

**Sudan National Environmental Management Workshop
Khartoum, 27-31 May 2007**

INTERSOS RELATION

WEST DARFUR

INTERSOS has started its intervention in the Chad-Darfur crisis in 2004, initially with the setting up and the management of two camps in Chad, Goz Amir and Djabal, after, in the second half of 2004 with an intervention of the main area of returns in West Darfur of the refugee population hosted in the two camps, specifically in the area of Habila AU and Wadi Salih.

In West Darfur, Intersos has implemented projects focused, since the beginning, on a strict community based approach, mainly in partnership with UNHCR.

Our activities in West Darfur are localized in the villages of the whole area of Habila and Wadi Salih AU and therefore we can assume to have acquired through the years a accurate knowledge of the area and of the link among its past and present problems.

In this workshop we were asked to give a presentation of the environmental situation in West Darfur. As it is understandable, Intersos will furnish a vision centered on the heart of its activities. Above all we don't pretend to give a technical and scientific vision of the environmental situation. This would require an assessment much more accurate and scientific than is possible and profit to do in this center. Some studies have already been done with remarkable results, surely others will follow this in the near future.

What we want to give, as partner of UNHCR and as INGO with particular mandate for the intervention in the refugees crises, is to give a general vision of the environmental situation in connection with the theme of Protection.

Surely the focus on the environmental aspect of the refugee crisis is absolutely appropriate and important for the very specific Darfur situation.

General introduction

It cannot be forgotten that the crisis of the Darfur, with its well known causes and external factors, is born on the wake of the great changes provoked by the droughts of the years' 80s and' 90s. These forced the movement of nomadic populations from the northern areas into the areas of Darfur.

Together with these distinguished and, we may say, chronic environmental factors, the 1970 land reform has contributed in a decisive way to weaken the traditional systems that

were used up until this reform, in terms of management of the resources (land and water above all) and of the resolution of the micro conflicts which is connected to them.

The conflicts that were born have been, as it is well known, exasperated up to the actual point by numbers of other factors, but they are always connected to a root of environmental origin that is not possible to ignore or to underestimate in order to act for an improvement of the situation.

This is particularly evident to Intersos now that, after some years from the first phases of emergency, the solution of this crisis will absolutely not be easy and not rapid as perhaps was thought, or at least hoped, at the beginning.

The territory of the Darfur can be considered in the sub Saharian ecological area. With an annual average value of precipitations of 800mm, with a predominance of sandy-clayey grounds and with the presence of seasonal courses of water and a varying altitude among the 500-700 ms slm, it fit in the parameters of a semi-desertic environment even if different are, of course, the areas in which various conditions are present.

During the past years, we have seen an impoverishment of the environmental resources of the whole area, regarding both the fauna and vegetation aspects.

One of the main factors responsible is related to the demographic growth observed in the last 50 years, where population increased from approximately one million in 1956 to almost six and a half million before the burst of the last crisis.

The demographic expansion came together with a decreasing of the natural resources available that is unfortunately common in most of the world nowadays.

This process happened without any opportune politics of resource control or of environmental management. From the traditional politics of management of the territory that have characterized the cohabitation among the different beneficiaries in Darfur we have shifted, in the last twenty years, to an almost unruly management of the resources.

Also is to be noted the absence of reforestation politics, of conservation management of the water resources, of formative politics for the improvement of the already fragile soil conditions. And as a result of the migration of hundreds of thousands of people, mainly agriculturists, towards the big urban centers, a lot of area has been exploited by the pasturing of an increasing number of herds of livestock, that led in many areas to the problem of overgrazing.



Drove and Overgrazing in West Darfur

All these factors have caused the phenomenon of deforestation before, and of desertification as a result of the destruction of the principal source of generation of organic soil.

That's why the crisis in Darfur has a very specific environmental background.

As in this case the deterioration of the environment can be considered as one of the root causes of the conflict and, at the same time, one of the most difficult issues to solve on which the conflict itself is impacting.

Environment here is fundamental in terms of environmental problems due to the rapid movements of mass of people in already impoverished lands but also by the fact that the difficult environmental situation was chronic before the conflict and seems to be consistently deteriorating.

