



Report KCDI Baseline Study 2014



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Registered offices

Kakamega, Kenya
+ 254 720 257421 (Kenya)

Kasvai Village
Kakamega, Wester-Kenya

E kasavaicdi@gmail.com
I www.kasvai.org

Author:

Jan Meyer

Editors:

Franziska Kerting
Alistair Y. Amendi

Layout etc.:

Franziska Kerting

Photo credits

Cover page: Alistair Y. Amendi

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KCDI Secretariat:

Alistair Y. Amendi, Executive Director

Franziska Kerting, Programme Officer

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I. Introduction

Kasavai is a small village in Kakamega County, Kenya, a few kilometers north the equator. Along with 4 other villages it constitutes Ivonda sub-location in Ikolomani District, bordering directly to Vihiga County. Kasavai itself is subdivided in three parts. Less than 5 years ago, the village lacked basic educational institutions, like a primary school or agricultural facilities such as a centralized irrigation project. In 2011 Kasavai Community Development Initiative (KCDI) was founded. The vision¹ of 2011 pursued by KCDI, is picturing a community where women and children rights are respected, education is taken keenly, people protect and conserve environment. Girls are given an opportunity to explore their potential and creation of opportunities among the youths in the community. The declared mission to these ends was to support children education, women rights, youth participation in issues involving the community as well as to spearhead the community development. Instilled by these values, KCDI has taken up an already existing initiative of the villagers to conduct primary school education. Aiding with expertise in organizing and especially in raising funds, KCDI has managed to build a full functioning primary school, recognized by the Kenyan government providing free education for Kasavai' s children. Appalled by the high rate of illiteracy among women in the village, KCDI initiated an adult education program. 15 women are now learning basic literacy skills on the premises of Kasavai Primary School free of charge. Other initiated programs include various projects such as a reproductive health workshops, computer training courses, farming projects and a health clinic. Furthermore, KCDI implements a school sponsorship program.

Carrying out different projects, KCDI is steadily maturing. In order to ensure, that the organization performs on the maximum of it possibilities and to act in the interest of the villagers, it is critical to develop a strategic plan with a Monitoring and Evaluation System. To these ends, a baseline study was carried out in February 2014. This study covers various fields of interest such as income, health, education, agriculture and religion. Both, quantitative and qualitative methods are combined. Besides providing basic information about their life and personal background, villagers had the opportunity to voice their individual concerns about the state of development in the village and to express their personal vision for the future of the village. The obtained information and context is expected to provide valuable insights into the lives of the villagers and the state of the village at large.

¹ The vision will change with the strategic planning process by 2015, in reference to the results of this study.

II. Methodology

36 random numbers out of 273 were drawn by internet based random generator. Employing the community health register of the local community health worker (CHW), Jacob Miheso, in which all households of Kasavai were listed and numbered, we picked the corresponding households. In this way, unbiased sampling among households was ensured. However, since we assumed to obtain most informed and relevant data from the head of the household and its spouse, we settled to interview the husband and his wife by default. Households, in which one of both was permanently (e.g. widow) or temporarily (e.g. working in Nairobi) absent, we replaced the missing partner with the oldest child of the same sex, given it was 15 years or older in age. In absence of such a child, we discarded the entire household and picked the household following in the health book. This approach entailed us to capture the opinions and backgrounds of the young generation. We set the minimum age of 15 years, in order to be compatible with studies, carried out by the government.

We administered two different versions of the questionnaires: One version for the husband/male child, another version for the wife/female child. Both versions resembled each other largely, but were distinct. The female version contained the part for agriculture, whereas, the male part contained the income part. The choice for this distribution was rooted in the assumption, that women are largely responsible for agriculture and men are more likely engaged in a paid employment. We included control questions in both versions, to see, if the assumptions hold. Both versions can be found in the appendix.

Administering the questionnaires usually followed a recurrent pattern. Jacob Miheso (the CHW) and I (Jan Meyer) went to the household and usually Jacob Miheso inquired in the vernacular, whether husband and wife are present and already gave a quick introduction to the study. Soon thereafter we got invited to enter the house and to take a seat. If present, wife, husband and other members of the household gathered. If the command of English granted it, I introduced myself and explained the purpose of the study. If not, Jacob translated, or explained it entirely on his own. Usually, the villagers showed great interest and cooperation. Before we commenced the questioning, we paid great attention to the local separation of the spouses, not to let them influence each other, especially at sensitive question pertaining to gender issues.

First, an informed consent (see appendix) was handed out, which needed to be signed by the participant and by the researcher. The question was read out and in more than 50% Jacob had to translate. Some participants were deemed fluent enough, to let them fill in the questionnaire on

their own. Only occasional assistance was necessary then. If one of the required participants was absent, we either returned another day, or we left the questionnaire to be filled in on their own. We thanked the participant and left. Like all sociological inquiries, this survey suffers under certain limitations. Participants might have felt compelled to comply with real or perceived expectations on the side of the researchers. This problem is exacerbated by the fact that Jacob Miheso, who was virtually always present during inquiry, is not only the local community health worker, but serves also an important role in the local Pentecostal church, to which several participants belonged. Despite this drawback, the assistance by Jacob Miheso was indispensable. Another bias might emerge from participants, who inflated the despair of their situation, in order to elicit material contribution (e.g. money) from the researcher. Forgoing this problem, we explicitly pointed out in the informed consent, that the researcher is not authorized to provide any immediate assistance. Through our sampling technique, we systematically excluded households, consisting only of one person or that are too young or too old to replace the missing spouse with an appropriate child. Therefore, bachelors/bachelorettes or widows are not captured in this study. Also the fact, that wives were always available, lead to the exclusion of female teenagers in this survey. Hence, this study is not entirely representative, but does rather focuses on certain layers. A different sampling procedure could remedy this shortcoming.

After collecting all the data, the data were entered into SPSS 16 for further analysis.

III. Results

1. Age: The mean age of all participants is 38.51 years ($SD^2 = 15.46$ years), ranging from 15 years to 77 years. Considering only the couples, we have a mean age of 40.38 years ($SD = 15.31$ years). A paired T- test revealed, that the wife is 6.11 years younger than the husband ($p < .001$). Eight children (all male), we interviewed had an average age of 18.62 years ($SD = 2.45$ years), ranging from 15 to 23.
2. Head of HH: 40 Heads of Household were interviewed.
3. Relationship to HH: 4 spouses and 8 sons were interviewed.
4. People living in HH 15 years and above: 3.11 people ($SD = 1.26$ ppl), ranging from 2 to 6.
5. People living in HH below 15 years: 2.69 people ($SD = 1.49$ ppl), ranging from 0 to 6.
6. Females living in HH, 15 years and above: 1.58 ($SD = .87$ ppl), ranging from 1 to 4.
7. Females living in HH, below 15 years: 1.5 ($SD = 1.46$ ppl), ranging from 0 to 6.

²SD refers to Standard Deviation.

Summarizing, the average HH consists of 5.81 (SD =2.05 ppl) members, of which are 3.01 females (SD = 1.89 ppl). 44.81% (SD = 16.75%) of the HH consists of members below 15 years. 22.44% (SD = 17.25%) are females below 15 years.

8. Since we assumed the distribution of field work to be on the shoulders of the wives and the burden of income generating activities to be on the shoulders of husbands, we put these assumptions to test with control questions in each version. The females were asked about their income generating activities and the males were asked about their field work activities.

8 fa. 91.4 % (32) of the female participants do not have an income generating activity. 5.7% (2) have casually an income generating activity and 2.8 % (1) revealed to have a job. One datum was missing. This largely confirms our initial assumption.

8 fb. Of those 3, that testified to have a paid job, one is in a weekly pay class of 1 – 200 Kshs, one earns 601 – 1000 Kshs and one earns above 1500 Kshs.

8 ma. Things are different with male work on the field. Violating our assumption, 80% actually engage regularly in agricultural activities. Considering only male spouses it is even 88.9%. This eagerness of men on the field was unpredicted and jeopardizes results, since we systematically neglect the male perspective on agriculture. It is, therefore advised to extent the survey on agriculture to the mal participants in future studies.

8 mb. Of 35 responses to this question, 18 males (51.4%) engage on a daily basis in agricultural activities, 5 (13.9%) work there twice or more a week and 5 (13.9%) work there once a week.

IV. Income

9. 18 (50%) of all male participants (60.7% of male spouses) have been employed in a paid job throughout the past 6 months.
- 10.5 (13.9%) of all male participants (14.3%) of all male spouses have been casually employed (i.e. in the past 6 months, being once or more employed in a paid job for less than 4 weeks at a time.)
11. The kinds of professions included: Working as farmer: 6; Driver (Piki Piki, Matatu, heavy commercial): 5; Teacher: 3; accountant, carpenter, chef, scrap metal dealer, road construction worker, watchman, self-employed; each 1.

12. 68.4 % reported, they learnt about their employment through their friends and relatives. 21.1% found out about their job through advertisements. 5.3% were transferred and another 5.3% obtained their work through self-employment.

