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Disaster risk reduction: experience from the MERET project in Ethiopia

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1. Introduction¹

Disaster risk management is a systematic approach to preventing, reducing, mitigating and coping with natural hazard risks, and for emergency response, recovery and reconstruction. In the context of disasters, risk is the probability of an adverse consequence occurring as a result of a hazard event, and it is influenced by the degree of vulnerability to the hazard. Within disaster risk management, disaster risk reduction is “the concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.”²

In 2005, in Hyogo, Japan the World Conference on Disaster Reduction formally recognized the role that vulnerability plays in risk, and thus in the consequences of disasters. The resulting Hyogo Framework now guides systematic action to reduce vulnerability and, hence, the risks from disasters.

The linkages among risk, vulnerability and food insecurity were already well understood by practitioners fighting hunger. Food *in*security occurs “Where households are unable to mitigate negative impacts [of risk] on food availability, access, and/or utilization.... Without viable expectation of availability, access and utilization at all times a household is prey to deep-seated uncertainty that affects all of its investment and disinvestment decisions” (Webb and Rogers, 2003). When risk is explicitly reduced, households have a chance to make more progressive investment decisions that help build food security.

Despite the call to action and the theoretical underpinning of disaster risk management, it has been difficult to implement effective programmes that both manage humanitarian needs and address the causal factors of vulnerability. This is mainly because humanitarian situations attract interventions that have the short-term objective of rapidly providing relief from a life threatening situation, whereas disaster risk reduction inevitably requires a longer-term developmental approach in communities that are typically beset with crises. This creates a conflict between meeting immediate needs and making important investments for future benefit.

For the last few decades, Ethiopia has served as a learning ground for approaches to combating food insecurity. The frequent recurrence of food crises for large parts of the Ethiopian population indicates not only the scale of the problem, but also its complexity and the inadequate resources – national and international – applied to the underlying constraints that allow hunger to persist.

This chapter also uses Ethiopia as a learning ground, by reflecting on the disaster risk reduction results achieved in a WFP-assisted development programme called Managing Environmental Resources to Enable Transition – MERET, which means “land” in Amharic. MERET’s origins lie in the emergency operations that responded to food crises in the 1970s. In 1980, the government, supported by WFP, embarked on a development project addressing what were felt to be the root causes of food insecurity in Ethiopia at that time. Spanning 30 years, MERET has evolved through times of turbulent change. These changes are part of MERET’s story and are woven into its current design.

It is hoped that lessons from MERET can inform disaster risk reduction programming in contexts of recurrent weather-related hazards. As climate change causes increasingly frequent erratic weather in many parts of the world, the disaster risk reduction results of MERET can also be applied to efforts to support adaptation to climate change by reducing the risk of hunger and livelihood damage resulting from weather hazards.

This chapter first describes the risk of and vulnerability to food insecurity in Ethiopia. It then describes the programmatic evolution of MERET, leading to its current design. This is followed by a summary of the main results achieved by MERET, including the technological innovations introduced. The chapter examines WFP’s role in supporting government and community implementation of MERET, and the challenges faced by the programme. It concludes with a synthesis of major lessons learned.

2. Food insecurity in Ethiopia

With a population of 79 million people, Ethiopia is the second-most populous country in Africa. It is one of the poorest countries in the world, ranking 169 out of 177 in the 2008 Human Development Index. Gross national income (GNI) per capita is about US\$280, far lower than the average for sub-Saharan Africa. The agricultural sector accounts for 47 percent of gross domestic product (GDP), 90 percent of total export earnings, and more than 80 percent of employment. The 2005 Demographic Health Survey highlights the underlying vulnerability of poor Ethiopians to food and nutrition crises. The results of this survey show Ethiopia to have the highest rates in Africa for stunting, at 47 percent, and underweight, at 38 percent of children under 5. The prevalence of wasting is 10.5 percent, which is above the threshold defining a nutrition alert. Undernutrition contributes to 58 percent of the deaths of children under 5, and life expectancy at birth is 45.5 years (Government of Ethiopia, 2005b).

Since 1970, Ethiopia has suffered two major famines and almost yearly food crises, ranging from localized to national disasters. During the almost 20 years of the Mengistu regime, from 1972 to 1991, the Ethiopian economy, including agricultural production, shrank. By the end of the regime, the economy had fallen back to 1960 levels, while the population had continued to grow.

