FARMING THROUGH CONFLICT





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ICRC and Economic Security

The nature of conflicts has changed. During the last few decades international and non-international conflicts have tended to last longer; clearly established frontlines and battlefields have disappeared to be replaced by hit-and-run tactics and prolonged struggles for resources, territories or populations control. As a result, the civilian population often become targets of the conflict, or are the major victims of conflict.

Not only are civilian populations the victims of conflict, but the impact of the conflict may affect civilians to a much greater and prolonged degree. Civilian populations are frequently forced to flee, losing all their belongings. Their villages and fields are often destroyed in a systematic and regular way. Their movements and access to resources may be limited. Furthermore the most productive members of the community are increasingly under threat of forced recruitment into armed groups leaving their households without a sufficient work force. In other words, households may not only be destituted, but their chances of recovery are more limited and sometimes impossible.

As protecting and assisting the victims of war is our core mandate, ICRC has to constantly develop new approaches to provide the best assistance to civilian populations. Adapting itself to the evolution of conflict, ICRC continues to address the needs of the civilian population not only during emergencies but also for some time after the conflict in order to restart their normal economic activities.



The Economic Security Unit (EcoSec) combined with the Water and Habitat Unit and the Health unit comprise ICRC's Assistance Division. The graph below provides a breakdown of the 161 programmes in 29 countries that EcoSec carried out in 2006, providing services to 4.4 million beneficiaries. Two thirds of these beneficiaries were in Africa.



ECOSEC Activities in 2006

In terms of beneficiaries, the bulk of these programmes were relief interventions (the free distribution of food or essential households items, quick emergency seeds and tools) to temporarily fulfil the immediate needs of the people either during or immediately after the turmoil of conflict.

The ICRC recognises that these relief interventions do not necessarily offer a longterm solution to the problem, hence, the Economic Security Unit is increasingly launching programmes to support or develop options for household/ community production that go beyond just life-saving interventions to address economic security (for more details visit http://www.icrc.org¹).

Economic security is defined as the condition of an individual, household or community that is able to cover its unavoidable expenditures in a sustainable manner, according to its cultural standards. Unavoidable expenditures include food, shelter, access to health care, education and taxes among others.

^{1.} The ICRC Assistance doctrine is available at http://www.icrc.org/Web/Eng/siteeng0.nsf/html/66DEZ7

Focusing on farming and economic security

Based on the victims needs and priorities, EcoSec responds with different interventions as shown in the below pie chart ²:

Classification of ICRC's agricultural production activities



Relief interventions aim primarily at saving lives and protecting livelihoods at immediate risk due to emerging or acute crisis. This is achieved by providing them access to the economic goods essential for their survival when they can no longer obtain these by their own means.

Production interventions aim at generating food and/or income. and ultimately restoring sustainable livelihoods in pre-, chronic- and post crisis environments. This is achieved by protecting and / or enhancing a household' or community's assets that provide for their means of production.

Structural interventions while supporting relevant technical services (such as agricultural or livestock services) always mobilise other key stakeholders to intervene in strengthening those essential services.

²This pie chart represents the breakdown by number of agricultural programmes and not by budget or number of beneficiaries.



This brochure, *"Farming Through Conflict"*, presents fifteen case studies, exclusively of an agricultural nature, that show the diversity of farming practices all over the world. The case studies are intended to go beyond the immediate problems, tragic deaths and broken destinies caused by conflict and to show how people can cope and rebuild their livelihoods. The purpose of the brochure is to illustrate the type of answers that an organisation like ICRC can provide.

Some of these interventions, such as livestock treatments in Somalia or kitchen gardens in Uganda are more related to relief than production because outcomes will, in many cases, only provide a partial or temporary self-sufficiency.

Beyond the quick impact relief interventions, ICRC also aims at more long-term sustainable livelihood improvement. The production interventions described in this brochure (such as fish pond rehabilitation, poultry, vegetable and quality seed production etc...) give war victims the opportunity not only to cover their basic needs but also to rebuild their livelihood in the midterm. The sustainability of such activities will of course depend on the conflict intensity, on the evolution of the global economic environment and on services (quality inputs, extension services, banking systems, etc...) that can be provided to the target population through local structures.