13. Of all employed males, the salary pattern is as following:

| Salary | Percentage of interviewees |
|------------------|----------------------------|
| 1 -200 Kshs | 13.0% |
| 401 – 600 Kshs | 17.4% |
| 601 – 1000 Kshs | 17.4% |
| 1001 – 1500 Kshs | 17.4% |
| > 1500 Kshs | 34.8% |

This pattern suggests a finer grading of provided answers for salaries above 1500 Kshs if the survey is repeated in the future.

Table 1: Salary Pattern of Employed Males

14. Of the 14 male participants (7 male children) that reported to have neither a continuous nor casual employment, 7 (4 male children) reported to receive support from family members. One person receives pension and 4 persons have no income whatsoever. Two have “other” incomes.

Of 22 male participants, that reported to have an income (continuously, casually or both), 4 (18.2%) have other incomes by salary/wages (this number is to be interpreted cautiously, misunderstanding in answering this question is likely, because income/wage was already tapped in the previous question and now it is listed amongst others). A different wording should be found in future studies. 5 (22.7%) obtain profit from trading and selling, 1 (4.5%) receives support from family members and 12 (54.5%) have no alternative income. The numbers of employed and non-employed males are cumulative (i.e. 22 +14 = 36).

15. 35 male participants gave following responses to where they have problems to cover basic needs. Multiple ticking was allowed:

| Basic Needs | Food | Housing | Clothing | School Fees | Medicine | No Problems |
|-------------|---------------|--------------|--------------|---------------|---------------|--------------|
| Respondents | 18 (51.4%) | 9 (25.7%) | 9 (25.7%) | 18 (51.4%) | 18 (51.4%) | 6 (17.1%) |

Table 2: Problems to Cover Basic Needs

Fig. 1 illustrates the distribution, of how many fields all households struggle to cope with financially in total. The majority of households experienced financial difficulties in one or two fields. Interestingly, there exists a strong and statistically significant correlation between Problems to cover food and to cover clothing ($r = .441$, $p = .008$). This might reflect that these needs are two basic ones.

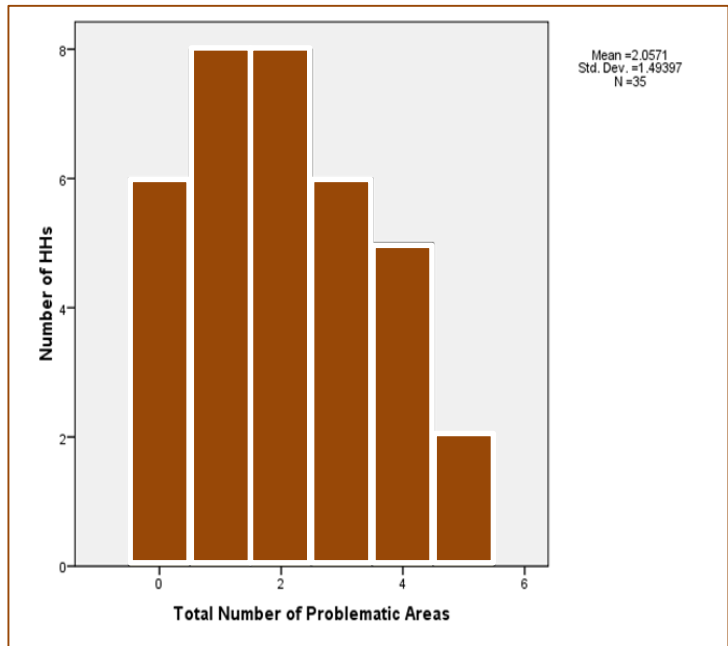


Figure 1: Distribution of Total Number of Problematic Areas

V. Education

16. The mean self-rated Reading and

Writing ability is 3.47. What is striking under closer inspection of Figure 2 is the difference between men and women.

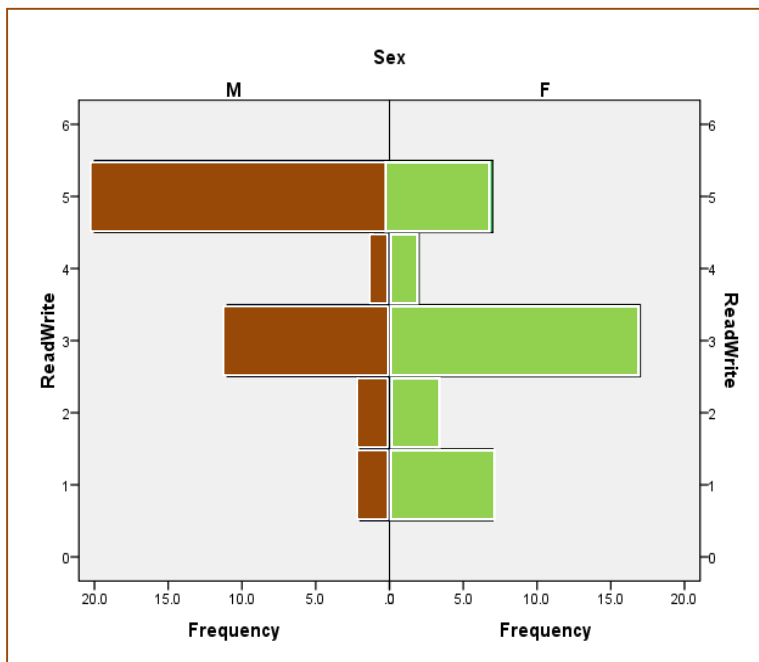


Figure 2: Gender Dependent Distribution of Self-rated Reading and Writing Ability

5.6% of all males rate themselves illiterate (this number may be confounded by the fact, that there are 8 well educated sons in the sample), whereas 19.4% of all women rate themselves illiterate. This grave imbalance is also reflected in the averages. Men score on average exactly one point higher (3.97 vs 2.97, $p = .002$) in their abilities than women. This is not only statistically significant, on a 5 point Likert Scale, this is of

huge practical significance.

17. The distribution of the highest educational level is presented in table 3.

| | |
|-----------------------|------------|
| None | 6 (8.3%) |
| Primary Dropout | 11 (15.3%) |
| Primary Graduated | 22 (30.6%) |
| Secondary Dropout | 8 (11.1%) |
| Secondary Graduated | 17 (23.6%) |
| Certificate Dropout | 1 (1.4%) |
| Certificate Graduated | 5 (6.9%) |
| Diploma Graduated | 1 (1.4%) |
| Master Graduated | 1 (1.4%) |

Table 3: Distribution of Highest Education

If we order these educational attainments on an ordinal scale and accord “None” a 0 and “Master Graduated” a 12 (some levels in between are not been attained by anyone, that is why they do not appear in Table 3), the average educational level is a 2.81 (close to “Secondary Dropout”). Again, the gender disparity is remarkable. Women score an average of 2.14, whereas men score a 3.47. A difference of 1.33 points ($p = .004$). Demonstrating conceptual validity, educational attainment and self

rated reading and writing abilities correlate strongly with each other ($r = .689, p < .0001$). Both educational indices correlate significantly with age (ReadingWriting: $r = -.419, p < .001$; Educational level: $r = -.272, p = .021$). Of the 5 graduated certificates, 2 have been obtained in computer training, 2 for being teacher and 1 as accounting technician.

18. The reasons for early dropout were universally a lack of funds. Occasionally, different reasons compounded the financial ones: one person was pregnant, one person failed in mathematics, another person was regularly sick. Reasons for having no money were diverse: orphanaged, too many siblings etc.

19. The sources to acquire the funds to cover school fees for their children is mainly working but also other means take important roles: This question is not applicable to couples that are too young for having children in the age of secondary school, and for couples’ children, we interviewed. Those are included in the category “Does not apply”.

| | |
|------------------------|------------|
| Savings | 5 (6.9%) |
| Sponsor | 3 (4.2%) |
| Support from Relatives | 7 (9.7%) |
| Taking a loan | 6 (8.3%) |
| Working | 26 (36.1%) |
| Trading | 8 (11.1%) |
| Does not apply | 33 (45.8%) |

Table 4: Sources to Cover Children’s School Fees

20. The question whether a person works in its field of educational expertise can only be applied to people with an according educational expertise. Due to a massive absence of education in the population, this question applies only to a minority of the participants. 6 interviewees affirmed this question, 9 denied it, one responded “sometimes”, one did not report any answer. 55 participants could not answer this question meaningfully. Those are included in the category “Does not apply”.

VI. Health, Food, Beliefs & Visions

21. Participants were required to rate their own health on a Likert-scale ranging from 1 (very poor) to 5 (very good). The mean health of the sample is 3.42. This is between average and good. Interestingly, not a single participant rated its health “very poor”. Furthermore, there is no difference between male and female health ($p = .584$). There seems to exist no correlation between the health of individual spouses ($r = .112$, $p = .517$).

