



Universiteit  
Leiden  
The Netherlands

## **The impact of the Cordaid-supported BASF project in Balungu (unpublished)**

Dietz, A.J.; Obeng, F.; Geest, K. van der

### **Citation**

Dietz, A. J., Obeng, F., & Geest, K. van der. (2002). *The impact of the Cordaid-supported BASF project in Balungu (unpublished)*. Retrieved from <https://hdl.handle.net/1887/15412>

Version: Not Applicable (or Unknown)

License: [Leiden University Non-exclusive license](#)

Downloaded from: <https://hdl.handle.net/1887/15412>

**Note:** To cite this publication please use the final published version (if applicable).

**Ton Dietz, Francis Obeng, Kees van der Geest and others**

Unpublished report

## **The Impact of the Cordaid-supported BASF project in Balungu, Upper East Ghana**

2002

Part of the Impact Study of Co-financing Organizations

### **The results of the survey in Balungu**

44 people have been interviewed in Balungu, of 12 different compounds. It was the intention to select households with a long existence and a long memory of changes in the area and of the impact of the Bongo Agro-Forestry Project. In each compound a woman of at least 35 years old was the prime informant, next to her husband, one of her children (between 12 and 27 years old; we interviewed ten) and one of the elderly people living on the same compound (often the father or mother of the husband; we interviewed eight mothers and two fathers). Half of the twelve selected families were selected because at least one of their members was a direct beneficiary of the Bongo Agro-Forestry Project; in the other half of the households this was not so. For each of these two subgroups an attempt was made to select two households, which locally were regarded as relatively rich; two, which were locally regarded as relatively poor and two in between. In Balungu, like in Anafobisi, the survey results about wealth levels so much deviate from this 'quick local perception scan', that we decided to base the wealth classification on the survey results. For our new wealth classification we looked at a large number of indicators for husbands' and wives' assets<sup>1</sup>.

Of the interviewed wives two had no 'rivals', which means that their husbands only have one wife. Nine wives had one co-wife; one had two. Of the interviewed husbands the average number of wives was two. The wives who were interviewed had on average five children (with a range from 1-8), the average number of children of the husbands is not clear. There are also 'visitors' on some of the compound for which the husband has or shares the responsibility.

Most interviewed inhabitants of Balungu are Frafras, who speak Grune. One of the husbands and one of the wives has a Kusasi background, but in different households. With one exception all husbands still adhere to the Traditional beliefs (the one who became a Catholic - in 1969- is one of the few men who went to school, but he married a Traditionalist wife, and she still is). After 1996 six wives started to become Catholics, and so did their children. In two households only the children decided to become Catholics. In three households all members are still Traditionalists, though. Unexpectedly, these households belong to the middle category of wealth, and not to the poor. There are hardly any 'competing faiths' in this village. The

---

<sup>1</sup> For each household we counted the total positive scores on the binary variables for husbands' and for wives' assets, and we gave double points for those variables with less than five out of twelve positive scores. Also we added an extra point for each wife beyond the 'normal' number of two (which is locally still regarded as a major sign of wealth). In Balungu total scores were between 37 for the most wealthy household and only 8 for the poorest household, almost the same range as in Anafobisi, despite the more isolated location of Balungu compared to Anafobisi.

important role of Traditional beliefs in Balungu can be illustrated by looking at the ‘stress behaviour during droughts’: among the husbands eleven said that sacrificing animals to the Gods is a good thing to do and ten of them recently practised it. Among the women nine still believe it is a good thing, and ten recently practised it; among them also Catholics.

Grune is the lingua franca. But the knowledge of other languages shows the exposure of the villagers to the outside world. Of the interviewed wives seven speak Twi (and hence have been to the South; three of them also went to school). One (educated) wife speaks both English and Talensi, next to Grune and Twi. Two wives speak Kusaal and one of them Bisa as well. Only two of the wives only speak their mother tongue. Among the husbands the migration to Southern Ghana has been widespread as well: eight husbands speak Twi, one in addition to Hausa and one in addition to English. Although very close to Burkina Faso, no one among the survey group in this village said they could speak More. Three husbands only speak their mother tongue. In these households the wife at least speaks one other language beside her mother tongue. So there is no household where both husband and wife can only speak their local language; a remarkable collective cultural capability.