In the agricultural/environmental circle in Darfur one of the greatest gaps is the lack of agricultural education, together with an urgent need of improving available technologies. These interventions must have as beneficiaries the cultivators and agriculturists themselves in order to safeguard and to improve the conditions of the territory. This will be also later on taken as one the most important interventions for the near future.

Through projects financed by F.A.O. Intersos has intervened with forms of primary assistance (seeds and tools distribution) and of formation directed at the present

agricultural communities in the area. During these trainings some of the most important gaps have been identified.

From an analysis on the roots of the conflict among the nomadic communities and those of the agriculturists, it is deduced that one of the fundamental problems is the lack of natural resources.

The struggle for the resources can be seen in fact, in a very schematic way :

- from the side of the community of the agriculturists that face the deterioration of the resources system, they are concentrating in the areas along the wadis and in the areas with more fertile soil able to maintain the water for a longer period,
- The nomadic communities at the same time push their herds in search of pastures and reserves of water, which is also along the wadis.

It must also be noted that in search of income, the former agricultural communities have now started to keep small numbers of animals as livestock, worsening the fight for poor resources available.

Inevitably, the ever increasing number of population and of livestock, in addition to the traditional rules of management of the territory that were not adjusted to the actual situation anymore, has contributed, as one of the roots causes, to what has become the conflict in Darfur.

During the last three years, the humanitarian intervention has mainly targeted the agriculturists as beneficiaries, focusing the efforts of emergency operations on them. As the very first emergency phase is behind us, it is the right moment to investigate the targets of those that could be the root causes of the conflict and looking for feasible ways of mitigating the ethnic tension.

With the mass influx of IDPs near the urban settlements, the pressure of a big number of people sheltered around the big centres has already hurt the fragile ecological equilibrium of these areas.

In an environmental system that before had its own equilibrium, this fragile balance has been broken:

- The places “planned” with a certain amount of sustainability that have received more than a double number of sustainable families.
- The demographic pressure has manifested with the disappearance of large areas of vegetation in the outskirts of the centers and with the overexploitation of the water resources with consequent lowering of the water stratum.

- finally the overexploitation of the land for agricultural purpose without improvements in the cultivating technologies drove to a consequential loss of fertility of the same land.

From the other side, nomadic communities have settled in the abandoned areas, sometimes occupying the same abandoned villages, always bringing a greater number of livestock and heading towards the overgrazing phenomenon.

In this crisis, if we really want to have an effective result in our intervention, it is necessary to look for the integrated use of the territory by the nomads and by the agriculturists, the first group as a source of organic enrichment, the second as preferred managers of the territory.

Forms of cooperation should facilitate both the processes of reconciliation, fundamental under the protection point of view, and the improvement of the environmental situation.

It is in this frame that INTERSOS has assembled its own efforts in the last years, through CBRP projects that integrated and facilitated the use of the territory from both the communities.

In the table below, the existing interconnections can be noticed with the different actions:

Problem	Solution	Method/ Example	Details
Management of the land	To increase the cultural-awareness-technological level of the communities	Creation of agricultural centers in which technical training is held regularly	<ul style="list-style-type: none"> • Characteristics of the soil • Improvement of organic characteristics of soil • Use of leguminose • Importance of the pasture as organic materials improve the soil • Irrigated setups • Maintenance of the soil • Intercrop management • Impact technical skills training
Fight against deforestation	To increase the number of trees / campaign of reforestation	Creation of plant nursery/center for formation	<ul style="list-style-type: none"> • Introduction of fruit species and not. • Life of trees • Reproduction of trees • Management of trees
Market support	To diversify the products	To introduce compatible variety / creation of seed-beds	<ul style="list-style-type: none"> • Realization of seed-beds • Training on the selection of the seeds

			<ul style="list-style-type: none"> • Self production of seeds • Increase of the resistance to the pathogenic elements • Reduce vulnerability of the agricultural market • Diversification of the market • Creation of income generating activities
Interethnic management of the territory	To facilitate the dialogue and to adopt methods of inter management	Shared technical formation to both the communities / realization of migration equipped route	<ul style="list-style-type: none"> • Formation on the integrated management of the territory • Selective reforestation of areas to be destined to pasture • Realization of tank drink of watering for animal use located in areas distant from the cultivated fields

It must be underlined, that a lot of feasible results are reachable on the basis of an environmental education.

