



## UNIDOScope

weekly internet newsletter

CONTENTS 14 - 20 August, 2005

### Reconstruction in the Nuba Mountains Region of Sudan



[an annotated picture gallery of the project is available here](#)

A UNIDO project, working with some US\$ 1 million provided by Japan through the [UN Trust Fund for Human Security](#), is assisting the people in the Nuba Mountains region of Sudan in the areas around the provincial centres of Kadugli and Dilling (a minimum of 6050 households -some 60,500 individuals). The project is targeting an area ([see map](#)) where the local population has been severely affected by armed conflict and drought, leading to internally displaced persons, severe poverty and breakdown of socio-economic structures. Food production is being increased through the provision and production of simple hand tools, agricultural implements, and basic food processing equipment. The project began in February 2004 ([see UNIDOScope 14 - 20 September 2003](#)) and is expected to run until August 2006.

Women, who constitute 84% of the agricultural related workforce, will particularly benefit from the post-harvest and income generating activities of the project.

Sudan has endured armed conflict for the last 20 years. The resulting disastrous effects have been compounded by recurrent drought. Consequently, in several regions of the country, the population is facing chronic and severe food insecurity and malnutrition, especially among poor and vulnerable groups in rural areas. Nearly 3 million people are severely affected by the civil war in the south and an additional 800,000 people have been displaced by drought in the north.

The Nuba Mountains Region covers an area of about 80,000 square kilometres with a population estimated at 1,025,772 according to the UN census of 1998. About 65% live in rural areas, 23% live as transhumance nomads and 12% live in urban centres. The Nuba Mountains Region includes the State of South Kordofan and part of the adjoining State of West Kordofan ([see map](#)). The Region is usually well watered (500 up to 800 mm/year) and has extensive and fertile agricultural plains. Agriculture constitutes the main livelihood for almost the entire population. Major crops include sorghum, maize, sesame, cotton, fruits and vegetables. There is also an extensive livestock industry, with some 1.3 million head of cattle, sheep, goats and camels.

There were many factors that led to the selection of Dilling and Kadugli areas for the project; high among these was the fact that each province has areas on both sides of the cease-fire lines. Other factors were: the (relative) accessibility of each area during the wet season; animal traction (the Nuba hoe) is not an entirely new concept in the chosen areas; project implementation can be secured and brought to a conclusive end; and there is no duplication (but instead complementarity) with other development programmes in the area. Another key factor in selecting Dilling and Kadugli was widespread poverty; it is estimated that 200,000 people are affected by civil strife and insecurity, mainly in Kadugli, Talodi and Dilling provinces. There may be between 33,000 and 66,000 people confined in the hills who are reportedly living in abject poverty in isolated villages of the area.

The project is working closely with the Nuba Mountains Programme Advancing Conflict Transformation ([UNDP-NMPACT](#)), a framework within which all the UN agencies and most NGO's are implementing their programmes in the region, and the [IFAD Southern Kordofan Rural Development Project](#) and ongoing FAO activities in the region.



The establishment of village community development groups is central to the Nuba Mountains Project

The establishment and sustaining of village community development groups and sub-groups to manage and sustain the project activities / inputs is central to the Nuba Mountains project. UNIDO is using the approach developed by IFAD (International Fund for Agricultural Development) for village community development groups (VCDGs) for its on-going South Kordofan Rural Development Programme. There is a Farmers' Group (whose members will benefit from animal draught cultivators and improved hand tools) and a Women's Group (whose members will benefit from the post-harvest processing and income-generating machines). The elected representatives of the VCDGs and sub-groups are being trained in management, work planning and budgeting.

The South Khordofan State Ministry of Agriculture has given concrete support to the project by making available a substantial building and compound in Dilling that is suitable for a project office, classrooms, guest house and storage space. As it is a difficult three-hour drive from the project office in Dilling to Kadugli, (see map) and on average another hour from there to a village, during the first year of the project the focus has been on the villages around Dilling. Implementing Dilling and Kadugli at the same time would have meant travelling would have consumed too much of project time. As of August 2005 the focus has moved to Kadugli.

The project has established a workshop / training centre at Dilling with a working area of 90 square meters and a secure storage area of 45 square meters. Workshop machinery includes a power hacksaw for cutting of steel, a pillar drill, two welding machines, one 15 tonne hand press, two angle grinders, a hand drill, and a compressor for painting. The main output of the workshop so far is some 750 "Nuba hoes".

The rural population is aware of the benefits the Nuba hoe (a simple spring-tine cultivator that can be used for both soil preparation and weeding by changing the working tool), because of an EC funded project (Nuba Mountains Rural Development Project - NMRDP, 1978). Although the NMRDP programme ended with the onset of conflict (and the trained oxen no longer exist) farmers who participated still remember the project as being of real benefit. Even villages that were not covered by the project are aware of the potential of animal traction.



The Nuba hoes manufactured under the UNIDO project have proved suitable for all three types of soil: sandy; sandy loam and clay. They are more environment friendly as they reduce soil erosion by only disturbing the top soil sufficiently for seed planting. They are also lighter than the earlier Nuba hoes and therefore more easily operated by women and more transportable.

Trials carried out by NMRDP have shown that cropped areas were estimated to increase by 45.5% on **vertisols** and 77.5% on lighter soils as a result of animal draught cultivation. With regard to yields and in comparison to traditional cultivation, draught animal cultivation showed an increase of over 50% for staple crops. Also, total costs were estimated to be lower with animal traction than with the use of tractor power.