Food insecurity in Ethiopia is linked mainly to the pattern of rainfall, land degradation and population density. Agriculture remains predominantly for subsistence, with smallholders cultivating more than 90 percent of total cropland and producing more than 90 percent of total agricultural output. Smallholders' landholdings generally range from 0.5 to 1.5 ha per household. The level of agricultural input use is even lower than the standard for sub-Saharan Africa (Government of Ethiopia, 2010). Climate change increases the risk of harvest failure and low pasture regeneration from weather-related shocks. In rural areas, 28 million people live below the poverty line. Of these, an estimated 15 million were food-insecure in 2002 – and this figure may now be higher as a result of population growth (Government of Ethiopia, 2002).

Agricultural potential and vulnerability to weather-related shock are heavily influenced by Ethiopia's geography. With a total land area of 120 million ha, the country has a very rugged and diversified topography, which has a strong influence on climatic conditions. As a result, rains are seasonal and unevenly distributed in time and space. About 45 percent of the land is above 1,500 m and characterized by mountainous terrain with plateaux, steep slopes and deep valleys. The highlands are temperate with regular rainfall, arable land and agrarian livelihoods; about 95 percent of crop production comes from the highlands. However, microclimates in parts of the highlands result in semi-arid zones, particularly near the Great Rift Valley escarpment, which bisects Ethiopia

to create the lowest point on earth – the Denakil Depression. Overall, the lowlands account for more than 55 percent of Ethiopia’s land area, and are characterized by high temperatures, low and erratic rainfall, and pastoral livelihoods.

Despite huge groundwater resources, 90 percent of agriculture depends on rainfall rather than irrigation; rain patterns are therefore a significant determinant of food security. The highland rains can last for about eight months and reach as much as 1,500 to 2,400 mm a year, but rains tend to occur in high-intensity bursts concentrated in three to four months of the year. In the lowlands, total rainfall can be as little as 400 mm, making the runoff from highland rain a major source of water. Analysing long-term climatic data from 1961 to 2003, the Famine Early-Warning System Network (FEWS-NET) concludes that rainfall has become more erratic over the past 30 years.

Land degradation, owing mainly to poor land management and high population density, is the main cause of Ethiopia’s low agricultural productivity and vulnerability to drought. Despite significant levels of rainfall, poor land management results in the soil’s inability to retain water, increased soil erosion and nutrient depletion. Only about 50 years ago, about 40 percent of the country is reported to have been covered by forests, but forest cover had fallen dramatically to about 10 percent, or 14 million ha, by 1990 and is now estimated at 5 percent (Government of Ethiopia, 2010). The main reasons for deforestation are land clearing for agriculture and the use of wood for fuel. Some 80 percent of the population still lives in rural areas, mainly in the highlands, where an estimated 50 percent of the land is degraded. The population density on arable land has more than doubled since 1950 (WFP, 2009).