The education history of the husbands is not completely clear. In one case we know that the husband finalised primary school. In four others it is not clear if they ever went. Seven husbands never went. Of the wives three had attended primary school and for two it is not clear. In seven households the wife had never gone to school. In ten households the parents had contributed to the education of their children. For some this already started in 1982, for others only very recently. Compared to Anafobisi, this more isolated village clearly lags behind in education. As far as we got information about the accumulated contributions of parents to their children’s education, we can say that the amounts differ widely: from zero (in two cases) to an exceptional case - one of the rich BAFP households - where the parents spent more than 2.2 million cedis on their children’s education.

Among the ten interviewed children, three had gone as far as Senior Secondary School, three to Junior Secondary School, one only to Primary School and three did not get any formal education. Seven children adopted the Catholic religion, and all did so after 1995. Three of these children still belong to Catholic Youth Groups. Three children still stick to their Traditional faith. The relatively high level of children’s education means that six of the ten children can speak English (two of them also Twi). One of the interviewed children speaks French and one Kasem. Two others can speak Twi but without speaking English. Only two of the children only speak their local language. Seven children had worked in the South; none outside Ghana. Farm and domestic seasonal labour are still important for them, next to local farm work (four manage their own crop farms, and seven own their own livestock), handicrafts (three) and petty trade (one). In 2001 the children earned on average 70,000 cedis (with a range from 10,000 to 360,000 cedis). The income ‘from the South’ is an important element of income opportunities for the youth. Some of them invested in their own assets (three have bicycles, two cattle, two donkeys, 2 wrist watches, two a pig, one a radio and one even an electrical heater. It is remarkable that children of households belonging to BAFP groups have higher education, more migration experience and more assets than children of non-BAFP households. However, it is worrying that hardly any children use the recommended agricultural practices on their farms. The Youth bitterly complain that they are “forgotten by the NGOs”, and also by Government and District Assembly.

We will now first look at a number of poverty indicators to find out if there are differences between BAFP-member households and non-BAFP households and what the overall assessments of rich, moderate and poor mean in terms of these indicators. We will present these findings in three categories (BAFP>non-BAFP; BAFP = non BAFP and BAFP< non-BAFP households). Per category we will start with the highest overall scores, which also shows a 'poverty fingerprint' for the village as a whole.

Before doing so, we first have to say that there are a number of indicators in Balungu where all interviewed households show a positive response: all husbands have planted trees, for instance.

#### Poverty indicators

**in bold where the difference between BAFP and non-BAFP >1**

w = wife; h = husband

A BAFP households have a higher asset level than non-BAFP households

Indicator	all	BAFP	r	m	p	NON	r	m	p
w owns chicken	11	6	2	2	2	5	2	1	2
<b>h has cattle</b>	<b>10</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>2</b>
w house has zinc roof	9	5	2	2	1	4	2	1	1
<b>h has economic trees</b>	<b>8</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>
<b>w had three meals yesterday</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>
w owns goats	7	4	2	1	1	3	1	0	2
<b>w has more animals than mother</b>	<b>6</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>
<b>w has economic trees</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>
<b>w owns &gt;2 bowl types</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>
<b>h owns radio</b>	<b>6</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>
h owns plough	5	3	1	2	0	2	1	0	1
h owns cutlass	5	3	1	2	0	2	2	0	0
<b>h owns wrist watch</b>	<b>5</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
w owns pig	5	4	2	1	1	1	0	0	1
<b>w house has door/window frames</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
2001 harvest food for >5 months	3	2	2	0	0	1	1	0	0
h house built with blocks	3	2	2	0	0	1	1	0	0
<b>w owns bicycle</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>w owns guinea fowls</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
w owns wrist watch	1	1	1	0	0	0	0	0	0
w has dry-season garden	1	1	0	1	0	0	0	0	0
h has VIP toilet	1	1	1	0	0	0	0	0	0
w owns sheep	1	1	1	0	0	0	0	0	0
h owns sheep	1	1	0	0	1	0	0	0	0
sub-total									
other indicators									
wives' fields acreage 1990	1.8	1.8	2	1	2.5	1.8	1.5	1.5	2.5
wives' fields acreage 2001	2.4	2.5	2.5	3	2	2.3	2.5	2.5	2
h expenditure on health 2001 x 10,000 cedis	1.4	2.0	6	-	-	0.7	1	0.5	0.5
w average number of bowl types	2.2	2.5	3	2.5	2	2.0	2.5	1	2.5