As populations cannot rely *ad infinitum* on humanitarian agencies, ICRC also aims to build —through "structural" interventions— the capacity of local structures in order to reduce the dependency on humanitarian agencies.

The Community Animal Health Workers (CAHW) project in Darfur is a good illustration of a structural intervention where the objective is to improve, on a continuous basis, services for better livestock health by improving veterinary drug availability and accessibility. In this intervention, both local and national structures are mobilized and supported.

Production activities often aim at tackling the sectoral issues identified by both the local populations and the ICRC EcoSec teams (e.g. improving farming systems). Nevertheless, in many contexts the needs of war victims are very specific to each individual household and a "sectoral" approach may not be relevant. Two case studies (the cow distribution in North Caucasus and the maize and piglet distribution in South Caucasus) are Micro Economic Initiatives (income generating projects) that are totally household driven - designed and selected by them. Within the wide range of MEI possibilities, these two examples have been chosen to illustrate the fact that some of ICRC's MEIs can be linked to livestock or crop.





Reducing the impact of war

The Shabelle River runs right across Hiran region in central Somalia. The rainfall in Hiran is very erratic and often insufficient for successful rainfed agriculture, thus the people used to irrigate their farms from the river. Since the civil war started, the population lost the capacity to maintain a sufficient agricultural production due to increasing degradation of the infrastructure, insecurity and looting.

Osman Guled, who lives in Kheli Dhere village relates: "I don't have many sources of income and my crop production is usually insufficient to cover my family needs. Is it normal that my relatives and I have to rely on humanitarian help to get enough food?"

ICRC distributed different pump units to village communities according to location and group capacities. The communities rehabilitate canals and other small irrigation infrastructures. With a 1 cylinder pump a group irrigate about 15 hectares; with a 4 cylinder pump they can irrigate up to 120 hectares. The groups vary from 10 to 100 families.

"I am member of the village group. Last year, we received a one cylinder pump and restarted irrigated agriculture on the scheme we used before the conflict" said Osman. "We are involved in maize and sorghum production but focus as well on fruit and vegetable crops. The region is favourable for cattle, so we can sell the stalks for a good price as fodder. Last season during Ramadan we were also able to sell watermelon in Garowe (a town in north Somalia), and made good money! So even if our staple crop production is insufficient, we get income for food, school fees and other expenses"

In Hiran, sorghum and maize harvests are substantially reduced by stem borers (a pest). In 1997, with the collaboration of the International Centre for Insect Physiology and Epidemiology (ICIPE), ICRC released, 5,000 wasps (*Cotesia flavipes*) at ten sites. The wasps attack the stemborer larvae, reducing the pest population and leading to better cereal harvests. A survey in 2003 showed that the wasp is well established and has an impact on the stemborer population.





Production



Rebuilding local veterinary

Since 2003, the conflict in Darfur has disrupted the traditional livelihoods of pastoralists and agro-pastoralists in many ways: animals have been looted; migration routes are blocked; herds are restricted in holding areas putting pressure on water points and destroying crops while grazing; veterinary services are also lacking.

ICRC helps pastoralists and agro-pastoralists to sustain their livelihood in areas where veterinary services have broken down. The ICRC trains community animal health workers (CAHW) and veterinary inspectors, and conducts animal vaccination campaigns in both opposition and government held areas; all in close collaboration with the Ministry of Animal Resources (MoAR).

The CAHW training uses the MoAR curriculum and ensures quality veterinary services in remote areas. MoAR staff even do the training. The ICRC selects course participants with the communities and their traditional leaders. After training, CAHWs receive a veterinary kit enabling them to set up small, mobile animal health clinics in their communities. They work on a cost-recovery basis thus making the programme sustainable.

Since 2005, over 200 CAHWs have been trained and are part of the decentralized animal health service. Each CAHW provides 100 - 300 treatments / interventions per month, benefiting some 56,000 herder households all over Darfur. CAHWs also report on the health status of livestock, and alert district veterinary offices to outbreaks of disease.

According to Mahmoud Masoud a veterinary technician from Nyala, South Darfur, the CAHW/MoAR partnership is a gift for people living in remote areas. *"Vet technicians and CAHWs working together make a strong team,"* he says.

