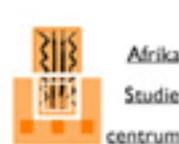
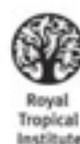


Participatory Assessment of Development

<http://www.padev.nl>

Life History Report Round 1: Langbinsi, Sandema & Tô by Kees van der Geest

PADev Working Paper No. W.2008.1



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November 2008

This working paper is part of series of papers reporting on a participatory and holistic evaluation of development initiatives in Northern Ghana and Burkina Faso, organised in the framework of the 'Participatory Assessment of Development' project. In this project the following organization are involved: the University of Amsterdam (UvA), the University for Development Studies (UDS, Ghana), Expertise pour le Développement du Sahel (EDS, Burkina Faso), ICCO, Woord en Daad, Prisma, the African Studies Centre (ASC) and the Royal Tropical Institute (KIT). The methodology is described in detail in the PAdDev Guidebook by Dietz et al (2011). The guidebook and more information about this project is available at <http://www.paddev.nl>.

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Life History Analysis: Langbinsi, Sandema and Tô

Kees van der Geest, 18 November 2008

The objective of this report is to provide some background information of the workshop participants and to illustrate some general trends in the area through the lives and experiences of the people who attended the workshop. We collected the 'life histories' of workshop participants through a short questionnaire. A total of 178 participants returned the questionnaire. Those who could read and write completed their questionnaires first and assisted the illiterate participants afterwards. The total number of life histories gathered was similar for the three research locations and so was the number of women. The average age of workshop participants was substantially higher in Langbinsi than in the other two locations (see Table 1).

Table 1: Workshops participants by gender and average age.

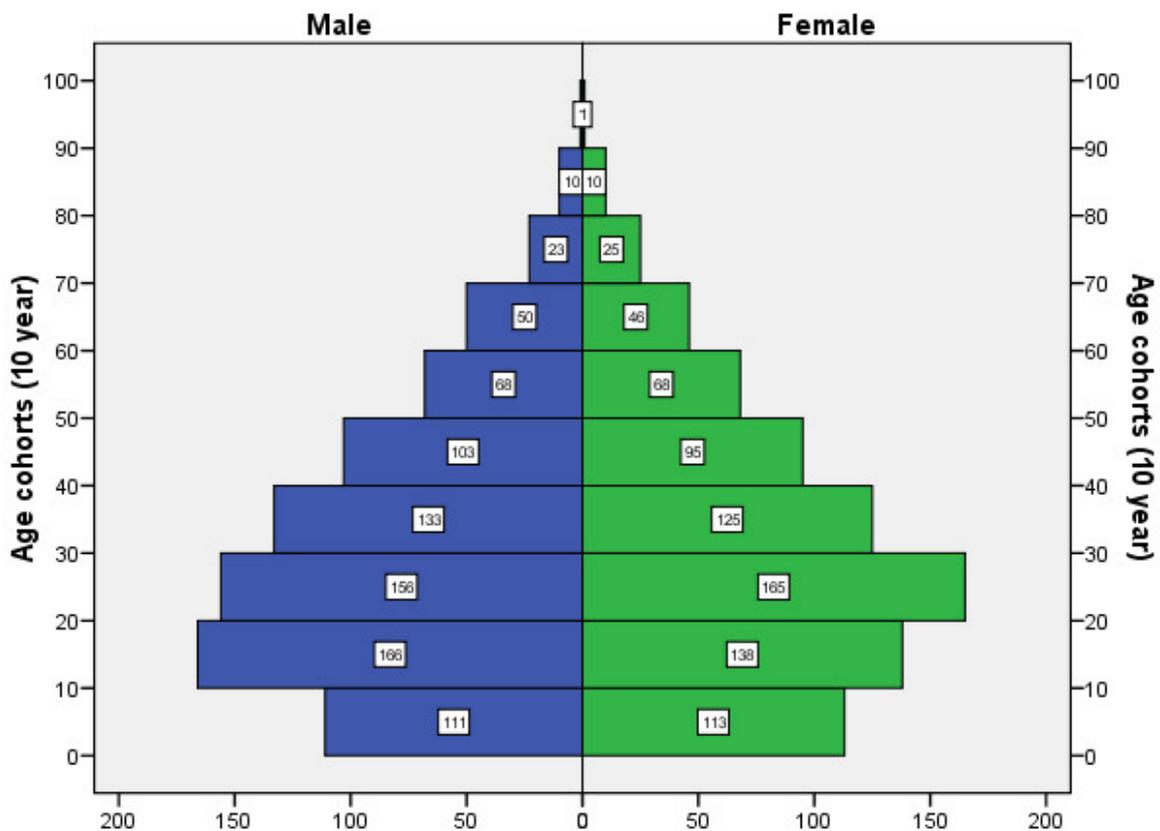
	Langbinsi	Sandema	Tô	Total
Country	Ghana	Ghana	Burkina Faso	
Region	Northern Region	Upper East	Sud-Ouest	
District	Gambaga	Builsa	Sissily	
Number of participants	62	56	60	178
Of whom women	17	17	15	49
Average age	52	42	45	47

Source: life history survey 2008

The life history survey contained questions about some basic socio-economic characteristics of the workshop participants themselves and of their direct relatives (children, siblings and parents), yielding a database of over 2,000 people. The information we have of these relatives are age, place of residence, occupation, level of education, religion and marital status. We use this information to assess some broad trends in the research areas, like livelihood diversification, increased education levels, migration trends and religious change. The population pyramid below (Figure 1) shows the gender and age distribution of the population sample.¹ The figure excludes (1) workshop participants' parents who are no longer alive, and (2) people whose birth year was not known.

¹ Appendix 1 shows the population pyramids for the three research areas separately.

Figure 1: Population pyramid of workshop participants and their relatives (N=1606)



Source: Life history survey 2008

Outline

This report is organised in several domains: education, occupation, religion, migration, ethnicity, languages, marital status and fertility. For each domain, I first present the information of the research participants in the three research areas. Afterwards I use the larger sample to analyse trends in the different domains. After presenting the findings from the different domains, I will analyse people's good and bad years, and I will conclude with a short overview of the main differences between the research locations and the principal trends in the research areas. The report also has some appendices with detailed tables specifying education levels and occupation by birth decade, gender and research area. Appendix five compares the workshop participants with their siblings. The appendix shows that the workshop participants on average had enjoyed more formal education (five years) than their siblings (three years). On occupation and religion, no large differences were discernible between the workshop participants and their siblings.

Education

We gathered information about the education level of all workshop participants, their children, siblings and parents. In the Sandema workshop, the participants had a higher level of formal education than in the other two workshops (see Table 2). More than half of the participants in Sandema had enjoyed secondary or tertiary education. In the Tô workshop, about half the participants had never been to school at all and only one had furthered his education beyond the secondary level.