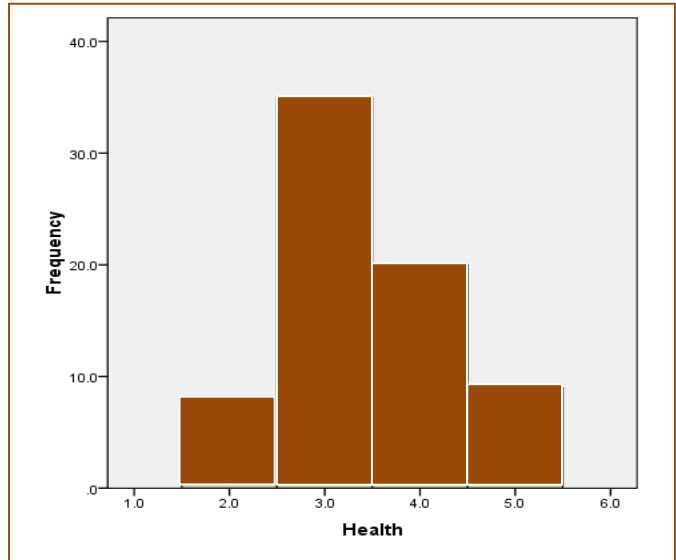


Figure 3: Distribution of Self-rated Health

22. Table 5 shows how many times people go for medical check-up per year. “0” means, that people go, when they feel sick, but have not established situation independent routine for check-ups.

| 0 | 1 | 2 | 3 | 4 | 6 | 12 | 24 |
|---------------|----------|----------|----------|---------------|----------|--------------|----------|
| 32 (44.4%) | 5 (6.9%) | 4 (5.6%) | 5 (5.6%) | 11 (15.3%) | 3 (4.2%) | 8 (11.1%) | 3 (4.2%) |

Table 5: Frequency of Medical Check-ups

23. The majority eats 3 times per day (66.7%). Some eat twice per day (29.2%). 2.8% only eat once per day and 1.4% can afford 4 meals a day. This averages 2.67 meals per day.

24. Virtually everybody eats Ugali during the day and drinks tea (milk with tea leaves) in the morning. Very popular are sweet bananas, rice beans and Githeri. People also consume chapati, cassava, Sukuma wiki and occasionally meat and fish.

25. and³

26. The investigation of gender issues requires some in depth analysis. First I will present the agreement rates of the aggregated data. Afterwards, I will split the data along the asked question (i.e. I will compare the male and female responses within question 25 and within question 26). Following I split the data along the fault line of sex (i.e. I compare the male attitudes in question 25 with male attitudes in question 26. The same I do for female attitudes). The next analysis level is to change mode of comparison. No longer, I look at the

³ Question 25 and 26 are analyzed together.

differences of the grand means, but I look at the differences *within* couples (i.e. I won't look for differences of grand means but for grand means of differences). In the end I develop a parameter, which tries to establish a measure in an individual for the perception of superiority of men over women. I call this measure "freedom of men".⁴

The following chart displays the crude agreement rates to the provided reasons.

"Number of other reasons" is the average of other reasons provided and needs to be divided by 100.

Reading the mere answers, infidelity is the split up reason Nr.1 with 73.4% of the responses condemning this practice in a marriage. Split up reason Nr. 2 is Domestic Violence, with 65% not tolerating its occurrence. This means, however, that in 35% of the cases this practice within a domestic relationship is at least tacitly accepted. In 58% of the instances sexual satisfaction is considered an integral pillar in relationship. 56.6 % of all answers indicate Alcohol or drug abuse on side of the partner serious enough to leave. Not even half of all responses (48.3%) would lead to a termination of a relationship, if the romantic love had faded. Infertility leads in 43.4% of all situations to an end of the connection. If the partner fails to contribute sufficiently, in order to keep the household running, in 35.7% of the cases participants would say goodbye forever. In mere 6.3 % of the cases people in the village of Kasavai wouldn't see any reason to leave the spouse. Apart of the last reason given, the 95% Confidence Interval is close to +-8%. In the last case it is +-4%.

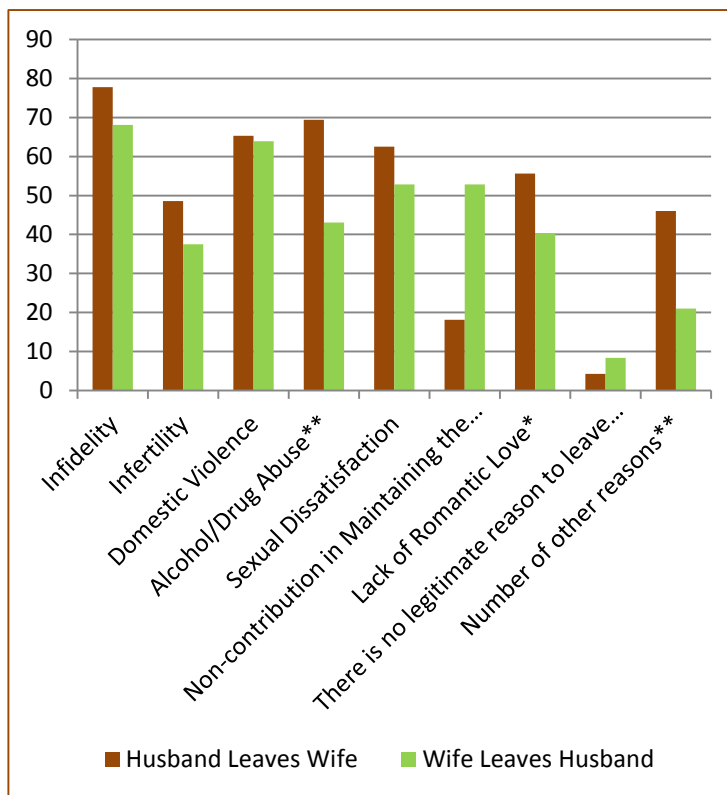


Figure 4: Agreement Rates of Total Sample
(Brown: qu. 25, Green: qu. 26)

even half of all responses (48.3%) would lead to a termination of a relationship, if the romantic love had faded. Infertility leads in 43.4% of all situations to an end of the connection. If the partner fails to contribute sufficiently, in order to keep the household running, in 35.7% of the cases participants would say goodbye forever. In mere 6.3 % of the cases people in the village of Kasavai wouldn't see any reason to leave the spouse. Apart of the last reason given, the 95% Confidence Interval is close to +-8%. In the last case it is +-4%.

⁴ Throughout, following meaning of symbols apply:

*: significant at $\alpha = .1$
 **: significant at $\alpha = .05$
 ***: significant at $\alpha = .01$

If we consider, who leaves who, differences in the perception for legitimate reasons become apparent. Alcohol and Drug abuse is far more accepted for the husband, than for the wife. Also is there tentative evidence, that the husband is attributed a higher need for romantic love. Very clearly, however, emerges that the husband is to be expected to provide the decisive share for maintaining the Household. Overall, participants more easily retrieved additional reasons out of their memory for a husband to leave his wife than vice versa.

The following two charts illustrate how men and women differ in their perception of what legitimate reasons are a husband to leave his wife and vice versa.

