

**Interim Report on
Food Security and Nutrition Project Western Kasai
S-063461 Innovation Fund CIDA
September 2006 – February 2007**

The Food Security and Nutrition Project Western Kasai aims to contribute to food security and improve nutritional status of the rural population. The pursuit of food security is primordial and has received the utmost attention.

The activities planned and executed were:

- provision of technical and material support to farmers' associations
- promotion of nutritious crops
- organization of seed farms
- encouragement of food security practices, improved agricultural methods and improved nutrition
- nutritional education
- monitoring of children's nutrition
- rehabilitation of malnourished children, mothers, widows and handicapped
- promotion of social solidarity with the elderly and the handicapped, widows, orphans and abandoned children

Due to high levels of interest from farming associations, lots of hard work by the Butoke team to provide technical and material support, and extra demand caused by the failure of some other NGOs to provide promised seed to associations, Butoke has been able to achieve outputs on food security that far exceed what was planned for the main season of 2006 - attaining in 2006 the targets set for 2007 or even 2008.

Butoke food security activities have expanded faster than anticipated in the CIDA proposal for several reasons. On one hand, we obtained complementary funding even prior to the commencement of the CIDA project, to get a head start on the seed farms. Secondly, the demand by the communities has exceeded our expectations. As a result, the surfaces planted by associations in the first primary crop season have been more than double what was projected: 658.8 ha instead of 300 ha. Similarly, the number of beneficiaries has reached 19,507 small farmers instead of 5,000.

Other activities related to nutrition have unfolded as expected, except for the mass media on nutrition sub-project, which only got started in February 2007, since up to that point we had our hands full with the expanded agricultural activities.

The expected outputs were:

- food for work
- 200 ha, then 300 ha in production by associations
- 100 ha in seed farms
- nutritional education broadcasts
- nutrition centre operational
- surveillance records
- children and others rehabilitated

As we demonstrate below, all these expected outputs were achieved. The total surface and the surface cultivated by associations far exceeded what was expected, except for the seed fields.

On nutrition we did very well, with 10 to 20 severe cases resident at the nutrition centre at all times and 40 to 100 moderate cases coming two to three times a day. Admissions at the nutrition centre are unevenly distributed because of seasonal patterns of hunger. From September to December the number of new cases per month increased steadily from 20 to a peak of 30 in December. During that stage we saw mostly children under five with pre-kwashiorkor and kwashiorkor. In January, February and March there was a decrease in the number of new cases to 19, 25 and then 10 per month, as most people had a new harvest available. Despite lower numbers, we started seeing children over six years of age with much more severe chronic malnutrition and marasmus. Recovery rates were well above 90%, with seven deaths out of 199 cases. Five other children were withdrawn by the parents before full recovery, usually as soon as weight for height was visually about average.

Face to face nutrition education continued with residents and with the surrounding population. Monitoring of the surrounding villages was carried out once every three months. Though there was a delay in starting the broadcasts, they are now a regular part of the program. The first broadcast was at the end of April, and so far we have had five broadcasts.

The tremendous success of the food security program is well documented. Indeed we started the season in May 2006 with eight satellites but by September 2006 we had 10 and the number of associations had climbed to 672, roughly double the final target. Seed fields, on the other hand, were much less eagerly sought after or even accepted.

Satellite	Axis	Number of associations
A	Ntambue	100
B	Tshikaji	128
C	Tshikula	122
D	Lutempa	120
E	Tshikele	24
F	Muamba-Mbuyi	70
G	Kabue	27
H	Luiza	24
I	Dimbelenge	30
J	Mueka	27
Total		672

The number of farmers in the associations attained 19,507 (we expected 5,000) or with their families about a population of 120,000 rather than the expected 30,000. Of the total, approximately 2,000 were individual farmers, primarily widowed or handicapped. The farmers were distributed in the satellites as follows:

Satellite	Men	Women	Widows	Total
A	1246	1802	156	3048
B	1064	2108	590	3172
C	1758	1902	422	3660
D	1200	1500	700	2700
E	564	780	84	1344
F	854	696	116	1550
G	580	636	96	1216
H	122	448	106	570
I	687	750	72	1437
J	390	420	120	810
Total	8465	11042	2465	19507

The older satellites grew fastest in number of associations and also most encouragingly in surface worked per association. We have established confidence and hope.