In order to ensure a sustainable decentralised animal health system, ICRC's inputs support the national policy where livestock owners pay the private sector for animal treatments. Rural veterinary inspectors provide a link where CAHWs can restock their vet kits and send their treatment and disease outbreak reports to the relevant authorities.





Relief/Structural



Restarting agricultural investment

During the armed conflict opposing the Government of Indonesia and the Free Aceh Movement (GAM), residents and internally displaced people were not able to tend to their land. As a direct consequence, most of their plantations were abandoned and overgrown by forest.

With the signature of the peace agreement in August 2005, many families who fled the conflict started returning to their farms and started clearing their land but lacked the capital to procure the needed agricultural inputs.

To address this aspect of the humanitarian consequence of the conflict, the ICRC has been implementing an "agricultural voucher" programme.

The aim of the voucher project is to help the returnees and residents to access, through local suppliers, a range of essential agriculture inputs to resume their farming activities. Each family receives a free voucher amounting to 500 000 Rupiah (55 USD).

From August 2006 to July 2007, 2731 households benefited from the programme and resumed their farming activities.

Mr. Ishak an inhabitant of Lhok Dalam village in Aceh Timur explains: "Not having money, I have never been able to fertilize my cocoa and palm plantations; with the coupon I received from the ICRC, I bought a sprayer, fertilizers and herbicides of good quality that helped me to clean and regenerate my plantation which is now in a good condition and more productive. "

"With the agro coupon received from the ICRC, I saved money that helped me to satisfy other family needs." says Ms.Ibu Yus living in the same village. "The method is good because it allows us to purchase agriculture inputs according to our real need; I bought a wheelbarrow which I use for all sorts

Voucher programmes are recommended where the needed items are present but the war victims can not afford to buy them anymore. ICRC provides a "coupon" of a certain value that is valid for certain items. For example, a beneficiary receives a coupon for 30 kg of groundnut seeds. Then he can select the variety he prefers and the supplier he trusts the most. This method not only has the merit to be more cost-effective than relief distributions but it also restore the victims' dignity by enabling them to decide how to improve their livelihood.





 \mathbf{P} roduction



Eggs and eggplants

North Katanga, DRC, is a very remote area and was the front-line for several years of conflict. Due to years of looting and destructive campaigns the population faced a situation of chronic malnutrition, especially when fish from the Congo River, once the main source of protein, nearly disappeared. The few feeding centres present were overwhelmed.

"Each time we returned our crops were destroyed and fish were unavailable. We could not eat properly. Lots of children got sick or even died."

To resolve this situation, ICRC provided an improved breed of laying chicken to a local community association. The association's chickens produced fertile eggs that were distributed to the population. At the same time farmers were trained in vegetable farming and supported to increase the availability of vegetables in the market.

"A few months after ICRC started, most of the people had bought a few fertile eggs to produce their own chicks. My hens now produce double the number of eggs than the local breeds."

During the first phase more than 30,000 unfertilised eggs were sold in the market.

"We could not recognize the market" says René "We were able to buy several eggs per day while we were waiting for our own production. Vegetable farmers started to sell their produce and soon the market was full of vegetables. The price of eggplant was divided by four and tomatoes were eight times less expensive. Everybody could eat vegetables again."

Feeding centres also noticed a drastic decrease in the number of malnourished people.

Chickens are often the only animals that the poorest people, especially women, can afford to keep. Poultry keeping is often traditional, and thus well-accepted and easy to introduce. The main challenges are balancing the potential higher production yields of introducing improved breeds with the frequent and devastating losses from diseases such as Newcastle disease and avian influenza, and ensuring that the higher nutritional requirements can be met in systems where even food for humans may be in short supply.





Production/Structural



From dependency to self-employment

Raisa Katsieva, an IDP from Chechnya and head of her 6 member household has finally settled in a rented dwelling in the village of Troytskaya in Sundjensky Region, Ingushetia after many moves from one collective accommodation to another. "Nobody within the family was able to get permanent employment. For years we have been living off two small pensions, temporary daily labour and humanitarian assistance. The land is dry and not good even for a vegetable garden."

In 2006 the ICRC introduced a Micro-Economic Initiative (MEI) programme aiming to support beneficiaries through self-employment.