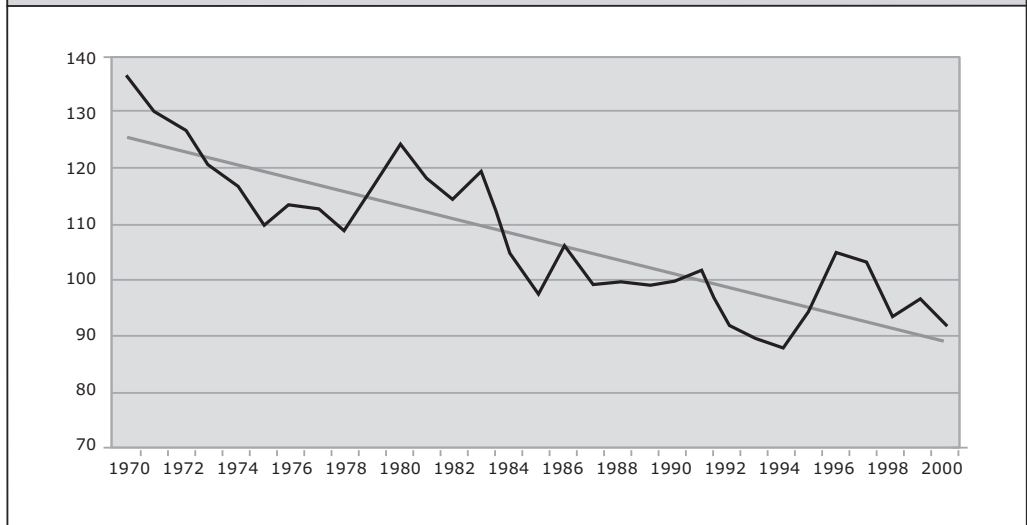
3. The evolution of MERET

3.1 The early years

After the devastating famine of 1973/1974, the Ethiopian Ministry of Agriculture began to use relief food aid for undertaking work in drought-affected areas, in collaboration with WFP. This led to a more developmental approach to disaster mitigation, which combined soil and water conservation efforts with afforestation to rehabilitate catchments and micro-watersheds. In 1980, Ministry of Agriculture and WFP, with technical support from the Food and Agriculture Organization of the United Nations (FAO), began implementing Development Project Ethiopia 2488: Rehabilitation of Forest, Grazing and Agricultural Lands – known as “Project 2488”.

Over its 20-year life span, Project 2488 laid the foundations for MERET.

Figure 10.1 Ethiopia's per capita agricultural production index, 1970 to 2000



Source: FAO, 2000

During this period, the project attempted to achieve development results while responding to drought and conflict. Although the results in natural resource management were limited, they spurred efforts towards disaster risk reduction as the foundation for development in crisis-prone communities. Political and cultural changes during Project 2488's life affected government policies, institutional structures and capacity, as well as farmers' organization and empowerment, and played a role in the learning cycle that led to the emergence of MERET.

During the 1980s, Project 2488 implemented large-scale, top-down forestation, soil conservation and rural road works throughout the country, paying little attention to the integration of these activities at the farm level. Quality and sustainability were low, resulting in a poor image of food for work as a developmental tool in subsequent decades. The staff time required to ensure farmers' participation was considered a luxury at a time when all available resources were devoted to supporting access to food. During the 1980s, Project 2488 therefore failed to overcome the challenges of addressing an increasing humanitarian caseload with a truly developmental intervention.

The Mengistu regime – referred to as “the Derg” – was a top-down hierarchical political structure. Nevertheless, one of its legacies, which eventually benefited Project 2488, was the creation of peasants' associations (PAs) as the lowest political and administrative unit. PAs are organizations of farmers who

live in the same area, usually with holdings that total about 800 ha.³ They were first organized between 1974 and 1976, when the Derg created PAs to ensure that its command and control system was effectively passed down to the community level. Following the end of the Derg regime in 1991, the PAs have evolved to become representative, and remain an important source of community capacity.

3.2 The transformative years

Between 1991 and 1993, the Transitional Government of Ethiopia initiated a new chapter in the country's political history. Communities seized the opportunity to gain control over decisions that affected their livelihoods. Realizing that the top-down approach had failed, MOA revitalized earlier attempts to increase participation. The new approach had to reconcile the technical demands of soil and water conservation with farmers' priorities. By 1992, with FAO technical support, Project 2488 had developed the local-level participatory planning approach (LLPPA), through which grassroots communities in target areas were involved at every stage of planning and implementing the various project activities.

When the Federal Democratic Republic of Ethiopia was created in 1993, under the leadership of Prime Minister Meles Zenawi, a process of decentralization and community empowerment was initiated. The newly developed LLPPA was welcomed by both communities and Ministry of Agriculture field staff, as they now had a greater voice in the planning process. However, the new policy of decentralization pointed clearly to the need for wide-scale capacity building before any planning could be effective. In addition, community empowerment had to be balanced with the technical requirements of soil and water conservation and the physical aspects of the watershed. Unfortunately, at this critical stage, FAO lost its funding for continued technical assistance, so WFP recruited a number of technical experts to provide the needed capacity building.

During the next decade, LLPPA became firmly entrenched as the preferred method for planning natural resource interventions. A process of feedback and technical scrutiny ensured that interventions combine the organizational and technical requirements of large-scale planning with the participatory approach essential for sustainable natural resource management. The achievements of communities that successfully managed and maintained the transformation of their local environments provided an example for others to follow. The success of Project 2488 grew, but at a time when WFP's resources for development activities were being slashed.