In September the total size of the fields sown for each crop was as follows, expressed in hectares:

Satellites	Peanuts	Corn	Cassava	Beans	Watermelon	Soy
A	86	0	0	6	0	0
B	172.8	7	2	0	0	0
C	61	3	4	61	0	0
D	64	0	0	10	2	0
E	22	0	0	8	0	7
F	28	0	0	7	1	0
G	19	0	0	5	0	4
H	4	0	0	22	0	0
I	28	0	0	6	0	0
J	59	0	0	0	0	0
Total	543.8	10	6	125	3	11

Of the total 698.8 ha, 658.8 ha were cultivated by associations and 40 ha are seed fields, compared to the final goal of 300 ha by associations and 100 ha in seed fields. For associations during this season we favoured peanuts, beans and watermelon (seeds are consumed) as nutritious crops. Corn

and soy were exclusively in seed fields as we hope to expand them later and they needed special care. Corn will have to be expanded with great care, because of its high demands on soil fertility. Similarly, soy will require great effort, because people have forgotten its high nutritious value and do not have recent experience in cultivating it. Also cassava was only in seed fields as we seek to multiply a disease resistant variety of this staple.

The high acreage in associative fields is an expression of the tremendous eagerness to work for individually-owned produce, rather than seeds that are a collective property. We plan to come closer to the communities' expectations by supporting and supervising the seed fields, but buying the harvest as one would from other associative fields, rather than relying on food for work or its analogue of shared harvest.

The fields of associations in the main season 2006 were as follows:

Satellites	Peanuts	Beans	Watermelon	Total
A	86	6	0	92
B	172.8	0	0	172.8
C	61	61	0	122
D	64	10	2	76
E	22	8	0	30
F	28	7	1	35
G	19	5	0	22
H	4	22	0	26
I	28	6	0	34
J	49	0	0	49
Total	533.8	125	3	658.8 ha

The seeds distributed to the associations initially were:

Number of ha and Crop	Seeds
Peanuts 533.8 ha	21,500 kg
Beans 125 ha	250 kg
Watermelon 3ha	60 kg

The outcomes we hoped and planned for were:

- increased food production
- seed conservation and stocking of food
- improved availability and quality of seeds
- increased levels of social solidarity
- improved nutrition of mothers and children
- rehabilitation of malnourished population

The food production of the associations' fields in general was quite good and is a significant addition to the production on family plots in the main season of 2006, except for the watermelon. In the following table the production is expressed in tons:

Satellites	Peanuts	Beans	Watermelon
A	60.2	2.4	0
B	120	0	0
C	42.7	0	0
D	44.8	4	0.4
E	15.4	3.2	0
F	19.6	2.8	0.21
G	13.3	2	0
H	2.8	11.6	0
I	19.6	2.4	0
J	40.0	0	0
Total	338.4	28.4	0.61

The seed fields were distributed as follows:

Satellites	Peanuts	Corn	Cassava ¹	NiebeH36	Vigna Beans	Soy	Total
A	0	0	0	0	6	0	6
B	0	7	2	0	0	0	9
C	0	3	4	0	0	0	7
D	0	0	0	0	10	2	12
E	22	0	0	9	0	0	31
F	4	0	0	7	0	0	11
G	0	0	0	0	0	0	0
H	4	0	0	0	0	0	4
I	0	0	0	0	0	0	0
J	10	0	0	6	0	0	16
Total	40	10	6	22	16	2	96

¹ The cassava has as of June 2007 been delayed for harvesting as we wait for the main season which is more favorable to harvest the cuttings

Production of the seed fields was as follows, expressed in tons. It was considered excellent for corn and peanuts average for beans and mediocre for soy. Despite planting fewer hectares of seed fields than planned, we still harvested more beans, corn and peanuts than anticipated.