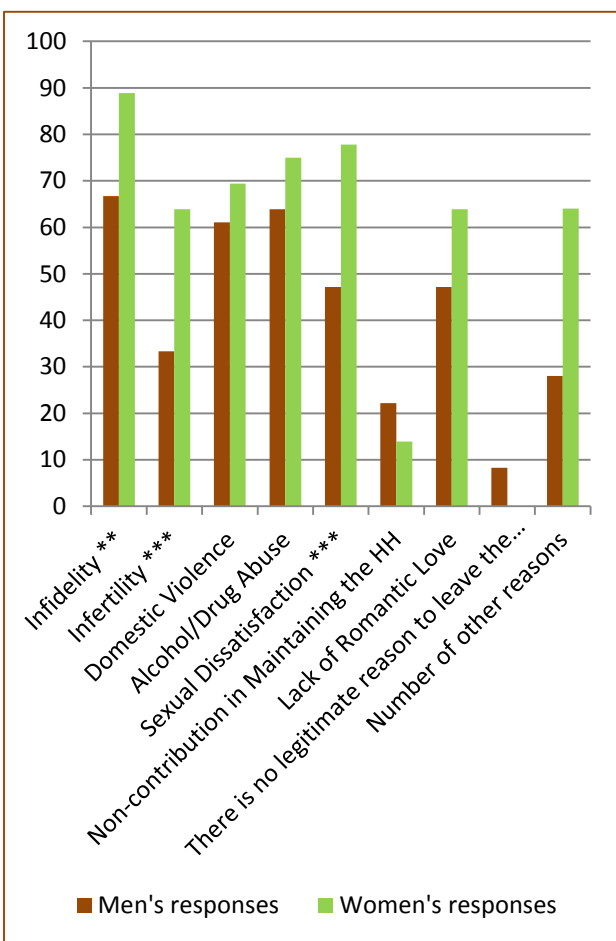


Figure 5: Agreement Rates for Husband leaving Wife (qu. 25), Comparing Sexes

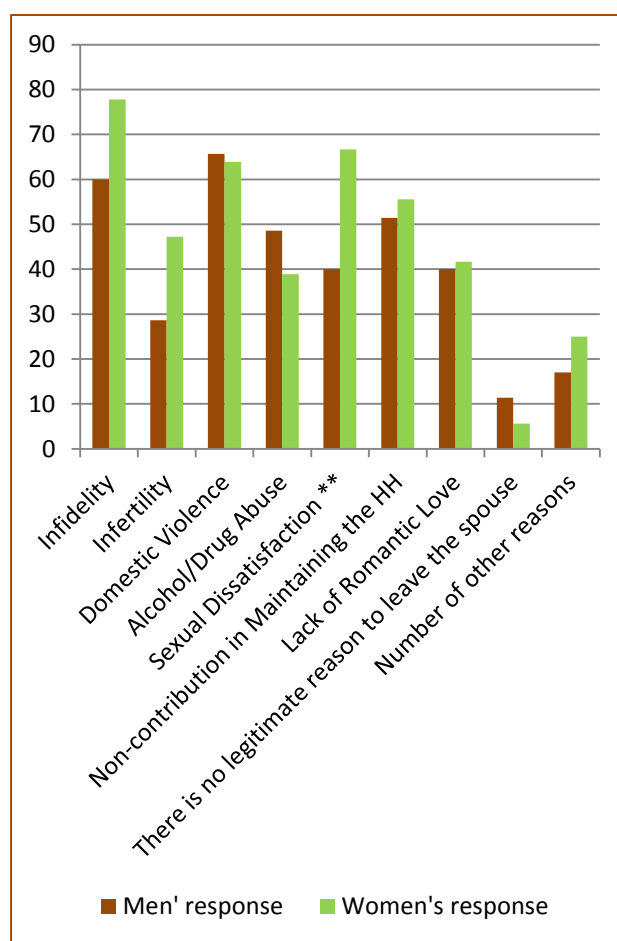


Figure 6: Agreement Rates for Wife leaving Husband (qu. 26), Comparing Sexes

Women grant men considerably more reasons to leave their wives than men grant themselves. This is true for infidelity and infertility on side of the wife and sexual dissatisfaction on side of the husband. On all other dimension (except contributing to the Household) women seem to possess also the tendency to grant their husbands greater

freedom, but these differences remain statistically insignificant. Not a single women considered the connection between man and women sacred enough, the man never to go. When it comes to the wife leaving the husband, both sexes have more conciliatory views. Infidelity seems to have the biggest impact for women to dump her husband. On second place is sexual satisfaction. However, this is the only dimension, in which both sexes heavily disagree and women demanding more rights in their sexual fulfillment, than men want to grant them. It is also the only instance that women put higher value on their own demands, than men concede.

The two following two charts depict the different perception on whether the husband leaves or the wife leaves within a certain sex.

Figure 7 nicely illustrates, that men on average do not differ much in the rights and duties they put forward to the partners in a relationship. Only in maintaining the household, they

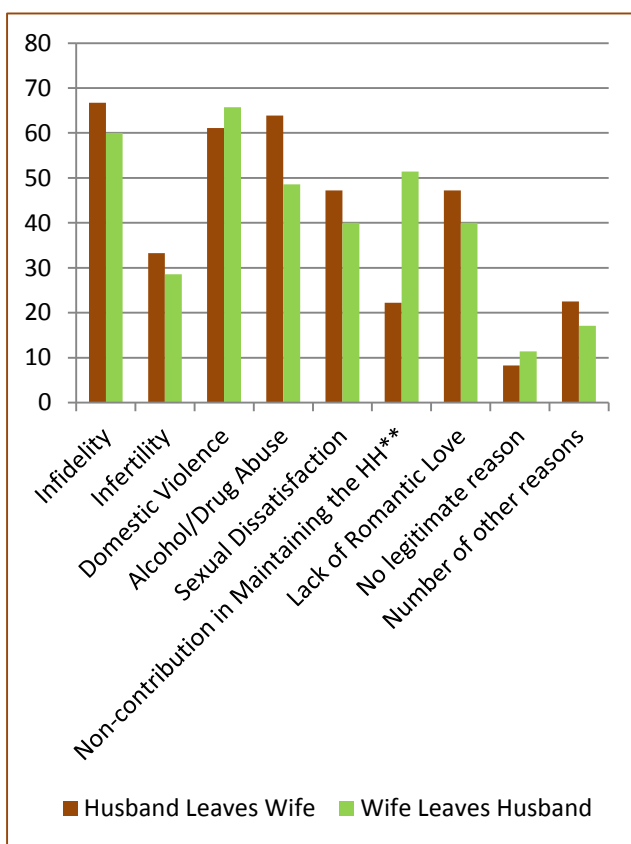


Figure 7: Male Perception of Dismissing Behavior, Comparing Husband Leaving Wife (qu. 25) and Wife Leaving Husband (qu. 26)

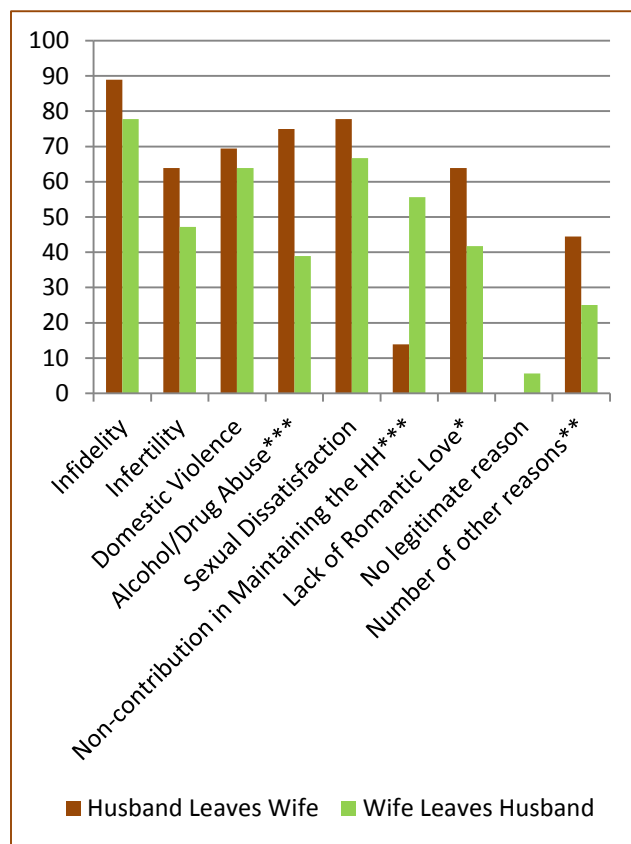


Figure 8: Female Perception of Dismissing Behavior, Comparing Husband Leaving Wife (qu. 25) and Wife Leaving Husband (qu. 26)

consider themselves in charge and consider the reaction of a woman by leaving her husband legitimate.

Figure 8 shows that women are quick in accepting that if men are heavy drinkers, their wives have to accept that. The other way around, however, men do not have to accept an alcoholic wife. Even more pronounced than in men, is their perception that the husband is the provider and has to act accordingly. Women were, in addition, more successful in amassing extra reasons for a husband to leave, than for a women to leave. In addition, comparing Fig. 7 and Fig. 8, one can observe, that women are far more willing to accept or to come up with a reason for a spouse to leave its partner, than men are. Men score on average 45.96%, Women score on average 57.48%. This difference holds true for Husband leaving Wife (46.56% vs. 62.16%) and Wife leaving Husband (45.36% vs. 52.8%).

Within couples

The next possible angle from which to analyze the data is from a within couple view. So far we compared the opinions collapsed over all women and compared them with average collapsed of all men. Now we look for differences within couples. So the comparison process is altered. However, also the absolute means differ from the previous view, because, data sets were removed in which not both spouses were interviewed (i.e. the data sets including the 8 male children and their mothers). We will look on, how male and female views differ on certain dumping behavior.

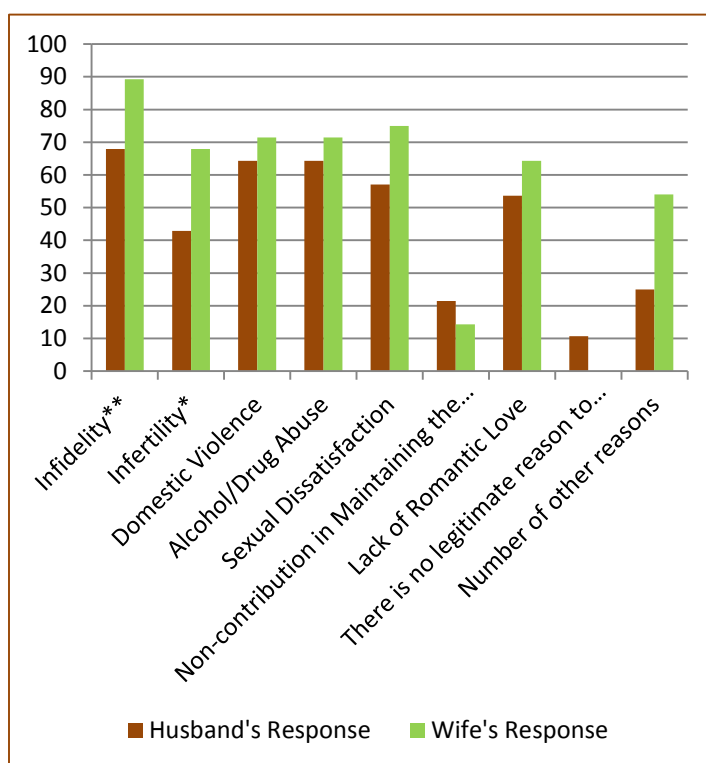


Figure 9: Agreement Rates for Husband leaving Wife (qu. 25), Comparing Husband and Wife

Figure 9 shows us, that husband and wives systematically seem to differ in their perception, whether husband can leave after the wife has cheated on him. Again, wives grant their husbands greater freedom than they do themselves. Marginally different are couples in their view on infertility and whether there are reasons at all for a husband to leave. Compared with Figure 5, it seems opinions converge, once woman and man become wife and husband. This holds especially true with sexual dissatisfaction. Either, men and women seem to choose their partners that are morally

alike, or both converge to similar attitudes over time. Two different hypotheses that needed to be tested.