## B No differences between BAFP and NON-BAFP households

Indicator	All	BAFP	r	m	p	NON	r	m	p
h >3 acres land	8	4	2	2	0	4	1	1	2
h owns gun	2	1	0	0	1	1	0	1	0
w owns sewing machine	2	1	1	0	0	1	0	1	0
sub-total	12	6	3	2	1	6	1	3	2

## C NON-BAFP households have higher asset levels than BAFP households

h owns bicycle	11	5	2	2	1	6	2	2	2
h had >1 meal yesterday	11	5	1	2	2	6	2	2	2
<b>h house has door/window frames</b>	<b>10</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>h owns guinea fowls</b>	<b>10</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>h has more cloth than 10 yrs ago</b>	<b>10</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>&gt;1 food barn on compound</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>2</b>
<b>h house has zinc roof</b>	<b>8</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>1</b>
h owns pigs	7	3	1	2	0	4	2	1	1
h owns cart	5	2	2	0	0	3	1	1	1
<b>h has bed/mattress</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>2</b>
w has bed/mattress	3	1	1	0	0	2	1	1	0
<b>h has dry-season garden</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>
w >3 acres land	1	0	0	0	0	1	0	1	0
w house built with blocks	1	0	0	0	0	1	1	0	0
sub-total	91	35	16	14	5	56	19	20	17

## Total wealth scores Balungu

	Rich	Medium	Poor	Total	Index R/P
Beneficiaries	53	44	23	120	230
Non-Beneficiaries	37	31	30	98	123
All	90	75	53	218	170
Index B/N	143	142	77	122	

As has been explained before, households have been selected as 'rich', 'medium' and 'poor' based on indicators which were derived from local judgements of 'wealth appearance'. All variables used to indicate wealth/poverty levels have been based on local judgements about what it is that makes people relatively rich or poor. We can now see that 'rich households' and 'medium-level' households are very close together<sup>2</sup>, and both have a much higher score on the total set of indicators than 'poor households'. If we combine this information with the information about households' membership of BAFP groups, we see a clearer order: from rich, via medium to poor, in both cases. It is rather striking to see that among the poor the scores for non-beneficiaries are better than among BAFP group members. This is caused by

<sup>2</sup> This is a side effect of our method: we ordered all households on the basis of their wealth scores and then ordered the beneficiary and non-beneficiary groups separately. In Balungu it then means that the medium-level beneficiaries have better scores than the rich non-beneficiaries, blurring the overall B/N picture.

one poor beneficiary household with very low scores on the wealth indicators. The overall difference between beneficiary households and non-beneficiary households is 22% (120 points versus 98). Of course nothing can be said yet about impact as the scores are a 'poverty fingerprint' of the situation in 2001 and do not yet say anything about causes and effects. We should therefore move to the second part of the analysis.

### The Project's impact

For the interviewed households in Balungu BAFP is the most important NGO, and more important than any of the government agencies (although BAFP works together with MOFA). Through the linkages of the Catholic church in Balungu there are also connections with other activities of the Catholic Diocesan Development Office. For a few households also World Vision has been of some importance. We will now study the differences between BAFP and NON-BAFP households in use of services or in activities. We will do so by again using the same three categories, and an ordering from high overall scores to low ones. We will add a further specification based on rich/medium/poor households. For some indicators used in this study all households had a positive score (e.g. all husbands make ridges on their fields; all wives are convinced that their standard of living has improved the last ten years; all wives nowadays make use of the grinding mill in the village). For other indicators no one in the survey group qualified. For instance: no wife earned money with dry-season garden produce or by selling fruits.