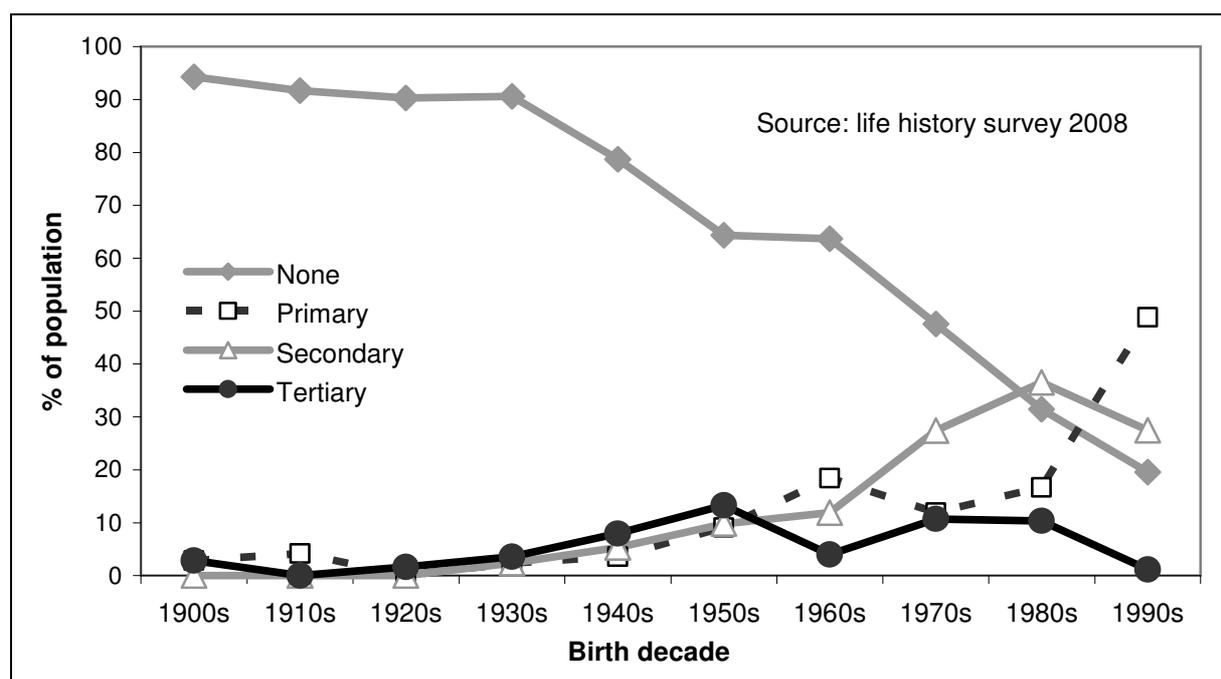
Table 2: Education levels of workshop participants by research area (N=178)

Education	Langbinsi	Sandema	Tô	Total
None	26	17	28	71
Primary	3	7	13	23
Secondary	12	16	13	41
Tertiary	10	16	1	27
Adult literacy	2	0	4	6
No data	9	0	1	10
Total	62	56	60	178

Source: life history survey 2008

Figure 2 below shows the steady increase in education levels.² Of the people born in the first three decades of this century, only very few ever went to school. In contrast, of those born in the 1970s, 1980s and 1990s more than half has been to school. The drop in secondary and tertiary education in the 1990s is because many children born in the 1990s have not yet reached the age of secondary school and none are old enough to attend a university. Children and siblings born in the 2000s have been excluded from this figure and the figures below because most of them are not yet of school-going age.

Figure 2: Highest education levels by birth decade (N=1777)



Historically, the education levels of men were higher than those of women (see figure 3). But in the 1980s and 1990s women caught up with men in terms of primary school enrolment. Of the children and adolescents born in the 1990s, more girls than boys have been to school. Furthermore, Figure 4 shows that girls have not only caught up with boys in primary school enrolment, but also in secondary school enrolment.³ The proportion of people with tertiary

² Appendix 2 shows the education levels by birth decade for the three research areas separately.

³ Appendix 3 shows the proportion of people with at least primary (A3.1) and at least secondary (A3.2) education by gender and per research area.

education is still higher for men than for women, but here too, the differences are reducing (not in table/figure).

Figure 3: Primary education by gender and birth decade(N=1681)

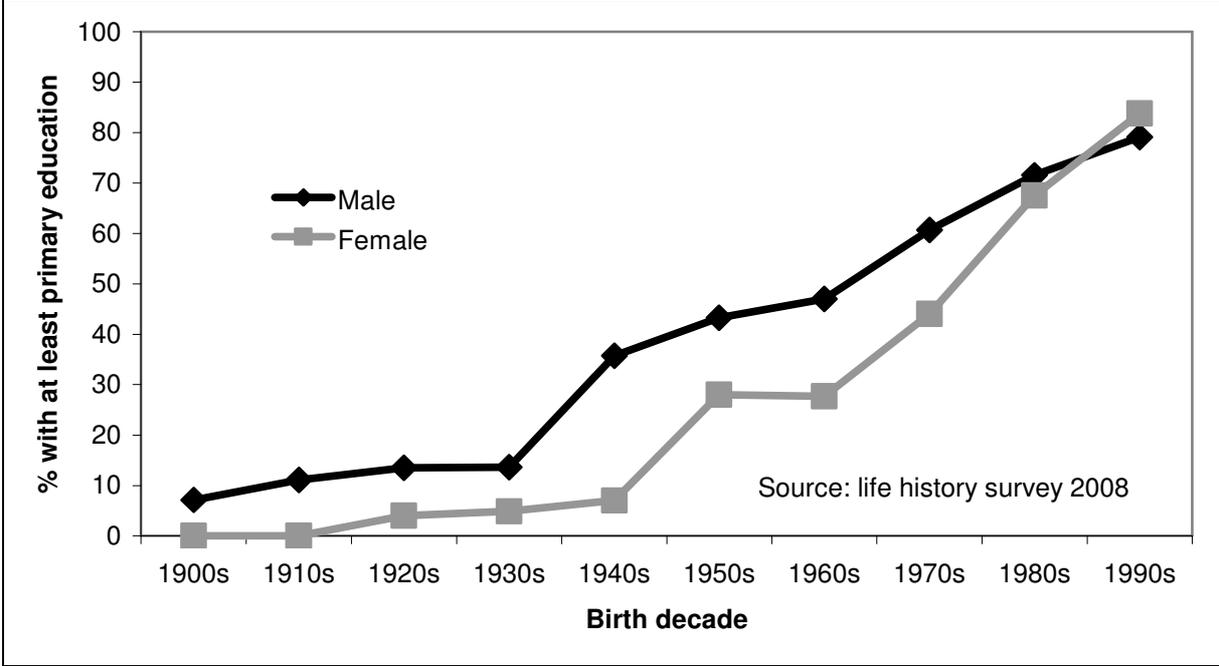
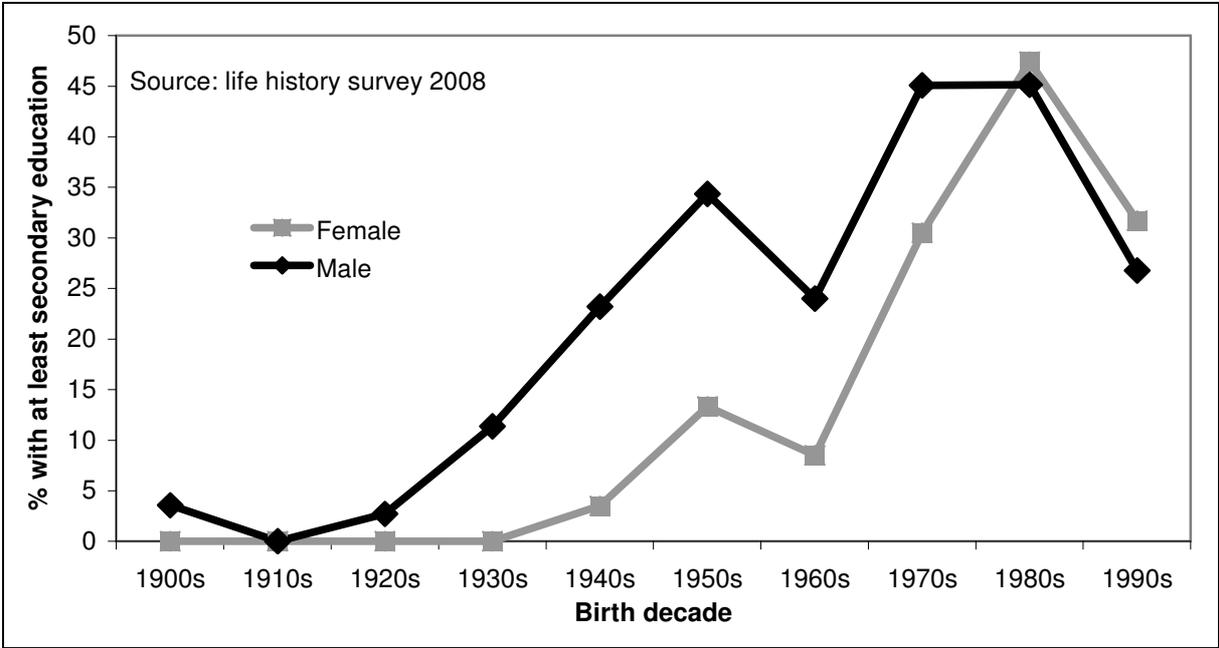


