



# ACTED

## Yida Deforestation Report



**Presented to:**



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**ACTED in South Sudan  
Refugee Response**

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## **Introduction**

ACTED conducted livelihood interventions in Nyeel and Pariang refugee camps in Unity State with UNHCR throughout 2012. One component of the livelihood programming included the establishment of tree nurseries and re-planting of seedlings either in the household or public sphere. In October 2012, ACTED and UNHCR opened discussion to replant trees from the Pariang refugee camp tree nursery in and/or around Yida refugee camp to reduce both the suspected deforestation and potential consequent tensions between the refugee and host communities. To implement the plan, ACTED agreed to first assess the status of deforestation in Yida and meet with Yida agricultural committees and leaders who had previously expressed interest in a tree nursery. This assessment took place in November 2012. Based on this initial assessment, ACTED will then identify the best type and quantity of trees to plant, determine how to move the seedlings to Yida and follow up discussions with the agricultural committees to ensure the trees are properly cared for through the 2013 refugee response planning.

## **Yida Refugee Camp**

Yida refugee camp in Pariang county, Unity state was first self-settled by refugees from South Kordofan, Sudan in June 2011. A second large influx arrived in the camp in June 2012. The refugees are fleeing hostilities in South Kordofan state, Sudan between the Sudanese People's Liberation Army-North (SPLA-N) and the Sudanese Armed Forces (SAF). The settlement location chosen by the first refugees, Yida, is located only 25 kilometers from the border with Sudan (see map of Unity camps in Annex 1). It is generally recommended that refugee camps be located at least 50 kilometers from the border. At this close proximity, the population of Yida camp is highly prone to not only direct, intentional SAF attacks, but to collateral damage as a result of the conflict in South Kordofan.

Two camps, Nyeel and Pariang (see map in Annex 1), were established by UNHCR to attempt to induce Yida inhabitants to relocate to a safe distance from the Yida border. Ultimately, by December 2012, only 853 individuals had relocated to Nyeel camp and 763 to Pariang camp (although Pariang hosted approximately 1,000 individuals during the school year due to the education services offered in this camp). Conversely, Yida continues to host approximately 58,084 refugees. The refugees are reluctant to leave Yida for several reasons including the fact that during the dry season, the close proximity allows for travel back to South Kordofan and the soil and climate is more similar to that of their places of origin (the swamps of the surrounding areas are foreign and less conducive to the Nuban agricultural practices).

Thus the refugee population in Yida remains quite substantive. The host community, on the other hand stands at approximately 700 individuals. Despite the fact that the refugees are Nuban and the host community is almost entirely Dinka, there have been few occurrences of conflict between the two communities. Yet, tensions have been present and concerns raised by the host community regarding depletion of natural resources due to the sudden expansion of the population. The issue was first raised in October 2012. With the understanding that the Yida refugees will remain in the area for several more months, it is important that tensions are addressed and eased quickly and appropriately by all actors in the camp.

## **2012 Refugee Livelihood Programming**

ACTED was the sole livelihoods actor in Nyeel and Pariang camps in 2012. Main activities included establishing agricultural committees in each camp, distributing seed, tool and vegetable kits, providing agricultural and compost training and establishing tree nurseries and re-planting the seedling in the household and/or public sphere. A full AMEU report on the impact and recommendations from the 2012 program was shared with UNHCR 8 January 2013 (available Annex 2).

The tree nursery component included the planting of maringa, lemon, Brazil, mango, cedar and papaya trees in the new nurseries. The trees were then to be re-planted in and cared-for by individual households. Following discussion with UNHCR, it was decided that the refugees could instead re-plant the trees as a gift for the host community in both private and public spaces. ACTED, the Relief and Rehabilitation Commission (RRC), the Agriculture and Forestry Department and local leaders mobilized the community to visit the tree nursery and select seedlings for household re-planting. Simultaneously, memorandums of understanding (MOU) were drafted with local institutions (government agencies, schools, hospitals, etc.) for re-planting in public areas with the assurance of sustainability. ACTED anticipates the survival and re-planting of 2,600 trees by the end of 2012.

## **Methodology**

This report has been developed based on the following sources (available in Annex 3):

1. Separate focus group discussions with individuals from the refugee and host communities (14 groups of approximately 6 individuals each, 43 host individuals and 35 refugee individuals total)
2. Transect-walk observations conducted by ACTED staff (with a focus on 120 refugee and 34 host community households)
3. Key-informant interviews including community leaders

The assessment was designed as a rapid assessment that took place 5-9 November 2012 with the intention of providing a quick snapshot of the level of deforestation in Yida camp both through observation and experience by the residents, refugees and key informants on the ground. Upon arrival in Yida, ACTED staff met with the top community leaders who then directed the team to appropriate tribal sheikhs. The focus for the focus group discussions was tribes that have been in Yida the longest. Final tribe selection was then based on availability of sheikhs during the three day assessment, who then selected relevant community members for the discussion. ACTED selected host community participants in a similar way, with a focus on bomas closest to Yida camp. Households that are noted in the transect walk tally sheets were randomly selected while traveling between areas of the camp to conduct focus group discussions. Key informants were suggested by tribal leaders.

The findings will inform an immediate response plan as well as medium and long term recommendations, including further assessment and information gathering. The level of deforestation due to the expanded population is to be explored by establishing the current status of the forest, perceptions of how forested the area was and how the forest was used prior to the first refugee influx (June 2011) and similarly, whether a greater change was

noted following the second large influx of refugees in June 2012. Thus, the refugee focus group discussions included a variety of individuals who have been residing in Yida camp since 2011 and those who have been there since 2012.

### **Findings Summary**

It is generally agreed by the host community, refugee and key informants that deforestation is occurring in and around Yida camp. Main deforested areas include the settlement and immediate surrounding areas, particularly around the main market, schools and water point. The host community blames the refugees for the change, but concedes that agencies on the ground also consume large amounts of timber, mainly poles for their compounds. Among residents, the most common reasons cited for deforestation was clearing for settlement, firewood (as no charcoal is used) and for construction of shelters. It was evident to ACTED staff that refugee households were heavily reliant on the forest for their current standard of living and relied on poles for construction and firewood for cooking. In every compound, three or four tree stumps were evident.

The host community and long-term refugees were unable to identify a specific point in time when the deforestation accelerated. However, it was agreed by both groups that change was noticeable between when the first refugees arrived in Summer 2011 and directly before the second influx the following year.

The negative impact of deforestation is not thoroughly recognized. Respondents did note that they now walk further to fetch firewood and poles. Yet this was not recognized as a negative impact of deforestation and overall it was difficult to come to a consensus as to whether deforestation has adverse effects on the environment or the populations' daily life. Conversely, women claimed that the deforestation made them feel safer from snakes or attack. The evident lack of awareness may explain the current lack of policies for resource control among either the host or refugee community in Yida camp, although host community respondents claimed to be in favor of government intervention. Overall, both communities did agree on a need for controlling resource use, either by relying on branches rather than full trees or through government policy development.

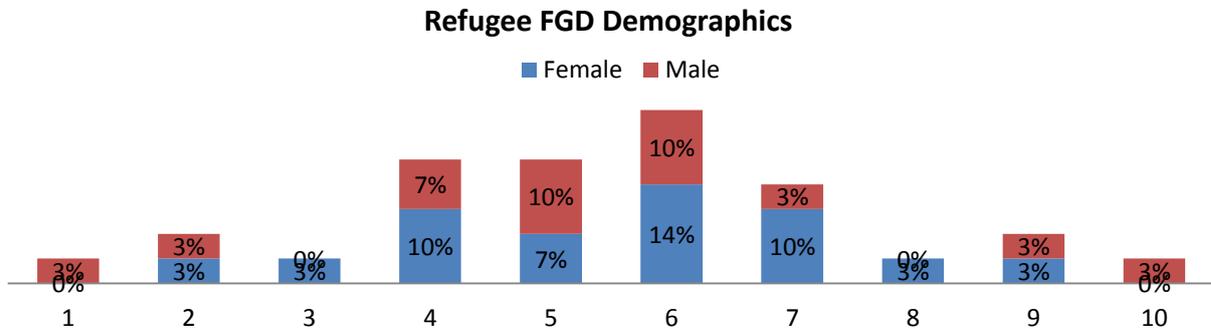
### **Focus Group Discussions**

Focus group discussions (FGD) were held with 14 groups of approximately 6 people each. Groups were separated by host and refugee community. Six group discussions were organized with the refugee community, involving 35 individuals. Eight group discussions were organized with the host community, involving 43 individuals. Questions posed to the group revolved around the following themes:

- Current employment, and change in employment over time
- Change in economic benefits gleaned from the forest over time (leaf litter, firewood, charcoal, fodder and timber)
- Change in forest cover over time
- Perceptions as to why the forest cover may have decreased
- Impact of the change in forest cover on agricultural productivity, household difficulties and risks
- What forest management policies are in place and the groups' recommendations

### Refugee FGD Overview

The focus group discussions with refugees had equitable participation between men and women with only slightly higher female presence (55%) than male. None of the participants reported a household size larger than 10 people. Almost all of the participants reported relying on agriculture for a living. Some rely on forestry, but if so they also farm.



Reliance on forest resources for firewood and timber is very high among the refugees and their main concern was the distance required to access these resources. There was no report of reliance on the forest for leaf litter, charcoal or fodder. It is recognized that the forest cover has changed dramatically in the past six months. Whereas almost all respondents agree that forest cover was very dense six months ago, almost one third agree that current forest cover is sparse. The refugees also report a sharp increase in the amount of energy and time expended on these resources. The current distance traveled to collect firewood is generally three or four times the amount of time reportedly required six months ago. Similarly, to collect timber, respondents now spend double the amount of time – although it should be noted from the below tables that significantly more time is required to collect timber. The below tables illustrate selected group responses to the question of distance for forest resources.

Current distance traveled to collect <u>firewood</u>	Distance traveled to collect <u>firewood</u> 6 months ago
3 hours	20 minutes
3 hours	60 minutes
2-2.5 hours	20-30 minutes
6 hours	20-40 minutes

Current distance traveled to collect <u>timber</u>	Distance traveled to collect <u>timber</u> 6 months ago
6 hours	3 hours
3 hours	1 hour
8 hours	3 hours
4 hours	2 hours
4 hours	1.5 hours

Despite the recognition that significantly longer distances are now required to collect firewood and/or timber, many respondents still indicated no impact due to deforestation. In fact, more individual participants reported no impact than mentioned the long distance.

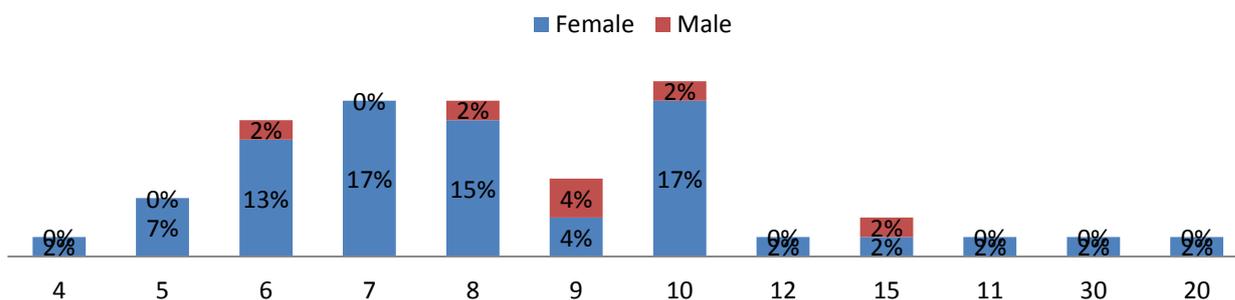
The refugee focus group discussions garnered interesting options for management of forest resources. It was noted that there are currently no management policies in place among the refugee tribal groups. Some options that were raised included tree planting, providing alternative construction materials and introducing energy saving techniques (such as

stoves). Some of these have been introduced to the refugee setting in South Sudan, and expansion to the refugees in Unity state should be explored.

### Host Community FGD Overview

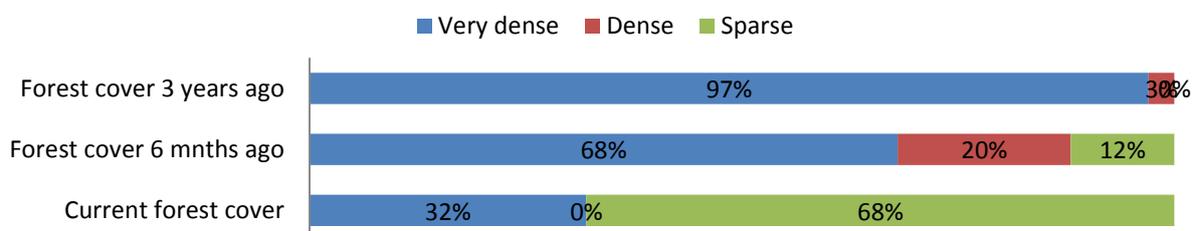
Almost all the focus group participants from the host community were women. This is most likely because the men were either farming or in the market. The largest percentage of respondents reported having a household of ten people, followed by 7, 8 and 6 people. A few individuals reported having more than 10 children. All of the participating host community households rely on agriculture for their livelihood.

### Host Community FGD Demographics



As was the case with the refugee discussions, host community participants recognize a significant variation in forest cover and time spent on fetching forest resource. Almost all participants report very dense forest coverage three years ago, before the arrival of the refugees. There appears to be a drop in this reporting at the six month mark, following the second influx of refugees in summer 2012. Within the last six months, the host community recognized a second significant change, with two thirds of participants reporting that current forest cover is sparse. The difference is also greater in the fetching of timber than of firewood. However, among the host community the variance was less prominent if at all (i.e. 30 minutes 6 months ago and 1 hour currently to gather firewood). In some groups, respondents reported no change at all. Where change is noted, it is more important when comparing current travel times to those three years ago, than comparing current time to only six months ago (i.e. there may be no or limited change in firewood collection time between 6 months ago and now, but the same individual reports that 3 years ago they only required 20 minutes to do the same chore).

### Change in Forest Cover



The recognized impact of the changes is inconclusive. Only a handful of participants noted the lengthier distances or diminishing of resources to be an adverse effect of deforestation. A couple of women noted the increased risk from wild animals. Despite this, many participants mentioned increased awareness as the main policy or activity to be

implemented to combat deforestation. Thus, participants are aware that more education in this regard is necessary and will be helpful. Other participants noted the need for government involvement on the matter, which should be followed up with host community leaders.

### **Transect Walk**

The perceptions provided through the focus group discussions were confirmed through tally sheets that ACTED staff completed while visiting households in Yida. The tally included counting of households collecting firewood, shelters using forest resources, standing trees, tree stumps and planted trees as well as the number of households who depend on forest resources (disaggregated by type), households that have alternative livelihood options and those that have received environmental education. One tally sheet was completed for the walk through the refugee settlement areas and one for the host community.

Only 34 households were included in the host community investigation while 120 households were tallied among the refugees, which reflects the large difference in the population of the two groups. Through the walk with the two communities, more trees were noted among the refugees (91 on the refugee tally and 34 on the host community tally), but also many more stumps (119 among refugee and 18 among hosts). Regardless, the number of stumps among both the refugees and host communities far outweighed the number of trees planted by households in each community. ACTED staff noted 199 stumps among the refugees and only 2 planted trees, and 18 stumps next to host community houses and 7 planted trees.

Firewood collection for cooking was the most prevalent dependency on the forests, while construction was also a common use of forest resources among both groups. Among the refugees there was also a prevalent use of forest resources for furniture; while the host community also largely rely on the forest for household fruit consumption and charcoal.

<b>Reasons for forest dependency</b>	<b>Refugee</b>	<b>Host</b>
<b><i>Sale firewood</i></b>	0%	0%
<b><i>Sale charcoal</i></b>	5%	0%
<b><i>Cooking firewood</i></b>	100%	65%
<b><i>Cooking charcoal</i></b>	11%	26%
<b><i>Construction</i></b>	22%	38%
<b><i>Sale fruit</i></b>	1%	0%
<b><i>Consumption of fruit</i></b>	4%	41%
<b><i>Furniture</i></b>	20%	12%

Approximately half of the households reported gardening as an alternative livelihood. A large percentage of host community households also have livestock. Concerning education on environmental issues, almost no refugees were found to have had prior training. A small handful appear to have tree seedlings and to have heard of alternative construction techniques. About one third of the host communities tallied had received education on alternative energy techniques, although none of these involved energy saving stoves.

