INTERNATIONAL RESCUE COMMITTEE

REDUCING MALNUTRITION IN HAGADERA & KAKUMA CAMPS

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The nutrition situation in Kenya's refugee camps improved considerably in 2010 with global acute malnutrition rate indicators reaching their lowest rates ever – 5.6% in Hagadera and 7.6% in Kakuma.

These improvements are a result of a combination of favorable factors and efforts: stable food pipeline, good seasonal rains, the availability of donor funding, the opportunity to enroll children in nutritional programs at an earlier stage due to change in nutritional standards and indicators, the consistent long-term and cooperative engagement with actors on the ground, and the successful collective response to the deteriorating nutrition situation in 2009.

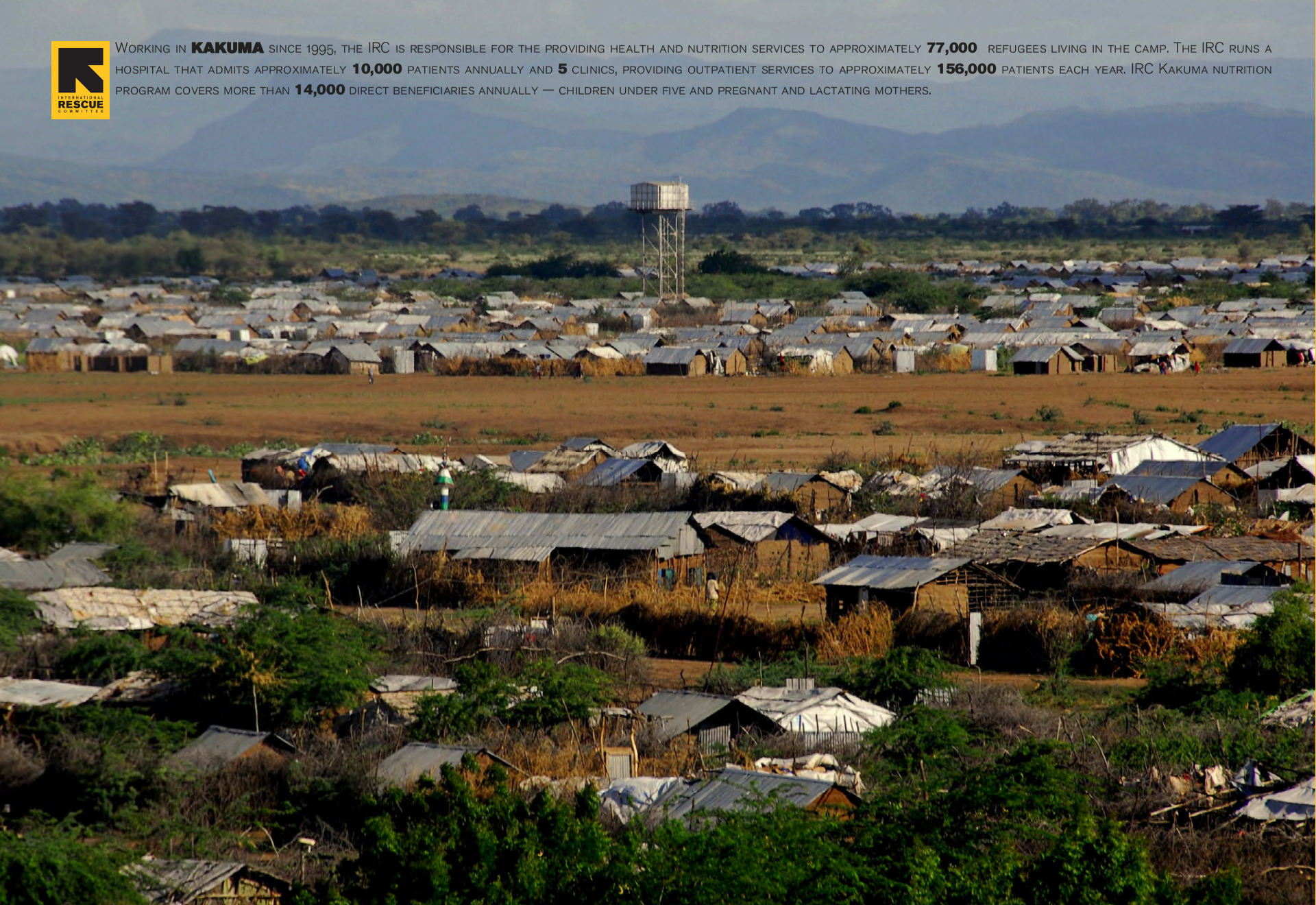
THE IRC, RESPONSIBLE FOR NUTRITION AND HEALTH PROGRAMMING IN KAKUMA AND HAGADERA, MADE AN INVALUABLE CONTRIBUTION TO THESE ACHIEVEMENTS. THROUGH 2009 AND 2010, THE IRC TOOK ON NEW RESPONSIBILITIES IN HADAGERA, ADAPTED NEW NUTRITION PROGRAMMING APPROACHES AND STRATEGIES, AND SECURED MUCH NEEDED IMPROVEMENTS IN INFRASTRUCTURE AND STAFFING.

THE IRC's SUCCESSFUL NUTRITION RESPONSE IS SPEARHEADED BY AN EMPHASIS ON THE REFUGEE COMMUNITY's ENGAGEMENT AND PARTICIPATION, EARLY DETECTION AND TIMELY ACTION, AND A FOCUS ON PREVENTION AND AWARENESS.

Despite improvements, many immediate and long-term CHALLENGES remain:

- **There is a need for sustainable funding to maintain and improve current service levels.**
- **More needs to be done to transform the knowledge on proper feeding and caring practices into action.**
- **Anemia, one of the most persistent problems in the camps, remains a serious threat with immediate and long-term consequences.**
- **Understanding and improving relations between refugees and local communities will be crucial for assuring their peaceful coexistence.**
- **Only sustainable and durable solutions can lead to a stable and viable nutritional situation.**

The IRC started its operations in **HAGADERA** camp, Dadaab, in January 2009, taking over the responsibility for comprehensive health and nutrition services for approximately **100,000** refugees living in the camp. The IRC runs a hospital that admits approximately **6,100** patients per year and **4** clinics, providing outpatient services for **90,000** cases yearly. IRC Hagadera nutrition program is serving over **20,000** direct beneficiaries annually, including children under five and pregnant and lactating mothers.



Working in **KAKUMA** since 1995, the IRC is responsible for the providing health and nutrition services to approximately **77,000** refugees living in the camp. The IRC runs a hospital that admits approximately **10,000** patients annually and **5** clinics, providing outpatient services to approximately **156,000** patients each year. IRC Kakuma nutrition program covers more than **14,000** direct beneficiaries annually — children under five and pregnant and lactating mothers.

CONTENTS

BACKGROUND NOTE ON NUTRITION

AND RELATED ISSUES IN KAKUMA AND DADAAB

This background note offers a concise overview of the nutrition situation in Kenya's refugee camps and serves as a necessary introduction to understanding the IRC nutrition programming, which is presented in detail in the following sections.

Protracted refugee settings present a challenging environment for health and nutrition programming, particularly in remote areas like Dadaab and Kakuma, where living conditions are harsh and difficult. Despite various challenges — lack of proper infrastructure and funding, arid climate, limited livelihood opportunities and compromised security — the nutrition situation in Kenyan refugee camps has been showing a trend toward improvement over the past few years; and by 2010 the global acute malnutrition rate indicators have reached their lowest levels ever – 5.6% in Hagadera and 7.6% in Kakuma.

NUTRITION IN PROTRACTED REFUGEE SETTINGS

Emergencies, by definition, threaten human life and public health, resulting in food shortages, compromised infrastructure and sanitation, limited security – factors that all affect the nutritional status of the entire community.[1] The resulting malnutrition, i.e. macro and micro nutrient deficiencies, is a consequence of insufficient quantities of properly nutritious food, ill-health and underlying factors such as environmental health, poor health infrastructure and the caring practices within the home and community.[2]

Nutritional deficiencies have an immediately negative health impact, as well as long-term consequences, which, together with poor child-caring practices and infrastructure, often lead to intergenerational malnutrition. For example, a newborn baby girl with low-birth weight, is likely to remain underweight if she survives, may be stunted and chronically malnourished, may become pregnant in early adolescence and, in turn, give birth to an underweight baby. Tackling malnutrition is therefore extremely important, particularly for children under-five and pregnant and lactating women.[3]

Protracted refugee settings, where refugees have been in the camps for more than five years – almost two decades in case of Kakuma and Dadaab – present particular nutritional challenges. Higher rates of malnutrition and micronutrient deficiencies are implicit in these settings[4] and they are associated with problems in the food pipeline, food rations inadequate in micronutrients and poor living conditions. Adequate shelter, water, sanitation, access to income and balanced diet in terms of fat, protein, and energy content impact malnutrition rates in these settings with a positive correlation, but do not on their own guarantee positive nutrition outcomes.

Several additional factors and measures can contribute to lowering malnutrition:

- a well functioning health care system with both curative and preventative services;
- strong nutritional monitoring, surveillance and information management systems;
- the existence of programs following standardized guidelines to prevent and treat malnutrition such as infant feeding, community based approaches to treatment of severe malnutrition, supplementary, therapeutic and blanket feeding programs, which mitigate the nutritional impact of food shortfall on children;
- focused health and nutrition education to beneficiaries;
- behavior change communication strategies addressing certain cultural practices;
- the routine inclusion of fortified blended foods in food aid.

Furthermore, designated area policies of a host government seriously constrain the opportunities for self-reliance in terms of agricultural initiatives and income-generating activities. Given its difficult living conditions, the uncertainty of its stay and its inability to return home, the population is often extremely dependant on humanitarian aid.