Figure 4: Secondary education by gender and birth decade (N=1681)



There are substantial differences in education history between the relatives of workshop participants in the three research areas (see Figure 5). Since the 1970s Sandema has consistently had the largest proportion of people with at least primary education followed by Langbinsi. In Tô one out of three children born in the 1990s still has not attended school. We have to be careful not to automatically generalise the findings for relatives of workshop

participants to the overall situation in the three research areas. As we saw in Table 2 the workshop participants in Sandema had a higher level of formal education than the ones in Tô. It could just be that more ‘officials’ had been invited to the Sandema workshop and that their relatives are also higher educated.

Figure 5: Education history by research area (N=1777)

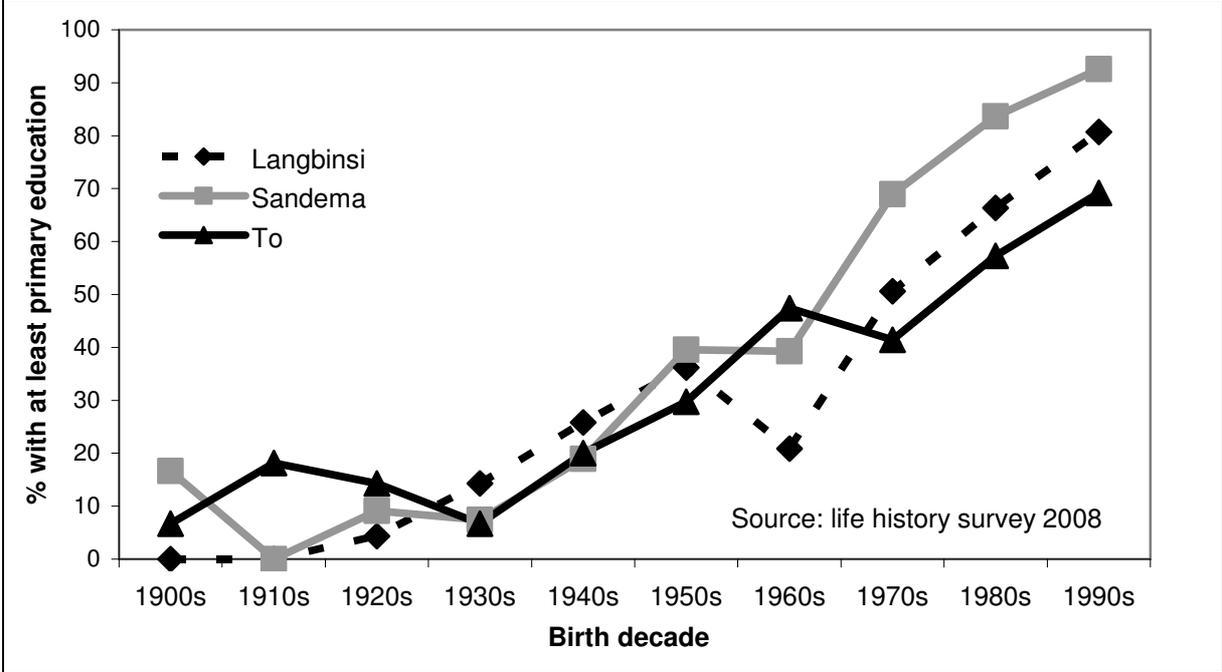


Figure 3 and Figure 5 just looked at the percentage of people with some level of schooling and for gender and research area separately. In Table 3 the education levels have been disaggregated by both research area and gender, and it looks at the average number of education years for each gender and birthyear group in the three research areas. The number of education years has been estimated⁴ as 3 for primary school; 9 for secondary school; fourteen for tertiary education; 2 for adult literacy classes; and two for coranic school (madrassa). The figures in Table 3 confirm the trends sketched above. Firstly, the level of formal education has gradually increased in the course of the 20th century. Secondly, women lagged behind in education but have generally caught up with men in the past few decades, especially in Sandema. Thirdly, education levels are highest in Sandema and lowest in Tô. The difference between Sandema and Tô is quite large, especially for women. Whereas in Sandema women born after 1970 on average have been to school for 6.6 years, in Tô they have only had 1.7 years of formal education.

⁴ In the questionnaire we did not record exact years of education. If someone had been to primary school for just one year, it was registered the same as someone who had been in primary school for six years.