Box 10.1 A new approach to gully control

In 1993, a slowly expanding gully was destroying Ato Ifru's small plot of land. He asked his neighbour if he could have the land at the head of the gully. His neighbour, looking at the muddy crevice, agreed that if Ato Ifru rehabilitated the land he could keep it. Ato Ifru had seen the benefits of tree planting in the nearby Project 2488 site, and decided to plant trees in the gully.

Slowly, over four years and with the help of the district (woreda) expert in soil and water conservation, Ato Ifru established a row of check-dams, reshaped the gully, and planted a variety of trees from the Project 2488 nursery. By the end of this period, Ato Ifru had created an oasis.

On seeing this, his neighbour decided that he would do the same, and sectioned off the next part of the gully for rehabilitation. By 1999, 214 farmers had sectioned off individual plots covering almost the entire gully. The community gives them "private rights" to any benefit from their work. By "privatizing" gully rehabilitation and introducing healthy competition among neighbours, the community has transformed more than 10 km of gully into verdant gardens.

3.3 The rise of MERET

Following approval of WFP's Enabling Development Policy in 1999, the Ethiopia country office had to rethink its role in development activities. The positive impacts of Project 2488 were only beginning to be seen, while WFP's donors were demanding the phasing out of food aid to development assistance.

WFP and the government's Natural Resource Department seized the opportunity of showing how food assistance could enable development by taking the best of Project 2488 and broadening its perspective to encompass a livelihoods approach, thus creating a new programme: MERET. Building on the experiences of Project 2488, MERET was adopted as a community-based participatory integrated watershed development approach with the explicit recognition that land degradation is not only an ecological issue but also a social and economic one. The previous focus on rehabilitating degraded lands through soil and water conservation and reforestation was broadened to encompass a wider range of productivity improvement and income-generating technologies, such as horticultural crops, small-scale animal fattening with improved forage production, and bee-keeping, which brought faster and significant improvement to beneficiaries' livelihoods. These livelihood packages were supported by low-cost soil fertility management techniques and small-scale irrigation practices, to increase productivity and profitability while minimizing production costs.

MERET was launched as Activity 1 of WFP's country programme Managing Environmental Resources to Enable Transitions to more Sustainable

Livelihoods. The key differences between MERET and Project 2488 are:

- geographic concentration on highly food-insecure communities;
- linkages beyond natural resource management interventions to include livelihoods and income-generating activities that consider the community's economic and social needs when planning conservation;
- a focus on women, their inclusion in planning and management, and the prioritization of interventions that reduce women's work burden while encouraging their empowerment;
- a focus on knowledge, technological innovation and learning, to ensure that MERET continues to evolve, remains relevant and disseminates knowledge about the natural resources system to leverage the scale-up of activities;
- the introduction of results-based management, including training on measuring results for *woreda* experts and community management teams;
- a plan for phasing out food assistance and moving towards technical assistance and partnerships for microcredit, village savings and loans, income-generating group formation, etc.

3.4 Design aspects of MERET

MERET is implemented through the Natural Resource Department's extension system and enables food-insecure communities to manage their natural resources effectively, in order to increase their resilience to weather-related shocks. Food assistance is provided for up to three months each year to enable food-insecure households to participate in labour-intensive soil and water conservation activities. Extension agents control the quality of the work before households receive food.

As sustainable land management requires community ownership and leadership, the MERET approach includes capacity building for a community-selected management committee, to ensure that the community works together and manages together. Communities work with extension agents – who are often conservation engineers – to identify their priorities, select and plan activities, and manage natural resources. Community plans for rehabilitating their micro-watersheds consider environmental, social and economic needs. The approach includes empowerment for disadvantaged groups such as poor women and elderly-headed households so that they can benefit from assistance, and support to women's participation in planning, implementation and decision-making on issues affecting their livelihoods; half of the management committee must be women.

As MERET requires communities to take marginal lands out of cultivation and prevent livestock from grazing freely in protected areas, food remains a preferred form of assistance to compensate for the reduction in household food

access during environmental rehabilitation. Once conservation measures have improved soil productivity and water recharge, the community can begin income-generating activities such as horticulture, forage harvesting, fruit tree production, and bee-keeping. As incomes improve, WFP phases out food assistance but continues to support MERET's outreach to communities through funds for additional extension activities, incentives for innovation, and training on income-generating activities.