This is a serious shortcoming as organizations working in protracted refugee situations face constant difficulties in providing sufficient resources and accessing funding.[5] These situations are often a tremendous drain on resources. They involve supporting large populations that live in situations requiring care and maintenance year after year; and having nutritional and livelihood needs as complex and extensive as in acute emergencies. Most of the agencies run on annual or biannual programming, focusing on temporary solutions. As years go by and the donors expect a decrease in assistance needs, the often temporary solutions in terms of multi-sectoral assistance as well as the continuous demand for basic medical and sanitation services and sufficient food relief end up being costly and funding needs are not met. This problem is only further accentuated by the stringent restrictions imposed on movement and income generation through the government's designated areas policies.

DADAAB AND ITS ENVIRONMENT

Although prone to environmental problems and not immune to the dangers of drought and water shortages, the North Eastern province, where the Dadaab camps are located, provides Kenya with most of its livestock. The region is also abundant in wildlife. Two good rainy seasons since 2009 have led to short-term improvements in food security in the region, which is, however, negatively impacted by the proximity of unstable Somalia and the continuous influx of new refugees. Thus, malnutrition rates remain high in the region, exceeding the 25% global acute malnutrition (GAM) rate in the border areas of Mandera, and are close to or exceed the 15% GAM emergency threshold in areas around Dadaab.[6] Nutritional habits of pastoral populations in the region lead to selling of more nutritious foods such as milk, eggs, and beans, to purchase starches. In addition, decreased herd sizes due to prolonged drought and migration leave children without access to milk during extended periods.[7] New arrivals to the region continue to impact host communities, of which most are ethnic Kenyan Somalis. Although they are ethnically and culturally much closer to the predominantly Somali refugee population, the limited resources in the region result in a tense relationship between the communities.

Because nutritional status is a manifestation of a complex interplay of factors, it is sometimes challenging to identify the most influential ones, as well as the strategies and activities that impacted the increase or decrease in malnutrition rates. The underlying causes are normally addressed by various actors on the ground and in close engagement with the refugee communities. Nutritional improvements on the ground can therefore be achieved only when a holistic and proactive approach is taken, meaning a multi-sectoral and comprehensive action.[8]

Communities and families themselves have often developed coping strategies for survival, particularly if previously victim of emergencies. The goal of emergency response and preparedness is essentially to enhance this self-help capacity and to ensure all the support necessary to enable each community to manage their health, food and nutrition situation adequately. This, however, needs to be carefully balanced through screening, monitoring and reversing of alternative and unskilled community self-interventions, which can cause harm or delay access to proper care and solutions because of cultural beliefs, attitudes and practices.

RIGHT Water source in Dadaab. The two refugee camps are located in arid areas where limited water sources affect every aspect of life and humanitarian programming.

NUTRITION IN KENYA'S REFUGEE CAMPS

In October 2010 Kenya hosted approximately 412,000 refugees,[9] of which almost 90% were located in camps in Northern and North-Eastern Kenya, established in 1992 after the escalation of conflicts in neighboring Somalia and Sudan. The three refugee camps near Dadaab – Hagadera, Ifo, and Dagahaley – have traditionally hosted mainly Somali communities (94% in 2010), with their overall population rising from 172,000 in 2007 to 288,000 in 2010. Kakuma camp, currently hosting approximately 77,000 refugees, i.e. Somalis (55%), Sudanese (30%), Ethiopians (14%) and other refugees from the Great Lakes region, was originally established as a camp for refugees fleeing civil war in Southern Sudan. Its ethnic composition, however, changed notably following the relocation of Somalis from Dadaab in recent years.

The camps are set in similar arid, semi-arid and hot environments, characterized by harsh living conditions. In both the Turkana region, where Kakuma is located, and the North Eastern Province, where Dadaab is located, rain falls infrequently, usually in April and October, making the two regions best suited for nomadic pastoralists. The local economy relies on livestock, mainly camels, goat and sheep. Scarce rivers and extremely limited alternative water resources make irrigation-based agriculture difficult or often impossible. This results in higher food prices and limited food diversity and contributes significantly to the nutritional challenges in the regions.

This dire living environment exacerbates the existing challenges of life in protracted refugee settings, particularly the limited opportunities to assure one's own livelihood. Consequently, the majority of the refugee population in Dadaab and Kakuma camps is largely dependent on the general food ration provided by humanitarian organizations as their source of food. Their livelihood opportunities have been severely hindered for years, the food ration is the main source of income for the majority of refugees. The sale of food is used to buy preferred foods such as pasta, rice, milk, sugar, and tea leaves to supplement and provide variety in the diet, but also to buy basic and irregularly provided non-food items such as clothing, jerry cans and soap.[10] As a result the required and distributed ration of Kcal 2,166 per person per day[11] often fails to meet basic nutritional needs, although for understandable reasons.

Adequately addressing food security and related needs of the refugees is the joint responsibility of the United Nations World Food Programme (WFP) and the United Nations High Commissioner for Refugees (UNHCR), working together with their implementing partners – international and local non-governmental

TURKANA

Turkana, where Kakuma is located, is regularly affected by droughts and famine. Its location far from the fast growing urban Kenya in a remote area makes it one of the poorest regions in the country. 74% of its population lives in absolute poverty.[12] Seasonal droughts, high poverty levels and limited infrastructure add to food insecurity in the region, especially among the traditionally pastoralist Turkana people. During the 2009 drought, 74% of Turkana's population relied on food aid; the 2010 numbers have shown improvements in GAM rate in Turkana North West district (where Kakuma is located) at 14.7% and severe acute malnutrition (SAM) at 1.6%, a decrease from alarming levels in 2009.[13] Significant recovery was anticipated in food security, water and nutrition following the good performance of the last two rainy seasons in late 2009 and 2010, with a critical situation persisting in Turkana Central and North East districts. However, the recovery is uneven and moderated by persistently high food prices and the cumulative impact of previous poor rainy seasons, which have diminished resilience at the household level. These circumstances, combined with general insecurity, contribute to occasional tensions between Kenyan and refugee communities, which are often perceived as better off by locals.

organizations, charities and development agencies, responsible for operational implementation. Specifically, WFP is responsible for the provision of the general food ration, to which every registered refugee is entitled, and the management of the food distribution points; UNHCR is responsible for protection and humanitarian assistance programs in the camps, i.e. the provision of health services, water and sanitation, shelter and basic non-food items, and also for distribution of complementary foods.

Despite numerous challenges and occasional disturbances, the nutritional situation in Dadaab and Kakuma camps has shown a trend toward improvement over the last few years, with a particularly significant decrease in malnutrition rates recorded between 2009 and 2010. The rates of global acute malnutrition have dropped significantly, from 26.3% at Dadaab/Hagadera and 19.6% in Kakuma in 2005 to 5.6% and 7.9% in 2010, respectively, thus well below the emergency threshold of 15%.

These improvements are the net result of several factors – general and camp-specific (see below, Hagadera and Kakuma sections) – and can be grouped as follows:

One of the most significant factors over the last years has been a generally stable food pipeline, assuring the population in both camps with relatively regular distribution of food rations.

Secondly, the provision of health- and sanitation-related services has gradually improved over the years, thanks largely to improved infrastructure, staffing levels and the identification of alternative sources of donor funding. That being said, funding insecurity remains an issue that can lead to rapid backsliding or regression, as demonstrated in Kakuma in 2008 and 2009.

Thirdly, improved collaboration among humanitarian actors on the ground and their adaptation of strategies and approaches to needs and challenges cannot be undermined (see some IRC responses below). This includes particularly the integrated and holistic approach to patient care and management, and community involvement to improve nutrition practices.

Finally, the year 2010 was marked by an increase in admission to supplementary and therapeutic feeding programs, resulting from improved screening and the introduction of the new WHO anthropometric cut-off points, initiating faster treatment.

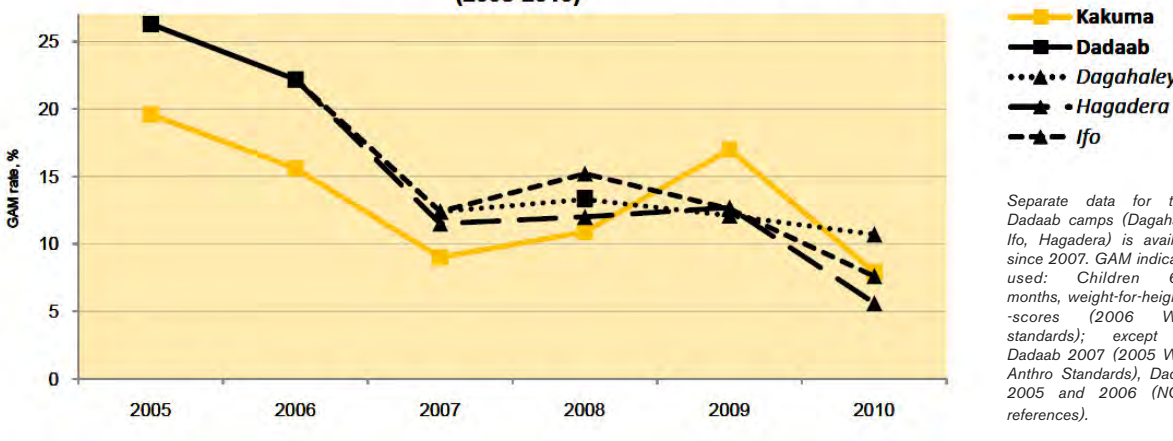
HAGADERA (DADAAB) REFUGEE CAMP

From 2002 to 2007 GAM rates in the Dadaab camps were regularly above the 15% emergency threshold and the nutrition situation had continuously been described as precarious.[14] Events and conditions associated with yearly rains and floods that compromised hygiene and resulted in diarrhea and malaria were regularly cited as the main factors contributing to high malnutrition rates,[15] together with chronic food insecurity, inadequate child caring practices and food pipeline disturbance. The continuous influx of new refugees from neighboring Somalia has considerably added to the burden. Most of these factors remain issues of concern today.