Table Changes in capitals and capabilities, BAFP and non-BAFP households compared

**In bold when the difference between BAFP and non-BAFP > 1**

w = wives; h = husbands

Indicator	All	BAFP group members				Non-BAFP group members			
		T	R	M	P	T	R	M	P
NATURAL									
<i>A BAFP &gt; non-BAFP</i>									
h planted trees	11	6	2	2	2	5	2	1	2
w cultivate groundnuts	11	6	2	2	2	5	2	1	2
w make use of veterinary service	11	6	2	2	2	5	2	1	2
h use goat/sheep manure	11	6	2	2	2	5	2	1	2
<b>h use cow dung</b>	<b>10</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>2</b>
<b>w use compost</b>	<b>10</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>2</b>
<b>w planted trees</b>	<b>9</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>1</b>
w use cow dung	9	5	2	2	1	4	2	0	2
h plough along the contour	9	5	2	2	1	4	1	1	2
<b>w practice gully control</b>	<b>8</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>1</b>
w plough groundnut vines in soil	7	4	2	1	1	3	1	1	1
w: soil fertility improved	7	4	2	1	1	3	2	0	1
h use donkey manure	5	3	1	2	0	2	1	1	0
w use fowl droppings	5	3	2	1	0	2	1	0	1
w use pig manure	5	3	2	0	1	2	1	0	1

<b>w use goat manure</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
h has on-farm tree nursery	2	2	1	0	1	0			
w has on-farm tree nursery	1	1	0	0	1	0			
w use donkey manure	1	1	1	0	0	0			
w has dry-season garden	1	1	0	1	0	0			
<i>B: BAFP = non-BAFP</i>									
w ridge along contour	10	5	1	2	2	5	2	2	1
h use fowl droppings	10	5	2	2	1	5	2	1	2
w practice grass bunding	10	5	1	2	2	5	2	1	2
h: soil fertility improved	10	5	2	2	1	5	2	1	2
w water quality improved	10	5	2	2	1	5	2	2	1
w: agricultural yields improved	8	4	2	1	1	4	2	0	2
h use pig manure	6	3	1	2	0	3	2	0	1
<i>C BAFP &lt; non-BAFP</i>									
h cultivate groundnuts	11	5	2	2	1	6	2	2	2
h practise grass bunding	11	5	2	2	1	6	2	2	2
w sow on ridge	11	5	1	1	2	6	2	2	2
<b>h use bullock plough</b>	<b>10</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>
h: agricultural yields improved	9	4	2	2	0	5	2	1	2
h use compost	9	4	2	2	0	5	2	1	2
<b>w plough along contour</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>1</b>
h plough groundnut vines in soil	5	2	2	0	0	3	0	1	2
w use sheep manure	3	1	1	0	0	2	1	0	1
h have dry-season garden	2	0				2	0	2	0
sub-total									
PHYSICAL									
<i>B BAFP = non-BAFP</i>									
w built stone bunds	6	3	1	1	1	3	2	1	0
<i>C BAFP &lt; non-BAFP</i>									
h practice gully control	11	5	2	2	1	6	2	2	2
<b>h use grinding mill</b>	<b>10</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>
<b>h built stone bunds</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>2</b>
sub-total									
HUMAN									
<i>A BAFP &gt; non-BAFP</i>									
w got training in agriculture/SWC	9	5	2	2	1	4	2	1	1
<b>w fields ever visited by BAFP</b>	<b>8</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>1</b>
<b>w trained in inc.-gen. activities</b>	<b>8</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>2</b>
<b>h trained on gender</b>	<b>8</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>2</b>
<b>w got exposure tour</b>	<b>4</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>			
<b>h got exposure tour</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>			
<b>h fields ever visited by BAFP</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>			
h trained in inc.gen.activities	2	2	1	0	1	0			
<i>B BAFP = non-BAFP</i>									
w fields ever visited by MOFA	8	4	1	1	2	4	2	1	1
h got agricultural training/SWC	6	3	2	1	0	3	1	0	2
h fields ever visited by MOFA	6	3	1	2	1	3	0	1	2