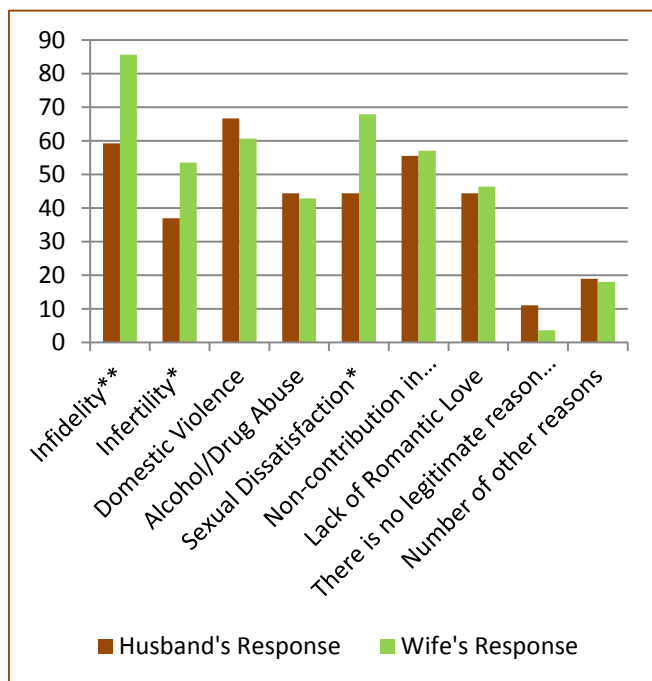


Figure 6: Agreement Rates for Wife leaving Husband (qu. 26), Comparing Husband and Wife

In comparison to Figure 6, we can see one striking development. Once we compare husband and wife directly with each other, differences over the perception of male cheating behavior change. Wives seem to be systematically less lenient about accepting their husbands cheating behavior, than when we compare the total averages with each other. Women might agree with men on male promiscuity in general, but opinions polarize, when it comes to their own relationship. (Note this change in significance is not due to the exclusion of the 8 households. An independent t-

test without the 8 households revealed also no statistical significance.)

Perception differences within individuals are not further examined at this point.

From the available data, I developed a dimension that captures all opinions of an individual and puts it into one number. For every individual I computed the total number it considers legitimate for a husband to leave his wife (counting all ticks in question 25 + the number of personally added reasons) and the total number it considers legitimate for a wife to leave her husband (all counting all ticks in question 26 + the number of personally added reasons). By subtracting the latter from the former, a measure is constituted, that is called "freedom of man". If this value is zero, that person is considered to have an egalitarian view on the rights on men and women. The more positive it gets, the more freedom it grants to men, the more negative it gets, the more freedom it grants to women.

The grand mean of that score is .56. Since it is significantly different from 0 ($t(70) = 2.265$, $p = .027$) it is safe to say, there is an attitude among the population, that favors the freedom of the male population.

Splitting the sample along the sex fault reveals an interesting result. Whereas men score a mere .11 ($t(34) = .38$, $p = .71$), women score exactly 1.00 ($t(35) = 2.6$, $p = .013$). This finding is line with previous results that women tend to concede men more freedom than they themselves. The difference between both sexes is marginally significant ($t(69) = -1.81$, $p = .075$). Any difference vanishes, when we compare spouses directly with each other (paired t –test: $t(26) = -.965$, $p = .343$).

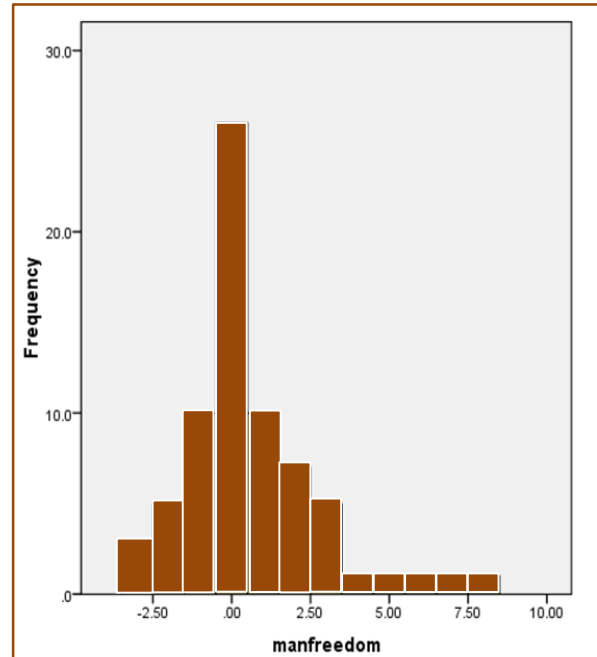


Figure 7: Freedom of Man

27. 45 persons (62.5%, 95%CI[51%-74%]) provided one or more reasons for why a husband could legitimately beat his wife. Since the question was formulated in a way, that it took explicit objection to the implication that there are reasons, we can consider the 37.5% of the people that spoke themselves explicitly out against a husband beating his wife as the lower bound. Possibly, some participants might have felt obliged to the implication of the question and provided reasons, simply they did not consider or dare to object. There was no difference between men and women in the reaction to this question (69.4% vs 55.6%, $p = .229$). There is a hint, however, that within couples, there might exist disagreement over this issue, with being the difference marginal significantly different: $p = .096$. The actual answers were not subjected to qualitative analysis, however, at this point some examples shall be provided: infidelity, disobedience (“this is my house”), irresponsibility, miscommunication, “if there is beating, there is no fighting”, “to silence the wife”, lack of romantic love, use of abusive language, “if he has other wives and he has no interest in her anymore”.

28. 88.9% of all participants report to never drink alcohol, 5.6% report to drink alcohol once per week, 2.8% report to drink twice a week, 1.4% to drink three times a week and 1.4% reports to drink every day. Given sensible smell of alcohol during the interview for some interviewees, the correctness of the responses in general can be highly doubted. Social desirability bias

might have lead many participants to deny any alcohol consumption. This statistic, therefore, renders almost unusable.

29. Of all given responses (5 participants did not respond), 77.6% agreed that on the decision of having another child, both wife and husband are involved. 10.7% reported, the decision lies solely with the husband and 2.8% reported the decision lies solely with the wife. 9.0% have the opinion, having another child affords no decision making process in the first place: it just happens. Men and women do not differ significantly in their opinions.

30. From the histogram in Figure 8 it gets clear, that almost half of women breast feed their children around 2 years. The average is 20.58 months. The question, however did not further specify, whether it was exclusive or inclusive. Wording, therefore should be improved in future.

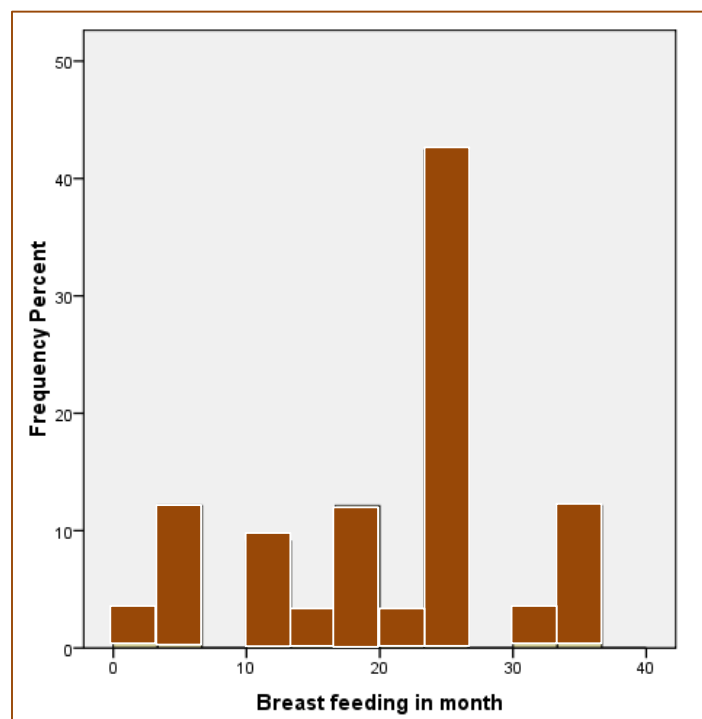


Figure 8: Breast feeding in months

31. Of all participants, Family Planning issues applied for, following responses were provided:

| Condom | Pill | Implant | Injection | Other (i.e. Cull Abstain) | No Family Planning |
|--------|------|---------|-----------|---------------------------|--------------------|
| 4.2% | 6.2% | 14.6% | 35.4% | 4.2% | 35.4% |