The improved nutritional situation in the camp in 2007 was largely attributed to changes in the food basket, which included wheat flour, a preferred staple among Somalis. This lead to improved dietary intake as the newly included staple was considered an appropriate food for children and was not resold. The same year brought better coverage of selective feeding programs, improved knowledge and practice in infant care and feeding and improved hygiene thanks to the intensified campaigns during outbreaks of cholera and other diseases, as well as to increased average daily water consumption per persony.[16] The latter improvements were, however, only a start, especially with infant feeding practices. Timely initiation of breastfeeding, distribution of pre-lacteals, appropriate duration of breastfeeding and exclusive breastfeeding reportedly remained areas of concern, together with high levels of anemia, limited livelihood opportunities and limited supplementary foods.[17]

Late 2007 and early 2008 brought a slight improvement to the quality of the food basket through the provision of complementary foods, namely groundnuts and green grams, and also the introduction, by Action Against Hunger, of the food voucher system for the provision of fresh vegetables and fruit, milk and eggs, aimed at improving the diet of children enrolled in selective feeding programs. The February nutrition survey reiterated that infant and young child feeding practices remain a challenge, particularly in relation to breastfeeding, complementary feeding and childcare during illness. It also made clear that health care systems remain overwhelmed due to continuous influx of new refugees and that there is a need for more community health workers to scale-up prevention and screening activities. Comparatively, Hagadera camp did worse than other Dadaab camps in child morbidity, therapeutic feeding program enrollment, breastfeeding[18] and complementary feeding practices.

GLOBAL ACUTE MALNUTRITION (GAM) RATES IN KAKUMA AND DADAAB CAMPS (2005-2010)



Separate data for three Dadaab camps (Dagahaley, Ifo, Hagadera) is available since 2007. GAM indicators used: Children 6-59 months, weight-for-height, Z -scores (2006 WHO standards); except for Dadaab 2007 (2005 WHO Anthro Standards), Dadaab 2005 and 2006 (NCHS references).

WHO DOES WHAT IN DADAAB?

WFP is responsible for the provision of the general food ration and the management of the food distribution points and CARE is the implementing partner responsible for their distribution. UNHCR is responsible for the provision of complementary foods either through direct distribution of commodities or seeds for kitchen gardening.

Furthermore, UNHCR oversees protection and humanitarian assistance programs in Dadaab, which it does through its implementing partners.

The IRC has been managing health and nutrition services in Hagadera camp since January 2009 and MSF Switzerland in Dagahaley since August 2009; Ifo camp is serviced by GTZ, which had previously managed health and nutrition in all three camps.

The National Council of Christian Churches in Kenya (NCCK) implements a reproductive health program.

The Norwegian Refugee Council (NRC) has been dealing with sanitation and housing.

Other agencies active in the camp are IOM, Save the Children, Windle Trust, Film Aid International, Handicap International, Refugee Consortium of Kenya, LWF and CARE.

Improved dietary intake was maintained in 2009, with the food pipeline remaining stable. The supplementary (although irregular) distribution of green grams ground nuts to pregnant and lactating women and Nutributter to children 13-36 months was particularly well accepted by the community and deemed suitable for children. Also the multi-storey gardening promotion was maintained with some success.[19] Although access to food remained stable, this was compromised by inadequate access to non food items not delivered in 2009, leading to a sale of the food ration by many refugee households to buy these items, particularly soap and firewood. The 2009 nutrition survey also reported no significant improvement in infant and young child feeding practices, a commendable level of immunization and vitamin A coverage, the persistently high prevalence of anemia, which is a heavy burden and a major aggravating factor to the health and nutrition situation in the camp.

New arrivals generally reach Dadaab camp in a compromised health and nutritional situation, fleeing from war-torn Somalia, which currently experiences food shortages and severely compromised or nonexistent sanitation and health services. Additionally refugees are often exhausted by their physical flight. Despite their prompt registration and refugee status determination, integration into existing camp services can be delayed, which can further negatively impact their nutritional and health status. 2009 saw a record high number of new arrivals – 72,250 – to Dadaab, but assessing the exact impact of their arrival remains a challenge. Most of them arrive in Dagahaley and are then registered in Ifo. Some, however, try to move on to Hagadera, which is generally perceived as the camp of choice in Dadaab due to perceived better services, a population originating mainly from Somali urban areas, the proximity of water resources and the surrounding vegetation. It is therefore not uncommon for refugees to be registered and collect their ration in one of the camps, but actually reside in and enjoy some services in another.

The year 2010 saw an improved nutritional situation in all three Dadaab camps, most significantly in Hagadera, where the rate of GAM decreased by seven points to an unprecedented 5.6%. Several factors can be identified that contributed to this drop, including the favorable climate condition in the Kenyan North Eastern province through 2009/2010. Generally, the food pipeline remained stable throughout the year, the rate of new arrivals decreased slightly compared to 2009 and several nutritional interventions such as the provision of green grams and Nutributter were well accepted by the refugee population.

Since 2009, the camps have undergone several structural changes. Most notably, the implementing partners in the health sector, namely MSF and the IRC, took over the responsibility for providing health services in Dagahaley and Hagadera, respectively, while GTZ remained responsible for the health sector in Ifo. This has resulted in new approaches, funding, and staffing and infrastructure improvements. Apart from building new or renovating existing medical facilities, the IRC intensified the whole cycle of its activities directly or indirectly linked to nutrition programming, from early screening at community level, to in- and outpatient services provided at medical facilities, as well as prevention and education. Consequently, the coverage of supplementary feeding was higher in Hagadera than in the other two Dadaab camps and more emphasis was given to the community health programming and working directly with the community. Thanks to the construction of water tanks, Hagadera furthermore benefitted from the improved supply of clean water, which is one of the most important determinants of the nutritional status of the population.

It is not negligible that Hagadera is believed to be economically better off than Ifo and Dagahaley camps due to its water resources, thriving market and the composition of its population. Its households are generally considered to be richer and the population better educated, two factors closely correlated with improved nutritional status.[20] This economic advantage, limited as it is, contributes to livelihood opportunities for the refugee population and at least partially diminishes dependence on food rations.

KAKUMA REFUGEE CAMP

Malnutrition is a manifestation of several factors including changes in population dynamics — a significant factor in Kakuma. Since 2008, the camp has been characterized by the repatriation of Sudanese refugees and the influx of Somali refugees from Dadaab and Somalia. Although these shifts make comparison between years difficult, with the fluctuation in malnutrition rates and other indicators becoming increasingly subject to external factors, the influx of new arrivals in 2009 has been identified as one of the major factors contributing to higher malnutrition rates. Furthermore, the camp is dynamic and diverse in terms of language and cultural practices due to its multiethnic composition, particularly in comparison to Dadaab.

Since 2005, the prevalence of acute malnutrition in the camp has been dropping and from 2007 to late 2009, the rate of acute malnutrition has been below the 15% emergency threshold.

The camp, however, experienced a major deterioration in nutritional status from 'risky' in 2008 to 'critical' in 2009, with malnutrition rates increasing by almost 6 points to 17% in October 2009. New arrivals, the change in the camp's composition and the 2009 cholera outbreak were the major additional causes for this deterioration, in addition to the persistently present underlying causes.

Although the food pipeline in Kakuma was relatively stable in 2009, the general food basket often remained insufficient for refugee households as they needed to trade part of it to purchase insufficient and irregularly distributed non-food items.[21] This is particularly harsh on new arrivals since they are totally dependent on this ration compared to refugees who have been in the camp for longer periods of time and who either have established networks in other parts of Kenya that allow them to access the foods they prefer or are able to produce at least some food at the household level.[22]

The 2009 nutrition survey revealed alarming infant and young child feeding practices, particularly the low rates of exclusive breastfeeding and the premature introduction of complementary feeding. Only 51.9% of surveyed mothers reported exclusive breastfeeding during the first six months of an infant's life, which was far less than in previous years, indicating the low exposure of new arrivals to such practices; instead, respondents reported feeding children milk, water and sugar formulas, tea and coffee, thus unknowingly impairing children's health, including iron absorption leading to anemia, a particularly prevalent and serious problem among the refugee population.

WHO DOES WHAT IN KAKUMA?

WFP is responsible for the provision of the general food ration and the management of the food distribution points, while UNHCR is responsible for the distribution of complementary foods. Lutheran World Federation (LWF) is the implementing partner responsible for their distribution, as well as for camp management (implemented by NCCK), distribution of food and non-food items, water, education and community services.

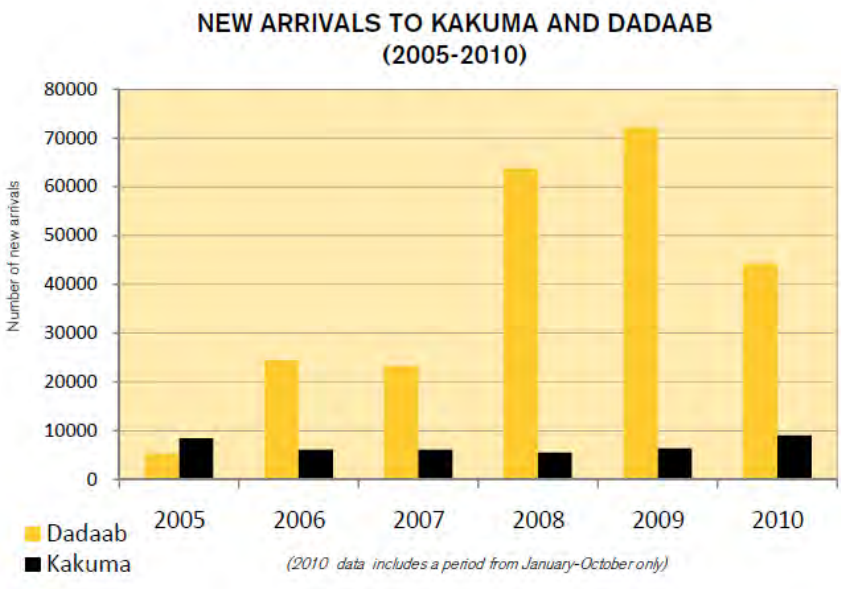
UNHCR is responsible for the protection and humanitarian assistance programs in Kakuma camp which it does through its implementing partners.

The IRC is responsible for providing the comprehensive and integrated primary health care program, including nutrition, mental health, sanitation, preventive and curative services..

Other agencies active in the camp are IOM, GTZ (responsible for firewood distribution, environment and backyard gardening), Windle Trust, Film Aid International, and JRS.