MERET is led and steered by the National Project Coordination Committee (NPCC), which is chaired by a State Minister of the Ministry of Agriculture and Rural Development and includes representatives from the Ministry of Finance and Economic Development and heads of regional bureaux of agriculture and rural development. NPCC decides on policy matters and resource allocation to the regions, and reviews progress. Its executive arm is the National Project Support Unit (NPSU) in the Natural Resource Department, which is headed by the National Project Coordinator, who is WFP's main focal point.

At the regional level, policy- and decision-making is carried out by the head of the Bureau of Agriculture and Rural Development, who reports to the regional council; the council is responsible for regional policy and budgetary allocations to agriculture and other sectors. The executive agency for MERET is the Regional Bureau of Agriculture and Rural Development, represented by the Regional Project Support Unit (RPSU), which is headed by a regional project coordinator and is responsible for project implementation at the regional level. Technical experts from the Bureau of Agriculture and Rural Development, the RPSU, and zonal and *woreda* natural resource offices provide technical support and oversight and ensure effective implementation.

Implementation is through natural resource extension agents at the community level. WFP country and sub-office staff include technically qualified soil and water conservation engineers, who work as a team within the NPSU and RPSU structure, providing back-stopping, supporting supervision and facilitating the exchange of knowledge and the learning cycle.

WFP and the Natural Resource Department have agreed a graduation strategy for food assistance, whereby FFW switches to technical support and, when funds are available, financial support for small revolving loans for income-generating activities. The *woreda* experts continue to receive advice and incentives, and community members continue to participate in awareness raising and training activities. After about five to seven years, WFP support moves to another community. WFP also provides funds for supporting technical staff in NPSU, training and other learning activities.

MERET supports more than 50 activities and technical packages, which can be grouped as in Table 10.1.

Table 10.1 MERET activities by category

Physical and biological measures	Livelihoods	Capacity development
Cultivated land treatment measures	Vegetable and fruit planting, bee-keeping	Community management support
Forest/closed area treatment measures	Fodder/forage development	Technical training for natural resource experts
Integrated gully treatment measures	Revolving loans for income-generating activities	Demonstration sites and study visits
Drainage structures	Nursery support	Incentives for innovation and technology development
Sediment capture structures	Village access road rehabilitation	Business training for community groups
Water harvesting, water ponds	Awareness creation on HIV/AIDS	Training on results-based management

4. Results achieved by MERET

Over the last few years, MERET has been evaluated by external consultants, Government of Ethiopia officials and WFP. These evaluations provide useful insights into the results achieved and ongoing challenges faced by MERET. All reports conclude that MERET has made substantial progress towards its goal of improving livelihood and food security opportunities for the most vulnerable, particularly women-headed households, through sustainable use of the natural resource base.

It should be emphasized that during most of the period of Project 2488 and MERET, communities implementing food-for-work activities have also received relief resources when affected by drought. However, both Project 2488 and MERET have adhered to the development standards for soil and water conservation required to rehabilitate a watershed, and transfers have only been given after verification that the work activity has maintained quality standards.

4.1 Results for community members

In addition to programme evaluations, in 2005 FAO undertook a cost-benefit analysis on behalf of WFP to assess the investment returns on MERET activities for beneficiaries. The study analysed soil composition, water capture, the production of woody biomass, and crop and horticultural productivity after conservation treatment implemented through MERET. It found that economic and financial rates of return averaged more than 12 percent for the main activities implemented through the programme – a remarkable achievement for drought-stricken areas.

The analysis also captured MERET communities' views on the benefits resulting from improved natural resource management. It found that all community members interviewed felt that their incomes had improved, and thus that their regular food deficit had decreased. They also found noticeable improvements in the quantity and quality of water available as a result of the conservation efforts. In particular, community members appreciated how pond development had improved the water supply for livestock. The study examined the project's effect on time savings in the collection of fuelwood, fodder and water, tasks traditionally assigned to women. Households in the community noted that significant time savings, averaging 2.2 hours a day for fuelwood collection and 2.0 hours for water collection (WFP, 2005d).