32. The HIV-status were reported as in Table :

| | |
|--------------------|-------|
| HIV - | 83.3% |
| HIV + | 4.2% |
| Do not know | 12.5% |

Table 6: HIV status

Due to social desirability bias, people, that reported not to know their status, are more likely to be HIV + than the overall population. Kasavai has its own HIV/AIDS Support Group with bi-monthly meetings and regular and high turnout of its members. One of its biggest problems is to

establish income generating activities. Though a poultry keeping project is already been done, it leaves too little revenues. Though situation improved since 2008, social discrimination is a viable problem. Kasavai villagers are well aware about incurability of HIV

(see question 33.), but seem not to have learnt a respectful and appropriate treatment of their fellow HIV positive neighbors. Fear of disclosure drives some Kasavaian to attend support groups in different villages and seek treatments in different hospitals, but Iguhu hospital. Assistance is required for orphans in the OVC (orphans and vulnerable children) program, as well as periods, when opportunistic diseases strike and the bread winner of the family might be incapacitated to provide for its family, but rather needs help for its own. These information obtained through communication with the local HIV/AIDS support group.

33. Generally, people in Kasavai are well aware, that there is no known cure for HIV/AIDS. 90.3% reported that according to their knowledge. The remaining 9.7% may either be not aware of the incurability of HIV/AIDS or they may have confused the word “cure” with the word “treat” and reported, ARV’s are a cure for HIV/AIDS (4.2%). One person is convinced, prayers are an effective cure against HIV/AIDS and two persons reported herbal medicine to be a remedy.

34. The following pattern for religious affiliation is discernible:

| | |
|---|-------|
| Roman-Catholic | 12.5% |
| Protestant | 51.4% |
| Other Christian Denomination | 33.3% |
| Traditionalist/Indigenous Belief | 2.8% |

Table 7: Religious affiliation

These numbers, however, should be considered with caution. Not always a clear line between “Protestant” and “Other Christian Denomination” was kept. Instead of providing options of Muslim and

Hinduism, a clearer disentanglement of “other Christian Denomination” could be provided. In addition, I want to stress, that the specific affiliation to a certain religious group was never really in the focus of interest, the question rather served as introduction to the topic not to take the participant off their guards with the following questions.

35. The frequency of prayers is thought to deliver a measure for intensity of faith, due to social desirability bias and low variability its suitability, however, is questionable. The average is 2.53 prayers, with the mode on 2 prayers per day.

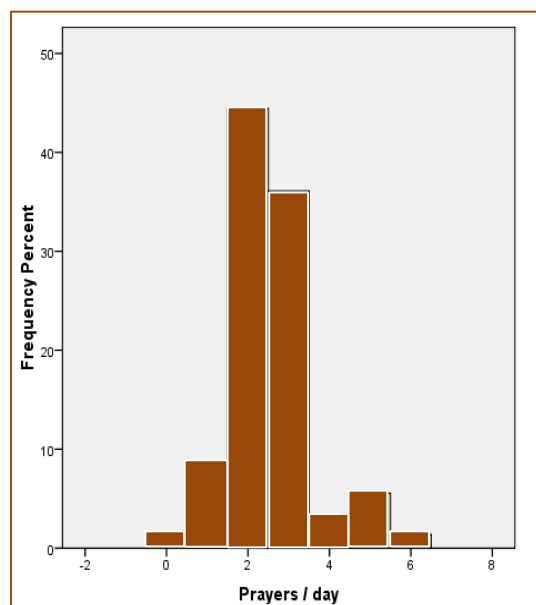


Figure 9: Frequency of Prayers

36. This question was the final question, the previous two were leading to. In a disguised fashion, this enquire was attempting to query the prevalence of belief in black magic and witchcraft. Instead of directly asking “Do you believe in it”, we were trying to deconstruct inhibitions to admit to it by phrasing the question in a more practical manner. Option 2 and 3 are not mutually exclusive, however, this poses no serious threat to validity, since differences in option 1, 2, 3 are irrelevant, because each of them necessitates belief in the existence of black magic and witchcraft. Only option Nr. 4 indicates that the respondent does not believe in its existence. Following statistics were obtained:

| | |
|---|-------|
| Yes, it can strike on you any time and everybody needs to be always vigilant. | 11.1% |
| Yes, but as long as you are not actively involved with it, it poses no serious threat. | 37.5% |
| No, not really, but there are people, who are capable of black magic and witchcraft. | 25.0% |
| No, because black magic and witchcraft simply does not exist. | 26.4% |

Table 8: Belief in witchcraft

This data suggests, that about 73.4% of all people in Kasavai believe in the existence of black magic and witchcraft.

37. This question and the following one provided opportunity for the participants to individually voice their concerns about problems and issues they consider the biggest problem in developing the village (37.) and about their personal ideas, visions and dreams, what they desire the village to look like in future or what the people should be enabled to do(38.).

The answers in generally, could be categorized into certain topics of answers, reported in table 9 and 10 according to frequency.

Further comments made by few participants: infertile lands, high rate of orphans, lack of perspectives,

| | male | female |
|--------------------------------------|------|--------|
| Lack of cooperation/unity: | 14 | 21 |
| Poverty | 14 | 17 |
| Poor education: | 19 | 11 |
| Alcohol, Idleness: | 12 | 9 |
| Poor Management, Corruption | 10 | 8 |
| Security: | 8 | 8 |
| Unemployment | 8 | 1 |
| Malevolence: | 2 | 4 |
| No Sense of Entrepreneurship: | 4 | 1 |
| Too little land | 3 | 2 |

Table 9: Problems identified by villagers

witchcraft, erroneous belief in witchcraft, fear of taking loans, poor health, poor farming methods.

38. Table 10 shows the most frequent answers, what people seek to be improved in their village:

Further ideas and aspirations provided by the participants: role model of certain people, provision of fertilizers, self-employment rather than casual work, internet access-availability of computers, art and decoration in the village, football field (for improved social cohesion), greenhouse and horticulture, Common Interest

| | male | female |
|---|------|--------|
| Extension of School facilities (including opening of Sec. School, Polytechnic, Adult Education, etc.) | 26 | 26 |
| Improvement of Market Facilities (Place where to offer homegrown crops and also to purchase more diverse offer of products: extension of already existing market or opening of Supermarket): | 6 | 13 |
| Health Facilities (improvement of existing facilities in Iguhu (better provision of medication better access), provision of health care in Kasavai, some people can barely afford trip to Iguhu): | 9 | 6 |
| Clean piped Water | 5 | 10 |
| Irrigation Project (access to ongoing project, initiation of new one): | 5 | 8 |
| Farming Projects (Group of people doing poultry farming etc. under professional tutelage, possibly fusion with adult education) | 8 | 5 |
| Electrification of the village | 3 | 9 |
| More Adult Education | 2 | 3 |
| Improvement of Roads | 4 | 1 |

Table 10: Visions for the village

Groups (CIG) and organizational leadership skills, petrol station, more loans available, improved security (e.g. evidence based police work), overcoming tribalism and clanships, retirement home for elderly, promotion of healthy lifestyle, availability of tractors, creation of fish ponds, at last one peculiar comment: “everything is just fine!”

VII. Agriculture

39. Precisely 50% of female participants considered the amount of annual rain to be sufficient.

The other 50% thought, it was too little for proper agriculture.

40. Only one out of 36 participants (2.78%) made use of the irrigation project that has been implemented by the government a few years ago.

41. Since virtually nobody makes use of the irrigation project, experiences with it are also limited. One participant said, there was too little water provided, and another said, it was not open to every villager.

42. We found following distribution of crops, which were planted by the households. The y-axis is in percent of the surveyed households⁵.