<i>C BAFP &lt; non-BAFP</i>									
w trained on gender	9	4	1	2	1	5	2	1	2
sub-total									
SOCIAL									
<i>A BAFP &gt; non-BAFP</i>									
h related to political relative	9	6	2	2	2	3	1	0	2
h related to Chief	5	3	1	2	0	2	1	0	1
h member of unit committee	2	2	1	0	1	0			
w member of unit committee	2	2	1	1	0	0			
<b>w women's leader</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>			
w member of school committee	1	1	1	0	0	0			
h member of school committee	1	1	1	0	0	0			
<i>B BAFP = non-BAFP</i>									
h member of water committee	8	4	1	2	1	4	1	2	1
h benefited from political relative	6	3	1	2	0	3	1	0	2
<i>C BAFP &lt; non-BAFP</i>									
w related to political relative	6	2	1	1	0	4	2	1	1
<b>h belongs to Tindana's family</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>1</b>
h leader in the village	3	1	1	0	0	2	1	1	0
w member of water committee	3	1	0	1	0	2	1	0	1
sub-total									
ECONOMIC									
<i>A BAFP &gt; non-BAFP</i>									
h livestock sales	11	6	2	2	2	5	1	2	2
household ever received food aid	9	5	1	2	2	4	2	1	1
<b>w member of economic group</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>
w remittances from children	7	4	1	1	2	3	1	1	1
w member of savings group	7	4	1	2	1	3	2	1	0
<b>h member of savings group</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>
<b>h member of economic group</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>
<b>h has access to savings account</b>	<b>5</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
w crop sales	5	3	1	1	1	2	1	0	1
<b>w has access to savings account</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>
h remittances from children	3	2	0	2	0	1	1	0	0
h received loan	1	1	1	0	0	0			
<i>B BAFP = non-BAFP</i>									
w received loan	8	4	1	1	2	4	2	1	1
<i>C BAFP &lt; non-BAFP</i>									
<b>h: standard of living has improved</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>2</b>
<b>w livestock sales</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>2</b>
h: crop sales	3	1	1	0	0	2	1	0	1
sub-total									
TOTAL									

If we compare the group of beneficiary households and the group of non-beneficiary households we can conclude that overall there are higher scores for beneficiary households (a

total score of 292 points versus 246 (19% higher for the BAFP households). Also it is evident that there are more indicators for which beneficiary households show a better score than non-beneficiary households. The beneficiary households show a somewhat better performance compared to the non-beneficiary ones.

We will again look at the differences between rich, medium and poor households. Among the medium-level households in wealth terms the difference between beneficiaries and non-beneficiaries is striking: BAFP members show 82% better performance, but that is very much due to an appalling performance of the medium non-beneficiary households, the lowest of all. The rich households show a much less impressive difference and the poor households show something rather surprising: the poor non-beneficiary households show a better performance than the BAFP members. In Balungu, many non-beneficiary households did improve on their capabilities, alongside the BAFP members. Positively formulated one may conclude that there are no big boundaries between BAFP and non-BAFP households and that BAFP (and MOFA) advice quite easily permeated throughout the community. The difference between BAFP and non-BAFP households (19%) is smaller than between rich and poor (26%), and certainly between rich and poor beneficiaries (44%). However, all these differences are not very big.