"When I heard about the new programme by ICRC I immediately applied to receive a cow eventhough I knew I would be removed from the list of food beneficiaries. At first I didn't believe that I would really get a cow. But when it came it was almost the same as the one I had before in Chechnya! It is a very calm animal; I can milk it without problem! It gives about 10 litres of milk which is more than enough for family consumption and so I also produce cheese. I sell it mostly to the neighbours and sometimes on the local market. I do not regret that I have given up the ICRC relief assistance; the income from the cow is higher and she will give a calf in few months... I hope that I will never have to go on distributions again!"

ICRC MEI programmes are characterized by the provision of productive inputs specifically chosen by individual households. Hence they can encompass very different inputs - from fertilizers to goats for agriculture, to chainsaws or shoemaker's tools for crafts, or even cash for trade. Their aim is to rapidly strengthen household income generating capacities in a significant and sustainable manner. But for extremely poor households, such as those in Georgia, it may only contribute for a limited period of time.





Production



Sunshine on Coffee

Lofa is a county covered with dense rainforest in the North-west of Liberia where local smallscale farmers obtained their main income from cocoa, coffee and pineapples. During the last war the population fled the area and left their mud-houses and farms unattended.

In early 2005 large numbers of people started to come back and the population increased from 40'000 to 280'000 within one year. Their houses had been destroyed and their farms overgrown by bush. Besides rehabilitating their rice farms, people needed to recondition their cash-crop farms.

Adolphus, a farmer who fled during the war to refugee camps recounts:

"When we came back we had no shelter, no food, neither seeds nor tools. We were working with our hands and were surviving by collecting fruits from the bush and hunting animals. ICRC provided us with tools and seeds."

In order to address agricultural rehabilitation and the need for food, ICRC introduced Food For Work programmes.

"Every farmer in my village received 50 kg of rice for clearing the cash crop farms. We did the work together in a group and cleaned one hectare for each farmer. Now that the sun can again shine on my coffee trees, I will be able to take care of my farm myself! I will weed the farm and next dry season I should harvest a small quantity of coffee which I can easily sell to traders at our local market. Next year, the harvest will increase and life will slowly come back to normal."

Food For Work operations often show poor results due to the lack of labourer's commitments in working on projects of "common good" or general interest. This programme targeted individual assets. The coffee growers priorities were to have their one-hectare groves cleaned properly. The interests of the labourers, organized in working groups, were the proper allocation of food and fair distribution. In 2006, a total of 456 Mt of milled rice and 27 Mt of salt were distributed to 50,000 workers; 5,000 hectares of coffee and cocoa were cleaned and an income estimated at 800,000 dollars will be harvested in 2007.





Relief/Production



A small boost to survival

The devastating drought of 2006 was nearly the final straw for Fowziya Qasim Ahmed and her 6 children in Somalia. With her husband missing since clanic clashes in May 2005, she has to care for her children, cultivate her land and keep her small flock.

Her land is dry, as is all land in Central/Southern Somalia. The last 2 harvests were failures due to below normal rainfall; this year she will not be able to feed her animals which are her only remaining capital.

"In addition, I can not bring my animals to the only remaining water point anymore because we are asked to pay." The animals are weak and no offspring are expected. "I don't know if my animals will survive," says Fowziya, "if I lose them, all our capital is gone and there is no way I can buy new animals". Fowziya is sharing her fate with many more agro-pastoralists and nomads - all are on the verge of destitution.

Although humanitarian efforts in the region were limited by insecurity, the ICRC maintained a functioning network of Somali and expatriate specialists, who, together with the Somali Red Crescent Society, launched a large scale de-stocking programme. 30`000 weak but healthy animals were purchased, slaughtered and their meat distributed to the most vulnerable families. The animal owners received cash and used the money to cover their immediate needs and some later purchased new animals. The meat provided a valuable input to families that otherwise were unable to get protein during a time of hunger.

Fowziya sold 3 of her weaker animals to the ICRC and used the cash to cover her immediate food needs. She could not save any of the money for later as she and her children were on the edge. It was a small boost to survival. As Fowziya said: *"Someone was there for me and my family when it was most needed. ICRC helped me during the worst times of the struggle".*

Emergency livestock interventions revolve around nutrition, marketing or disease control. Destocking or emergency slaughter offers a substitute when existing markets are flooded, whilst also providing local protein to the needy. Whilst sheep and goats are mostly targeted, as they are the "current account" of pastoralists and can recover rapidly; camels and cattle can also be targeted.