Satellites	Peanuts	Corn	NiebeH36	Beans V	Soy
A	0	0	0	2.4	0
B	0	7	0	0	0
C	0	3	0	0	0
D	0	0	0	4	0.9
E	15.4	0	3.7	0	0
F	2.8	0	2.9	0	0
G	0	0	0	0	0
H	0	0	0	0	0
I	0	0	0	0	0
J	7	0	2.5	0	0
Total	25.2	10	9.1	6.4	0.9
Expected Yield	8.4	1.26	6.3 (both varieties)		7.2

Before the harvest, food for work was given to those cultivating the seed fields. The harvest was then split 50/50 between Butoke and the farmers. Of Butoke's portion, approximately 70% was retained as seed and 30% used as food for the nutrition centre or food for work.

The rapid expansion of Butoke's agricultural program has implications for how Butoke manages its cash flow projections and for the sustainability of its activities. Key to Butoke's sustainability is its ability to recover and produce seeds from one season to the next. In prior seasons, success on this front has been limited. However, the formula for seed recovery and production now seems to be well in hand. According to this formula, associations are expected to return to Butoke the amount of seed that they received at the beginning of the season. If they do not, they will not be supported in the next season. We have also observed increased retention of food and seed stocks among the association participants.

Butoke continues to work hard on increasing the levels of social solidarity. It does so by systematically including widows, handicapped and recently demobilised (the latter especially in Luiza, where they are more numerous) in associations. Butoke acts also on concepts of human rights and solidarity through the nutrition program.

The nutrition program has become a local legend as people have observed severely malnourished children that arrived in a desperate state recover and bounce back as happy children. The chiefs and immediate surrounding villages are also very aware that many less children die in the community thanks to the rehabilitation of the moderately malnourished. The success of the program is shown by the fact that children are regularly brought to the centre from as far away as 100 km and occasionally from places like Lodia at 550 km. We have seen a noticeable improvement in child nutrition (weight for height and height for age ratios and fewer deaths) in the area around Tshikaji. Among Butoke's associations and workers and nearby populations, we have also seen a growing

recognition of malnutrition as malnutrition rather than witchcraft. However, specific dietary advice is slower in taking hold. There are many barriers, including continued lack of food security for much of the population, lack of generalized understanding of the role of nutrition in survival and growth, and the need to reorganize the female workload to permit more than one meal a day.

With this in mind, we continue to see the need to intensify our efforts in nutrition education both face to face and through mass media. Although our own studies show that food security of the whole family is one of the main factors leading to malnutrition, many children arrive with the severest forms of malnutrition without the parents realising it is malnutrition and instead accusing the child of being a sorcerer. This accusation results in further neglect and punitive measures. Too many parents put their children at risk by short child spacing and deleterious food habits. It is clear that our nutrition education can only be effective, insofar as our rehabilitation proves to people that there is a malnutrition problem and that the paradigm of witchcraft is irrelevant.

Since February

In February 2007 associations started sowing for the secondary season. The harvest started in May and continues in June 2007. Given that further expansion could enable Butoke to make a significant difference in food security in Western Kasai province and preparations for the main season 2007 need to be underway by June, we have at the same time been reorganising and multiplying the satellites to 20. This has principally been done by splitting the older satellites, rather than by geographic extension. These satellites already had too many associations for efficient supervision. In the same and neighbouring villages more associations were added, but each agronomist will supervise between 60 and 70 associations only. All satellites are set to be active during the main season and preparations have been started.

The two only crops that have been sown with reasonable success in the secondary season are beans and soy. The secondary season is problematic in most of the villages for a number of reasons. Rains are largely unpredictable in timing and importance. In this season goats are left free to roam, as gathering fodder is too labour intensive. Because of this fields around the houses or close to the village cannot be used. In the secondary season only six satellites were active on limited surfaces.