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Building capacities in the manufacture of the hoes is one thing, but the farmers and oxen also have to be trained in the use of the hoe. An extensive two-week training of trainers on animal traction was conducted in March 2005 for 30 participants and 30 oxen from Dilling locality. Training was conducted at Sunjukaya animal traction training centre and covered: theoretical training on basics of crop production, plant protection,

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animal husbandry and health care, information dissemination, technology adoption, etc.; practical training on use of yoke and harness, Nuba hoe with reversible shovel, weeder attachment, planter, ridger, groundnut lifter, oxen cart etc.; assembly of the Nuba hoe and use of wooden marker (for planting in straight line); and practical and theoretical training on how to set up and conduct animal traction training programme for farmers and oxen in their villages.

The second training of trainers on animal traction was conducted at Julud during May 2005 for 12 participants and 12 oxen from SPLM Western Jebels area of Dilling.

The farmers trained at Sunjuka training centre in March 2005 began 10 day training sessions in their communities in the in 13 animal traction training centres in the Government of Sudan area in the last week of May 2005. Altogether 450 Nuba hoes were distributed in the GOS area. A total of 900 farmers and oxen were trained.

Training of farmers in the Dilling region was delayed due to severe shortage of water caused by delayed rain, and migration of farmers along with animals to the south in search of fodder and water. A total 244 farmers and 70 oxen, 49 camels and 3 horses were trained on animal traction in July 2005. Training was conducted at seven training centres: Kajala, Shongel, Wali, Julud Mandari, Katek, Tolo, and Kabela.

Training of farmers in the SPLM Western Jebel area got underway at the beginning of August 2005 in Wali, Katla, Julud Mandari, Kabook, Kajala, Temain and Julud Basha. The delay in starting this training was due to the severe shortage of water in SPLM villages.

While the Nuba hoe is very suitable for farmers with oxen, very poor farmers (particularly in the SPLM areas) lack even simple hand tools for soil cultivation and weeding. These farmers, male and female, are being provided with basic hand tools on a grant basis to assist them to improve their food security. In total, the project is expected to fabricate locally 30,000 hand tools which would benefit 3000 families. The blacksmiths trained under the project are subcontracted to produce the hand tools.

By the first week of June 2005, 15,000 hand tools had been distributed to 1,500 households in Western Jebels ([see map](#)) SPLM villages. A complete set of 10 traditional hand tools for land cleaning, planting, weeding and harvesting, was distributed to each household.

The scarcity of hand tools in the SPLM controlled area is also due to shortage of raw materials and trained blacksmiths. During May 2005, 14 blacksmiths from these villages were trained on traditional hand tool fabrication and how to set up a blacksmith shop and repair old hand tools. To support the newly trained blacksmiths, UNIDO also distributed a tool kit and scrap steel to each participant. During follow-up it was observed that each blacksmith has already opened a blacksmith shop in their village and started manufacturing hand tools. Of course, the proximity of these blacksmiths is a great benefit to the farmers.



These trainers will now train all the interested women in their villages.

On April 5 – 11, 2005, 24 women from the Dilling locality (GOS area) took part in a one-week training on the production of high value milk products such as cheese, ghee, butter and yogurt and operation and maintenance of the milk-cream separator. The women were also instructed on milk preservation techniques, testing of milk and concept of hygiene, etc. These trainers will now train all the interested women in their villages.

Twenty women from Government of Sudan area villages took part in a three-week training on sewing and garment making in February 2005. Women from the Sudan Peoples Liberation Movement villages did their training May 21 - 11 June 2005. Trainees learned and practiced making children's clothes, boy's and girl's school uniforms, shirts and pants, jalabia and sukhal (traditional Sudanese dress), etc. for adults.



Nuba Mountains villagers with "Arachi"  
the UNIDO Representative in Sudan, Jebamalai Vinanchiarachi

A World Bank (WB) team was in Dilling on 29 - 31 July, 2005 to assess the community driven projects in South Kordofan. On 29 July, accompanied by the UNIDO Representative in Sudan, Jebamalai Vinanchiarachi, the WB team visited the UNIDO Workshop and saw the blacksmiths at work on Nuba hoes. Mr. Vinanchiarachi told UNIDOScope that the WB team was highly impressed with the workshop and facilities and the quality of Nuba hoes produced by the blacksmiths. He said that the Dilling Commissioner, when questioned by the WB team, described the UNIDO performance in the Nuba Mountains Region as "unparalleled". The Dilling society of blacksmiths asked for assistance to convert the workshop in to a regional training school, with provision for boarding and lodging for young boys to undergo intensive two-month training in welding, cutting and fabrication.

On 30th July, the WB team met with members of the Village Community Development Groups in the villages of Sunjukaya and Farshaya. "The cohesiveness and enthusiasm of the group members had to impress the WB team" said UNIDO's Vinanchiarachi. "The Head of the WB delegation remarked on the high degree of local empowerment with which the project is being implemented." he said.

On the afternoon of the 30th of July, the WB team visited Tukma village where ceremonies were underway inaugurating the project's village community centre and closing the project's training on tailoring. The training had been conducted by participants in the February 2005 UNIDO training of trainers course. The visitors commented on the high quality of the clothing produced by the participants.

In Tukma they also visited one farm where they saw farmers weeding sorghum with the Nuba hoe.

The UNIDO team is hoping the good impressions gained by the WB team of UNIDO's work with the community development groups in the Nuba Mountains region will be reflected in the WB report which is expected by the end of September 2005. "We hope we will be asked to implement some of the programmes on a bigger scale." said UNIDO Representative in Sudan Jebamalai Vinanchiarachi.

And so say all of us!

While you are here, why not have a look at [an annotated picture gallery of the project?](#)

A special thanks goes to R. K. P. Singh, Project Officer, UNIDO, Sudan, for taking the photos.

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