Currently the results are difficult to attain in foreseeing projects on a large scale without the consent and the sharing of the whole community. This impact on the community, as it is very well known to Intersos, thanks to its CBRP activities, can result only from the understanding and a common education about the gravity of the situation.

It is unimaginable to succeed in imposing a solution to a community that is in a historical and critical situation, as it is in Darfur, and if the community itself is not properly informed, mobilized and consulted on the best solutions.

Also for the environment, a very rigid Community Based Approach must be the backbone of every possible intervention.

Training focused on the management of resources on a village level can allow a distribution on a larger scale of those that are the benefits locally present.

Technical notions of intercropping in partnership systems together with practical examples may sustain the maintenance and the protection of the ground from the erosion. The use of the same portion of land by nomads in transit and by agriculturists, under methodical pre-arrangements, can improve the realization of suitable soil for agricultural purposes (by the use of manure, ...), it contributes to the process of humidification and formation of the ground, first step in the facilitation of the processes of maintenance of water in the ground and of struggle against desertification.

Within the processes of reforestation, the use of particular plants, for instance the *Moringa oleifera*, helps in the management of the water and may facilitate the understanding of the importance of resource sharing processes in the planned activities for reforestation.

We must start to think in all our Community Based Rehabilitation Projects about the use of alternative building technologies, as recent studies suggest. This especially for the necessity of introducing an alternative way of brick production for the communities instead of the traditional system that requires large amounts of firewood.

ENVIRONMENT and IDPs CAMP

The deteriorating environmental situation of the IDP camps in West Darfur is sadly already well known. Always avoiding a technical analysis of the situation, the general picture Intersos can confirm is that these new settlements have impacted negatively on the fragile system of the main towns in Darfur. As in all the crisis that face a huge number of people in movement and that see new emergency settlements that grow in a short time, these had a very heavy impact on the natural resources available in the areas surrounding the main towns of Darfur.



Vegetation reduction around Towns

The general situation of the IDP camps is overcrowding, a critical lack of natural resources (land and water above all), lack of the possibility of cultivation either for the lack of tools as well as the difficulties in moving out of the camps to reach available land.

There is an urgent need to improve Income Generating Activities in the IDPs Camps in terms of Urban Skills .

The condition of “urban” IDPs is in fact a complete change in their life-style as they basically came from an agricultural background. This generates a big “dilemma” in the fact that agricultural skills are no longer vital in this moment, but instead, the generation of income inside an urban context (i.e. it is needed to find an alternative for the I.G.A. based on the firewood collection by women).

But, on other hand, if we, as INGO, focus on the creation of urban skills and “urban” I.G.A. it could put in serious danger the possibility of a future return, contributing to definitive resettlement of these masses of people around the urban areas.

The unfortunate deep impact that an IDPs/Refugees crisis has on the natural resources of the host communities is confirmed here in Darfur. That means over strengthening of natural resources (water, food, land...), but in addition to this, in Darfur, we have also, as said above, a critical environmental situation that was already in a deteriorating process, and also the fear that this mass of people may stay around towns for many years to come. Not pretending to be exhaustive, we can say that in this case environmental issues are strictly related with the protection issues. What we can report that the only way to solve the “dilemma”, in a sustainable way, is to focus on the security situation of the IDPs population.

In fact every kind of intervention that may directly sustain the environment in the urban areas would have a short term impact but, by consequence, would have in the long term a hard impact on the already poor natural resources available in the urban areas.

In West Darfur, this overcrowding around urban areas united with the critical resources can drive to, realistically speaking, the creation of a new sort of urban slums.

ENVIRONMENT IN RURAL AREAS

In 2007 Intersos is implementing, as in the past years, a CBRP Project in the Habila and Wadi Saleh localities. In 2007 we decided to focus more on the environment also in partnership with UNHCR, as we have done and we are doing with traditional partners like FAO.

Three plant nurseries and Agricultural Centers have been established in GARSILA, UM KHER and FOROBARANGA towns. The youth centers, already in place always within

the UNHCR Project, in these 3 towns were fundamental for the participation of the construction of the nurseries as well as the digging of the wells.

The main objective is to produce 120,000 seedlings (fruit 60%; forest trees 40%) in the nurseries. It is foreseen to distribute these seedlings to Intersos CBRP villages between September and October. This will be joined by trainings in the villages for the PTAs, the students, women and youth from our centers, and local farmers. It is our conviction that educational activities is fundamental to have a real impact on the behaviors of the beneficiaries.