### **Key Informant Interviews**

Seven key informant interviews were held in Yida refugee camp. The informants include the chairman of the council of refugees and other traditional leaders.

There was general agreement that deforestation has accelerated in the past year. The chairman of the council of refugees was most specific, detailing that the deforestation began in 2011, but has increased exponentially throughout 2012. Almost all directly point to refugee settlement as the main cause for the deforestation. Other main causes are firewood and

construction. One key informant specifically highlighted to use of poles by humanitarian agencies in Yida camp as well as their distribution of axes that may encourage further deforestation. Overall, the negative and positive effects of deforestation are agreed to cause decreased biodiversity, change in weather (including erosion and drought) as well as firewood, shelter and income (sale of firewood). One informant mentioned arts and crafts as a further benefit from the forest. The most commonly mentioned preventative measure that should be adopted was development and enforcement of a resource management legal framework. Tree planting was also a common remedy along with further encouraging selective cutting (policies that are reportedly already in place, although all informants state that they are not enforced), sensitization of the communities and introducing energy saving stoves.

### **Recommendations**

In order to move forward the previously planned re-planting of trees and address the overall issue of deforestation in Yida, ACTED AMEU firstly recommends further investigation into several specific areas to both ensure a full picture of the situation on the ground and to fulfill some of the medium and long term recommendations offered below.

Further investigation may include:

- A full shelter analysis. The shelter analysis will ultimately determine the differences structurally and in terms of resources required for both the local *tukul* and the Nuban shelter. Issues will involve, (1) the type of shelters are regularly used in Nuba, (2) the feasibility and viability of using sand or soil stabilized bricks (or other alternative construction technique) with these indigenous designs, (3) the current political dynamics that need to be taken into account in devising a shelter strategy. Such an analysis can be used to develop a shelter strategy that can be adopted in all the Unity state refugee camps.
- Conflict mapping. The current rapid assessment did not scrutinize UNHCR's concerns of potential conflict over forest resources between refugees and hosts. The focus group discussions validated that the host community places some degree of blame on the refugees, and the refugees recognize this. ACTED does not at the moment have a relationship with these populations to go further into this issue effectively.
- Protection investigation. Protection issues were raised by UNHCR; apart from fear of wild animals, these issues were not mentioned in the focus group discussions, even when discussing with women alone.
- Energy saving alternatives. The option of energy saving stoves was raised by both refugees and key informants. There are also brick makers already present in the



camp. Further investigation should be conducted to determine whether these skills can be enhanced and shared more widely.

- Re-forestation areas. This assessment focused on perceptions and observations of the status of deforestation. Re-forestation was marked as a possible solution, and more thorough investigation should be conducted by a trained agronomist to determine the best position for this.

Concrete immediate recommendations based on the assessment conducted in November include:

- Distribution of approximately 4,000 tree seedlings (preferable quick growing wood trees or fruit trees) to refugees and hosts (private households)
- Tree seedling planting in institutions that are willing to take care of the seedlings
- Environmental awareness campaigns
- On the ground agencies develop environmental sensitivity policies and mainstream environmental sensitivity throughout all projects and programmes

Recommendations for actions that should begin within the next six months (medium term) include:

- Planting tree seedlings in public spaces
- Initiate dialogue between refugees, hosts and government on usage and protection policy and law development
- Analyze local tukul and traditional Nuban houses regarding wood usage in comparison to current refugee shelters in order to develop a shelter strategy
- Analyze the Nuban sand brick business and its viability as an alternative to current shelters (this will feed into the shelter strategy)
- Fuel efficient stove pilot and roll-out if appropriate

Activities that should begin within the next year (long term) may include:

- Develop and implement a shelter strategy in all Unity state refugee camps
- Introduce stabilised soil bricks (linked to sand bricks if they are considered viable)
- Reforest select areas
- Develop protection and usage policies with agencies and government