Table 3: Education years by birthyear, research area and gender (N=1662)

Birthyear	Langbinsi		Sandema		Tô	
	Male	Female	Male	Female	Male	Female
1880-1940	0.9	0.1	1.6	0.0	0.3	0.2
1940-1970	2.6	1.3	3.9	1.5	2.2	0.8
1970-2000	5.5	4.9	6.1	6.6	3.1	2.4
Total	3.6	2.8	4.8	4.1	2.4	1.7

Source: life history survey 2008

Occupation

The life history questionnaire inquired after the occupation(s) of workshop participants, their parents and their siblings. No job information was gathered for the children of workshop participants, except in the last workshop (Tô). Table 4 shows the breakdown of occupations of workshop participants by research area. The table shows that most participants were farmers and/or 'housewives'. I combined this category because women quite arbitrarily called their occupation either farmer or housewife. This category could also be labelled 'no non-farm income'. It should be noted, however, that in reality, most of these people, especially women, do have at least some kind of supplementary income besides farming. In the Tô workshop for example, Wouter Rijnveld asked the women about non-farm income generating activities and all but one woman engaged in such activities while only four out of fourteen women in Tô mentioned these activities in the questionnaire. Still, it could be argued that for those who mentioned their non-farm activities, this source of income was probably of greater importance than for those who forgot to mention such activities.

Twelve out of the twenty-one workshop participants that mentioned a non-farm income generating activity as their occupation were at the same time farmers. The most common non-farm activity was trading, either as petty trade or at a larger scale. Some other activities that were mentioned were pito brewing, sheanut processing, carpentry, traditional healing, tailoring and pottery. Most of the salary workers were agricultural extension officers (eight) and teachers (eight). Other professionals that attended the workshop were NGO staff and civil servants working in different departments. The category 'other' consisted mainly of chiefs.

As one can see in Table 4, the workshops in Sandema and Langbinsi were attended by more salary workers and less farmers than the workshop in Tô.

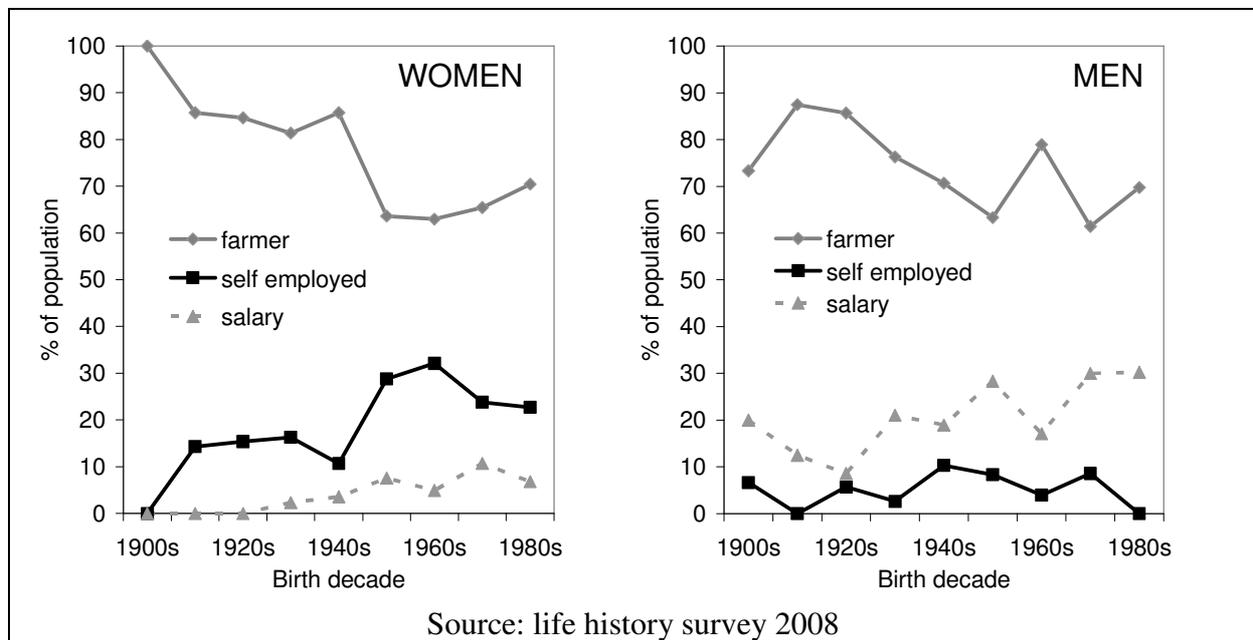
Table 4: Occupations of workshop participants by research area (N=178)

	Langbinsi	Sandema	Tô	Total
Farmer / housewife	36	31	43	110
Non-farm self employed	8	6	7	21
Salary work	14	16	7	37
Other	4	3	1	8
Missing	0	0	2	2
Total	62	56	60	178

Source: life history survey 2008

Figure 6 shows the occupational history of men and women for the three research areas together.⁵ Children and siblings born in the 1990s and 2000s have been excluded from this figure because most of them are still schooling or are not yet of working age. The trend is a gradual diversification into non-farm activities. A consistent difference between men and women is that women tend to diversify into self-employed non-farm activities while men tend to diversify into formal salary employment. Figure 6 shows a relatively high percentage of male ‘salary workers’ born in the 1900s and 1910s. It should be noted that most of these salary workers were ‘ancien combattants’ who served in the French colonial army. Upon their return, most of them went back to farming. The process of diversification into non-farm occupations is slower than one might expect looking at the educational trend. In colonial times, when levels of education were generally low, having a few years of primary education or being literate was often enough to get access to formal employment. In contrast, nowadays, having a senior secondary school diploma does not even qualify somebody for such a job. In most cases, one needs at least tertiary education to get a formal sector job.

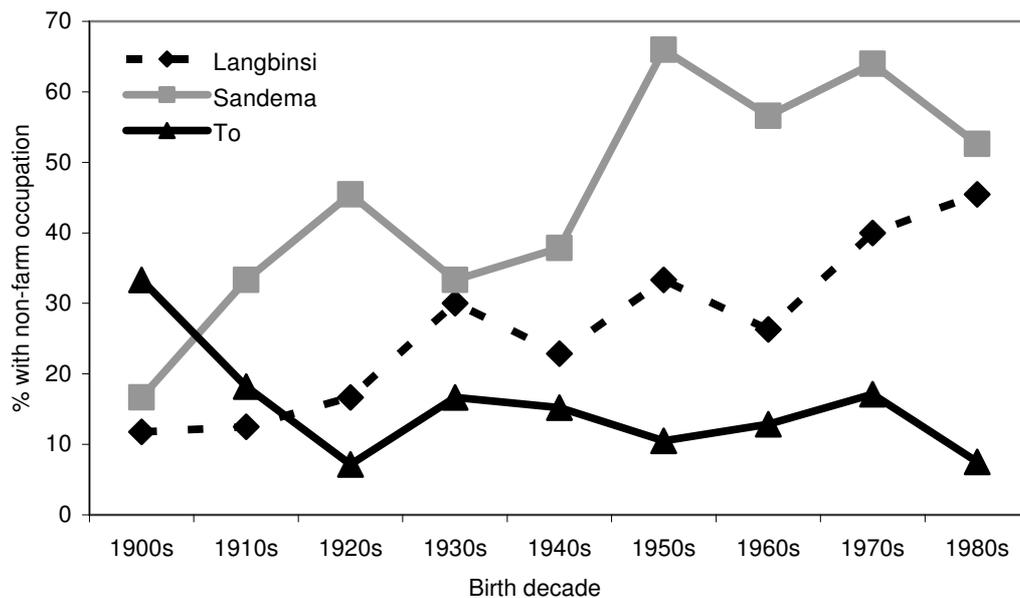
Figure 6: Occupational history by gender (N=865)



The process of diversification into non-farm activities is most advanced in Sandema (see Figure 7). Both Sandema and Langbinsi show a steady increase in people having non-farm occupations. In the sandema sample, of all people born after 1950 more than 50 percent has a non-farm occupation. This does not mean that this figure applies to people living *in* Sandema. As we will see below Sandema has experienced a high degree of out-migration in the course of the 20th century and many relatives with non-farm occupations are living in Southern Ghana. In Tô, the proportion of people with non-farm activities has generally been low (around ten percent) and has seen little to no growth since the cohort born in the 1930s.