2009 was marked by the scaling down of health services due to refugee repatriation. This led to a reduction in funding and the eventual closing of two health clinics and a reduction in the number of staff - trends that were not reversed after the influx of new arrivals.

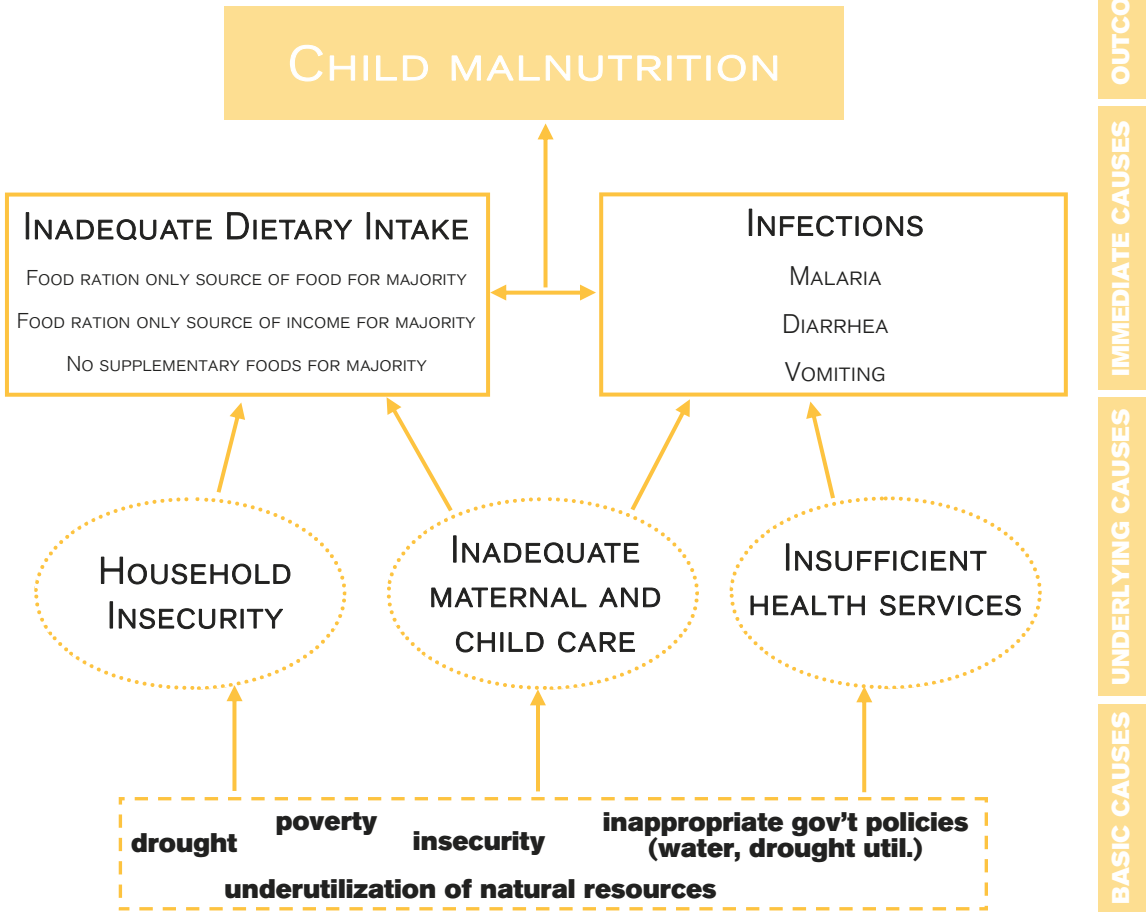
The outbreak of cholera in late 2009, following the brief October rains, coincided with the nutrition survey and was a reflection of poor hygiene, mainly due to a lack of adequately safe water, which had been an outstanding issue in Kakuma for some time. The situation was further worsened by the occasional use of water designated for consumption to make bricks for shelter construction and the increased rates of malaria. The survey estimated the consumption of water at 12.4 l/person/day, which was below the acceptable minimum standards (20 l/person/day), and highlighted major challenges such as remoteness of collection points, inadequate storage facilities at household level, old water piping systems, inadequate soap availability and the insufficient coverage of latrines and sanitation facilities.



The closure of the medical clinics because of funding reduction in 2009 led to overstretched resources with daily consultation rates rising from 51 per day per consultant to 82,[23] and increased the distance covered by some refugees to access those services — an additional hindrance considering that certain parts of the camp are cut off by seasonal rivers during the rainy season. Not only do rains prevent refugees from accessing medical services, but they also disrupt food distribution – although WFP pre-positioned food stocks to prevent such an event – and the transfer of patients to the hospital. The IRC ini-

CAUSAL FRAMEWORK OF CHILD MALNUTRITION IN KENYA'S REFUGEE CAMPS

Adapted from UNICEF (1998), IRC (2006)



tially responded to the closure of clinics by introducing outpatient services at the hospital to improve access to care

Reduced funding was further felt through the reduction in staffing levels of the community health and nutrition programs, resulting in competing activities within those programs, a shift of focus, lower preventive and community health coverage levels and the decrease in identification of risky cases.

The net effect of these unfavorable circumstances and factors, together with the general uncertainties about donor funding and the future of Kakuma camp, was the deteriorating nutritional status of the camp population toward the end of 2009. The assessment of the nutrition survey led to intensified efforts to bring down the level of acute malnutrition with the participation of all actors operationally present on the ground.

Additional funding was identified to improve staffing and to strengthen various health- and nutrition-related activities. The number of incentive staff recruited from the camp to assist with therapeutic feeding and community health programs doubled and one more IRC nutritionist and community health officer were employed, resulting in better efficiency of feeding and distribution sites and supervision of screening of children by incentive staff. This was complemented through the scale-up of community mobilization involving refugee leaders trained to assist with the prevention of malnutrition.

The immediate response to the 2009 survey was the November mass screening that resulted in increased levels of child-admission to nutrition services. The numbers of community health workers increased along with the attention they were required to give to malnutrition symptoms, which intensified door-to-door screening to identify and refer mothers with malnourished children to therapeutic programs, those with sick children to the health facilities and to trace and follow-up with defaulters. Consequently the 2010 survey[24] showed a significant increase in supplementary feeding program rates from 24.8% to 75.6% and outpatient therapeutic program rates from 27.8% to 93.3%, partially also a consequence of the new WHO anthropometric cut -off points allowing for earlier identification of risky cases.

By early 2010 significant improvements in water and sanitation services in Kakuma were recorded, resulting from the construction of new water tanks, boreholes and latrines. Coverage of the latter increased ten-fold at some locations from October 2008 to April 2010. In fact, initial poor community participation due to shelter prioritization had been the main reason limiting the step-up for latrine construction activities before the cholera outbreak. An increase in distribution of mosquito bed nets to households

led to high levels of use of mosquito bed nets by children under five years of age (95.5%), probably resulting in the decrease in malaria prevalence among this population. Morbidity rates for watery diarrhea and fever decreased by more than 10%.

The food pipeline remained stable in Kakuma throughout 2010, without decreases in the food basket, contributing to food security at the household level. Although diversity and the sufficiency of the food ration remained a problem, it is assumed that the settlement of new arrivals also led to the balancing of the food ration and the development of coping strategies. Several complementary food distribution activities remain in place, such as the WFP-provided micronutrient fortification through Mix Me sprinkles, school feeding and dried skimmed milk for the beneficiaries of the supplementary feeding program (moderately acutely malnourished under-fives, pregnant and lactating mothers and medical cases such as those suffering from HIV, AIDS and TB). The UNHCR-provided groundnuts and green grams have complemented the micronutrient content of the food basket since August 2007. This is in addition to fish distribution by the IRC to children between the ages of six and 24 months to improve their dietary diversity and contribute to the reduction of anemia.

Despite drastically improved malnutrition rates, immediate challenges remained in Kakuma in 2010, particularly with the improper infant and young child feeding practices, vaccination rates below acceptable levels, dependence on food rations and limited food diversity. Optimal breastfeeding practices such as timely initiation of breastfeeding, exclusive breastfeeding up to the age of six months and continued breastfeeding up to two years or longer remained below acceptable levels, particularly among the new arrivals. Complementary feeding practices remained inadequate in terms of timely introduction of complementary feeding, dietary diversity and frequency of feeding of children. One third of the children between one and two years of age were not fully immunized and vaccination documentation was scarce and unreliable.

FINAL BACKGROUNDER COMMENTS

The nutritional situation in Kenyan refugee camps had been showing a trend toward improvement over the past few years; by 2010 the nutritional status of the refugee population in Kakuma and Hagadera, where the IRC is responsible for the provision of medical services and nutrition programs, was better than ever.

Managing nutrition in protracted emergency settings is challenging, requiring a multi-sectoral and multi-actor approach, and a continuing commitment. The scaling-down of services, resources and funding can lead to a fast deterioration of the nutritional and health situation and an almost immediate loss of long-term programming achievements as demonstrated in Kakuma. On a similar note, the rapid increase in camp population can result in their needs not being met and in an overstretch of available services and resources, as experienced at both locations.

In any of such circumstances the operational actors on the ground can and do adapt their strategies, prioritize, and adopt new ones, as is shown below with the examples of the IRC. However, this can only partly address the issue of inadequate resources, just as the coping strategies of the hardship-accustomed refugee population can offer only partial and temporary solutions to the constant challenges they face. It is fair to say that a protracted setting offers the refugee population little chance to sustain themselves and their households, where such harsh environments like Kakuma and Dadaab are concerned. They remain therefore dependent on outside assistance, which needs to be provided to them in a timely, adequate and dignified manner.

BELOW Waiting line at the supplementary feeding program food distribution site in Hagadera camp.

THE IRC's APPROACH TO NUTRITION

IN KAKUMA AND HAGADERA

ABOVE IRC nutritionist in Hagadera during a home visit.

GENERAL APPROACH

Nutrition in general is one of the areas in which outcomes are severely affected my multiple factors and areas such as food security, health, infrastructure, education and security. This is worsened in a refugee camp setting where services tend to be essential or often insufficient, severely affecting several of these areas at the same time.