Table The impact of interventions: BAFP beneficiaries and non-beneficiaries, and wealth categories; scores on selected indicators; Balungu

	Rich	Medium	Poor	Total	Index R/P
beneficiaries	111	104	77	292	144
non-beneficiaries	99	57	90	246	110
total	210	161	167	538	126 (R/M 130)
index (B/N)	112	182	86	119	

We can do a final quantitative analysis showing the BAFP/non-BAFP index figures for the five categories of capitals. The BAFP households show a minor performance advantage in the sphere of most social capabilities, with the exception of human capabilities (better) and physical capabilities (worse). It is very interesting to note that in all categories of capability changes (with one exception) the medium-level households in the wealth classification show the biggest difference between BAFP and non-BAFP households. They are the ones gaining most from BAFP interventions. In the economic domain the poor BAFP households outcompete the others in relative BAFP advantage. This is surprising, as the poor non-BAFP households show a better performance compared to the poor BAFP households in all other fields. It is the medium-level households who seem to have gained most from BAFP activities.

Table Index figures for rich, medium and poor households showing performance differences between BAFP and non-BAFP households.

Capability domain	Rich	Medium	Poor	Total
Natural	109	<b>171</b>	73	111
Physical	71	<b>83</b>	50	68
Human	136	<b>450</b>	100	164
Social	130	<b>240</b>	80	121

Economic	111	145	<b>162</b>	136
Total	112	<b>182</b>	86	119

What did the elders say about these changes? They are positive about the agro-technical changes in agriculture (e.g. the successful introduction of bullock ploughing; and new crop varieties). There is more diversified food now and of better quality. Also the water quality has much improved, and water-borne diseases are no longer threatening people's health. The educational and health facilities are appreciated (but too expensive, according to some). About the growing importance of the Catholic church the elders are divided. A few complain about the major destruction of traditions, as they see it. Others like the way people are being assisted by the church and their organisations. They notice (and most of them with appreciation) that women nowadays have become much more independent, and that they do manage their own farms, their own livestock and their own businesses. However, they hope that these changes do not change the dowry system, which they regard as important. Two of the elders were assisted themselves by BAFP (with seeds and tree seedlings). Three elders said they ever received assistance from a government agency (a loan, farm implements, food aid). Five elders have ever worked and lived outside their home area, and they can also speak languages like Twi. They appreciate that their children and grandchildren also go beyond the home area. Many elders are worried about some of the changes in the area, though. Rainfall has become a headache, the water in rivers and streams is drying up fast after the rainy season, wildlife has almost disappeared, the original vegetation is fast disappearing as well and soil fertility as well as crop yields have deteriorated for many farmers. The number of livestock has also gone down, animal diseases have become rampant and feed is a growing problem. The elders compare the current situation with the situation before the drought of the late 1970s and early 1980s, which - in environmental and agricultural terms - they regard as better than the current situation, despite the recovery during the 1990s. The elders observe a rapid individualisation in the village, with a rise of nuclear families and a tendency to restrict social assistance to the next of kin only. Social vices have proliferated, often connected with alcohol abuse (*pito* and a local gin, *akpeteshie*, mainly), although some elders confess that they earn good money producing those.

We can now finalise the analysis by adding a 'historical' analysis of changes and change agents for each of the twelve survey households.

Table Time-specific information for the interviewed households

nr	number of household interview
cat	wealth category of household (rich, medium, poor)
hb yr	husband born in year 19xx
nr w	husband's number of wives
nr ch	husband's number of children
nr ot	husband takes care of x others as well on his compound
h ed	husband has received formal education or not
wb yr	interviewed wife is born in 19xx
1w 2w	interviewed wife is first or second/third/etc wife
yr ma	wife married in 19xx
her	husband's ethnicity (Frafra or Kusasi) and religion (Catholic, Traditional)
wer	wife's religion (same)
cr	children's religion (same)
ei h	year when husband started to invest in children's education
ei w	year in which wife started to contribute to children's education costs
mil h	year husband started to use the grinding mill (indicating producing or buying maize grains and a change in diet)
mil w	same for wives
h at/g	year husband got agricultural training/ year husband started a garden for dry season production of vegetables

w at year wife got agricultural training  
 pig husband and/or wife started pig rearing  
 B wg year wives became member of BAFP women group  
 h ln year husband received loan (and is member of BAFP group)  
 w ln same for wives  
 wh g wife and/or husband got gender training  
 wh iga wife and/or husband got training in income-generating activities  
 vh M year the husband's farm was visited by a person from the Ministry of Food and Agriculture  
 vw M same for wife's field  
 bp household uses a bullock plough  
 tree tree planting (h by husband, w by wife, n = there is a tree nursery on the plot)  
 gs h year the husband started to adopt making grass strips on his fields  
 gb w year the wife started to adopt making grass strips and/or stone bunds on her fields  
 sb h year the husband started to adopt making stone bunds on his fields  
 cp h year the husband started to use compost on his fields  
 cp w year the wife started to use compost on her fields  
 pc h year the husband started to plough along the contours  
 pc w first year the wife's field was ploughed along the contours

nr	cat	hb yr	nr w	nr ch	nr oth	hw ed	wb yr	lw 2w	yr ma	her	wer	cr	ei h	ei w	mi l	mi l w	h at/ g	w at
1	BR	39	3	9	?	w	57	2	64/75	FT	FC96	C	86	96	-	98	-	99
5		57	1	8	10	h	61	1	80	FC69	FT	C	?	?	86	?	01	?
3	BM	31	2	>7	1	-	51	1	70	FT	KT	T?	82	90	92	99	01	95
4		45	2	>5	0	h?	51	1	72	FT	FT	T?	82	94	92	?	01	00
5	BP	46	1	4	1	w	54	1	75	FT	FC99	C	97	?	-	98	01	98
6		31	2	>5	0	-	45	2	60/67	FT	FT	C	-	98	-	92	-	99
7	NR	31	2	>4	?	h?	53	2	67/75	FT	FC00	C	-	-	?	99	-	01
8		49	2	8	1	-	54	2	69/75	FT	FC	C	92	?	?	00	-	00
9	NM	45	2	8	0	-	53	1	79	KT	FT	?	01	82	-	?	-	?
10		44	2	>6	0	-	56	2	60/82	FT	FT	C	96	?	-	?	-	-
11	NP	53	2	>6	0	-	56	1	82	FT	FC98	C	96	01	92	99	00	-
12		53	2	4	0	h?	45!	1	73	FT	FC01	C	-	-	92	92	00	01
nr	cat	pig	B wg	h ln	w ln	wh g	wh iga	vh M	vw M	bp	tree	gs h	gb w	sb h	cp h	cp w	pc h	pc w
1	BR	hw	99	-	98	-	w	-	98	+	hwn	01	-	-	99	99	-	-
2		w	-	95	01	w	h	01	-	+	hw	85	95	95	85	01	+	98
3	BM	-	99	-	95	wh	-	92	-	+	hw	92	99	-	98	99	97	99
4		-	97	-	+	wh	w	92	01	+	hw	92	99	-	98	99	97	?
5	BP	hw	99	-	98	wh	w	-	-	-	hw	98	97	-	-	99	98	98
6		h	98	-	97	-	w	-	99	-	wn	-	99	-	-	01	-	-
7	NR	-	-	-	-	w	-	-	90	+	w	97	99	99	96	99	?	?
8		w	-	-	98	wh	w	-	-	+	hw	99	98	99	00	-	-	?
9	NM	-	-	-	01	-	-	-	-	+	-	00	-	-	-	92	-	?

10		h	-	-	-	w	-	90	-	+	h	97	-	-	00	-	?	-
11	NP	w	-	-	-	wh	w	80	-	+	h	?	97	96	92	00	90	-
12		w	-	-	-	wh	w	00	-	+	hw	99	00	98	87	99	?	00

A sequential analysis of the time-specific data in the interviews of husbands and wives shows a rather straightforward picture. Compared to Anafobisi, the village became involved in BAFP activities much later; only after the mid-1990s. Like in Anafobisi, mainly the women have played key roles in BAFP.

The first household which became involved in activities of BAFP did so only in 1995, getting a loan (nr 2). This is the only household where the husband had joined the Catholic church. Recently (2001) the husband attended an agricultural training and the wife got a loan. But the wife never joined a BAFP women's group. In agricultural innovations this household is the village pioneer, starting with grass strips and compost already in 1985. They are also the first ones making use of a grain mill, indicating the start of producing or buying maize for home consumption. The household belongs to the more wealthy households.

The second household became involved in BAFP activities in 1995 as well (nr 3), when the wife got a loan and agricultural training. She joined a BAFP women's group in 1999. The husband joined recently. Upon a visit by MOFA the husband had started making grass strips in 1992. Other innovations started upon joining BAFP. This household can be regarded as medium-rich.

In the third household that can be regarded as a BAFP household (nr 4) the wife became a member of a BAFP women's group in 1997. First the wife and later the husband attended agricultural training and other courses. Like many households in the village both wife and husband attended gender courses. Also like many households in the village only the wife attended a course about income-generating activities. Upon a visit by officers from MOFA, in 1992, the husband started to make grass strips on his fields. Recently he and his wife also started to adopt the other agro-technical innovations propagated by BAFP and MOFA. In educational terms the household is exceptional: the wife and probably also the husband went to school and they were among the first ones to invest in the education of their children. Still, the household adheres to their Traditionalist faith. It can be regarded as medium-rich.

In the fourth household joining BAFP (nr 6) the wife got a loan in 1997 and became a member of a women's group in 1998, followed by an agricultural training. The wife started agricultural innovations and is one of the few with a tree nursery. The husband is not involved at all and his agricultural and educational behaviour is extremely conservative, although he adopted pig rearing. It is interesting to note that in this household the MOFA people did visit the wife's fields, but avoided the husband. This household also got support from World Vision International. Only in 1998 the wife started to invest in her children's education (again: without any support from her husband. In our wealth classification the household is the absolute bottom line, with very few assets.

In the fifth BAFP household (nr 5) the wife got a loan and agricultural training in 1998 and joined a women's group (and the Catholic Church) in 1999. The husband reluctantly follows (he attended an agricultural course in 2001), but he is one of the few who does not plough with a bullock (like his conservative colleague of household nr 6), and he was very late in supporting his children's education (only in 1997). In agricultural innovations the wife takes the lead (after 1997), and the husband started adopting some of the practices on his own fields recently. The household can be regarded as poor.

In the sixth BAFP household (nr 1), again the wife took the lead. She became a Catholic in 1996, got a loan in 1998 and agricultural training and women group's membership in 1999. She even started a tree nursery on the farm. And she also got some support from World Vision

International to start income-generating activities. Her husband does not participate, although he adopted some innovations (pig rearing; grass strips, compost) recently. For local standards, the household is very well off, though. It is the only household in the survey group in which the husband has three wives, and the wife who was interviewed could display a good number of bowl types, locally regarded as a sign of prestige. But also other assets are well represented, with a remarkable display of wealth by the wife, and not so much by the husband. As one of the few houses the husband's house was built with blocks. But the wife's house has wooden door and window frames, which is very rare in this village. She also owns a sewing machine, a bed and mattress, a watch (as the only woman in the sample), a bicycle and sheep and guinea fowls. As one of the few households this household could feed itself from their 2001 harvest for seven months, which is the village record.

All other six households cannot be regarded as BAFP households, although some members did attend courses in which BAFP was involved as one of the organisers. In this village the BAFP and non-BAFP households can not so easily be separated. Two non-BAFP households recently succeeded to get some micro-credit, five wives and three husbands attended gender training meetings, and almost all started to plant trees. Three non-BAFP households also began to adopt agro-technical innovations recently and in this group there are four recent conversions of wives (and their children) to Catholicism, so one can expect a further breakthrough of innovative behaviour. On the other hand the fact that two of these households (one even relatively rich; the other one poor) never invested in the education of their children is worrisome.