Production



A new virus threatens millions of lives

The virus responsible of the new Cassava Mosaic Disease (CMD) mutated thousands of kilometres away from the Republic of Congo at the end of the 80's but was brought there by the moving populations. This severe form of CMD reduces the cassava yields by up to 90%. As cassava is the main food crop in Congo, the food security of the population is seriously at risk.

Christiane, a widowed mother of five, explains: "An armed group attacked my village I had to flee with my children A few days later, I tried to come back to uproot some sweet cassava but I had to turn back because of armed looters."

"A few months after we returned to our village, we realized that our cassava fields were suffering from a disease. We could not understand what was happening. From my field I harvested just a few small roots. I had to borrow cassava from my neighbours but very soon their fields too became totally empty."

ICRC organized the extension services to sensitize the population about the dangers of the virus to limit its propagation, and initiated a community-based, cassava multiplication project. Through collaboration with the State Agricultural services, several hundred farmers' associations were trained in the techniques of multiplying tolerant cassava varieties.

"When my neighbours see my vigorous cassava fields, they press me to give them a few cuttings", says a smiling Christiane, who is very proud of her achievement. "I expect to harvest big roots of cassava. I may even be able to sell cassava flour in the market, as I used to do before the war".

By exchanging a few stems with their neighbours, each farmer continues the work initiated by the ICRC and hence reduces the impact of the mosaic.

Originating from South America and introduced in the 16th century to Africa by sailors, cassava very quickly became an essential crop in time of crisis. The low maintenance required, its capacity to be stored in the ground, the fact that bitter varieties are less likely to be looted than other crops make it particularly well adapted to conflict areas. It produces more than twice the number of calories per ha than maize.





Production/Structural



Protecting animals: Protecting livelihoods

Mohamed Omar lives in Gode, a small historic village at the heart of the Ethiopian Somali Region. For generations his family, like many others in the region, have depended on their camels, sheep and goats for meat and milk, and through the sale of a few goats have purchased cereals, clothes and other necessities. Recent persistent cycles of poor rain have caused scarcity of water and insufficient feed for the livestock. Animals slowly lose their body condition and diseases have killed the weakest of them. Mohamed tried to sell his goats but prices were very low. Insufficient income from selling goats made it difficult enough to even buy food for the family. In a good year he would afford to buy veterinary drugs for his animals, but this year he only managed to obtain some cheap, poor quality drugs to treat a few animals. Life became hard for many livestock owners and even the neighbouring farmers did not harvest any crops.

The ICRC initiated a drought operation that included livestock treatments aimed at increasing the chances of survival of the animals. Over subsequent weeks Mohamed noticed an improvement in most of the camels, sheep and goats treated. Around 325,000 animals like Mohamed's were treated against ticks, worms, respiratory diseases and tsetse fly transmitted *trypanosomiasis*.

Finally, the long awaited *Gu* rains fell, quenching the dry earth and after a few weeks the goats started to breed again. It would take at least a year for the camels to recover, but Mohamed Omar breathes a sigh of relief.

Emergency animal parasite control and health treatments help pastoralists survive by protecting their breeding stock. Parasite control may increase an animal's chances of surviving stress periods by as much as 20%.





Relief



Old trees, new incomes

In the village of Akkaba in Tulkarem, the construction of the West Bank Barrier has cut off farmers from their olive trees for the whole year except during the 3-4 month harvest season. In 2005 because farmers could not reach their fields to weed out the high grass, bush fires wiped out 70 percent of the village's agricultural land. Whilst the fields were ablaze, the Palestinian farmers could only stand helpless on the other side of the fence. It took three hours for fire trucks to get permission to pass through the gates - too late to save the trees.

The ICRC stepped in with a plan to rehabilitate 25 hectares of olive groves through the renovation of rainwater wells and planting olive tree seedlings. In addition, the ICRC persuaded Israeli authorities to keep the gates open all year round so that farmers could prevent fires and tend to their crops more thoroughly.

Eventually, 450 hectares of olive trees -representing 80% of the Akkaba landwere pruned and weeded through the project. An Akkaba villager explains *"Without the project, these trees would have taken five years to grow back and be productive. Thanks to this they were productive again within two years".* It is estimated the production time gained is three years with a financial gain of US\$ 750,000 over the same period.