Therefore, the IRC's work in nutrition is necessarily driven by the organization's underlying principles – participation, holistic approach to programming, capacity building and partnership.

The IRC has consequently recognized the crucial role of strategies and policies that help with achieving results across the board:

- thorough and continuous assessments of needs to assure responsiveness;
- the active engagement of beneficiaries in identifying and implementing sustainable and tailored solutions that build local capacity;
- cross-program work based on the integrated mainstreaming of services through existing ones;
- and the support of partnering with other actors present on the ground.

Nutrition programs, supported by the clinical and community health services that the IRC provides exclusively in both camps constitute the core of the IRC's work in nutrition in Hagadera and Kakuma camps and is complemented by other IRC (environmental health) or partners' programs.

NUTRITION PROGRAM

In both camps the IRC runs a nutrition program with a range of preventive and curative nutrition activities in five key functional areas:

- Integrated Management of Acute Malnutrition (IMAM)
- Micro-nutrient Deficiency Control (MNDC)
- Infant and Young Child Feeding (IYCF)
- Hospital Feeding and Dietetics
- Nutrition Education and Counseling

The activities, which usually simultaneously address several of these functional areas, are conducted at community and health-facility levels.

Community-level outreach plays a particularly important role in screening and identifying cases of acute malnutrition, and in

prevention through various education means and counseling activities.

Identification and prevention are similarly conducted at the health -facility level, which additionally serves as a point of departure for therapeutic programming. This includes supplementary and outpatient therapeutic feeding, usually through health clinics closer to the community to assure high coverage and accessibility, vitamin A supplementation, de-worming, infant and young-child feeding practices and various forms of community involvement.

The main health facilities – hospitals – serve to manage of cases of severe acute malnutrition with medical complications in stabilization centers and integrate key nutrition aspects in all in- and outpatient services at these facilities. This includes infant and young-child feeding practices through confidence-building and offering support sessions in maternity and pediatric wards, nutritional aspects of managing HIV/AIDS or tuberculosis patients, dietary management etc.

SUPPORT PROGRAMS

CLINICAL SERVICES AND SUPPORT

In both camps the IRC runs a primary care hospital with operating theaters, outpatient departments, male and female inpatient wards, a pediatric ward, an isolation ward, a tuberculosis ward, laboratory, pharmacy and therapeutic feeding centers. In addition, the IRC supports five outpatient clinics in Kakuma and four in Hagadera, providing curative services, preventative health care, pre- and postnatal care, immunizations and family planning. The IRC also offers physiotherapy and rehabilitation for persons with disabilities.

RIGHT Somali refugee family in Dadaab visiting outpatient clinic in Hagadera camp section.

COMMUNITY HEALTH PROGRAMS

The IRC focuses on preventive health care and education in both camps with a team of community health workers, traditional birth attendants, vaccinators, and reproductive and mental health workers. The program offers vital support for therapeutic and supplementary feeding – community health workers trace defaulters, undertake referrals, provide hygiene education and birth supervision.

RIGHT IRC community health worker during the routine weekly home visit in Kakuma refugee camp.

ENVIRONMENTAL HEALTH (Kakuma)

The community-based sanitation program in the camp covers solid, liquid and human waste control, vector control, food quality and animal slaughter inspection, and burial of the dead.

RIGHT Latrines at Kakuma Refugee Camp.

THE IRC NUTRITION BEST PRACTICES AND LESSONS LEARNED

FROM NUTRITION PROGRAMMING IN KAKUMA AND HAGADERA

The multi-dimensional nature of nutrition in emergency settings makes it difficult to single out specific practices and actors that can be attributed to improvements in the nutritional status of a refugee population, especially in operations of the size and complexity of Kakuma and Hagadera refugee camps.

External factors, many of which were assessed above in the Nutrition Backgrounder, can directly or indirectly contribute to either higher or lower malnutrition rates and other relevant indicators. Moreover, the work of every single agency invaluably contributes to successes and improvements, particularly when complemented by strong interagency communication and cooperation. Although there is always room for improvement, coordination efforts among the humanitarian actors in Kakuma and Dadaab are commendable.

It is, nevertheless, important to assess and acknowledge the role of individual actors and sectors, particularly as lessons and practices drawn from their experience can contribute to improved interventions and better results in the future and in other locations.

Although the IRC is running similar programs and nutritional interventions in both locations, which share much in terms of environment, refugee population and operations, two important differences between Kakuma and Dadaab need to be underlined in relation to 2010 nutritional improvements:

Difference in Response Incentives

There is a fundamental difference in incentives for the IRC's response that led to the improvement of the nutritional situation in both locations. While the changes in approach and strategy in Kakuma were, to a large extent, a response to alarmingly high malnutrition rates identified by the 2009 nutrition survey, the Hagadera context presented new ground for the IRC in which the organization was taking over existing programs. This implied identifying the existing gaps and adapting previous strategies, programs and activities to the needs on the ground.

Different Roles and Responsibilities

While in Kakuma the IRC has been present for almost twenty years and has been a leader in health sector for fifteen years, IRC Hagadera operations are relatively recent, having started only in 2009. This implies different levels of organizational experience at each of the locations and also differences in structuring, adapting and implementing programs, particularly where the IRC took over responsibilities only recently. Furthermore, the IRC is responsible for some sectors that have a crucial impact on nutrition in Kakuma, i.e. environmental health, whereas this is not the case in Hagadera. Another difference lies in the ability to attract resources and funding, which, although always challenging, seems to be less of an issue in Hagadera than in Kakuma as the camp's future has been uncertain for the past few years.

Listening to the Community >>> p. 8

Improved Screening and Optimization of Nutritional Interventions >>> p. 7

Prevention, Education and Awareness-Raising >>> p. 10

ESSENTIAL PRECONDITION: SECURING RESOURCES

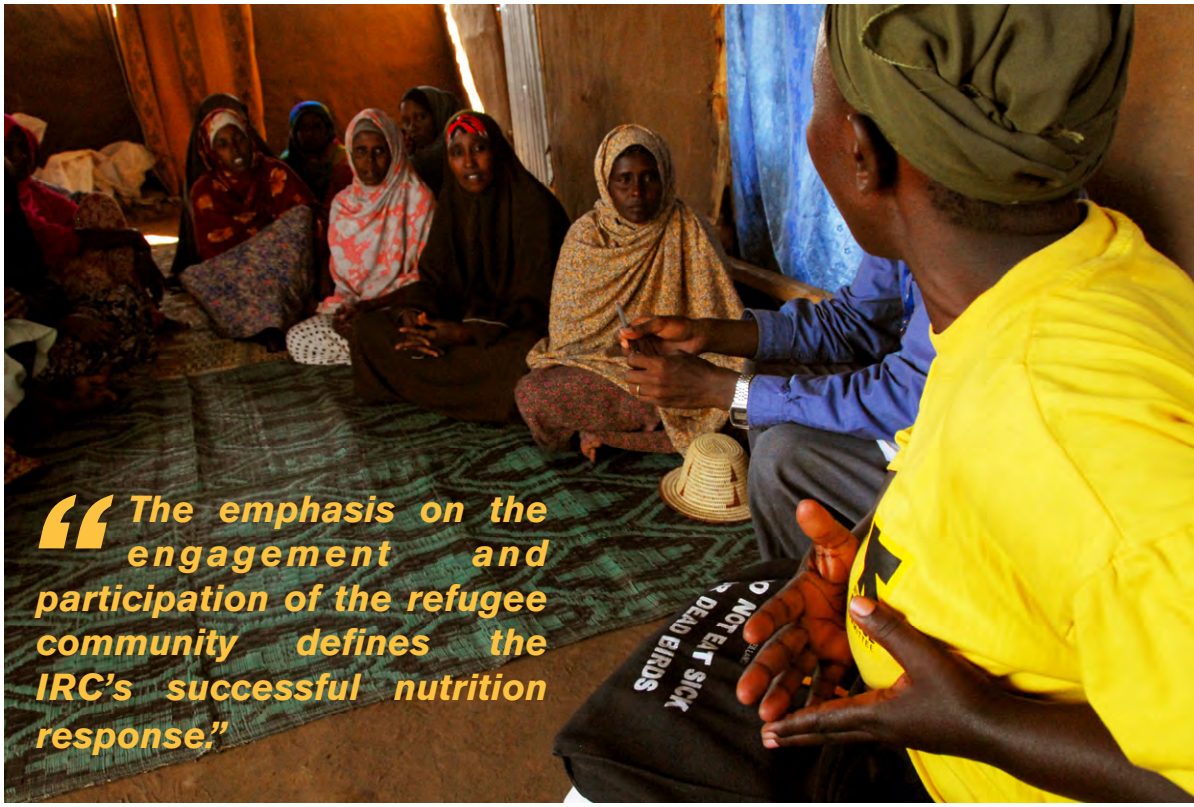
Limited resources impact the availability of basic medical and sanitation services, which has a particularly negative impact on the health and nutritional status of the refugee population. Agencies working in Kakuma and Dadaab are continuously confronted with limited availability of resources or the inability to access/provide them. This manifests itself in decrepit or improper infrastructure and understaffing particularly affecting community programs, participation and capacity.

In 2009, the IRC was one of the two new agencies that started providing health services in Dadaab camps. The IRC's arrival in Hagadera was marked by improvements in infrastructure and staffing levels, nutrition programming being among the major beneficiaries. In the course of less than two years, the IRC was able to secure funding for the new stabilization center laboratory, maternity ward and several other facilities at Hagadera hospital, as well as for the reconstruction and expansion of health posts scattered around the camp. New funding further enabled adequate staffing of all the medical programs run by the IRC; it increased the number of community health workers and incentive staff, and provided much needed emergency vehicles.[25]

Securing adequate resources for operations in Kakuma has been more challenging due to the uncertain future of the camp, whose dominant population – the Sudanese – has mostly been repatriated in recent years. The changing demographics of the camp were not initially realized and led to a severe gap in funding to address the increasing demands. Aside from the challenges posed by the camp's decrepit health and sanitation infrastructure and its comparatively higher staffing needs due to its multiethnic composition, the IRC's responsibilities in Kakuma are broader, including areas like environmental health, and therefore have proven financially more demanding. Events such as disease outbreaks and an increase in malnutrition rates in 2009 were a wake up call on how quickly a situation can deteriorate. This was combined with the IRC's relatively diverse portfolio of donors, which resulted in improved funding levels in 2010.[26] Major benefits from this have been the new stabilization center at the camp hospital, an increase in national and incentive nutrition and community health staff, and the opening, in September 2010, of a new clinic in the new arrivals area of the camp.

