friday afternoon – 14.00 hrs to discuss performance and technical aspects. Decisions to be taken by consensus of all members. Only wife/husband or close pre-determined representative allowed in case of absence. Three absences unjustified disqualify members from membership. Secretary responsible for attendance and record keeping on decision and actions undertaken. 	
7	External resources	<ul style="list-style-type: none"> FFA available and all group members eligible to participate – registration to be carried out Time for undertaking FFA: Nov – June 	
8	Contributions and record keeping	<ul style="list-style-type: none"> Each group member contributes XX cash for membership. Cash deposited by secretary in bank account or safe at community administration level. One compost pit/sub-group established on a self-help basis. Record keeping by each sub-group secretary and checked by all members every month at meeting - 4 logbooks needed 	
9	Profit	<ul style="list-style-type: none"> Profits in nature (palatable grass and fruits, pruned branches) from various nursery activities shared by group. The first year 10% of sub-group profit in cash (selling of produce) collected and used to repay loans (bee-hives, seeds, etc), then the rest is shared amongst individuals. Profits within subgroups shared equally and re-divided amongst members in case of negligence at work (ascertained and agreed by consensus or automatically after three warnings). In case of death of one member profits obtained to date of death provided to widow or closer relative. 	
10	Disciplinary actions against members	<ul style="list-style-type: none"> Absence to be notified and justified. Warnings provided after each unjustified absence. Three warnings and membership is cancelled. All claims for refunding not valid. Justified absence compensated with extra work or equivalent value of cash determined by the group by consensus. Dishonesty denounced to CBPP planning team/Gvt rep/CP and to ward level court, etc., and legal action taken. 	
13	Additional capacity development	<ul style="list-style-type: none"> Training by Gvt/CP on grafting and planting cash crops, water needs, spacing, etc. Training on book keeping and basic accounting Training on bee keeping and provision of improved beehives (CP/others) 	
Agreed by Community Chairman and CP representative (s): Name _____ Title _____ Signature _____ Name _____ Title: _____ Signature _____ IGA Chair and Secretary: Name _____ Signature _____ Date: _____ / _____ / _____			

The above is only one example of many initiatives that can be formulated in every community by using small or larger groups according to the interest of members and the nature of the activities. Clearly, the following conducive conditions are required for the creation of IGA groups:

- Self-help attitudes are encouraged and supported
- Organisational structures are simple and established by consensus

- Benefits are clearly outlined and foreseen by members
- More than a single group is created within the community (different initiatives)
- Poor and women groups are strongly represented
- Leadership is accountable to group members

2. Sub-group Constitution form

Following the above large group MOU, a sub-group "Constitution" can be prepared to ensure each sub-group is strengthened and each member is accountable to each other.

IGA Sub-group Constitution		Date: ____/____/____	
Village/sub-location: _____ + _____			
Community/ward (others): _____			
IGA Activity title: _____		Ref. large group IGA No _____	
1	Membership	Name: _____	Role: _____
		Name: _____	Role: _____
		Name: _____	Role: _____
		Name: _____	Role: _____
		Name: _____	Role: _____
		Name: _____	Role: _____
		Name: _____	Role: _____
2	Type of Activities related to the sub-group		Calendar
	1.		
	2.		
	3.		
	4.		
	5.		
	6.		
	7.		
	8.		
	9.		
	10.		
3	Capital received or available for IGAs: _____ XXXX Date: _____		
4	Expenditure plan:		
	Items	Cost	Source
	1.		
	2.		
	3.		
	4.		
	5.		
6.			
5	Agreement on utilization of cash as per MOU by the following members and the set of activities indicated above (signature): 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____		
6	Description of sub-group sharing of profits and saving plan	Description of sub-group treasurer responsibility: 1. Book keeping: 2. Deposit and withdrawal . .	
		Description of future investment plan (vision)	