Intersos Trainings with Farmers

In the nurseries there will also be the cultivation of diverse species of vegetables. Not only will this part be used as a practical training ground, but will also be used as income generating activities. The vegetables produced will be sold in the market and the income will be used to buy new seeds.

Trainings are on a weekly basis in each center. The participants include farmers from the town, youth and women from Intersos centers, and farmers from surrounding villages.

The trainings include the following, but not limited to, issues:

1. training for farmers in soil different kind
2. diversifying methods of agriculture
3. how to grow and produce vegetables and cereal crops
4. irrigation techniques

5. conservation of the environment to increase bio diversity
6. how to improve and increase their production
7. forest management, the principles of water harvesting and water storage
8. Education and awareness on the importance of trees to stop desertification.

The constant presence of INTERSOS on the field conducted with specialized staff and strictly in a Community Based Approach, has opened a privileged communication link between the local community and the INGO on the problem of environment, this is also thanks to feedbacks obtained in the last 3 years of intervention in West Darfur.



Irrigation System

Therefore, an environmental component of the CBRPs, involving both ethnic groups, Arab and African, to respond to their needs of fruits, wood and plants for the animals and at the same time to stop the serious deforestation process and to contrast desertification has been planned. Through this component of CBRPs INTERSOS aims at increasing the number of plants and the biodiversity as well as the quantity of fruits available and to further develop the reconciliation process at local level among nomads and farmers.

A number of under-utilized species with edible fruits have been identified which have a considerably wide range of uses. The seeds of these species are available in Sudan and they can be purchased in Darfur or in Khartoum.

Some of the possible species are listed below:

Gambil (*Cordia africana*) 37

Homeid (*Sclerocarya birrea*)

Medaika (*Ximenia americana*) - The juicy, yellow plum like fruit is eaten fresh and can be stored for a short time

Joghan (*Diospyros mespiliformis*) - These fruits are very popular among children who are used to eat them as 'snacks'

Tamarhindi (*Pithecellobium dulce*)

Aradaib (*Tamarindus indica*), *Gudeim* (*Grewia tenax*), *Gunguleiz* (*Adansonia digitata*), *Lalob* (*Balanites aegyptiaca*) and *Nabak* (*Ziziphus spina-christi*) – dry fruits that can be stored for several months during the dry season.

Different beverages are prepared in different ways from the fruit pulp of these plants

Dalaib (*Borassus aethiopum*) - The fruits of this plant can be eaten and in addition to the food source they spread a very nice and intensive smell. For this reason they are used in houses and rooms for better smelling.

Acacia nilotica - Fruits from this tree are used against colds and fever

Fruits like '*Aradaib*' (*Tamarindus indica*), '*Dom*' (*Hyphaene thebaica*), '*Gunguleiz*' (*Adansonia digitata*), '*Lalob*' (*Balanites aegyptiaca*), '*Nabak*' (*Ziziphus spina-christi*) are available all year on the markets, because of a high demand and their excellent storage capacity. These fruits are usually a very important source of income for the rural population.

Planned intervention for the near future in the rural areas:

In the immediate future we think that it is necessary to act on three levels, if we really want to have a realistic impact on the critical environmental situation in our areas:

1) In the frame of our CBRP activities, continuation and reinforcement of the ongoing activities of seeds nursery and in general on environmental appropriate practices (FEE training, vocational training for youth, I.G.A for women in our women center to give real alternatives to firewood collection – that is really fundamental also on a protection point of view) focusing on a Community Based approach.

2) Focus on Education for Environment. As said, in fact, we think it is important to have an impacting activity of education, in schools for children in the villages, through our specific trainings. All sustainable changes in the environmental situation start from a change in the behaviors can be reached only through education.

3) Pilot Project for an integrated approach to the resources management among different ethnic groups through a community based intervention, that should be the starting point for reconciliation processes among the community.

Following the transformations explained at the beginning of our relation in the General Introduction, traditional methods for the land management and related micro conflict resolution have lost their importance and impact. In addition to this, the environmental changes in the area, together with the security situation, have driven the nomadic communities to a more permanent settlement and, by consequence, life style. In other terms, the nomadic routes, that were the cornerstone of the relations between the different ethnic groups, are no longer the preferred ways of movements for the nomadic tribes.