Opposite to single stemmed trees such as coconuts or bananas which yield annually, the multi-stemmed Olive tree provides high yields once every two years. Rainfall and maintenance - especially pruning are the main factors that influence production. Pruning increases exposure to sunlight, reduces pests and diseases and increases oil quality. In the Occupied Territories where olives are rainfed, the harvest averages 400 kg olives per hectare with 500 mm. of rainfall but less than 100 kg when rainfall is less than 350 mm.







Enabling a new start

Micro - Economic Initiative programme

Zugdidi, the main town of Samegrelo region (Western Georgia) remains badly affected by the socio-economic consequences of the break-up of the Soviet Union and the 1992/3 conflict with Abkhazia (1992-93) which displaced 250'000 people. Today, Zugdidi is home to more than 90'000 IDPs, 35% of whom still live in collective centres. Up to 40% are unemployed and suffer from extreme poverty.

In order to limit dependency on humanitarian assistance and promote economic self-sufficiency, the ICRC launched an Micro-Economic Initiative (MEI) Programme for existing resident and IDP food beneficiaries. The aim was to enable them to start or resume a productive activity. From 2004 to 2006, 8'600 households (33'000 persons) received agricultural and productive items or cash grants. This was supported with training and technical advice to ensure they could generate a regular household income.

Nonna, a 71 years old resident living off her teacher's pension received chickens and a small greenhouse (32 m2). When ICRC agronomists visited her in May 2007, there was no plastic sheeting on the greenhouse. She explains:

"I could not afford to buy more plastic sheeting because I had to help my son buy clothes for my four grandchildren. However, I still have more than seventy jars of jams and conserves from last year which I can feed to my grandchildren. Last year I supplied a lot of tomatoes and cucumbers to my neighbours. I would still make the same choice. Look at my five beautiful hens, one just started to lay eggs."

In greenhouse vegetables, early harvesting is key, so that they can be sold at a good price before the arrival of vegetables from the open fields. The choice of appropriate varieties is crucial as the selling price will also depend on their shape, appearance and size. Calendar and dose of chemical applications have to be strictly respected and good cultivation practices including irrigation are required. A well planned production design, with sequential cropping all the year, and specific skills are necessary for a greenhouse producer to get a good income. ICRC was able to do this for a large MEI greenhouse programme in Serbia. Unfortunately, in Georgia extension and support were insufficient. Only the most dynamic people were able to get an income.





Relief



Enabling a new start

Coaching programme

A lesson learnt from the MEIs implemented in Georgia is that to distribute inputs alone is not enough to reach economic security, nor does it restore the dignity of the victims. ICRC developed a "coaching" programme to further support the beneficiaries. This essential part of a production intervention consists mainly of training and listening to the person. It is an opportunity for him/her to get off to a good start. During both training and the programme itself, interaction between beneficiaries was encouraged so best practices could be shared.

After the war, Iya, a mathematics teacher, and her family had to leave Achigvara, her native town in Abkhazia. In 2005, Iya received 4 piglets, some fodder and a maize kit for cultivation. One year later, her livestock assets had expanded to 3 sows and 14 piglets:

"Through the ICRC coaching workshops and regular visits from a veterinarian, I learnt how to rear pigs correctly. But above all, I was really motivated to look for new economic opportunities, in a way that I would never have thought possible before."

Early in 2006, when the price of pork rose by 30% because of avian flu, lya sold 8 piglets, allowing her to buy the necessary equipment for her son to start the production of small ovens. *"My life became brighter"* she says astonished by the recent achievements of her family. By last September, the family saved up enough money to enrol her grandson at the Regional Institute of Agriculture.

In traditional Georgian pig breeding systems, sows mature at five months old, and after 115 days can produce a litter of twelve piglets that are weaned after two months. Theoretically, from the second year a household could sell and/or consume 20 piglets (of 7 kg each) annually. Unfortunately, due to disease, poor hygiene and sub-optimal feeding practices households rarely reach such a potential and some even loose money due to fodder costs. The ICRC introduced a personalized coaching programme, providing technical advice and business planning and accounting, which improved the economic returns to piglet beneficiaries.