This explains why only 133 hardy associations with fields at a long distance from their village have sown this season. By planting at a distance they avoid the domestic animals but are exposed to damage by wild boars, antelopes, etc.

Satellites	Axis	Number of Associations
A	Ntambue	6
B	Tshikaji	35
C	Tshikula	18
D	Lutempa	60
E	Tshikele	1
F	Muambambuyi	13
Total		133

Satellites	Men	Women	Widows	Total
A	45	65	10	110
B	288	597	155	885
C	48	80	9	128
D	600	750	350	1350
E	10	14	2	24
F	105	100	22	205
Total	1096	1606	548	2702

The surface areas worked during the secondary season totals only 26.75 ha distributed as follows:

Satellites	Beans	Soy
A	0	3
B	2.25	1.5
C	6.5	3
D	2.5	3
E	0	1
F	0	4
Total	11.25	15.5

As of June 15, 2007, the production of these fields is not yet determined, as the harvest continues and is hampered by untimely rains.

In managing future expansion, Butoke will require continued external funding for salaries, transportation, renewal of tools, special projects, and for the nutrition centre. Major uncertainties, aside from those associated with national politics, include agricultural yields, which tend to be quite uneven, and the availability of supplementary funding in the future. The challenge for Butoke is to manage these risks, while maintaining an ambitious expansion path. Budget management in this context requires continual adaptation to changing circumstances and opportunities. Organisational management requires that we maintain the dialogue with the affiliated associations at all times, that we are open to new associations seeking affiliation, and that we verify their validity and ability to function, their willingness to include elderly and widows, and that their leadership structure includes women.

The following is a preview of the satellites and associations we plan to work with in the main season 2007, if enough supplementary funding becomes available. Six satellites still have to report in the coming days as they are new and still being organised and also more distant.

Satellite	Axis	Number of associations	Desired Crops and surface worked					
			Peanut	Beans	Corn	Soy	Water-Melon	Pista-chio
A	Ntambue	70	47	4	2			
B	Tshikaji	70	68	38	2	4	1	2
C	Tshikula I	78	63.5	4.25	6	0.50		
D	Lutempa	80	85	47	10	14	9	2
E	Tshikele	57	57					
F	Muamba-Mbuyi	76	76	25		16		2
G	Kabue	50	50					
H	Luiza	No report yet						
I	Dimbelenge	No report yet						
J	Mueka	No report yet						
K	Mbuanya	56	56					
L	Tshikula II	75	47	19			5	16
M	Bunkonde	75	71	5		4		
N	Kananga ceinture verte	No report yet						
O	Dibanda	42	42			9		4
P	Kapinga - Kamba	No report yet						
Q	Matamba	No report yet						
Total		729	662.5	142.25	20	47.5	15	26

In total there are already 729 associations preparing 913.5 hectares and six new satellites have still to report. The demand for cassava is still uncertain.

Satellite	Axis	Number of associations	Farmers			
			Men	Women	Widows	Total
A	Ntambue	70	523	652	53	1175
B	Tshikaji	70	571	1359	181	1930
C	Tshikula I	78	482	755	181	1237
D	Lutempa	80	950	1250	500	2200
E	Tshikele	57	720	560	100	1280
F	Muamba-Mbuyi	76	776	840	253	1616
G	Kabue	50	No	report		
H	Luiza	No report yet				
I	Dimbelenge	No report yet				
J	Mueka	No report yet				
K	Mbuanya	56	186	240	20	426
L	Tshikula II	75	1003	2285	283	3288
M	Bunkonde	75	801	777	203	1578
N	Kananga ceinture verte	No report yet				
O	Dibanda	42	343	432	49	775
P	Kapinga - Kamba	No report yet				
Q	Matamba	No report yet				
Total		729	6355	9150	1823	15505

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