4.2 Technological results

Probably one of the most striking features of MERET has been the role of the partnership between WFP and the natural resource extension system in encouraging innovation. MERET has developed a range of appropriate technologies that adapt international standards of conservation engineering to Ethiopia's watershed requirements and community economic needs.

For example, the development of sediment storage dams, combined with check dams and reshaping techniques, helps control floods, stabilize gullies and restore the disrupted hydrological balances in catchments. Farmers were quick to notice the suitability of these methods, leading to increased popularity and faster rates of replication. As a result, gullies were transformed into productive land, where the concentration of fertile soil and sufficient moisture allow the production of high-value crops that generate income.

The development of these adaptive technologies results from a combination of government investments in technical support and incentives for natural resource experts and extension agents to innovate. Incentives include scholarships for summer schools to learn new approaches and undertake graduate and post-graduate programmes, as well as opportunities for travel and promotion. Farmers and extension agents are also rewarded directly through farmer field days, when experience sharing visits are organized and prizes – certificates and non-food items – are awarded to model farmers and exemplary extension agents.

Locally developed physical technologies, such as sediment storage dams, eyebrow basins and percolation pits, are all variations on basic conservation structures that have been adapted to the highlands' steep terrain and intense rain bursts. Biological measures range from soil fertility management such as composting and manuring, to vegetative measures such as planting trees, shrubs and herbaceous grasses and legumes among the physical conservation works.

For example, leguminous fodder plants combine gully stabilization with fodder supply for livestock. Similarly, pigeon pea provides a source of nutrition, stabilizes land and is drought-resistant. Tree crop planting includes economic wood and fruit trees and trees that enhance soil nutrients.

4.3 Community empowerment

In recent years, greater attention has been paid to MERET's impact on building community capacity and empowerment. A study by the International Food Policy Research Institute (IFPRI), in 2006, found that by focusing on the community, MERET has resulted in community empowerment. "Plans are subject to ratification by the whole community, allowing for voice and accountability. As communities have gained skills in carrying out development activities, they have moved beyond basic conservation to deciding on the allocation of productive resources and governance of communal assets" (Garrett *et al.*, 2009).

A more recent study also found "that individual households now find themselves as part of expanded social networks, and strengthened social values of interdependence and solidarity." By strengthening social capital, MERET enhances collective action and helps reduce individual households' vulnerability to risk (Government of Ethiopia, 2010).

4.4 The capacity for sustainable land management beyond MERET

The problem of land degradation and food insecurity in Ethiopia far outstrips the ability of any single agency to resolve it. MERET therefore has the explicit objective of reaching out to others, sharing learning and building capacity across the government natural resource extension system, by finding partners that can contribute their own knowledge, resources and support to the government. The impact of influencing a system rather than just a community can be seen in Tigray region where the Natural Resource Department applied lessons from MERET to the entire region. For the past 20 years, about 80 percent of cultivated land in Tigray has been treated with soil and water conservation measures. This amounts to about 960,000 ha, of which 300,000 ha is under livelihood-improving biological measures such as fruit trees, fodder shrubs and grasses. Overall, just under 40 percent of Tigray's land mass is treated, protected or reforested. This has been accomplished through the commitment of the regional government and its administrative structure to using all available resources and community self-help to implement quality community-based integrated watershed development (Tafere, 2009).

WFP, the World Bank and the German Agency for Technical Cooperation (GTZ) have collaborated with the government to develop and publish national community-based participatory watershed development planning guidelines.

This partnership has also advocated for and helped form the government-led Sustainable Land Management Forum, which helps to harmonize the efforts of all partners working on watershed rehabilitation, by providing a platform where they can learn from and support each other in expanding sustainable land management practices across the country.

5. WFP's support to MERET and the challenges faced

Project 2488 enjoyed significant development funding during the 1980s. In many ways, this was to the detriment of WFP, because the 1980s top-down food-for-work schemes became a symbol of why WFP should not be involved in development food aid. Although scepticism remains over the role of food in development, MERET's more recent successes have reignited hope that development results can be achieved with a humanitarian caseload – remembering that many MERET beneficiaries have continued to receive relief resources in severe shock years.

Challenges remain, however. Ethiopia still struggles with the need to invest in development, but the obligation first to provide humanitarian assistance. Covering humanitarian needs while trying to achieve quality development investments is still difficult. Furthermore, the dominance of relief food aid in official development assistance (ODA) flows to Ethiopia has generally hurt WFP's support to MERET.

5.1 Funding development in a humanitarian context

Over the past three decades, efforts to promote rural productivity and income growth in Ethiopia have been overshadowed by emergency relief assistance, which until 2005 was the major form of aid to food-insecure households (Thurow, 2003). In 2000, about 30 percent of ODA funds to Ethiopia went to humanitarian efforts, compared with 8 percent to agriculture and 10 percent to transport infrastructure (FAO, 2002). By 2007, a greater share of ODA was going to health, education and safety nets, but humanitarian resources were still high, at 25 percent of ODA. During 2008, humanitarian funding increased dramatically in response to the food and fuel price crisis; as a result, flows to other sectors declined by about 10 percent. Again, humanitarian needs displaced some development ODA. In donor budgets, Ethiopia currently receives more ODA than any other sub-Saharan country, but per capita flows are among the lowest, at about US\$41.⁴

WFP's development programming in Ethiopia is also only a fraction of its humanitarian assistance. During the 2008 crisis, MERET accounted for less than 5 percent of WFP's assistance to Ethiopia. Attempts to increase resources for

MERET are hampered by donors in Ethiopia wanting to encourage non-food approaches to development, given the dominance of food aid in the humanitarian sector.

Table 10.2 summarizes the value of WFP's assistance through Project 2488 and MERET.

Table 10.2 WFP assistance through Project 2488 and MERET					
Period	Project	Beneficiaries	Food (mt)	Cost to WFP (US\$ million)	Total, including government contribution (US\$M)
1980–1982: Original	Ethiopia 2488	2 280 000	145 000	49	66
1982–1987: Phase II	Ethiopia 2488/I	5 340 000	350 000	105	137
1987–1994: Phase II	Ethiopia 2488/II,	5 040 000	378 000	86	96
1994–1999: Phase III	Ethiopia 2488/III	936 000	137 000	50	60
1999–2002: Phase IV	Ethiopia 2488/IV	1 427 000	320 000	122	161
2003–2006	MERET	1 311 000	135 000	51	60
2007–1011	MERET-PLUS	1 700 000	164 000*	72*	79*

* This is the planning figure, thus far MERET has been 50 percent underfunded.

5.2 Trying to achieve development results in a humanitarian context

Despite efforts to increase investment in development, Ethiopia and its partners have been frustrated by the scale of food insecurity and its drag on development. Given that donors are already spending more in Ethiopia than elsewhere, taking MERET to scale is seen as a way of leveraging development results while addressing humanitarian needs.

Since 2005, Ethiopia's Productive Safety Net Programme (PSNP, chapter 20) has sought to meet the challenge of providing long-term development assistance to a humanitarian caseload. PSNP is an attempt to scale up the success of MERET as part of a longer-term commitment to disaster risk management and social safety nets using development funds. However, there are major

differences between design of PSNP and that of MERET, including the following:

- The PSNP transfer is a household entitlement not a community-based incentive to undertake quality soil and water conservation works.
- PSNP public works include a menu of options, and give less emphasis to applying a participatory integrated watershed management approach in their planning.
- PSNP often excludes work on homesteads and farmland, even when needed to treat a watershed, as its priority is work on communal land.
- PSNP does not invest time and effort in strengthening the community natural resource management committee.
- The PSNP package does not include the learning cycle and incentives for natural resource extension agents, experts, and community members.

As a result, PSNP lacks a focus on community natural resource management and has faced challenges in transforming natural resources and productivity in marginal communities. The hopes and resources placed in PSNP have diverted attention and resources from MERET. Since 2006, owing to resource shortfalls, MERET has been scaled down from supporting 600 communities to its current 451, reaching only about 300,000 people. At the same time, PSNP has faced problems in generating MERET-like successes in watershed rehabilitation.

During 2008 and 2009, WFP undertook significant work with donors to increase awareness about the differences between MERET and PSNP, emphasizing that MERET is not a substitute but rather a complement that helps PSNP achieve its productive aims. In particular, the value of MERET's support to capacity building, community empowerment and the learning cycle was confirmed by an evaluation in 2009 and by work undertaken by IFPRI (WFP, 2009a; Garrett *et al.*, 2009).