ANNEX 10b. Example of capacity development plan for FFA in one hypothetical CO

	Type of activity	Modality	Outputs
A) Stocktaking what works and experience sharing			
1	Stocktaking of existing FFA projects (from gvt institutions, UN partners, NGOs, local efforts) by major FFA intervention and geographical area/coverage, performance, etc.	Local consultants supported by CO/SO staff to undertake a stocktaking of major FFA interventions in the country or areas of interest – including planning, design, layout and construction phases of different FFA	<ul style="list-style-type: none"> . Identification of major partners suitable for FFA planning & implementation . Identification of gaps by FFA type and areas to cover . List of best practices
2	Visit to XXXXX country (By mid-20XX): <ul style="list-style-type: none"> a. Observation of local level participatory planning for integrated and large scale watershed development b. Familiarization with a number of land rehabilitation and management of runoff water in moisture deficit and degraded lands FFA (XXXX CP activity and Safety Nets) c. Learning from synergies between FFA, School Feeding, Nutrition and P4P 	Selected CO/SO and Gvt staff travel to XXXXXX for 10 days	<ul style="list-style-type: none"> . Awareness on productive safety nets and environmental aspects enhanced . Gvt. support increased to joint efforts in social protection and resilience building . Synergies in CP strengthened . Quality monitoring aspects internalized
B) Technical Training			
2	Training of trainers (TOT) to 30 WFP/CP/Gvt staff on FFA technical interventions (by end of 20XX)	TOT for 10 days (by end 20XX)	<ul style="list-style-type: none"> . Capacity to implement better quality and integrated FFA increased in selected communities
3	Preparation of technical kits for FFA (by mid-20XX)	<ul style="list-style-type: none"> . InfoTechs and work norms prepared for main FFA activities (consultant and through HQ – by mid-20XX) 	<ul style="list-style-type: none"> . Improved capacity of cooperating partners to support on-the-job training and field implementation . Higher quality standards achieved in FFA

C) Programme implementation and M&E			
4	Consider the possible recruitment of 2 international UNVs with strong capacity in FFA and safety nets programme design and implementation. (by mid-20XX)	<ul style="list-style-type: none"> 1 UNV/Sub-office 	<ul style="list-style-type: none"> Operational capacity in FFA strengthened CO Capacity to inform programme discussion on cash/food splits, targeting aspects, seasonal livelihood analysis, type of response and partnerships improved
5	Consider the possible recruitment of 1 FAMs/Sub-office with technical skills on dry and sub-tropical land management, agroforestry and water harvesting, or related fields (by 1st quarter 20XX)	<ul style="list-style-type: none"> CO and RB to discuss with HR asap Contact CO XXXX with similar experience 	<ul style="list-style-type: none"> Operational and monitoring capacity improved Best practices documented and shared with partners Local level partnerships and community & household participation enhanced
D) Tools and non-food costs			
6	Discuss with partners a plan to support capacity development and provision of non-transfer/wage costs for resilience building on a predictable basis (by mid-20XX)	<ul style="list-style-type: none"> Explore the possibility to create a pool fund dedicated to support non-wage costs for tools, equipment and essential items at district level Alternatively, develop a coordinated plan for complementary assistance - include stocktaking on what each organization could provide to joint efforts, and advocate for complementary support. 	<ul style="list-style-type: none"> Minimum and timely supply of non-food items supplied for the duration of the CP Entry points for joint efforts agreed Sufficient complementary support provided
E) Upgrading skills through educational incentives			
7	Enabling dedicated and best performing national staff to access distant learning courses or country specific summer courses and skills upgrading mechanisms (by end of 20XX onwards)	Set aside 5% of ODOC budget to support best performing national counterparts located in hardship duty stations to access summer courses for the duration of X years	<ul style="list-style-type: none"> Minimum stay of 3-5 years in a most difficult and food insecure location Upgrading of staff skills in specific technical areas of relevance to FFA



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