This changes have had a negative impact on the capacity itself of the local community in dealing with the conflict situation ongoing, by losing this essential community mechanism of dialogue it has been lost available and important spaces where to intervene in order to look for a solution for this conflicts.

How it is the situation in our intervention area, the “triangle” from Habila to Forobarang and Garsila?

In this area there has been an influx of nomadic tribes that came to settle for long term period, basically occupying the available lands and starting an intense exploitation of the already poor available resources.

To have a clear picture, all the traditional system of land occupation by farmers and nomadic movements that was in place, is nowadays almost abandoned. It is clear that together with environmental related causes there are also external ones in this process. But if a solution is possible then it must be found through the traditional system of resources regulation.

In the last months, a further critical factor was added to an already difficult situation, the mass influx of new nomadic tribes arriving from the near Chadian area. Numbers of this influx are still being assessed, anyway by now we are speaking for sure of more than 5,000 new families. This is leading to a very critical situation regarding the natural resources available, and also is bringing a new deteriorating factor in the area. These new nomads have to build up new relations not only with the agricultural tribes but also with the old nomadic tribes pre-settled.

This really seems to be a strong challenge for the near future, as this process seems to represent a great obstacle for a future possibility of return in the area of IDPs and Refugees population who fled in 2003.

In our view, this situation that is a very complex one, has potential solutions, as well as one of its causes, that is hidden in an environmental intervention.

Apart all the related issues that are out of the mandate of an INGO, what we think is that in this case it is really important the link between environment and protection.

In the sense that, if may be found an impacting way of intervention to avoid the unruly occupation of the land, this is naturally linked to a community based approach that leads to the different actors on the ground to restart a dialogue focused on resources management.

This seems to be quite unrealistic at this stage, but is important to remember that the critical environmental situation in the area must be the common factor that can link the opposite communities. Exploitation of resources, in fact, without the old traditional balance between the different actors and habits that was in place, would lead to unavoidable and unrecoverable further deterioration of resources available.

We are convinced that this is an intervention that can be attempted on a micro level.

It is important to start with an educational program on environment, together with trainings on more efficient agricultural techniques.

After, taking the example of the former regulation of the nomadic routes, it is necessary to support the communities in rebuilding local committees that would be responsible for an integrated management of local resources and, above all, would be the entry point to support reconciliation processes.

Of course, this first step cannot be attempted without the congruent support to increase the availability of resources available – first of all, water – and in the technologies that are needed for their utilization.

This seems to be at the moment an impacting strategy to undertake that is only possible with a consistent presence on the ground.

What in fact is frequently the gap in many community based intervention, is the lack of a continuous and qualified presence of facilitators on the ground. For sure it is not possible to reach a dialogue between the different communities in such a critical situation, if this factor is underestimated.

Without forgetting the difficult problem of the nomads occupying abandoned villages, a particular attention must be paid to avoiding support to similar cases, and above all, any activity must start with the African agricultural communities and after involving the nomadic tribes for dialogue and conflict resources, an opposite process would be probably misunderstood by beneficiaries and with no, or worse, effects.

FINAL RECCOMANDATION:

1. To implement the environmental education at scholar level;
2. Reinforce the preexistent farmer committees for a better understanding of the environmental problems and needs;
3. To share the agricultural/environmental/land management knowledge at village level and facilitate the dialogue between the several users available (farmers, nomads);
4. To realize an effort lead principal to the IDP's settlement in order to increase the environmental quality (selected and controlled green loop around the big town);
5. Facilitate the use of fuel efficienct stoves as methods to mitigate the use of wood or coal like firewood;
6. To involve the local authority in the planned decisions;
7. To implement all activities in a strict Community Based Approach.

LESSONS LEARNED:

Most of the problems in West Darfur are related to the lack of environmental resources, an effort to improve the environmental quality is necessary to reduce the problem between the farmers and nomads. To improve the condition of the land is the most important step. Communities are, usually, available to open a discussion about it and very sensitive to the land problem. Both farmers and nomads recognize the scarcity of land available and all of them are committed for several activities but, is necessary that the communities are opportunely informed about it.

The lack of knowledge is a dominant factor commonly recognized. The communities have always responded in a great way to information campaigns and follow technical trainings to carry out and participate themselves towards the improvement process of their own land.