⁵ Appendix 4 shows the occupation history of men and women for the three research areas separately.

Figure 7: history of livelihood diversification by research area (N=888)



Religion

The religious affiliation of workshop participants differed clearly between the three research sites. While in Tô most participants were Muslim, in Sandema most were Christian and in Langbinsi Christians, Muslims and Traditional believers were more evenly represented (see Table 5).

Table 5: Religious affiliation of workshop participants by research area (N=178)

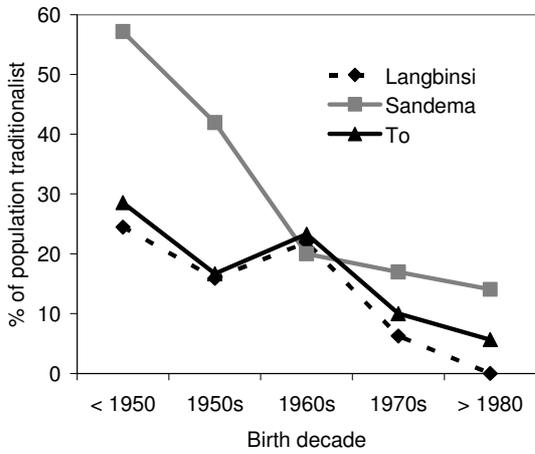
Religion	Langbinsi	Sandema	Tô	Total
Traditionalist	15	16	8	39
Muslim	20	1	40	61
Christian	26	36	12	74
No data	1	3	0	4
Total	62	56	60	178

Life history survey 2008

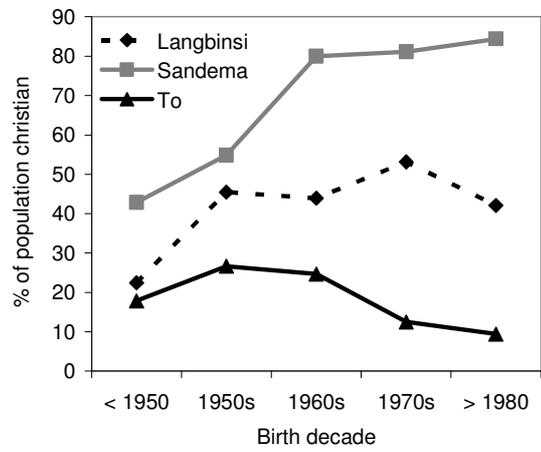
We also gathered information about the religious affiliation of the brothers and sisters of workshop participants. Figure 8a shows that there is strong trend away from traditional religion in the research areas. For the three research areas together, most conversion seems to be from Traditionalism to Christianity (see Figure 8d). In Sandema, the proportion of Christians has increased from about 43 percent among people born before 1950 to 84 percent among those born in the 1980s or later (see Figure 8b). In Tô, most traditionalist convert to Islam, from 54 percent before 1950 to about 85 percent in the 1980s or later (see Figure 8c). No very clear patterns of difference are discernible between the religious trend of men and women. A known pattern that is also discernible in the Figure 8e and f is that men are generally a bit later in converting from Traditionalism to Christianity. I don't have an explanation for the remarkable decrease in the proportion of Muslim women until the 1960s (see Figure 8c).

Figure 8: Religious trends in the three research areas (N= 649)

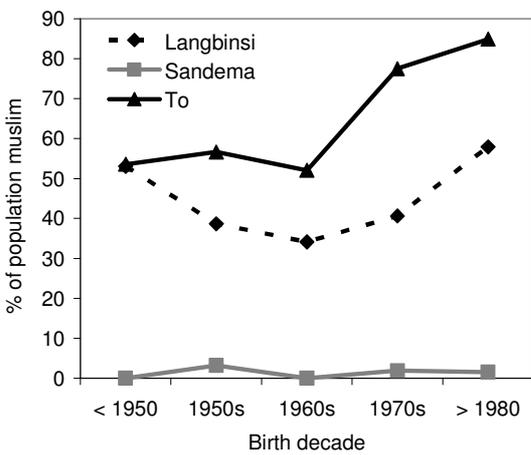
8a: proportion **traditionalist** by research area



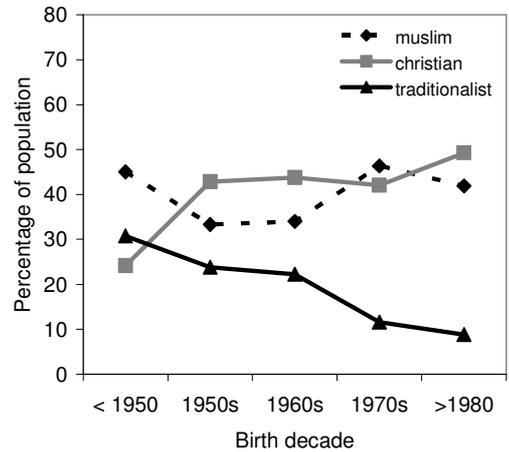
8b: proportion **christian** by research area



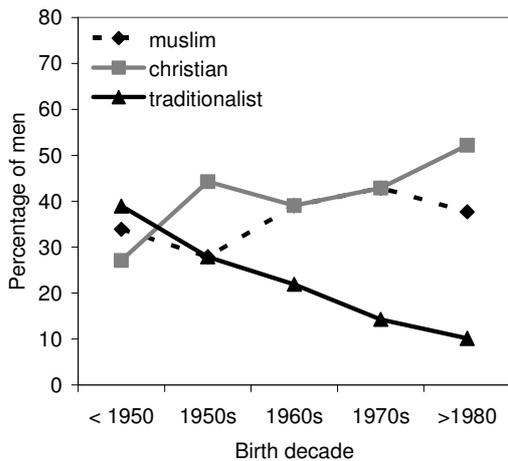
8c: proportion **muslim** by research area