6. Lessons learned

The Government of Ethiopia has focused on watershed rehabilitation since the mid-1970s. Meanwhile, MERET currently reaches only about 4 percent of the areas requiring treatment, and its funding is marginal compared with WFP's resources for humanitarian assistance. Therefore, can MERET really be seen as a success story, and does it really offer lessons for other WFP operations?

In answering these questions, three factors should be kept in mind: it takes time and mistakes to learn lessons; inertia within government and international organizations hampers efforts to respond to lessons and change direction; and a context of continued humanitarian crises and low administrative capacity slows the process of transferring political and institutional change down to the

grassroots level. However, despite these hurdles to institutional learning and developmental transformation in a crisis-prone context, MERET shows that change can occur and food assistance can support effective disaster risk reduction at scale.

A critical success factor of MERET is the vision, commitment and tenacity of NPSU in pushing forward the learning agenda and ensuring that staff working in MERET truly partner communities, listening and responding to their needs. The adaptive technologies and the integration of livelihood needs and income-generating activities in the MERET approach are a direct result of this learning partnership. Similarly, WFP's consistent support – both financial and in food and staff resources – to NPSU and regional staff gave them the leverage they needed to experiment, innovate and incentivize communities to act.

The key lessons from MERET and WFP's experience of supporting it are at the strategic and programme levels.

6.1 At the strategic level

- Communities facing humanitarian crises can achieve development results, but combining humanitarian and development objectives in one programme is extremely challenging. In MERET, it has been more effective to implement a community-based programme that maintains the rigour and quality of a development intervention but is complemented by, rather than combined with, humanitarian interventions.
- A project cannot transform a society. Only the society, supported by national government, can resolve its own problems; this underlines the importance of capacity building, learning, and working through government systems.
- Investing in community management capacity is essential to the sustainability of disaster risk reduction interventions. This requires time and regular support to the community, but the resulting social capital is an important part of resilience.
- In highly food-insecure communities where markets do not function reliably, food is often a preferred transfer, especially when development investments require households to reduce income levels in the short term, through eliminating unsustainable livelihood activities. Various studies (Government of Ethiopia, 2010) have noted that poorer communities in Ethiopia often prefer food wages to cash, and only about 15 percent of the food is sold to meet other basic needs. In times of stress, more than 90 percent of the food wage is consumed.

6.2 At the programme level

- Achieving “quick wins” in livelihood enhancement increases incentives and people’s commitment to continuing with environmental rehabilitation. In the watershed development package, intensive water harvesting activities in semi-arid areas have allowed small-scale irrigation within as little as a year. This, coupled with the selection of viable income-generating packages, quickly improved the livelihoods of beneficiaries, increasing their commitment to implementing the watershed treatment and collectively managing and maintaining the watershed.
- Working with the community as a partner requires community empowerment for decision-making, and encouragement to government administrators at all levels for internalizing and sharing the problems voiced by community members.
- Using learning to effect change requires adequate support to capacities for planning, implementation and monitoring and evaluation; regular supervision; and technical support among community managers, natural resource experts and extension agents.
- To encourage the adoption of new technologies, they should be developed within communities, not at research stations, and disseminated through demonstrations in the field by technical staff. Farmer field visits, where farmers share experiences with each other, are a useful tool.
- Maintaining an effective quality control system with agreed standards across all sites ensures that efforts achieve the intended results. In MERET, technicians review the quality of soil and water conservation structures, ensuring that suboptimal work is corrected before food transfer are made.
- It is important to have technical capacity within WFP and funding to provide government technicians, administrators and community members with incentives for learning. These make it possible to adapt technologies to local needs and allow the close collaboration and support on programme design and implementation that achieve results.

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² United Nations International Strategy for Disaster Reduction website, Terminology 2009: www.unisdr.org/.

- ³ Although all land is still owned by the State, communities and farmers have traditionally been allocated land-use rights. Building on this tradition, a land-use certification process is now being established.
- ⁴ Organisation for Economic Co-operation and Development/Development Assistance Committee (OECD/DAC) Table 2a ODA disbursements by recipient and type: www.oecd.org/dac.