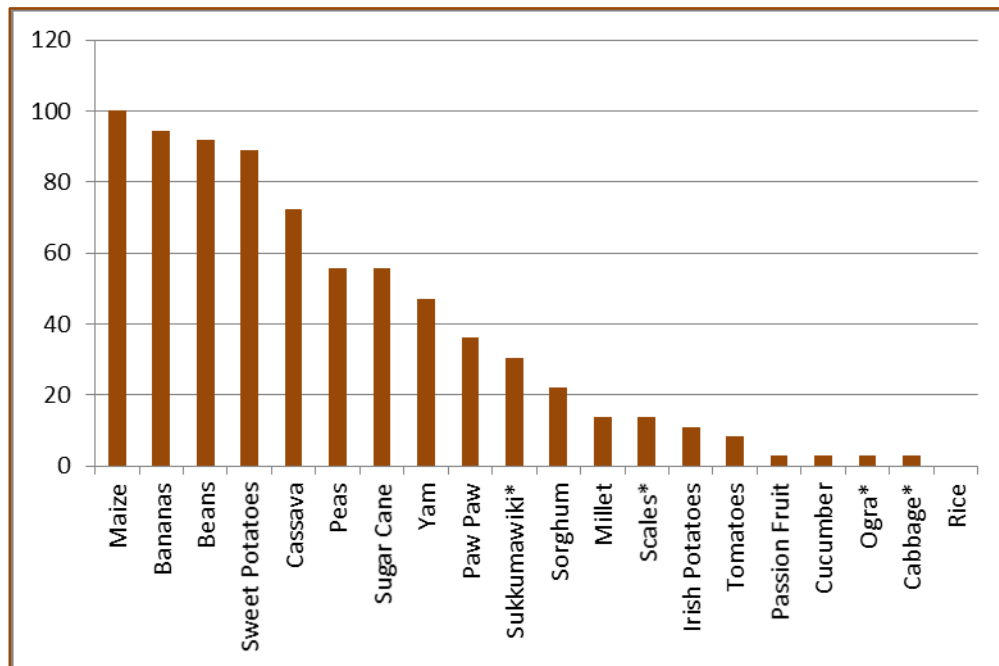


Figure 10: Crops grown in Kasavai

43. Question has been dropped due to redundancy.

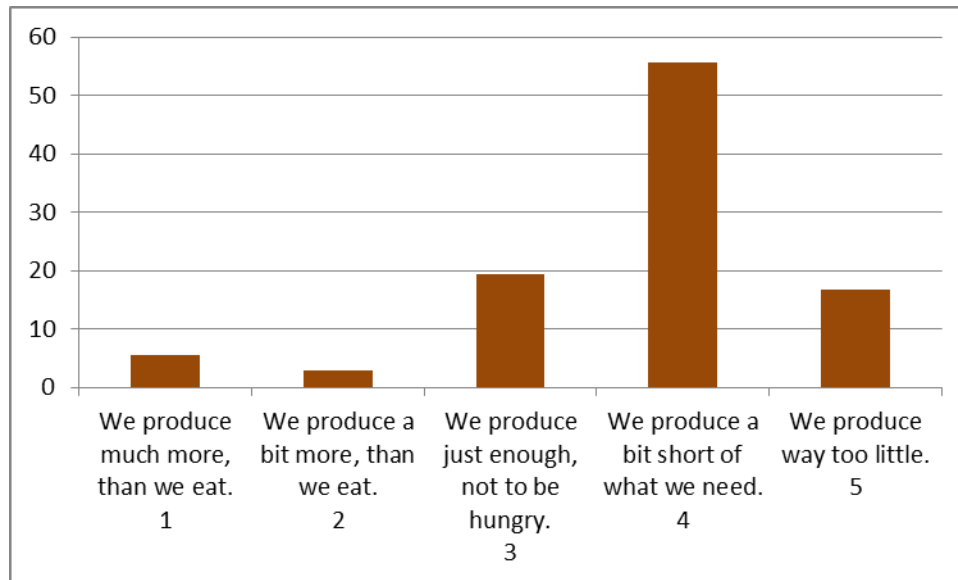
44. Out of 24 households (66.7%) that reported to sell some of their crops, following marketing patterns have emerged:

- Maize by 10 households
- Sukumawiki by 9 households
- Peas, Bananas, Sweet Potatoes by 7 households each
- Beans by 5 households
- Sugar Cane by 4 households
- Millet, Yam, Scales by 2 households each and
- Cabage, Cassava, Sorghum, Pumpkin, Ogra, Tea by one household each.

45. Market destinations were mainly regional. 58.3% sell their products within Kasavai. 37.5% sell their products within Kakamega and Vihiga County (mostly Chavakali). One participant reported to sell her products in other counties of Kenya. To sell the products outside of Kasavai still implied, that that those products were also traded within Kasavai.

46. Self-perception of food sufficiency produced following outcome:

⁵ * means, that these crops were not asked by default, rather were named by participants among "other".



The mean value is 3.75 with a 99% CI of 3.31 to 4.19. This result is clear evidence, that the people in Kasavai consider their food production not enough to be not hungry.

47. Resentment to drought resistant crops was very limited. However, we were able to elicit some objections. Those include: birds would eat the seeds, the mole destroys the roots, bacteria destroy the fruit, soil is not fertile enough, land is limited and the fruits are disliked by children.
48. Exactly 25% of all households were using Farmyard Manure, another 25% used Commercial Fertilizers and the remaining 50% utilized both products on their fields.
49. 52.8% consider Farmyard manure the more effective fertilizer, whereas 16.7% consider Commercial Fertilizer the product of favored use. 30.6% wouldn't have an opinion over this issue. The question arising at this point is, whether there is incongruent patterns between convictions and behavior. Assuming, that having an indifferent opinion about fertilizer's affectivity and using only one of both is not an incongruent behavior and that using both fertilizers and having an expressed opinion about advantages of one of both is also not an incongruent behavior, we are left with 5 out of 36 households(13.9%), that do not act according to their conviction. 4 participants reported to prefer Farmyard manure but use exclusively farmyard manure and one participant reported to prefer commercial fertilizer but was left with using exclusively farmyard manure.
50. 1.94 (SD = 1.14ppl) members of a household (>14 years) work at least once a week on the field. That are 65.52% (SD = 29.2%) of all family members 15 years and above.
51. 1.03 (SD = .57ppl) female members of a household (>14 years) work at least once per week on the field. In direct comparison, they provide 58.1% of each households agriculture workforce. This value is not significantly different from 50% ($t(33) = 1.577, p = .124$).

Considering a true value of 50.69% female members of 15 years and above in each household, the insignificance of difference in agriculture workforce further increases to: $p = .159$. Hence, no evidence for unequal involvement in fieldwork was found.

52. An overwhelming 91.4% prepare their land by hand. 2.9% use animal workforce such as oxen and 5.7% employ some form of motorized workforce, such as tractors.

53. Not a single participant received any support by the Kenyan government.

Annex I: Questionnaire Baseline Study 2014

Personal Details

1. How old are you? _____years

2. Are you the head of your household?

| | |
|-----------------------|-----|
| <input type="radio"/> | Yes |
| <input type="radio"/> | No |

3. If you are not head of household what is your relationship to the Head of Household?

| | |
|-----------------------|-----------------|
| <input type="radio"/> | Spouse |
| <input type="radio"/> | Parent |
| <input type="radio"/> | Sibling |
| <input type="radio"/> | Cousin |
| <input type="radio"/> | Other, specify: |

4. How many people (including you) in your household are 15 years and above?
_____people

5. How many people in your household are below 15 years? _____people

6. How many females in your household are 15 years and above? _____females

7. How many females in your household are below 15 years? _____females

8ma. Do you regularly work on the field?

| | |
|-----------------------|-----|
| <input type="radio"/> | Yes |
| <input type="radio"/> | No |

8mb. If you ticked "Yes" in 8ma., how often do you work on the field?

| | | | |
|-----------------------|------------------|-----------------------|-----------------------|
| <input type="radio"/> | On a daily basis | <input type="radio"/> | Twice or more a week |
| <input type="radio"/> | Once a week | <input type="radio"/> | Less than once a week |

Income

9. Have you been continuously working in one paid employment throughout the past 6 month?

| | |
|-----------------------|-----|
| <input type="radio"/> | Yes |
| <input type="radio"/> | No |

10. If you answered question 9 with No:

In the past 6 month, were you once or more employed in a paid job for less than 4 weeks at a time?

| | |
|-----------------------|-----|
| <input type="radio"/> | Yes |
| <input type="radio"/> | No |

If you answered question 9 and 10 with “No”, please proceed with question 13.

11. What have you been doing you?

12. How did you get to know about this job? _____

13. How much do you earn in your job per week?

| | | | |
|-----------------------|-----------------|-----------------------|----------------|
| <input type="radio"/> | 1 – 200 Ksh | <input type="radio"/> | 201 – 400 Ksh |
| <input type="radio"/> | 401 – 600 Ksh | <input type="radio"/> | 601 – 1000 Ksh |
| <input type="radio"/> | 1001 – 1500 Ksh | <input type="radio"/> | > 1500 Ksh |

14. What other source of income do you have?

| | | | |
|-----------------------|-----------------------------|-----------------------|-----------------------------|
| <input type="radio"/> | Salary/Wages | <input type="radio"/> | Pension/Social Welfare |
| <input type="radio"/> | Scholarship/Sponsorship | <input type="radio"/> | Profit from Trading/Selling |
| <input type="radio"/> | Support from Family Members | <input type="radio"/> | Others: |
| <input type="radio"/> | None | | |

15. Do you have problems to cover one or more of the following basic needs with your monthly income?

| | |
|-----------------------|--------------------------------------|
| <input type="radio"/> | Food |
| <input type="radio"/> | Housing |
| <input type="radio"/> | Clothing |
| <input type="radio"/> | School fees |
| <input type="radio"/> | Medical bills |
| <input type="radio"/> | No problems to cover any basic needs |

Education

16. How do you rate your Reading and Writing ability? Please indicate on the following scale that

ranges from 1 (illiterate) to 5 (excellent) your Reading and Writing ability.