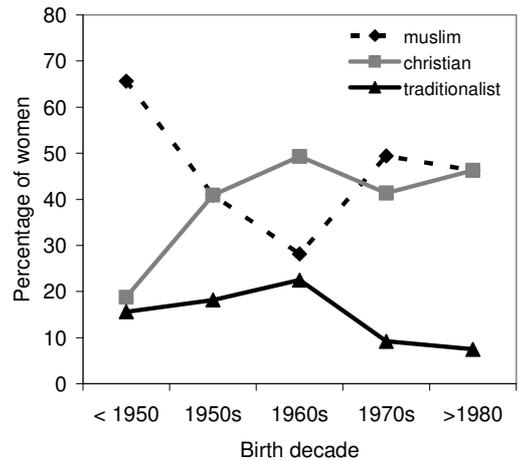
8d: proportion of **total population** by religion



e. proportion of **men** per religion



f. proportion of **women** per religion



Source: life history survey 2008

Migration⁶, ethnicity and languages

The three research areas have quite different migration profiles (see Table 6). Sandema is an area with massive out-migration to Southern Ghana. The vast majority of workshop participants had migrated before and returned. Langbinsi is an in-migration area with migrants mainly coming from the densely populated Upper East Region (Frafra and Talensi). Very few workshop participants from Langbinsi had migrated out of the area. In Tô out-migration (to Cote d'Ivoire) is substantial, but not as massive as in Sandema. Besides being an out-migration area, Tô is also an in-migration area. Mossi people from the Central Plateau settle in Burkina's Southwest province in search of fertile farmland.

Table 6: Migration status of workshop participants by research area

Migration status	Langbinsi	Sandema	Tô
Never migrated	30	13	29
In-migrant	20	2	13
Return migrant	4	41	18
Missing values	8	0	0

Life history survey 2008

The workshop in Langbinsi was most diverse in terms of ethnicity (see Table 7). About half the participants in Langbinsi were Mamprusi, while the other half were Frafra, Talensi, Kasena and others. In Sandema, most participants belonged to the same ethnic group: the Builsa. In Tô three quarters of the workshop participants were Nouni. The rest were Mossi and a few Wala.

Table 7: Ethnicity of workshop participants by research area (N=178)

Research area	Main ethnic group	Main in-migrant group
Langbinsi	Mamprusi (53%)	Frafra (20%)
Sandema	Builsa (88%)	Kasena (5%)
Tô	Nouni (75%)	Mossi (20%)

Life history survey 2008

In Sandema and Tô we asked the workshop participants about the different languages they spoke. This question was not yet included in the questionnaire for Langbinsi. Table 8 shows that on average people spoke almost three languages. No large differences in language proficiency are discernible between Sandema and Tô. Only 13 percent in both workshops spoke just one language. Some even spoke up to seven languages. Either English or French were spoken by more than half the participants in both workshops. In Sandema, 61% spoke Twi, the lingua franca in Ghana, while 81% of the participants in Tô spoke Moré, the lingua franca in Burkina Faso.

⁶ Unfortunately, it has not been possible to reconstruct the migration histories of the three research areas.

Table 8: Workshop participants' language proficiency by research area (N=116)

	Sandema (N=56)	Tô (N=60)
Average number of languages spoken	2.9	2.7
1 language spoken	13%	13%
2 languages spoken	34%	32%
3 languages spoken	27%	35%
4 to 7 languages spoken	27%	20%
% speaking English or French	59%	57%
% speaking Twi or Moré ⁷	61%	81%
Most common other languages	Hausa Kasem Frafra	Dioula Peule Wala

Life history survey 2008

Marital status and fertility

The data that we gathered on marital status and fertility are summarised in Table 9. In Tô, virtually all participants were married. In Langbinsi and Sandema, some widows (all female) and unmarried people also participated in the workshop. None of the respondents mention that they had divorced or separated from their partners. I do not think that this necessarily reflects the reality. In case of separation, I think respondents just mentioned that they were married. The largest percentage of unmarried people was counted among women in Sandema (12%). There were quite marked differences in polygamy between the male participants in the three research areas. In Langbinsi, polygamy was quite common. Seventy percent of the married men had more than one wife. Interestingly, this did not result in a large proportion of single men. Apparently the men of Langbinsi are able to attract brides from outside, which could be a sign of wealth or at least favourable conditions. Polygamy was much less common in Sandema where less than a quarter of the married men were polygamous. Age may be an influencing factor, however, as the male respondents in Langbinsi were on average ten year older than the ones in Sandema. In terms of fertility we see the same pattern: fertility is highest in Langbinsi, closely followed by Tô, and it is lowest in Sandema. Here again, age may play a role in explaining the lower fertility in Sandema. On the other hand, we also say that education levels and the process of de-agrarianisation were most advanced in Sandema, and this often goes hand in hand with declining numbers of children.

⁷ Twelve out of the 60 workshop participants in Tô were Mossi people. The percentage of 81% has been calculated over the non-Mossi.

Table 9: Workshop participants' marital status and number of children by research area and gender (N=178)

	Langbinsi		Sandema		Tô	
	Male	Female	Male	Female	Male	Female
Age (avg.)	54	48	44	38	47	43
Marital status:						
– Married (%)	93	82	90	82	98	100
– Widowed (%)	0	12	0	6	0	0
– Unmarried (%)	7	6	10	12	2	0
Men married to one wife (%)	30		77		47	
Wives per married men (avg.)	2.14		1.37		1.71	
Children (avg.)	8.24	4.88	4.90	3.53	7.11	4.71

Life history survey 2008

Table 10 shows the marital status of brothers and sisters of workshop respondents. Here again, Sandema records the lowest proportion of married people.

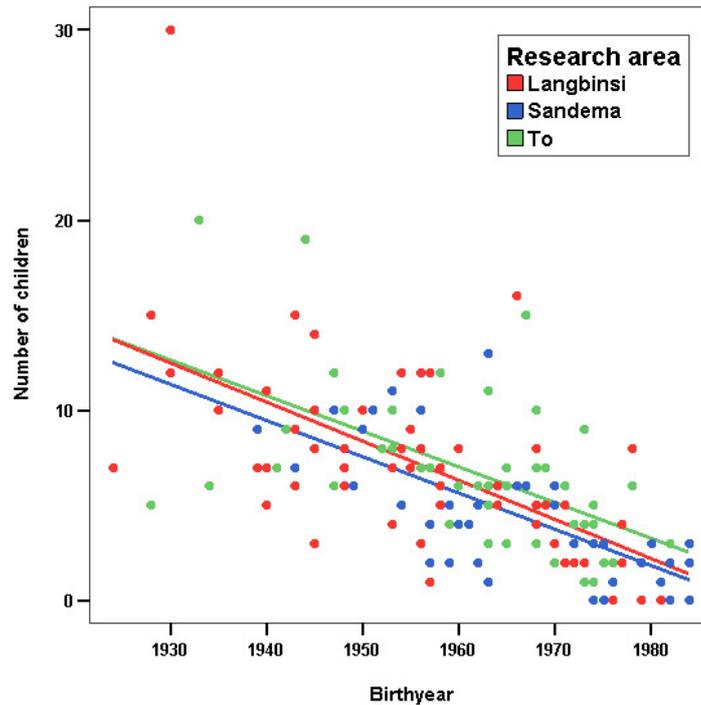
Table 10: Marital status of respondents' siblings by research area and gender (N=523)

	Langbinsi		Sandema		To	
	Male	Female	Male	Female	Male	Female
Average age	45	47	34	35	38	36
Marrital status						
– Married (%)	93	88	65	71	87	97
– Unmarried (%)	6	9	34	26	13	3
– Widowed (%)	1	4	1	3	0	0

Life history survey 2008

Figure 9 shows the number of children of each of the workshop participants by their birthyear. As could be expected, the older participants tend to have more children than the younger participants. Obviously, this is at least partly because the younger participants are still in the process of getting children. However, the demographic and health surveys conducted in Northern Ghana in the past two to three decades do indicate a clear and consistent trend towards lower fertility rates. The figure indicates that fertility rates in Tô are declini

Figure 9: Number of children per workshop participant by research area



Good and bad years

Each workshop participant had the opportunity to mention good years and bad years in their life. They also indicated what made these years good or bad. Some respondents decided to rather mention good or bad periods. In general, recent years were mentioned more often than years in the past, both for good years and for bad years. The year 2007 was mentioned by most people as a bad year because of the floods in Sandema that caused havoc to farms and houses, and resulted in hunger for many. Another bad year that was often mentioned was 1983 when widespread drought and political turmoil caused hunger in the whole country. Particularly good years seem to have been 2006 and 2004. In these years, people recorded good rains and bumper harvests. As we will see below, people's good and bad years are to a large extent related to personal tragedy and triumph. Therefore, it is hard to discern a trend in good and bad years.

Table 11 lists the reasons that made people deem a certain year good or bad. Bad years are mainly related to the death of relatives, natural disasters, hunger and disease. Some respondents particularly lamented the year that they had to drop out of school. Good years are related to good agricultural production, positive turns in careers, marriage, birth of children and successes related to schooling, for example being admitted to university.

Table 11: Clusters of reasons mentioned for good and bad years

Why bad	Times mentioned	Why good?	Times mentioned
death related	37	good harvest / enough food	45
flood	31	career related	20
hunger / low harvest	23	marriage	14
health related	13	education related	11
education related	9	birth of children	4
livestock related	5	became chief	4
drought	4	travelled abroad	4
politics related	4	Built a house	3
career related	3	peace in the house	2
unemployment	3	aid from NGO	2
plagues on crops	2	business related	2
traffic accident	2	politics related	2
high prices	2	started bullock farming	1
crime related	1	low prices	1
business related	1	good funeral celebration	1
fire destroyed farm	1	bought a motorbike	1
maltreatment	1		
divorce	1		
economic problems	1		
discriminated in south	1		

Life history survey 2008

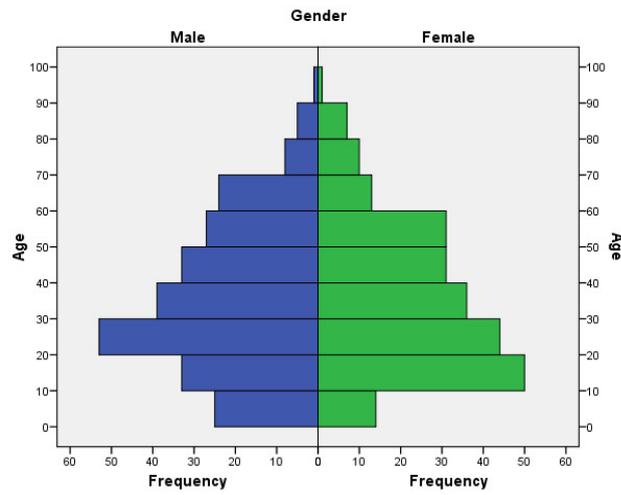
Conclusion: patterns and trends

The life history survey has yielded a wealth of data on socio-economic and demographic trends in the three research areas. The analysis revealed some general patterns of difference between Langbinsi, Sandema and Tô. On all indicators, Sandema seems to be more ‘modern’ than the other two sites: in Sandema the workshop participants and their relatives were higher educated (especially young women), had more non-farm activities, were less often Traditional believers, were more often monogamous and had lower fertility rates. In Tô much more workshop participants were farmers and only a very low proportion of their relatives had non-farm occupations. Langbinsi was most traditional in terms of polygamy and fertility rates. The three research areas also showed marked differences in migration history and ethnic setup. Langbinsi was clearly an in-migration area with a heterogeneous population; Sandema is an area with heavy out-migration; and Tô experiences both in- and out-migration.

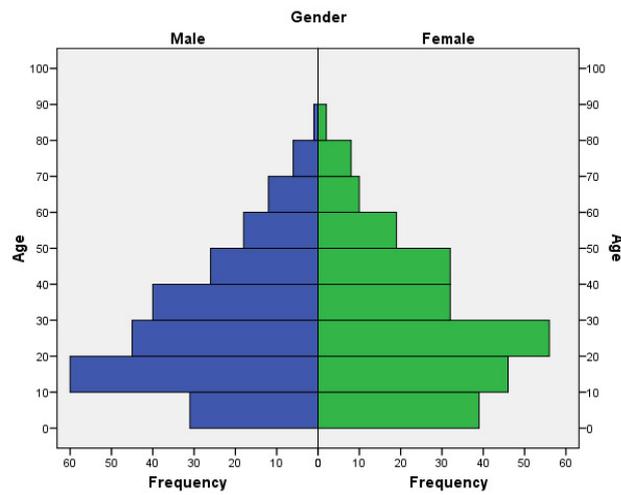
Several trends are discernible – to different extents – in the three research areas. Firstly, there is a strong increase in education levels. Secondly, there is a substantial move away from livelihoods that purely rely on farming. This trend is strong in Sandema and Langbinsi, but weak in Tô. Thirdly, there is a massive conversion from Traditional belief to Christianity (especially in Sandema) and Islam (especially in Tô).

Appendix 1: Population pyramids per research area

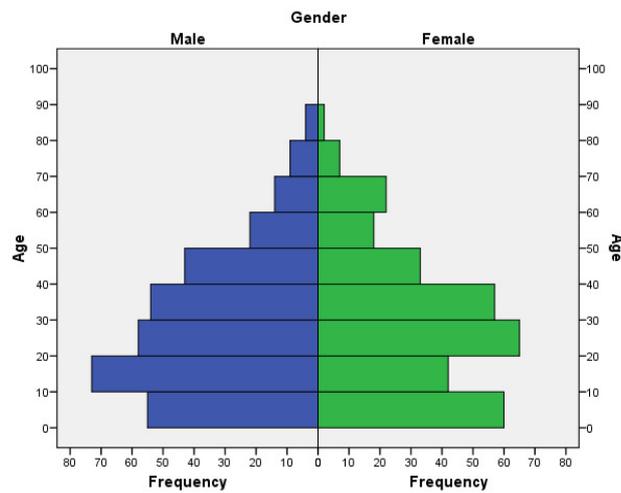
Langbinsi



Sandema



Tô



Appendix 2: Education level by birth decade and research area

(% of people per education level)

Langbinsi (N=581)

	None	Primary	Secondary	Tertiary	Literacy classes	Madrassa
1900s	100	0	0	0	0	0
1910s	100	0	0	0	0	0
1920s	96	0	0	0	4	0
1930s	86	0	4	7	4	0
1940s	74	6	6	10	3	0
1950s	64	10	9	16	2	0
1960s	79	4	13	3	0	0
1970s	49	4	28	16	3	0
1980s	34	9	39	15	4	0
1990s	19	51	29	1	0	0
2000s	56	44	0	0	0	0
Total	53	18	20	8	2	0

Sandema (N=534)

	None	Primary	Secondary	Tertiary	Literacy classes	Madrassa
1900s	83	0	0	17	0	0
1910s	100	0	0	0	0	0
1920s	91	0	0	9	0	0
1930s	93	0	4	4	0	0
1940s	81	0	8	11	0	0
1950s	60	6	15	19	0	0
1960s	61	20	9	11	0	0
1970s	31	11	39	19	0	0
1980s	16	11	57	15	0	0
1990s	7	55	36	2	0	0
2000s	51	49	0	0	0	0
total	41	23	26	10	0	0

Tô (N=622)

	None	Primary	Secondary	Tertiary	Literacy classes	Madrassa
1900s	93	7	0	0	0	0
1910s	82	9	0	0	0	9
1920s	86	0	0	0	4	11
1930s	93	7	0	0	0	0
1940s	80	4	2	4	4	4
1950s	70	11	5	3	5	5
1960s	53	29	13	0	3	3
1970s	59	19	18	0	2	2
1980s	43	29	15	2	5	6
1990s	31	42	18	1	0	8
2000s	81	19	0	0	0	0
Total	59	23	11	1	2	4

Appendix 3: Education by birth decade, gender and research area

A3.1: Proportion of people with at least primary education (N=1681)

<i>Birth decade</i>	<i>Langbinsi</i>		<i>Sandema</i>		<i>Tô</i>		<i>Total</i>	
	Male	Female	Male	Female	Male	Female	Male	Female
1900s	0	0	20	0	8	0	7	0
1910s	0	0	0	0	22	0	11	0
1920s	8	0	14	0	18	9	14	4
1930s	23	7	13	0	7	7	14	5
1940s	39	8	30	6	39	7	36	7
1950s	44	27	55	27	28	32	43	28
1960s	28	19	56	26	54	38	47	28
1970s	57	43	68	71	58	28	61	44
1980s	75	62	83	85	58	57	72	68
1990s	84	84	90	96	68	71	79	84
2000s	53	55	54	46	18	20	35	34
Total	50	42	62	56	45	36	52	44

A3.2 Proportion of people with at least secondary education (N=1681)

<i>Birth decade</i>	<i>Langbinsi</i>		<i>Sandema</i>		<i>To</i>		<i>Total</i>	
	Male	Female	Male	Female	Male	Female	Male	Female
1900s	0	0	20	0	0	0	4	0
1910s	0	0	0	0	0	0	0	0
1920s	0	0	14	0	0	0	3	0
1930s	23	0	13	0	0	0	11	0
1940s	22	8	30	6	17	0	23	4
1950s	33	17	55	15	11	5	34	13
1960s	21	16	32	10	22	0	24	9
1970s	51	37	60	56	27	11	45	31
1980s	56	50	67	77	14	20	45	47
1990s	24	39	36	41	21	16	27	32
Total	30	26	39	33	14	9	27	22

Appendix 4: Occupation by birth decade, gender and research area
(Proportion of people per occupational group)

Langbinsi (N=238)

	<i>Farmer</i>		<i>Self employed</i>		<i>Salary</i>	
	Male	Female	Male	Female	Male	Female
1900s	85	100	8	0	8	0
1910s	100	100	0	0	0	0
1920s	85	82	15	18	0	0
1930s	90	71	10	29	0	0
1940s	70	92	17	0	13	8
1950s	60	75	5	17	35	8
1960s	79	70	7	26	14	4
1970s	69	50	6	43	25	7
1980s	50	67	0	33	50	0
1990s	100	67	0	33	0	0
Total	73	74	9	22	18	4

Sandema (N=274)

	<i>Farmer</i>		<i>Self employed</i>		<i>Salary</i>	
	Male	Female	Male	Female	Male	Female
1900s	80	100	0	0	20	0
1910s	100	50	0	50	0	0
1920s	67	50	0	50	33	0
1930s	60	82	0	18	40	0
1940s	60	69	5	31	35	0
1950s	41	29	9	63	50	8
1960s	58	31	8	62	33	7
1970s	42	29	15	46	42	25
1980s	61	39	0	44	39	17
1990s	67	100	33	0	0	0
Total	56	43	7	47	37	10

Tô (N=504)

	<i>Farmer</i>		<i>Self employed</i>		<i>Salary</i>	
	Male	Female	Male	Female	Male	Female
1900s	58	100	8	0	33	0
1910s	78	100	0	0	22	0
1920s	88	100	0	0	12	0
1930s	73	93	0	0	27	7
1940s	72	93	6	4	22	4
1950s	85	94	10	0	5	6
1960s	88	91	2	6	9	3
1970s	79	91	2	5	19	4
1980s	96	87	0	4	4	9
1990s	94	94	3	0	3	6
Total	85	92	3	3	13	5

Appendix 5: Comparing workshop participants and their siblings

A5.1 Education years (N=719)

	<i>Langbinsi</i>	<i>Sandema</i>	<i>Tô</i>	<i>Total</i>
Participants	4.9	6.9	3.0	4.9
Siblings	2.3	4.5	1.5	2.8

A5.2: Education level (N=705)

	<i>Langbinsi</i>		<i>Sandema</i>		<i>Tô</i>	
	Participants	Siblings	Participants	Siblings	Participants	Siblings
None	49	71	30	46	47	67
Primary	6	8	13	16	22	16
Secondary	23	14	29	26	22	8
Tertiary	19	5	29	12	2	1
Literacy classes	4	1	0	0	7	3
Madrassa	0	0	0	0	0	6

<i>Total sample</i>		
	Participants	Siblings
None	42	60
Primary	14	14
Secondary	24	17
Tertiary	16	6
Literacy classes	4	2
Madrassa	0	2

A5.3 Occupation type (N=652)

	<i>Langbinsi</i>		<i>Sandema</i>		<i>Tô</i>	
	Participants	Siblings	Participants	Siblings	Participants	Siblings
Farmer	61	74	57	42	75	89
Self-employed	14	16	11	30	12	2
Salary	25	10	31	28	12	9

<i>Total sample</i>		
	Participants	Siblings
Farmer	65	71
Self-employed	12	15
Salary	23	15

A5.4 Religion (N=708)

<i>Langbinsi</i>		<i>Sandema</i>		<i>Tô</i>	
Participants	Siblings	Participants	Siblings	Participants	Siblings
35	55	2	1	67	66
40	33	68	77	20	18
25	12	30	22	13	15

<i>Total sample</i>		
	Participants	Siblings
Muslim	36	42
Christian	42	42
Traditionalist	23	16