 $\mathbf{P} \text{roduction}$



Farming to improve detention conditions

In a high-security prison located on the outskirts of Lubumbashi in DRC, around 200 detainees live in a small detention block. For years supplying food to the detainees was an issue, forcing the prison authorities to ask for assistance from charity organisations. *"Even with their supplies the food is scarce and very monotonous"* says Martin, one of the detainees.

Thanks to its mandate to visit detainees, the ICRC has privileged relations with the prison authorities, which has enabled the development of a food production programme aimed at safeguarding the nutritional status of the detainees and improving their detention conditions.

In 2004, ICRC supported a vegetable gardening project within the limit of the prison walls. ICRC provided seeds and tools as well as technical advice while the detainees remained entirely responsible for the management of the garden. Since then, around fifteen detainees have the opportunity to leave their detention block everyday, in order to look after the garden.

"In addition to the vegetable garden we produce ladyfingers, cowpeas and sweet potatoes on 7000 m2. We supply the central kitchen with our harvest so that all detainees can benefit from this extra food". Though the harvested quantities are not enough to provide all the necessary food, they contribute to diversify the detainees' diet and improve their living conditions.

"Now we have an opportunity to go out from our walls and the gardening is like exercise. Each time we come back with some harvested vegetables it is always a big event for everybody. Thanks to proper planning we succeed in having vegetables at least every other week."

In Rwanda, ICRC has provided agricultural material to HIV associations in 8 detention centres. Those associations establish gardens and supply the harvest to the prison health center, thus providing a nutritional supplement to all sick detainees. As a result, the image and status of HIV positive detainees has improved significantly as the rest of the prison population acknowledges their contribution to the well being of all detainees.





Relief



Regaining pride

20 years of armed rebellion in Northern Uganda displaced more than 1.7 million people, mostly into overcrowded Internally Displaced Persons (IDP) camps with very poor conditions. Movement out of these camps is limited because of the security situation. Even if it is possible to "borrow" pieces of land near the camp, the scarce resources and poverty restricts the IDPs from acquiring the necessary seeds and tools. Consequently, nearly all the IDPs depend on external assistance to provide their basic needs.

From 2004 - 2006 an important part of ICRC's assistance was the distribution of vegetable seeds and tools to 100'000 displaced families (more than 500'000 people) in 46 of the camps. The seeds enabled the IDPs to utilise the available small pieces of land to produce vegetables contributing to a more varied and nutritious diet. Their sale also generated new incomes.

Akello Esther who lives in Arum IDP camp, Pader district, explains:

"I planted all my seeds in a few days on a piece of borrowed land of only 1'000 m2. I was so excited to have work to do! When I started to harvest we ate vegetables 4 - 5 times per week and my children really enjoyed the meals. I saved money because I did not have to buy vegetables anymore. In addition I sold some vegetables in the market and used the money to grind (mill) the donated grains. Previously I was obliged to sell part of my assistance. I am now able to buy other types of food - like fish that we have not eaten for years. I am very proud to produce food from my own work and not just to depend on food distributions!"

In several conflict affected areas, ICRC has been encouraging, through the delivery of inputs and extension services, the intensification of gardening methods. At the household level good use of land, labour, seeds and organic fertilizers has been proven to yield an average of four times more vegetables per ha than the amount grown by producers using mechanized "modern" agricultural methods!







A nourishing pond

The Republic of Congo has been affected by four conflicts since 1993. Pool District was one of the most severely affected, the population being obliged to take refuge in the capital or in the forest.

Armand, a resident of Pool, relates: "During and after the main military actions our village was destroyed, our fields and animals looted. Before the conflict our main source of meat came from individual fish farming but the ponds were systematically looted and destroyed".

In 2005, lack of protein was a serious issue in the Pool District. In order to assist the civilian population, ICRC in collaboration with the MoA, launched a programme to rehabilitate fish farming activity. Groups of farmers received training and some tools to rebuild the ponds. They received fingerlings of the specie *Tilapia nilotica* which is much more productive than the local breeds.

"After five months our pond produced around 60 kg of fingerlings. We gave some of them back to ICRC to redistribute to two additional groups. All the members of my group dug their own pond and stocked them with fingerlings from the first one".

In one year ICRC assisted 119 groups through out the Pool District.

"When our neighbours realized that our production was going very well some of them started to ask for fingerlings. Now we not only earn money by selling fishes in the market but also by selling fingerlings to new producers. As we speak new fish ponds are built everyday".

Tilapia nilotica female lays around 300 eggs per spawning season. Put down in a nest, they are then inseminated by the male. One of the parents will then place them in its mouth in order to protect them during incubation. Under local conditions, a 100 m2 pond stocked with 2 fingerlings/m2 produces around 15,000 live fingerlings after six months.







ICRC's agricultural approach

ICRC's Economic security programmes are mostly implemented by qualified national or international staff in each country. The EcoSec unit includes a number of agriculturalists and economists based either in Geneva or Nairobi who provide specialist technical support to the delegates in the field and maintain institutional rigour. The aim of the specialists is to enhance the quality of ICRC's relief and production interventions by ensuring maximum benefit to beneficiaries and sustainability where possible. This is done in terms of both policy and implementation by promoting an integrated and harmonised approach. The specialists provide both technical and operational support as well as training. Through networking and discussions, the specialists ensure that ICRC is kept up to date with the latest approaches and new technologies and implement them where appropriate. Of particular concern to ICRC, and topics that the Unit is currently addressing are:

- Conflicts and land tenure issues
- The potential for urban and peri-urban farming in conflict situations
- Adopting a Tracking Strategy Approach to livestock responses
- Responding to the threat of Cassava Mosaic Virus
- Environmental change and conflicts

A Tracking Strategy Approach to livestock responses

In many East African countries, livestock rearing in the drylands faces many risks and shocks. The humanitarian agency emergency responses to these shocks are often too late or inappropriate. In these "non-equilibrium" systems, pastoralists have adapted to the risks by adopting a "Tracking strategy approach", which means they manage their animals opportunistically – responding with different actions at different times according to the different circumstances they face.

Current thinking amongst practitioners is that humanitarian and development agencies should adopt the same strategy or approach – essentially helping communities to cope in stress periods, whilst developing new opportunities in normal periods. The ICRC has been promoting this approach both in their own planning of livestock interventions as well as amongst the wider humanitarian community in the hope that a more harmonised response will provide a better impact globally.

Cassava Mosaic Virus

Due to viral mutation, a new severe form of Cassava Mosaic Disease (EACMD-Ug) appeared in Uganda in the late 80's. This severe form devastates fields, reducing yields by up to 90%. The virus is a major threat to the food security of rural populations in Africa and has spread much faster than predicted.

In the field, the disease is transmitted from one plant to another by the white fly (Bemisia tabaci). The spread of the disease by such a vector is geographically limited and slow. The other way to spread the disease is by planting infected material, which then infects other plants in the field through the white fly vector.

Thanks to ICRC's permanent presence in the conflict-affected areas of the Great Lakes Region since the 90's, we have identified that the major cause of the spread is due to the propagation of infected cuttings transported over great distances by both the displaced populations and by the armed groups.

Cassava is the main staple crop in the region; it is often the only crop remaining after all other food sources have been destroyed or looted; it can be stored for long periods and quickly propagated – thus it remains a vital resource in the region. Since the future of cassava and its cultivators is closely bound to conflict, ICRC is paying special attention to the problem and is a major actor in the fight against the CMD; currently ICRC is multiplying and distributing virus-tolerant cassava varieties in two countries in the region.

Epizootics

When dealing with diseases in livestock and agriculture, ICRC respects the lead roles and minimum standards set by international organisations such as FAO and OIE. When new diseases such as Highly Pathogenic Avian Influenza and Rift Valley Fever emerge, ICRC responses aim to fit within the national guidelines of each country where we work. ICRC also set internal guidelines to ensure that within any ongoing or planned interventions, not only is the safety of ICRC staff protected, but also the welfare of the beneficiaries.

The Mission

The International Committee of the Red Cross (ICRC) is an impartial, neutral and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of war and internal violence and to provide them with assistance. It directs and coordinates the international relief activities conducted by the Movement in situations of conflict. It also endeavours to prevent suffering by promoting and strengthening humanitarian law and universal humanitarian principles.

Established in 1863, the ICRC is at the origin of the International Red Cross and Red Crescent Movement.





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