BEST PRACTICE

LISTENING TO THE COMMUNITY



ABOVE Participants of the mother-to-mother support group in Kakuma refugee camp discussing breastfeeding best practices with IRC community health worker.

Community participation and engagement are crucial components of humanitarian response that empower the community and create ownership over preferred, plausible and suitable nutrition-related solutions in a given setting. Successful nutrition programming implies a thorough understanding of the community's dietary, health, care-giving and sanitation practices best obtained by working together with the community. Furthermore, strong community involvement is more likely to lead to a timely assessment of a population's needs and exchange of information, two essential elements of humanitarian programming.

Community participation and engagement has been at the center of the IRC's policy approach,[27] as the comprehensive and long-standing community health programming in Kakuma has clearly demonstrated. Working closely with the community and using its resources helped to overcome language barriers and cultural differences, establish trust and stimulate community engagement that could even provide livelihood. In short, it offered a unique type of outreach, raising the sense of community responsibility and ownership.

Nevertheless, due to their complexity, nutritional aspects were until recently not necessarily prioritized in community health programming, leaving space for improvements. Those were identified and brought into practice in late 2009 to respond to increased malnutrition rates in Kakuma and by learning from the experience of agencies the IRC replaced in health and nutrition programming in Hagadera.

This shift to community-based nutrition programming led to the introduction of similar adaptations at both locations, for which the strengthening of the community health program, including an increase in the number of community health workers, improved supervision and an additional nutrition-focused training, was a prerequisite.

In addition to the improved malnutrition screening, referrals and enrollment in feeding programs (see the next section), the community focus allowed the IRC to reach out to various segments of the refugee population, using the existing community structures. More emphasis was given to working with community representatives, particularly leaders and health committee members representing camp subsections. This communication boosted awareness and made the refugee population more accepting of the implementation.

This enabled a timelier exchange of information and more accurately indicated pressing health- and nutrition-related issues that could have an immediate impact on malnutrition rates such as problems with water supply, pressing health and sanitation issues, flagging underscreened camp sections, etc. Such community consultations are invaluable for setting up and rolling out interventions aimed at promoting proper care-giving and

feeding practices as they help with identifying the audience and strategies for the most effective outreach, such as the expansion of mother-to-mother support groups with men and elderly caretakers.

Another approach to systemize community needs assessment through the existing programming is to regularly conduct community focus group discussions and health surveys, which although usually targeting specific issues, are comprehensive and frequent enough to help provide a reliable snapshot of the existing health situation in the camps, and of issues to be flagged for immediate response. With the help of health information management systems, constant surveys and monitoring, the IRC staff and management are able to make informed decisions best fitting the needs of beneficiaries.

BEST PRACTICE

IMPROVED SCREENING AND OPTIMIZATION OF NUTRITIONAL INTERVENTIONS

ABOVE Mid-Upper Arm Circumference (MUAC) screening by an IRC community health worker in his own Nuer refugee community in Kakuma camp.

The 2009 nutrition surveys in Kakuma and Dadaab showed that there is much room for improvement in malnutrition level screening and the subsequent treatment or enrollment in supplementary or therapeutic feeding programs. Low screening coverage automatically leads to lower enrollment rates in feeding programs, which leads to portions of the population of children either not receiving essential treatment or starting it late, which can delay recovery or have long-term negative health consequences.

The IRC improved screening levels to achieve nearly 100% coverage at both Kakuma and Hagadera, with a shift towards community-based nutrition interventions and a number of other modifications being significant contributing factors. The issue of where to screen was addressed through identifying camp sections where screening was below the required levels (see Box 6). Community health staff were instructed to prioritize the nutritional status of children and re-trained on how to assess its, using Mid-Upper Arm Circumference (MUAC) and edema screening methods, which are preferable due to their sensitivity,

cost effectiveness and simplicity. Lastly, the screening was now also conducted on a routine quarterly basis and through mass screening campaigns.

The improved screening coverage consequently contributed significantly to higher rates of referrals and enrollment in the supplementary and therapeutic feeding programs as the locations were now comprehensively screened and community health staff have been more attentive to acute nutritional deficiencies. In addition, screening has now applied the new WHO growth standards lowering the referral threshold for malnourished children, which has resulted in earlier referral and initiation of treatment. The additional added value of this approach is that the likelihood of identification of a malnourished child before the onset of an illness is higher, which implies faster recovery and fewer complications if properly followed up. This is particularly important due to the tendency among the refugee populations in Kakuma and Dadaab to seek medical or nutritional assistance relatively late.

Logistic and staffing improvements further contributed to the quality and coverage of supplementary and therapeutic feeding programs. Nutrition staff improved the supervision of services and their timely provision and reduced waiting time for the provision of services. The waiting time acts as a deterrent as mothers cannot afford losing time away from their households, which is also the case when supplementary feeding sites (usually at health facility level) are far away from their homes.

Lastly, providing both locations with stabilization centers for the treatment of malnourished children with traces of illness has ensured required facilities for the proper triage of cases requiring nutrition intervention and special care, which might not be available at the pediatric ward. Stringent referral processes were set in place ensuring that every child admitted to the outpatient therapeutic program (OTP) is screened by a clinician and referred to the stabilization center if needed. Additional resources were allocated for timely follow-up and defaulter tracing, which now also include home visits when required.

IDENTIFYING SCREENING GAPS

Although overall screening coverage numbers in Kakuma seemed acceptable in 2009, a detailed section by section analysis revealed great disparities, with screening coverage rates for some sections below 50%. This was confirmed by the disproportionately higher numbers of malnourished children from certain sections visiting health facilities.

In an informal arrangement, the IRC used Health Information System (HIS) data, to which it added residential data, to compare coverage and malnutrition rates per section with information from the previous survey. If, for example, supplementary feeding coverage for an individual section was much lower compared with coverage from the time of the last survey, this was an indicator that screening coverage at the section is insufficient and needs to be strengthened.

Although introduction of mass screenings and improvements in routine screening fill many of the existing gaps, this "mapping of coverage" helped considerately with the immediate response to the alarming malnutrition rates in Kakuma in late 2009.

RIGHT Somali refugee mother feeding her son plumpy nut butter, which is fortified with nutrients and distributed to children taking part in outpatient therapeutic feeding program (OTP). Improved screening in Hagadera and Kakuma contributed significantly to higher rates of referrals and enrollment in OTP programs, where children are regularly screened by IRC nutritionists and provided with complementary foods.

PREVENTION, EDUCATION AND AWARENES-RAISING

"Integrated and prevention-oriented nutrition, health and sanitation programming is key for reducing malnutrition."

ABOVE Refugee women in Hagadera taking part in mother-to-mother support group session, facilitated by IRC national and incentive staff.

Despite the unfavorable conditions and difficulties linked to protracted refugee settings, which seriously affect the nutritional status of a population, interventions with appropriate coping strategies and taking on harmful cultural practices, particularly linked to infant and young child feeding (IYCF), can lead to positive results and nutritional improvements.

At the same time taking on established practices, beliefs and myths is one of the most challenging tasks. Such practices and beliefs are usually deeply rooted, hard or impossible to supervise, and constantly reinforced by segments of the population that are hard to reach with proper messaging, examples and guidance (see Box 7 for some examples). It often happens that proper messages are delivered and memorized, but the old practices are continued, as for example with exclusive breast-feeding and the premature or improper provision of complementary feeds.

Once these misconceptions and practices, which are present at multiple levels, are identified, they need to be addressed simultaneously with strong community participation.

HOSPITAL DELIVERIES–A KEY STARTING POINT FOR PREVENTIVE ACTION

From 2009 to 2010 the IRC drastically improved hospital delivery rates at Hagadera and Kakuma camps, therefore ensuring the implementation of all aspects of safe motherhood and building maternal confidence to successfully initiate and maintain lactation even in very difficult cases like cesarean section, twins etc. IRC deliveries are conducted by qualified staff who initiate breastfeeding immediately after birth. The IRC assists with approximately 5,000 deliveries yearly in Kakuma and Dadaab at 90% health facility delivery rate.

Community health workers who are able to surpass the language, cultural and trust barriers common when talking about such intimate issues play a crucial role in this process. They are also better able to identify the key players who contribute to the persistence of certain beliefs and practices such as elderly female population and men among Somalis.

It is crucial that these opinion leaders, who might not be directly responsible for certain practices but who do play a role in steering them, are approached in a respectable formal or informal manner or even integrated into the already existing initiatives like mother-to-mother or community support groups, leadership meetings or other consultative events and processes. The topics need not be addressed directly and in a confrontational manner, but should rather take into consideration the community's communication and behavior practices.

Although obvious, it is at times challenging to make sure that awareness raising and education are an integral part of every step of health and nutrition programming. The IRC tries to achieve this through integrated nutrition programming, which introduces the presence of well-trained nutrition staff offering advice to other medical staff or directly to beneficiaries at all stages of the cycle when nutrition intervention is potentially beneficial.

HIV/AIDS, NUTRITION AND MUTUAL BENEFITS OF INTEGRATED PROGRAMMING

While a compromised nutritional status is a common condition of HIV/AIDS patients requiring special care and attention, HIV/AIDS teams are also engaged in active screening of malnourished children at health facilities, providing HIV/AIDS testing by default and allowing for no missed screening opportunities . Close integration of some HIV/AIDS and nutrition program activities encourages and promotes voluntary counseling and testing in the refugee community, and provides nutritional assistance for HIV/AIDS patients, particularly through home visits as part of prevention-of-mother-to-child-transmission (PMTCT) interventions. The IRC has occasionally been providing food vouchers to secure a balanced diet to HIV/AIDS patients, although on an irregular basis due to limited funding.

BREASTFEEDING– AND NUTRITION–RELATED PRACTICES AND MISBELIEFS

The established cultural practices and beliefs may offer a suitable coping strategy, but can also be very harmful, particularly when dealing with infant and young child feeding.

Breastfeeding is, for example, not considered a preferable feeding practice among Somalis. Not only do Somali women not initiate breastfeeding instantly after birth or practice exclusive breastfeeding, but there is widespread belief within the community that breastfeeding is harmful to mothers, depriving them of their blood and energy. Therefore mothers often breastfeed only on one breast and subsequently complain that there is not enough milk. The other poor practice leading to child malnutrition is the reduced feeding time with fast interchanging between a mother's breast, which results in reduced milk intake and different types of breast milk, and nipple breastfeeding that exhausts the infant before he or she receives enough food.

Consequently exclusive breastfeeding of infants is often not practiced because of the belief that mother's milk is not sufficiently nutritious to sustain a child as well as the belief that infants need water in the hot climate of Dadaab or Kakuma. This leads to either adding or completely substituting breastfeeding with water, water and sugar mixes, tea, or fresh animal milk – improper complementary foods causing diarrhea and other illnesses, which negatively impact the health and nutritional status of infants. It is also believed that not adding water to a child's diet will make him or her blind or deaf.

RIGHT A Somali refugee mother is taught how to properly attach her newborn for breastfeeding by an IRC health worker in Hagadera camp hospital.

ABOVE Preparation of sukuma wiki during a cooking demonstration in Hagadera camp. The session starts with a theoretical discussion about most common foods and staples and their nutritional value and is then followed by practical demonstration of food preparation.

COOKING DEMONSTRATIONS

The IRC periodically organizes cooking demonstrations for common complementary foods to improve caregiver's skills and knowledge of nutrition. They provide a practical approach to preferred food, its frequency, amount, thickness and density, variety, active responsive feeding and hygiene practices, mainly for children under five but also beneficial to the wider community. Demonstrations are usually held at health posts and in community blocks in conjunction with mother-to-mother support groups, supplementary and therapeutic feeding program activities. The cooking part is preceded by a short education and discussion session to address knowledge gaps in the area of appropriate food combinations and preparation.

This includes prenatal counseling for future mothers and interventions at maternity wards within minutes after a child's birth. Accordingly, medical staff ensures that every child is properly attached to the mother's breast within 30 minutes of birth. Mothers and newborns are usually discharged from hospital within three days and then receive follow-up in the form of supervision and guidance on proper breastfeeding and caring practices and importance of their own and the family's wider nutritional status. They are also linked to the community health program and mother-to-mother support groups.

The target of community health workers is to visit each household once per month, thus maintaining a regular link with a lactating mother even if she is not participating in a mother-to-mother support group; further advice is given either at supplementary or therapeutic feeding sites and distribution points, health posts, during home-visits and other ad-hoc or planned screening and surveying activities.

MOTHER-TO-MOTHER SUPPORT GROUPS

Mother-to-mother support groups are community level interventions promoting proper infant and young child feeding practices mainly for pregnant and lactating mothers. The participants are trained and supported in how to feed their child and given other relevant health information. The groups average 12 in size and meet up to once a week, usually choosing one central topic of discussion that is revised at the next session.

Although primarily an education and awareness tool for proper nutritional and sanitation practices, mother-to-mother support groups have other multiple functions. They are an additional referral and supervision tool for community health workers as the participating women raise issues and refer their counterparts who do not participate in the group's activities or complementary feeding programs. Furthermore, the groups are also an advocacy tool and encourage the participating women to help by sharing their experience and things learned within the community.

There are currently 176 active groups in Hagadera and 25 in Kakuma, reaching out to approximately 4000 and 1500 women monthly. Future plans are to expand the groups' coverage and to complement their activities by including other relevant opinion leaders and caretakers, for example men or elderly women.

CHALLENGES AND RECOMMENDATIONS

THE NEED FOR SUSTAINABLE FUNDING TO MAINTAIN AND IMPROVE CURRENT SERVICE LEVELS

At both locations there remains a lot of room for the improvement of services, infrastructure and supplies, which would have an immediate and long-term effect on the nutritional and health situation in the camps. Seldom mentioned recommendations include a more diversified and micronutrient-balanced food ration, which could be increased given that a portion of it is often resold; further increased staffing levels, particularly at the community level, which would strengthen screening, prevention, awareness and education activities; regular distribution of non-food items; improved livelihood opportunities for refugees; and further improvements in water, sanitation and health infrastructure.

The experiences from 2009 and 2010 and the drastically improved malnutrition rates are testimony to the fact that the levels of service and joint efforts at both Hagadera and Kakuma can reach levels close to satisfactory. But this confidence will only be upheld if this current equilibrium, fragile as it may be, can be conserved. This will fundamentally be subject to maintaining the current level of services or, preferably, improving it. The nutritional situation is subject to rapid deterioration and is dependent on the weakest link, at any given time, in this complex chain. Sudden events have a high potential to quickly undermine achievements attained over a period of months or years.

This implies the need for services to go beyond the minimum acceptable levels, which to a large extent depends on available funding. But although long-term donor commitments are challenging to secure in protracted refugee settings, the experiences from Kakuma and Hagadera camps prove that short-term planning is even costlier.

THE CHALLENGE OF TRANSFORMING INFORMATION AND KNOWLEDGE INTO PRACTICE

Transforming awareness into practice is one of the main challenges of achieving a long-term and sustainable reduction in malnutrition rates. It has been reported on several occasions that although the beneficiaries receive the information and know what the practice should be, traditional beliefs prevail and lead their behavior practice.

The essential best practices such as exclusive breastfeeding, proper complementary foods and care, and diverse and nutritiously balanced food are new to the target refugee population, particularly Somalis. Shifting to these best practices and the rejection of some traditional beliefs cannot be instantaneous, particularly with respect to sensitive topics where traditional beliefs are constantly reinforced. The refugee community tends to search for other solutions for their severely malnourished or ill children such as traditional healers, religious leaders and unskilled community health providers, thereby delaying access to appropriate care and often worsening the child's condition.

One lesson learned from the IRC's work in Kakuma and Dadaab is that there is a great degree of satisfaction gained by the caregiver when provided with guidance on good care and support to the child, which also changes the caregiver's perception of other sources of care. Consequently the caregiver also becomes a crucial role model in propagating the need for prompt and proper health-oriented behavior.[28] The advocacy power of these role-models should therefore be even better employed when designing and implementing programs.

Secondly, the communal aspect plays a crucial role in transforming existing practices, the implication being that advocacy should look beyond mothers as primary caregivers. It is often reported that they are heavily influenced in their practices by other household or family members, namely elderly women and men, and their influence often reverts to traditional practices. Awareness and education activities should therefore be systematically extended to all opinion leaders in the community if they are to have a comprehensive and lasting effect on actual practices.

REFUGEE–LOCAL COMMUNITY RELATIONS

Dadaab and Kakuma camps are located difficult environments that pose many similar challenges for local Kenyan communities. Affected by the harsh climate and insecurity and with less privileged access to aid and assistance, the latter are sometimes worse off than the refugee population, as demonstrated by some nutritional indicators. Global and severe acute malnutrition rates in the Turkana West and Garissa districts, where Kakuma and Dadaab camps are located, have been greater than the rates in the camps since 2008.[29]

Such differences can and often do lead to grievances among local communities who find it hard to understand and accept why their living situation is worse, particularly when services and resources available for refugees communities cannot be utilized by them, as it is the case with most of nutrition-related activities. This can very quickly lead to a deterioration in relations between the communities, and can result in clashes that impact the security situation, impede assistance delivery and program implementation.

Mitigation of local-refugee community relations should therefore take into consideration ahead of time the needs of both communities, as well as the possibility of establishing structures and a mechanism to be used should issues or tensions arise. Although

the shortage of resources and the mandates of agencies working in refugee camps may fall short in terms of providing equal assistance to the local communities, this should not be a hindrance to finding plausible solutions for a peaceful and mutually beneficial coexistence of these communities.

TACKLING ANEMIA, ONE OF THE CAMPS' MOST PERSISTENT AND DIRE PROBLEMS

Anemia – the decrease in number of red blood cells or less than the normal quantity of hemoglobin in the blood –among children and women in Dadaab and Kakuma is one of the most persistent and chronic conditions affecting refugee populations. Most commonly caused by insufficient dietary intake or absorption of iron due to parasitic infestations, iron and vitamin A deficiency, and unbalanced nutrition, it bears severe health consequences. It causes perinatal, maternal and child mortality, impaired intellectual capacity in children, premature and low-weight births, and decreased working capacity.

Anemia levels for children under five and pregnant women in the two camps have remained between 70% and 85% since 2008, which is well above the WHO-acceptable standards and considered a serious public health problem.[30] The most plausible reasons for the high levels of anemia among young children are inadequate breastfeeding and complementary feeding practices, resulting in iron and other micronutrients deficiency. Anemia resulting from the long-term reliance on food aid is a consistently observed medical problem among refugee populations globally.[31]

Despite the control measures in place at both Kakuma and Hagadera, such as mass periodic de-worming for children, iron supplementation for pregnant women and the provision of bednets, there is an obvious need for further and strengthened food- and dietary-based strategies that also expand coverage to non-pregnant women. These strategies include strengthening efforts to raise awareness of the importance of the consumption of fresh vegetables, increasing their availability through food voucher systems and multi-storey gardening, the continuing practice of home-based micronutrient fortification and the provision of other supplements, such as Nutributter, that have demonstrated positive impact on anemia levels.

SUSTAINABLE SOLUTIONS, STABLE NUTRITION

The reduction, in 2010, of global acute malnutrition rates in Kakuma and Dadaab to their lowest levels ever raises a challenging question: how to go one step further and attain levels below the WHO 5% public health concern threshold? Considering the emergency environment of protracted refugee settings, this might be impossible without sustainable long-term solutions that would allow for stable living conditions and sufficient resources. Given the realities and insecurity of donor funding and the resulting dependence, the most viable way to achieve self-reliance is to stimulate the environment and circumstances that give the refugee communities the possibility to secure their own livelihood.

This is by default challenging in protracted refugee settings, where durable solutions are hard to materialize. Third country resettlement opportunities are a solution for a very small segment of the refugee population, around 1%, and this is not likely to change in the future. If prospects for voluntary repatriation of south Sudanese refugees that account for approximately one third of the population of Kakuma seem plausible, this is not the case for more than 300 000 Somali refugees in Dadaab and Kakuma, as the civil war in their home country produces more and more displacement and insecurity.

Temporary local integration might seem like the most viable solution for those – the majority – who cannot be resettled or return home; but it raises many difficulties. The host country and the setting of the settlement may not be able to economically absorb integration of thousands of refugees, particularly when host communities alone are already struggling to secure their own livelihoods in areas where resources are limited. Host governments are furthermore reluctant to opt for integration as a solution, as it might be a pull factor, attracting new arrivals and further eroding the cultural and economic balance in host areas.

But difficulties can also point to opportunities, especially in remote locations like Kakuma and Dadaab. Located in Kenya's most underdeveloped areas, these settlements and refugee communities provide an invaluable contribution to the region's economy and offer prospects for further development and economic growth. The impacts of the Dadaab camps, for example, is significant and includes business and trading opportunities, reduced food and commodity prices, and investments in services and infrastructure, resulting in large-scale in-migration of people. The camps have therefore become major centers for services, shops and social amenities, and host and refugee interactions are significant. The major pull factors include the availability of cheap food from food distribution in the camps and imports via Somalia; the opportunity to register as a refugee and receive a ration card; improved availability of services than in other comparable places; and the existence of more employment opportunities.[32]

Kenyan and worldwide experience has shown that protracted refugee situations are a huge burden for humanitarian actors and host governments. Only solutions focused on the refugee community's empowerment can offer long-lasting and sustainable life prospects that are based on dignity, self-reliance the economic added-value. When refugee communities are given the opportunity to take responsibility for their own survival and well-being, it is more likely to result in healthy and well-nourished individuals, families and communities.

ENDNOTES

1 WHO, The Management of Nutrition in Major Emergencies, Geneva, 2000, at VII.

2 UNHCR/WFP, Acute Malnutrition in Protracted Refugee Situations: A Global Strategy, 2006, based on UNHCR missions in Kenya and Ethiopia.

3 Ibid.

4 Ibid, at 20-22, also WFP/L. Richardson, A Brief Investigation of Nutrition in Protracted Refugee Populations, December 2004.

5 UNHCR Protracted Refugee Situations, 30th Meeting of the UNHCR Standing Committee, at 4.

6 Respectively, above 25% GAM for Mandera West District, above 15% GAM in Mandera Central, Wajir South, and Wajir East districts and at 15% GAM in larger Garissa area, closest to Dadaab.

7 USAID Kenya, Food security – Food Insecurity, Fact Sheet #9, Fiscal Year (FY) 2010, 30 September.

8 WHO, The Management of Nutrition in Major Emergencies, Geneva, 2000, at X.

9 Numbers derived from UNHCR Statistical summary, 30 September 2010, accounting for registered refugees and asylum seekers.

10 WFP/UNHCR, Food Consumption Survey in Dadaab and Kakuma Refugee Camps, 2004; BMZ/UNHCR Partnership Operations 2006, 2007 and 2008; Kakuma 2010 Nutrition Survey, at 2; Dadaab 2009 Nutrition Survey, at 2.

11 FAO/WHO recommendation as the level of kilocalories required to sustain life.

12 Government of Kenya, Turkana District Development Plan 2002-2008. Nairobi, 2002.

13 GAM 20% and SAM 3.5%.

14 Joint Assessment Missions 2002 and 2006; Dadaab 2005 Nutrition Survey, at 14.

15 23.9% GAM rate was reported in 2003, resulting in higher rates of child morbidity (MSF Nutrition Survey, 2003); and the April-May 2005 rains manifested itself in high prevalence of protein energy malnutrition and anemia levels (2005 Nutrition Survey).

16 Dadaab 2007 Nutrition Survey.

17 Ibid, at 15-18.

18 About 60% of the children were breastfed up to 2 years or longer as recommended and slightly more than 1/3 of the children were introduced to complementary feeding at an early age. Mean duration of breastfeeding was until the age of 16.7 months in Hagadera.

19 Reintroduced by the WFP in 2007 and continued by UNHCR/GTZ in late 2009, the practice is considered to contribute to the improved micronutrient and nutritional status of children and family food security, despite its limited coverage. Dadaab 2009 Nutrition Survey, at 93.

20 For the link between education and nutrition see E. Mukudi, Education and Nutrition Linkages in Africa: Evidence from National Level Analysis, International Journal of Educational Development, Volume 23, Issue 3, May 2003, pp. 245-256.

21 92% of households needed to obtain additional firewood to that allocated per person – 8.3 kg/month, which is below the recommended firewood ration of 45kg/p/month. Firewood is scarce around the camp and its collection presents a security threat for refugees.

22 Refugees have been encouraged to grow food in multi-staged gardens and be involved in kitchen garden activities. However, this turned out to be much more labor intensive than envisioned due to water availability issues. Some households also raise animals, i.e. chickens, ducks, pigeons and goats. Dadaab 2009 Nutrition Survey, at 22.

23 UNHCR/IRC, HIS Quarterly Report, 3rd Quarter report for 2009.

24 Dadaab 2010 Nutrition Survey.

25 In Hagadera the IRC is financially supported by UN High Commissioner for Refugees (UNHCR), UN World Food Programme, European Commission Humanitarian Aid Department (ECHO), US Bureau of Population, Refugees, and Migration (BPRM), UK Department for International Development (DFID), Centers for Disease Control and Prevention (CDC), Swedish International Development Cooperation Agency (SIDA), Canadian International Development Agency (CIDA), UNICEF, Refugees International Japan (RIJ), Stichting Vluchteling (SV) and Otto Family Foundation.

26 In Kakuma the IRC is financially supported by UNHCR, WFP, BPRM, USAID, DFID, CDC, SIDA, CIDA, UNICEF and Otto Family Foundation.

27 Experience, exposure and knowledge being the other three.

28 Reference to IRC, Best Practices in the Management of Acute Malnutrition: A Hagadera Refugee Camp Case Study, March 2010.

29 GAM rate of 21.9% in 2008, 20.2% in 2009 and 14.7% in 2010 for Turkana West; and 15% in 2008/2009 for Garissa district.

30 See 2008-2010 nutrition surveys for Dadaab and Kakuma, or Anemia in Children Under Five and Women of Reproductive Age in Hagadera Camp, Dadaab Refugee Camp. A collaborative study between the Centre for Public Health Research (CPR) Kenya Medical Research Institute (KEMRI) and UNICEF Kenya.

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ACRONYMS & ABREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
BPRM	US Bureau of Population, Refugees, and Migration
CDC	Centers for Disease Control and Prevention
CIDA	Canadian International Development Agency
CPR	Centre for Public Health Research
DFID	UK Department for International Development
ECHO	European Commission Humanitarian Aid Department
FAO	Food and Agriculture Organization
GAM	Global Acute Malnutrition
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
HIV	Human Immunodeficiency Virus
IMAM	Integrated Management of Acute Malnutrition
IOM	International Organization for Migration
IRC	International Rescue Committee
IYCF	Infant and Young Child Feeding
JRS	Jesuit Refugee Service
KEMRI	Kenya Medical Research Institute
LWF	Lutheran World Federation
MNDC	Micro-nutrient Deficiency Control
MSF	Medecins Sans Frontiers
MUAC	Mid-Upper Arm Circumference
NCKK	National Council of Christian Churches in Kenya
NRC	Norwegian Refugee Council
OTP	Outpatient Therapeutic Program
PMTCT	Prevention-of-mother-to-child-transmission
RIJ	Refugees International Japan
SAM	Severe Acute Malnutrition
SIDA	Swedish International Development Cooperation Agency
SV	Stichting Vluchteling
UNHCR	UN High Commissioner for Refugees
UNICEF	UN Children's Fund
WFP	UN World Food Programme
WHO	World Health Organization

ABOUT **IRC**

The International Rescue Committee (IRC) responds to the world's worst crises and helps people to survive and rebuild their lives. Founded in 1933 at the request of Albert Einstein, we offer lifesaving care and life-changing assistance to refugees forced to flee from war or disaster. At work today in over 40 countries and 22 US cities, the IRC restores safety, dignity and hope to millions who are uprooted and struggling to endure. **The IRC leads the way from harm to home.**

IRC **KENYA** Strategic Objectives 2010-2015

- Urban Programming: To foster a stable environment for vulnerable urban populations (poor and refugees) by boosting household viability, strengthening the voice of the urban poor and refugees, as well as increasing government accountability.
- Governance: To increase IRC's programmatic impact and sustainability through institutional capacity strengthening, accountable use of resources and greater political and conflict analysis.
- Disaster Risk Reduction: To optimize IRC's impact through targeted programming that minimizes vulnerability and increases capacity to proactively mitigate and reactively address disaster impacts for sustainable development.
- Refugees: To maintain IRC's high quality refugee program and amplify its impact through appropriate research and advocacy to influence global and national refugee policies and practices.

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MARCH 2011

INTERNATIONAL RESCUE COMMITTEE

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The nutrition situation in Kenya's refugee camps improved considerably in 2010 with global acute malnutrition rate indicators reaching their lowest rates ever – 5.6% in Hagadera and 7.6% in Kakuma.

Through 2009 and 2010 the IRC took on new responsibilities in Hadagera, adapted its programming approaches and strategies in Kakuma, and secured much needed infrastructural and staffing improvements at both locations.

The IRC's successful nutrition response is led by an emphasis on the refugee community's engagement and participation, early detection and timely action, and a focus on prevention and awareness.