1 _____ 2 _____ 3 _____ 4 _____ 5

illiterate | | able with limitations | | excellent

○ ○ ○ ○ ○

17. What is your highest level of education?

| | Drop out | Graduated |
|----------------------|-----------------------|-----------------------|
| Primary School | <input type="radio"/> | <input type="radio"/> |
| Secondary School | <input type="radio"/> | <input type="radio"/> |
| Certificate, specify | | |
| | <input type="radio"/> | <input type="radio"/> |
| Diploma | <input type="radio"/> | <input type="radio"/> |
| Bachelor | <input type="radio"/> | <input type="radio"/> |
| Master | <input type="radio"/> | <input type="radio"/> |
| PhD | <input type="radio"/> | <input type="radio"/> |
| Professor | <input type="radio"/> | <input type="radio"/> |
| None | <input type="radio"/> | |

18. If you dropped out of any of the above, please specify the reason(s):

19. How do you raise the money for school fees for Secondary School for your kids? Maximal 3 choices possible.

| | |
|-----------------------|-------------------------|
| <input type="radio"/> | Savings |
| <input type="radio"/> | Scholarship/Sponsorship |
| <input type="radio"/> | Support from relatives |
| <input type="radio"/> | Taking a loan |
| <input type="radio"/> | Working |
| <input type="radio"/> | Other, specify: |

20. Do you work in your field of educational expertise?

| | |
|-----------------------|----------------|
| <input type="radio"/> | Yes |
| <input type="radio"/> | No |
| <input type="radio"/> | Sometimes |
| <input type="radio"/> | Does not apply |

Health and Food

21. How do you rate your Health? Please indicate on the following scale that ranges from 1 (very

poor) to 5 (very good) your own health.

1 _____ 2 _____ 3 _____ 4 _____ 5

very poor | poor | average | good | very good

22. How frequent do you go for medical check-up?

23. How many meals do you eat per day on average?

24. What do you eat? Please name the 3 most eaten meals:

25. What are legitimate reasons for a husband to leave his wife? Multiple ticking possible

| | |
|-----------------------|---|
| <input type="radio"/> | Infidelity (i.e. to cheat on the partner) |
| <input type="radio"/> | Infertility |
| <input type="radio"/> | Domestic Violence (beating, abuse, etc.) |
| <input type="radio"/> | Alcohol/Drug Abuse |
| <input type="radio"/> | Non-fulfillment of sexual desire |
| <input type="radio"/> | Partner does not provide contribution in maintaining the HH |
| <input type="radio"/> | Lack of romantic love |
| <input type="radio"/> | There is no legitimate reason to leave his wife. |
| <input type="radio"/> | Others, specify |

26. What are legitimate reasons for a wife to leave her husband? Multiple ticking possible

| | |
|-----------------------|---|
| <input type="radio"/> | Infidelity (i.e. to cheat on the partner) |
| <input type="radio"/> | Infertility |
| <input type="radio"/> | Domestic Violence (beating, abuse, etc.) |

| | |
|-----------------------|---|
| <input type="radio"/> | Alcohol/Drug Abuse |
| <input type="radio"/> | Non-fulfillment of sexual desire |
| <input type="radio"/> | Partner does not provide contribution in maintaining the HH |
| <input type="radio"/> | Lack of romantic love |
| <input type="radio"/> | There is no legitimate reason to leave her husband. |
| <input type="radio"/> | Others, specify |

27. In your own opinion, what reasons are morally justified, for a husband to beat his wife?

28. How many times do you drink alcohol per week?

29. Who decides on having another child?

| | |
|-----------------------|-------------------------|
| <input type="radio"/> | Husband |
| <input type="radio"/> | Wife |
| <input type="radio"/> | Both |
| <input type="radio"/> | Somebody else, specify: |
| <input type="radio"/> | It just happens |

31. Do you and your partner use currently any family planning methods?

| | |
|-----------------------|---|
| <input type="radio"/> | Condom |
| <input type="radio"/> | Pill |
| <input type="radio"/> | Implant |
| <input type="radio"/> | Injections |
| <input type="radio"/> | Sterilization |
| <input type="radio"/> | Other, specify: |
| <input type="radio"/> | We do not use family planning methods |
| <input type="radio"/> | Does not apply (Menopause, too young, etc.) |

32. What is your HIV-status?

| | |
|-----------------------|-----------------------------|
| <input type="radio"/> | HIV negative (HIV -) |
| <input type="radio"/> | HIV positive (HIV +) |
| <input type="radio"/> | I do not want to disclose |
| <input type="radio"/> | I do not know my HIV status |

33. HIV/AIDS can be cured by...

| | |
|-----------------------|---------------------------------|
| <input type="radio"/> | Herbal medicine |
| <input type="radio"/> | Having sex with a virgin |
| <input type="radio"/> | Anti-Retroviral Treatment (ARV) |
| <input type="radio"/> | Intense Prayers |
| <input type="radio"/> | Witchcraft |
| <input type="radio"/> | Antibiotics |
| <input type="radio"/> | HIV/AIDS is not curable. |

Religion

34. What religion do you follow?

| | |
|-----------------------|----------------------------------|
| <input type="radio"/> | Roman-Catholic |
| <input type="radio"/> | Protestant |
| <input type="radio"/> | Other Christian Denomination |
| <input type="radio"/> | Muslim |
| <input type="radio"/> | Hinduism |
| <input type="radio"/> | Traditionalist/Indigenous belief |
| <input type="radio"/> | Do not follow a religion |
| <input type="radio"/> | Other, specify |
| <input type="radio"/> | |

35. How many times do you pray per day on average?

36. Do you consider dark magic or witchcraft a threat to you and your family?

| | |
|-----------------------|--|
| <input type="radio"/> | Yes, it can strike on you any time and everybody needs to be always vigilant. |
| <input type="radio"/> | Yes, but as long as you are not actively involved with it, it poses no serious threat. |
| <input type="radio"/> | No, not really, but there are people, who are capable of black magic and witchcraft |
| <input type="radio"/> | No, because black magic and witchcraft simply does not exist. |

Development in Kasavai

37. In your perception, what is the main obstacle in developing the village?

38. What is your personal vision for the future of the village?

39. Is Rain enough and reliable throughout the year?

- yes no

40. Do you make use of the Irrigation Project?

- yes no

If you ticked No, please proceed with Question 42.

41. What are your experiences with the Irrigation Project? Please give a concise answer in 2- 4 sentences:

42. What crops do you plant? Multiple ticking possible:

- | | | |
|--|--------------------------------------|--------------------------------------|
| <input type="radio"/> Maize | <input type="radio"/> Sweet Potatoes | <input type="radio"/> Irish Potatoes |
| <input type="radio"/> Bananas | <input type="radio"/> Yam | <input type="radio"/> Sugar Cane |
| <input type="radio"/> Casava | <input type="radio"/> Rice | <input type="radio"/> Beans |
| <input type="radio"/> Cucumber | <input type="radio"/> tomatoes | <input type="radio"/> Popo |
| <input type="radio"/> others, specify _____ | | |

43. Which of the in question 42 indicated crops do you produce for own consumption?

44. Which of the in question 42 indicated crops do you produce for selling?

If you left question 44 blank, please proceed with question 47.

45. What are the destination markets of your crops?

- Kasavai and neighboring villages
- other Regions in Kenya
- Africa (outside from Kenya)
- outside of Africa

46. Which of these markets is the most profitable one for you:

47. Do you make use of green fertilizers, farmyard manures, or both?

- Green Fertilizer

Farmyard Manures

Both

48. If you use both, which of both usually yields best, green fertilizers or farmyard manures?

Green Fertilizer

Farmyard Manures

I don't know.

49. Where do you buy your crops? (e.g. Monsanto)

50. How many members of your household work on the field on a regular basis?

_____members

51. How many female members of your household work on the field on a regular basis?

_____female members

52. What technical devices do you use during your field work? Please name the 5 most used devices:

53. Did you receive any governmental support?

Annex II: Informed consent

This study is conducted by the Kasavai Community Development Initiative (KCDI). Its objective is to gain an overview of important social and economic determinants of the people living in Kasavai/Kenya, in order to optimize the planning and implementation of future developmental projects. It takes about 30 minutes to completely fill in the questionnaire.

My participation in this study is entirely voluntary and I am aware, that I can refuse to answer any question, I am uncomfortable with or to withdraw from the study all together at any time. My data is treated confidentially and is exclusively used for the purpose of this study. The results of the study will be communicated back to the community of Kasavai. This happens in a way that all data is pooled and presented aggregated. It is impossible to trace back any data, hence my identity remains anonymous.

I strive to give answers that best reflect the true state of affairs, however, I am not liable for any answer that might deviate from the truth.

Hereby I declare my willingness to participate in the Kasavai Baseline Study 2014.

Date:

Place: Kasavai

Name of Participant:

Signature of Participant:

Name of Researcher: Jan Meyer

Signature of Researcher:

