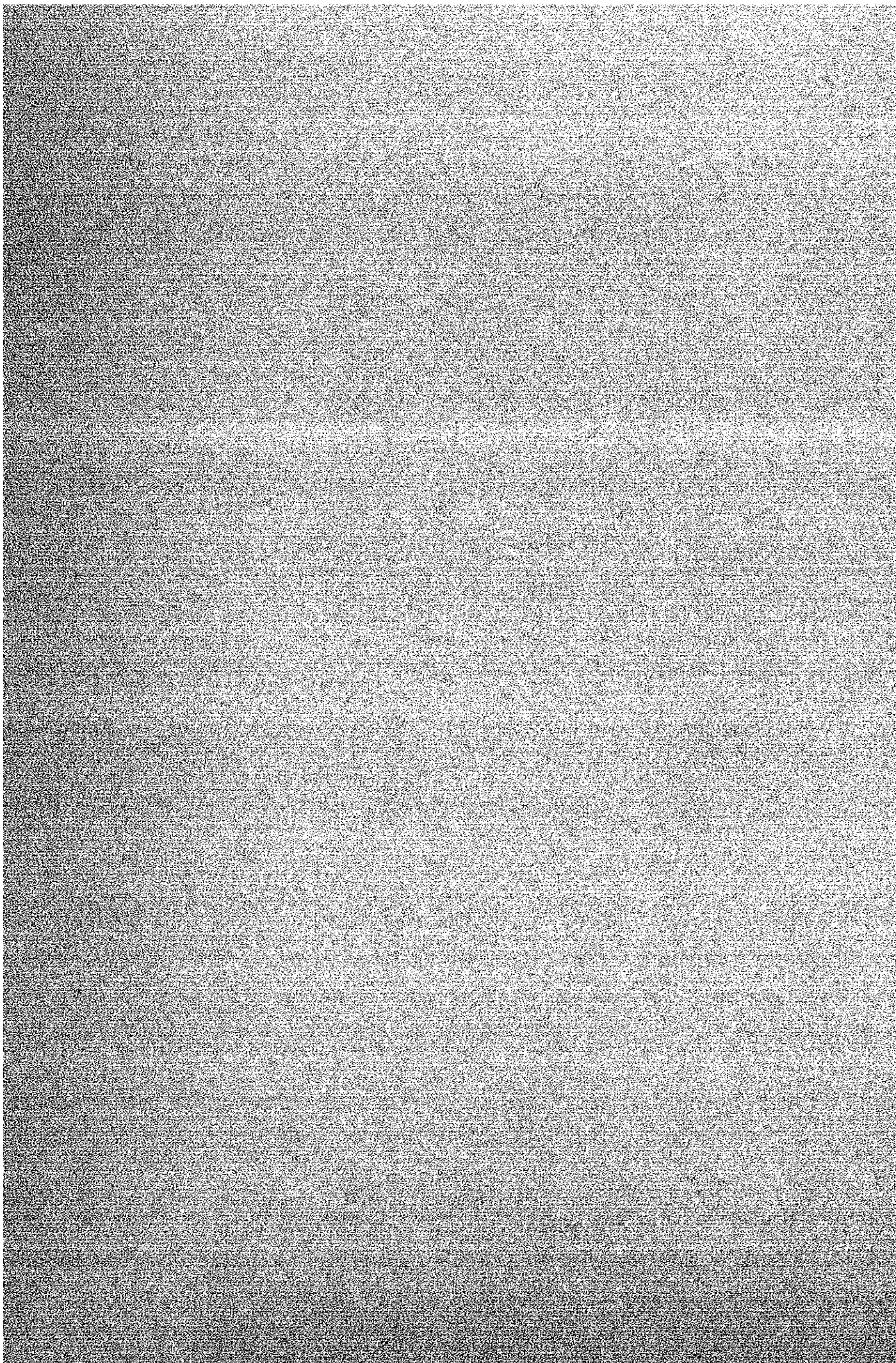# Chapter 4

ANALYSIS OF SURVEY RESULTS

CHAPTER 4 ANALYSIS OF SURVEY RESULTS

1. Characteristics of Household

(1) Population Distribution and Age Composition

The number of households surveyed was 1,593, and 3.2% of the total households in Kavrepalanchok, and 1,616 and 2.0% in Dhanusa.

The total population of the surveyed households was 8,820 and 2.9% of Kavrepalanchok entire population, and 8,427 and 1.9% of Dhanusa.

Table 4-1-1 shows sex ratio by age group (the ratio of males to 1,000 females). In both districts, the male ratio is higher than the female (Table 4-1-1).

In Kavrepalanchok, however, the sex ratio is 1,035 for the entire district while it is 939 for the surveyed area. That is, the female ratio is higher. By age group, for the age group between 0 and 14, and for the age group above 65, the male ratio is higher as it is for the entire population. However, for the productive age group of between 15 through 64, the female ratio is conversely higher. The people suveyed are those who were home one day prior to the survey and usually live with their families. Migration history was not included in the current study, but there is the possibility of single migration of males of productive age. In the case of Dhanusa, the sex ratio in the surveyed area almost exactly represents that of the entire district. In the age group over 65, the sex ratio is opposite that of the entire population. According to the 1985 estimation by CBS (Central Bureau of Statistics), life expectancy of female is shorter than that of male, that is, 53 years for males and 50 years for females in Nepal. Judging from this fact, it is reasonable that the male ratio is higher in the older age group.

Table 4-1-2 indicates population distribution by five year of age group. In both districts, there are fluctuations in some age groups but, on the whole, the population ratio of younger age groups is higher, which forms a typical mountain-shaped distribution. Population distribution in Dhanusa is more irregular than in Kavrepalanchok. The mountain-shaped distribution is often seen as a result of a continuation of a high birth rate and relatively low mortality rate. It is a type of population distribution often seen in developing nations or so-to-speak, population composition in a rapidly increasing population[1]. The ratio of the population age 0-4 is 15.1% in Kavrepalanchok and 15.2% in Dhanusa. Proportion of youth population (yourth population (0-14)/ total population x 100) are 40.2 and 40.7, respectively, while youth population ratio to working population (youth population (0-14)/working population x 100) are 80.4 and 74.6. These figures

are applicable in the range of a mountain shaped model. Due attention must be paid to the fact that the ratio of population age 0-4 is lower than the population age 5-9 in Dhanusa. The same distribution pattern is observed in the whole district. Whether this is an effect of a family planning program should be determined after completion of a time-series analysis of research since the ratio of population age 15-19 is similarly low.

Tables 4-1-3 and 4-1-4 show the population distribution in three age groups: youth, productive age and aging populations. The population composition of the surveyed households is almost equal to that of the entire district in both Kavrepalanchok and Dhanusa. However, in Kavrepalanchok, as seen in the general sex composition, the male-ratio in the productive-age population is lower than that of the entire district. As a general trend, the youth population ratio is high. (Tables 4-1-3, and 4-1-4)

(2) Marital Status

Table 4-1-5 shows marital status by age groups and sex in the surveyed districts. In this survey, questions on marital status were posed to people over 10 years of age. (Table 4-1-5)

The following factors influence fertility: average age at the first marriage, proportion remaining single, and proportion of divorced, widowed and remarried[2]. As shown in Table 4-1-5, the ratio of people having a spouse is already high in the population age 15-19. In Dhanusa, 74.9% of the total female population age 15-19 are married. In the same age group, the rates of widowed and separated women are 5.8% and 0.4% respectively. Thus, the proportion of marriage exceeds 80% in this age group. The high rate of population having spouses naturally leads to a high fertility rate. In the population age 20-24, as many as 97.9% females are married. The ratio of married women reaches its peak in the age group 30-35, and then gradually declines. Conversely, the ratio of widows increases. In contrast to females, the ratio of married men is higher in the older age groups. The ratio of married men is the highest in the 35-39 age group, and then starts to decline. However, the ratio of widowers does not increase as rapidly as in females. This is because, in addition to the fact that males get married older than females, incidence of widow remarriage is low and thus, the ratio of married women decreases and that of widows rapidly increases. Comparing Dhanusa with Kavrepalanchok, the ratio of married population is higher in Dhanusa. The average age of the first marriage is slightly older in Kavrepalanchok. These two factors influence the fertility of reproductive age women, which will be more closely examined later. Both districts show a tendency of universal marriage, which is commonly observed in Asia, and there are few people who never marry.

(3) Educational Level and Occupational Distribution

Tables 4-1-6 and 4-1-7 show the educational level and occupations of heads of households. Educational level is classified according to the years of schooling.

With respect to educational background of the head of household, 56.5% of respondents in Kavrepalanchok have attended school while 30.9% of them in Dhanusa had schooling. Comparing educational levels of the two districts according to educational experience in schools, it can be said that the educational level in Kavrepalanchok is higher than that of Dhanusa. However, in light of years of school attendance, those who have only one-year of schooling is 67.5% in Kavrepalanchok, and 55.6% in Dhanusa, and the ratio of householders who have more than two years of schooling shows a large drop. As already pointed out in Chapter 2-1, the drop-out rate is very high even though a modern educational system has been introduced.

With respect to occupational structure, its structure in the surveyed area is somewhat different from that of the entire districts in both Kavrepalanchok and Dhanusa. According to the 1981 Census, the ratio of those who are engaged in agriculture is very high: 93.3% in Kavrepalanchok; 80.5% in Dhanusa. In this survey, however, there is a marked trend that the ratio of population in the service industry is high although the majority is still engaged in agriculture.

Among those engaged in the service industry, those who have one-year of schooling represent 42% and those who have more than 10 years of schooling 36.4%. People who have higher educational backgrounds are public service workers, bank employees, and teachers while those with a lower level of educational background are domestic service employees such as drivers, watchmen, and porters.

On the other hand, Dhanusa shows a high proportion of labor population. According to the occupational classification for the purpose of coding, agricultural laborers are included in "agriculture" but the classification of agricultural wage laborer is not clearly defined. In this regard, future studies should more clearly define occupation categories.

(4) Environment of Public Health

Items which are included in the questionnaire in this field are source of drinking water and availability of latrine. In order to see the relationship between these factors and economic conditions, Table 4-1-8 tabulates survey results by using the size of land holding by the household. In Kavrepalanchok, households having land of 1-4 ropani show the highest percentage, while 27.4% of the households in Dhanusa do not possess land. The source of water supply seems to have no significant correlation with size of land holding. However, there are clear differences in the

sources of drinking water which are closely related to the geographical conditions of each district. That is, in Kavrepalanchok, reflecting its geographical features in the hills, springs, taps, and ponds are the major sources of water. In contrast, wells are most commonly used in Dhanusa. This survey did not specify whether households have individual water supplies or use public facilities. However, based on observations in the surveyed areas, most households are using public facilities. Spring water widely used in Kavrepalanchok is often hard water containing mica, and this seems to be a cause of disease in digestive organs.

In the case of Dhanusa where wells are the major sources of water, deep wells and shallow wells are not separated in this survey. However, this difference is important in terms of contamination problems. If a contaminant exists near a well, there is a danger that water would be polluted with hazardous contaminants and that it becomes a cause of infection and other diseases.

In Kavrepalanchok, no correlation was observed between size of landholding and availability of latrine. In Dhanusa, however, households which have a larger size of a land show a higher availability of latrine, that is, the availability of latrine seems to reflect economic conditions of the households.

2. Fertility

(1) Characteristics of the Eligible Women

Eligible women interviewed were 1,467 in Kavrepalanchok and 1,471 in Dhanusa (Table 4-2-1). Table 4-2-1 shows the age distribution of eligible women and their mean age. In this survey, eligible women interviewed were those who ordinarily live with their family and stayed at home the day before the survey and whose age was 15 to 49 years old. The results include, however, female under 14, those over 50, and those whose ages are unknown. The average number of eligible women is less than one per household. The average age of eligible women is younger in Kavrepalanchok than in Dhanusa, that is, 30.8 years old and 31.4 years old, respectively. As for age distribution, the population is concentrated in the 20-34 age group in both districts, but this proportion is higher in Dhanusa than in Kavrepalanchok. This difference in age composition is partly because in Kavrepalanchok, the population of eligible women includes 5.9% of the women who do not know their age.

Table 4-2-2 shows distribution of eligible women by educational attainment and age. The illiteracy rate is 87.2% in Kavrepalanchok and 92.5% in Dhanusa, with the educational level extremely low in both districts. However, comparing the educational level by age groups, literacy rate is higher in younger age group of both districts. It is especially high in the 15-19 age group. In contrast, the literacy rate is lower in the higher age group (Table 4-2-2).

The average age at marriage by educational level is shown in Table 4-2-3. The age at marriage is 15 to 16 in Kavrepalanchok, and 12 to 14 in Dhanusa. Mean duration of cohabitation, however, is longer in Dhanusa; that is, more than one year in Dhanusa and less than half a year in Kavrepalanchok. Therefore, the average age when a woman starts living with her spouse is 14 to 15 in Dhanusa (Table 4-2-3).

There is no correlation between marriage age and educational level. In Dhanusa, the age at marriage of women with education is the highest, but as for the age of actually starting to live together that of illiterate women is the highest, whose relationship reverses. Taking into consideration, however, that those who attended school are concentrated in the younger generation, and the overall rate of literate women is low, it is difficult to make clear the correlation between the age at marriage and educational level by only the results of this survey.

(2) Fertility

Figure 4-2-1 shows age specific marital fertility rate (ASMFR) by 5 year age group in Kavrepalanchok and Dhanusa. ASMFR is the number of births during a one-year period prior to this survey to 1,000 married women of a specific age group. Peak fertility is observed between ages of 20 and 29, decreasing slowly thereafter. Fertility is generally higher in Kavrepalanchok than in Dhanusa in every age group except the 45-49 age group (Figure 4-2-1).

Table 4-2-4 shows the mean number of children ever born by age of eligible women. The mean number of children ever born to eligible women of all ages is 3.0 in Kavrepalanchok and Dhanusa. The mean number of children ever born gradually increases by age. Age group 45-49 in Kavrepalanchok is an exception. In the 45-49 age group, whose chance of getting pregnant is probably quite low, ratio of eligible women never bearing children is 1.7% in Kavrepalanchok and 1.2% in Dhanusa. This means primary sterility is low in both districts (Table 4-2-4).

(3) Reproductive Intention

Table 4-2-5 shows mean number of currently living children and ideal number of children by educational level of eligible women. First, regarding the ideal number of children, women with education apparently want to have less children than illiterate women in Kavrepalanchok. Likewise, when comparing illiterate women with literate women in Dhanusa, the former want to have more children than the latter. Regarding the number of currently living children, women with education have less children than illiterate women in Kavrepalanchok. Contrarily, in the case of Dhanusa, literate women have more children than illiterate women. It should be carefully con-

sidered that the school-educated population is predominately the younger generation who have not completed their reproductive period. Taking this fact into account, it is difficult to attribute the difference in the number of children to the difference in educational level (Table 4-2-5).

The distribution of desired number of children by age groups is shown in Table 4-2-6. In Kavrepalanchok, mean number of children desired is less than in Dhanusa in every age group. The desired number of children differs according to a female's age. Mean number of children desired is less in younger age group and gradually increase by age. This is partly because the overall educational level is higher in the younger generation and, as discussed later, partly because attitudes toward family planning are changing in the younger generation. In Kavrepalanchok, three is the ideal number of children. Breaking it down, 69.4% of the eligible women want two sons and 63.7% want one daughter. In Dhanusa, 72.4% want two sons and 73.9% want one daughter (Table 4-2-6).

Tables 4-2-7 and 4-2-8 show additional number of children desired by number of living sons. As Tables show the desire for sons prevails in Kavrepalanchok and Dhanusa. Among women who do not have sons, 89.6% want sons in Kavrepalanchok and 88.7% want sons in Dhanusa. As the number of currently living sons increases, the mean number of additional children desired decreases. In Kavrepalanchok, 91.8% of those who currently have two sons do not want any more children. In Dhanusa, 89.9% of the respondents who have two sons do not want any more sons.

3. Family Planning

There are various factors which have an indirect influence on fertility changes: cultural, social, and economic. However, factors which have a direct effect on fertility are limited: fertility restraint effect of breast feeding, changes in marriage age, and family planning methods (including abortion). Today, these three factors are known as intermediate fertility variables. Of these, family planning methods are important when purposely trying to control fertility because it has the most direct and profound effect on restraining fertility. Therefore, in order to forecast future trends in birth rates and prepare appropriate guidelines and policies for family planning and maternal and child health projects, it is necessary to accurately grasp people's attitudes toward family planning. Accordingly, this section will analyze the general situation of family planning in Nepal.

First of all, people's awareness of family planning will be analyzed. In this survey, a total of 2,816 women were interviewed: 1,383 in Kavrepalanchok and 1,433 in Dhanusa. The ages of the women surveyed range from 15 to 49 (reproductive age), but actually several women not in that

age group were included. Excluding females who are not at reproductive age, the number of females who answered "Yes" to the question "Have you ever heard of family planning?" was 1,191 (89.5%) in Kavrepalanchok and 1,328 (92.7%) in Dhanusa. In both districts, about 90% of the females had heard of family planning, and it is obvious that the majority in both districts have some knowledge about family planning. Table 4-3-1 shows the distribution of respondents who have heard of family planning by age group and contraceptive method. The first noticeable trend is that male and femal sterilization are well known in both districts. Especially in Dhanusa, there is a high percentage of respondents who have heard of female sterilization (laparoscopy). Secondly, the knowledge they have about contraceptive methods is biased geographically. Male sterilization (vasectomy) and female sterilization are equally known in Kavrepalanchok, while laparoscopy is more commonly known in Dhanusa. Also of note is that the pill, IUD, and inject-able (depoprovera) are known better in Kavrepalanchok than in Dhanusa.

Based on the above analysis, a considerable proportion of the surveyed females have know-ledge about family planning and contraceptives in both Kavrepalanchok and Dhanusa, but the knowledge about contraceptive methods differs by the district they live. However, the biggest problem here is in the usage of family planning. The number of those ever used contraceptive measures was 325 in Kavrepalanchok and 341 in Dhanusa. This means that the ratio of those who have ever used a contraceptive method to those who have heard of family planning is 27% (325/ 1,191) in Kavrepalanchok and 26% (341/1,328) in Dhanusa. However, it should be noted that questions concerning contraceptive methods allowed multiple answers and it was possible for a respondent to name two or more contraceptive methods. Taking this into account, the ratio obtained here could be higher than the actual usage ratio.

Table 4-3-2 shows the distribution of contraceptive methods for those ever used any of the method by age group in each district. Based on these data, it is first pointed out that there is also a regional difference here, similar to the one pointed out above. More specifically, among the methods ever used, vasectomy is the most common method in Kavrepalanchok while female sterilization is the most popular in Dhanusa. People in Dhanusa are more dependent on laparo-scopy, while the percentage using the pill and injectable is higher in Kavrepalanchok than in Dhanusa. In short, the ratio of laparoscopy is outstandingly high in Dhanusa. The next salient feature is the age at which contraceptive methods are started. The ratio of vasectomy starts to increase in the 25-29 age group in Kavrepalanchok and the ratio of laparoscopy also starts in-creasing in the same age group.

The presnt state of the use of family planning will be examined next. Unfortunately, how-ever, there is some inconsistency in the survey data. As generally known, male and female sterli-zation is a permanent contraceptive method. Thus, a prior sterilization operation would have

been effective at the time of the survey. However, according to the data in the survey, the number of people who cited sterilization as a currently used contraceptive method is smaller than those who had a sterilization operation. Such statistical inconsistency occurs at the levels of field survey and coding. For example, cases have occurred where the respondents had answered "had sterilization operation in the past", but interviewers failed to mark "sterilization" as a currently used method. Such cases could not be checked at the stages of field research or coding. Therefore, this analysis will use the number of those who had a sterilization operation as a substitute variable for the number of people who currently use sterilization as a contraceptive measure.

After the above modification of the data, the ratio of those who currently use a contraceptive method to those who have heard of family planning is obtained: 22% (259/1,191) in Kavrepalanchok and 22% (294/1,328) in Dhanusa. Again, remember that the questionnaire allows choosing several contraceptive methods. These rates are higher than the actual usage rate. Table 4-3-3 indicates the distribution ratio of currently used contraceptive methods by respondents' ages in each district. According to this table, male and female sterilization have an overwhelming proportion in both Kavrepalanchok and Dhanusa. By district, the same characteristic as pointed out above can be seen. That is, the most popular method currently used is male sterilization in Kavrepalanchok while female sterilization is overwhelmingly popular in Dhanusa. By age group, the ratio of those who have a sterilization operation starts to increase in the 25-29 age group in both districts and the ratio of those who are not practicing family planning starts to decline in the same age group.

Table 4-3-4 tabulates the attitudes toward future use of family planning in the same manner as in Table 4-3-3. This table indicates an interesting fact. In Kavrepalanchok, the major contraceptive methods they plan to use in the future are male and female sterilization pills, and depoprovera. In Dhanusa, however, laparoscopy ranks first, vasectomy comes next, and pills are placed third. This is the same trend as previously pointed out.

Judging from the above, both in Kavrepalanchok and Dhanusa, there are not many cases in which family planning is practiced even though there are many people who have heard of it. The final analysis should be focused on the reasons for such a situation. Table 4-3-5 shows the reasons for not practicing family planning by age group. (Table 4-3-5) As shown in this table, in both districts the most common reasons cited by those who are over 15 up to 34 is "the desire for additional children." On the contrary, among those who are over 35, many respondents answerd "health reason," "religious reason," "husband's disapproval," "menopause," and "infertility". By district, "health reason" is more commonly found in Kavrepalanchok, and "religious reason" and "husband's disapproval" are frequently seen in Dhanusa. In both districts, "desire for daughters" is minimal. In contrast, many people answerd "desire for sons" in both districts. In

Kavrepalanchok, the percentage of people who want a son increases from 7.7% in the 15-19 age group to 30.9% in the 25-29 age group, and then rapidly drops to 6.0% in the 45-49 age group. In Dhanusa, the highest ratio of 28.3% is seen in the 25-29 age group, the same age group as in Kavrepalanchok. However, in Dhanusa, the "desire for sons" maintains the 10-20% level for every age group. According to these trends, it can be said that preference for sons is stronger in Dhanusa than in Kavrepalanchok. The social custom of preferring a son to a daughter has the effect of increasing fertility.

It should be noted here that "no contraceptive available" is more frequently observed in Kavrepalanchok than in Dhanusa. This seems to be related to the geographical differences in these districts; that is, hill area and Terai area. Then, it seems that the accessibility to contraceptives is more difficult in Kavreparanchok.

The relationship between the desire to have children and the use of family planning can be seen in Table 4-3-6 as well. (Table 4-3-6) This table shows the ratio of those currently using contraceptive methods by the number of currently living children. As indicated in this table, in Kavrepalanchok, when the number of currently living children reaches about three, the ratio of those who have vasectomy operation increases and at the same time, the rate of those who are not practicing family planning declines sharply. In Dhanusa as well, when the number of currently living children reaches three, the ratio of laparoscopy increases and the ratio not practicing family planning declines. The number of currently living children — three is equal to the ideal number of children, which was noted in Chapter 4, Section 2. In light of this fact, it is assumed that people start to practice family planning after they have had the ideal number of children.

The above analysis can be briefly summarized as follows. There are many people who have heard of family planning in both Kavrepalanchok and Dhanusa, but the ratio of those who actually use family planning is still at a low level. It seems that couples actually start family planning after they have the ideal number of children (about three). However, it should also be noted that differentials between the two districts as to family planning practices and other related behavior are delicately influenced by geographical, social, and cultural factors. In order to effectively promote family planning, it is essential to prepare a carefully thought-out program which takes such regional differences into consideration.

4. Mortality

Information concerning mortality in the last 12 months, number of deaths, sex, cause of death and age at the time of death is collected in Section 2 of the questionnaire "Social and Economic Conditions of the Households". Table 4-4-1 shows conditions of death by age (five

divisions; age under 1, age 0-4, age 1-14, age 15-64 and age over 64) and by region, but does not include classification by sex. A simplistic classification has been adopted because, due to the small number of samples of death, a detailed classification by region, sex and age would dilute the patterns and make them more difficult to understand. However, some beneficial information was obtained from these samples which altogether exceeded 230 in number (Table 4-4-1).

Firstly, the total number of deaths was 120 in Kavrepalanchok and 16 in Dhanusa. Since the numbers were almost equal, no significant difference was seen in the total number of deaths in the two regions. However, an interesting fact is observed when this is seen from the viewpoint of age structure. Over one-third of the total deaths in these regions, i.e. 36.7% in Kavrepalanchok and 37.1% in Dhanusa, occurred under one year of age (infant deaths).

Furthermore, it can be seen by expanding the range of the age group to age 0-14 that over 50% of the deaths, i.e. 55.9% in Kavrepalanchok and 61.2% in Dhanusa, are concentrated in this age group. That is, more than half of the deaths occur in age group 0-14 (young population) while the rest is shared between the age groups 15-64 (working age population) and over 65 (old age population). This phenomenon in which a large portion of deaths are concentrated in the youth population is a typical pattern often seen in communities with high infant mortality.

Such a difference in the ratio of deaths by age structure between the two districts raises yet another interesting issue. Although the two regions have similar infant mortality rates, the component ratio of deaths during age 1-14 is 19.2% in Kavrepalanchok while it is 24.1% in Dhanusa. This relationship is reversed in the component ratio of deaths during age 15-64, as the percentages are 28.3% in Kavrepalanchok and 15.5% in Dhanusa. The relationship between the two regions is again reversed for the group over 64, with 15.8% for Kavrepalanchok and 23.3% for Dhanusa. Possible causes for these phenomena include temporary fluctuations in number of deaths, regional differences in causes of death as well as differences in socio-economic conditions and public health standards. However, investigation into this matter is a future task which requires collection of additional information and considerable study.

The causes which brought about these deaths can be found in Tables 4-4-2 and 4-4-3. The former is a classified table of death causes used for this analysis while the latter shows the number of deaths from each cause. Unlike the International Classification of Diseases (ICD), this classification of death causes is very simple, but is effective for understanding the actual health and hygiene conditions in the rural areas of Nepal. Particularly in the village area, it is not very common to see a doctor when a person is sick. This is described in detail in the following Chapter 5.

For this reason, it is generally impossible to judge the cause of death accurately. That is why in this survey, death causes were evaluated by adopting a method in which the interviewers collected information on the symptoms of the deceased person as accurately as possible, and the

coders selected the proper name of the disease from the classified table of death causes based on that information. Considering the quality of information obtained from the respondents, therefore, simple classification criteria can reflect the actual conditions more accurately than more detailed types (Tables 4-4-2 and 4-4-3).

As can be seen from Table 4-4-3, the highest death cause is "other diseases" (104 cases) followed by "other scientific causes" (24 cases). But these death causes are not sufficient to know the actual name of disease. The third highest reason "fever (cause unknown)" shows that the person died from a fever, but the actual name of the disease remains unknown. Important information which can be obtained from this table is found more from the fourth cause onward. That is, diseases which might be common among infants, such as diarrhoea, measles, acute respiratory infection and whooping cough as well as complications of pregnant women are prevalent.

However, the largest obstacle in analyzing the causes of death is the fact that the majority of the causes are listed as "other diseases," "other scientific causes" and "fever (cause unknown)" and do not reveal the actual circumstances. In the future, more scientific and detailed data collection will be necessary for death causes.

5. Diseases

Diseases include infectious diseases, noninfectious diseases and extraneous disorders. With infectious diseases, in particular, one patient can spread the disease to the residents of an entire community over a short period of time. The community will be affected by suffering from sickness and various subsequent damages. That is why the patients, who are potential sources of infection, as well as carriers, contacts and infected animal sources must be reported and disinfected in addition to taking measures to control infection channels and receptibility.

The present situation regarding measures against diseases in the Kingdom of Nepal is that hospitals are available in cities but very scarce in rural areas. Instead, there are health posts which perform treatment and prevention of disease, check-ups on pregnant women and provide family planning guidance.

We conducted a questionnaire survey and studied the attitude of female residents, most of whom were farmers, toward disease.

(1) Medical Treatment and Its Measure

In this section, the attitude of married women in the two districts of Nepal toward treatment of disease was studied first.

Replies to the question, "Will you receive treatment if you get sick?" are shown in Table 4-5-1-1. In Kavrepalanchok, 93.0% of 1,466 respondents indicated they would receive treatment and the percentage exceeded 90% at each health post. In Dhanusa, 95.9% of 1,471 respondents said they would receive treatment and the percentage exceeded 91.7% at each health post (Table 4-5-1-1). Thus, most women have a positive attitude toward receiving treatment when they get sick.

Although small in number, there were 13 women in Kavrepalanchok and 24 in Dhanusa who replied that they would not seek treatment. A fact revealed by the analysis was that the most common reason was financial problems in both districts, which requires some consideration (see Table 4-5-1-2).

Replies to the question, "Where will you receive the treatment?" are shown in Table 4-5-1-3. In Kavrepalanchok, 54.8% of the 1,459 respondents replied "medical institutions (hospitals and health posts), 32.8% replied "dhami jankri" (faith healer). In the Dhanusa District, 42.6% of the 1,480 respondents stated "medical institutions," 42.5% replied "doctors or nurses."

Many people in Kavrepalanchok go to faith healers because there are no local medical practitioners, while many people go to medical practitioners and unlicensed doctors in Dhanusa because, except in the Godar Health Post region, they are available.

As a result of a survey on diarrhoea, which is the most common disease in Nepal, 94.5% of the 1,370 women who gave effective replies in Kavrepalanchok had knowledge about diarrhoea. High percentages between 96.8% to 100% were obtained from each age group. Similarly, 84.2% of 1,401 women in Dhanusa had knowledge about diarrhoea. By age group, high percentages between 72.8% and 88.6% were obtained from each age group, with the exception of one female under age 14 (Table 4-5-1-4).

Table 4-5-1-5 shows the results of a question asked mothers with children age five or younger about the cause of diarrhoea. In Kavrepalanchok, 41.9% of the 830 women who gave effective replies did not know the reason. Those who knew gave replies in the sequence of superstition, decomposing matter, indigestion, flies, dirty food, stomach disorders and stagnant water. In Dhanusa, 43.3% of the 430 women who gave effective replies did not know the reason. Those who knew gave responses in the sequence of indigestion, decomposing matter, superstition, dirty food, stomach disorders, stagnant water and flies (Table 4-5-1-5).

The matter of importance here is that, in both districts, as many as 40% of mothers who have children age five or younger do not know the cause of their children's diarrhoea. It is no wonder that diarrhoea is the most common cause of death among children age five or younger. For this reason, mothers must be educated about diseases for the sake of public health. In addition, the fact that 13.3% of mothers in Kavrepalanchok and 12.1% in Dhanusa are superstitious

in their belief about the causes of diarrhoea, may be main reason which increases the mortality rate of children. Furthermore, 9.1% of the mothers in Kavrepalanchok and 0.2% in Dhanusa believe that diarrhoea is caused by flies. The reason for the low figure in Dhanusa probably comes from the fact that there are many flies throughout the year because of the hot climate and people do not pay as much attention to them.

Regarding treatment for diarrhoea, the most common reply in Kavrepalanchok was traditional treatment, which accounted for 28.9% of 1,278 effective replies, followed by administration of chemical drugs. In Dhanusa, the most common reply was administration of chemical drugs, followed by administration of Jeevan Jal, which is an oral rehydration solution. As mentioned, treatment through traditional methods such as faith healers is probably prevalent in Kavrepalanchok (see to Table 4-5-1-6).

Thus, diarrhoea is common in both districts. Particularly since diarrhoea is a type of waterborne disease, measures such as boiling the water before giving it to children, preventing contamination of the water source and conducting disinfection will be necessary. Furthermore, instructions on hygiene and treatment methods will have to be propagated through health workers and others.

Table 4-5-1-7 shows the percentage of children age five or under suffering from eye disease at each health post and the type of disease. Also included in the table is the percentage of mothers who replied that their child had night blindness because their child had told them they cannot see well at night (Table 4-5-1-7). The percentage of children with eye disease was 10.1% of 1,304 effective replies, with 48.5% having had conjunctivitis followed by trachoma (3.8%) and xerophthalmia (2.3%). In addition, 0.8% of the entire group had night blindness. In Dhanusa, the percentage of eye disease was 7.7% among 1,256 replies, with 39.2% having had conjunctivitis, followed by xerophthalmia (6.8%) and blindness after birth. In addition, 4.3% of the entire group had night blindness.

Taking these data into consideration, we found that eye diseases are more prevalent in Kavrepalanchok than in Dhanusa. The fact that conjunctivitis and trachoma are more widespread in this area apparently originates from the difference in lifestyles. For instance, conjunctivitis and trachoma are more common in Kavrepalanchok possibly because of the custom of an open fire inside the house for cooking which fills the house with smoke. Meanwhile, in Dhanusa, xerophthalmia is more common and 4.3% of the children have night blindness, which is six times higher than in Kavrepalanchok. This seems to be caused by the difference in vitamin A intake due to variations in the diet.

The figure in Dhanusa that 4.3% of the children have symptoms of night blindness is high compared to the world standard. Although it is not included in WHO's report[3], some measure

must be taken. Regarding xerophthalmia, the occurrence rate in Dhanusa is similar to that for India found in WHO's 1978 Report[3] which was 8.2%. Therefore, instruction must be provided regarding intake of vitamin A for preventing xerophthalmia as well as night blindness.

Table 4-5-1-8 shows the replies from others with children under five about whether their children have suffered from any of the six most common diseases (Table 4-5-1-8). Figures inside parentheses refer to the number of effective replies obtained for each disease. In Kavrepalanchok, the highest disease rate was diarrhoea, as 72% of the 881 mothers who gave effective replies said their children had the disease. Other diseases included, in order of percentage, worms, acute respiratory disease, whooping cough, measles and diphtheria. In Dhanusa, 63.3% of 832 mothers who gave effective replies said their children suffered from diarrhoea. Other diseases, in order of percentage, were acute respiratory disease, worms, whooping cough, measles and diphtheria.

This calls for measures against diarrhoea because it is quite common among children age five or younger in both districts, and, as previously mentioned, has led to many deaths. As for parasitic worms, the problems are extermination of these worms and disposal of human feces. Raw vegetables must be washed well or boiled before eating. Other diseases, which will be discussed later, can be greatly reduced by diffusion of vaccination.

Lastly, Table 4-5-1-9 is added here as a reference showing the place of treatment when children suffered from the diseases listed on the previous table.

(2) Antenatal and Postnatal Care of Mothers

Medical examination of women before and after delivery is important to implement in terms of maternal and child health, particularly in countries like Nepal where maternal death rate seems to be high. In other words, maternal and child health is one of the fundamental areas of public health which must hold a firm position in the administration.

First, Table 4-5-2-1 shows the results of a question asked married women in the two districts as to whether they were pregnant at present and, if the reply was yes, where she was planning to have the child. In Kavrepalanchok, 148 out of 1,356 women (10.9%) said they were pregnant. Among them, 93.2% said that they wanted to deliver at home and 5.4% said in a hospital. Five of 1,196 non-pregnant women replied, three stating they would want to deliver at home and two indicated they would want to go to a health post.

In Dhanusa, 115 out of 1,407 women (8.2%) said they were pregnant. Among them, 96.5% said that they wanted to deliver at home, 2.6% at health posts and 0.9% in a hospital. One out of 1,282 non-pregnant women answered that she would want to deliver at a health post (Table 4-5-2-1).

To the question "Where did you deliver your child?", 95.3% of 1,190 effective respondents in Kavrepalanchok said they delivered at home, followed by hospitals (4.0%) and health posts (0.7%). In Dhanusa, 96.6% of 1,225 effective replies said they delivered at home, followed by hospitals (2.9%) and health posts (0.5%). (See Table 4-5-2-2).

As for a desirable place to give birth, over 93% replied "home" in both districts. Giving birth in hospitals was more common in Kavrepalanchok (4.0%) than in Dhanusa (2.9%), while 0.7% of the former and 0.5% of the latter gave birth at health posts. Therefore, efforts must be made to increase health posts, improve facilities, improve worker quality and increase the number of stationed staff.

Assembling expectant mothers and giving them guidance through group medical examination is an effective way to completely implement maternal and child health. However, visiting counselors must be provided to give guidance to expectant mothers who cannot attend the group medical examinations during the last period of pregnancy or because of some abnormalities or complications. Table 4-5-2-3 shows the replies to the question regarding the place where expectant mothers receive medical examinations.

Effective replies were very few in both districts – 100 out of 1,372 replies (7.3%) in Kavrepalanchok and 75 out of 1,429 replies (5.2%) in Dhanusa – which makes it difficult to obtain accurate information. Analysis of the effective replies, however, indicates that 82.0% in Kavrepalanchok and 50.7% in Dhanusa received their medical examinations at hospitals. More people in Kavrepalanchok received medical examinations at hospitals while more people in Dhanusa received theirs at health posts. Furthermore, the reply "others" was more common in Dhanusa which probably means that they went to quack. However, the questions asked for preparing this table lead to answers which may differ with place and person, and the problem is in the preparation of the questions. Table 4-5-2-4 shows whether the person who received the medical examination was satisfied with it, and many seem to have been satisfied.

Table 4-5-2-5 shows on what occasions the expectant mothers in both districts obtain medical examinations. Although only a few expectant mothers replied (105 in Kavrepalanchok and 81 in Dhanusa), more women in Dhanusa said they go regularly for medical examinations. This seems to be as a result of easier access, as the district is in the plains, as well as on-going activities of the health workers and mothers' club. In Kavrepalanchok, many expectant mothers go for a medical examination when they experience complicatons.

Content of the medical examinations of expectant mothers is shown in Table 4-5-2-6. Although everyone should undergo a thorough and complete examination, it is regrettable that they only take one aspect (Table 4-5-2-6).

Questions regarding who recommends medical examinations are in Table 4-5-2-7. In both

districts, advice from family members is most common, accounting for 60% of the total. The fact that advice of health workers is only several percent is a problem which needs future resolution (Table 4-5-2-7).

Regarding the frequency of health workers visiting homes, 3.0% of the 1,372 mothers in Kavrepalanchok replied "once a month," 3.7% replied "once every three months" and 4.9% replied "once a year." Frequency of visits is very low as only 11.6% of the mothers were visited once a year or more. In Dhanusa, 49.2% of the 1,411 mothers replied "once a month," 9.5% replied "once every three months" and 9.7% replied "once a year." The high percentage of "once of month" visits show that health workers are frequently visiting the mothers. As 68.4% of the mothers in Dhanusa were visited once a year or more, it has been found that they are being visited six times more often than in Kavrepalanchok.

The topic of discussion with the health worker when they visited once a year or more is shown in Table 4-5-2-8. Despite the fact that the respondents were allowed to give multiple answers, the frequency of having heard about each topic was lower than 10% in Kavrepalanchok. The most frequent topics were "vaccination" and "family planning," but their percentages were only 7.5% and 7.4%, respectively.

Compared with Kavrepalanchok, Dhanusa has higher frequencies of having discussed each topic. In order of frequency, the topics were "family planning" (65.5%), followed by "oral rehydration solution" (34.9%). This seems to come from the fact that since the Kavrepalanchok is in a hill area and Dhanusa in a plains area, it is easier for health workers to visit the latter than the former. In addition, health workers are probably more active in Dhanusa than in Kavrepalanchok (Table 4-5-2-8).

Generally, the standard pattern of health care for expectant mothers starts with a general medical record prepared through detailed questions asked during initial diagnosis. Then attention is given to blood pressure and weight during medical examinations, and tests such as a urine test and blood test for anemia is conducted.

Maternal death would decline in Nepal in the future if something equivalent to a maternal and child health handbook were made available and issued to expectant mothers during regular medical examinations. For this, it is necessary to increase facilities which are capable of conducting medical examinations and training health workers.

(3) Immunization

Vaccination of infants is a precautionary measure against infectious disease, and lowers receptivity through artificial immunity.

In Table 4-5-3-1, the mothers in both districts were asked from whom they obtained knowledge about vaccination (Table 4-5-3-1). The most common reply in both districts was a "immunization camp." However, the figure for Dhanusa is much higher than that of Kavrepalanchok, which suggests that the activities of immunization camps are very strong in Dhanusa. A similar percentage of people in both districts cited health workers. But the fact that the percentages were both below 10% calls for guidance to health workers and increase of their number with consideration to the maternal and child health.

Table 4-5-3-2 shows the replies from mothers with children of age five or younger about the types of vaccination their children have had (Table 4-5-3-2). Those who received a B.C.G. vaccination were 54.5% in Kavrepalanchok and 90.5% in Dhanusa. This means that about 36% more children in Dhanusa have been vaccinated. Over 50% of the children have been vaccinated for measles in both districts, with Dhanusa about 12% higher. The vaccination rate for combined vaccine diphtheria, pertussis and tetanus was high, exceeding 60% in both districts. In Kavrepalanchok, the vaccination rate was 69.0%, 41.2% of which received one of the three vaccinations and was the most common pattern. In Dhanusa, the vaccination rate was 88.9%, 45.4% of which received all three vaccinations and was the most common pattern. The vaccination rate was higher in Dhanusa.

The vaccination rate for polio was also high, exceeding 50% in both districts. In Kavrepalanchok, the vaccination rate was 50.3%, 28.6% of which received one of the three vaccinations and was the most common pattern. In Dhanusa, the vaccination rate was 83.4%, 41.1% of which received all three vaccinations and was the most common pattern. The vaccination rate was higher in Dhanusa.

Thus, Dhanusa has an overall higher vaccination rate than Kavrepalanchok. As mentioned, this seems to be as a result of geographical conditions, frequency of visits by health workers and activities of immunization camp.

Table 4-5-3-3 shows replies from mothers with children of age five or younger about where their children were vaccinated. As many as 63.9% of the mothers in Kavrepalanchok and 80.1% in Dhanusa replied that they had their children vaccinated at immunization camps. However, the figure for Dhanusa is higher. Few mothers in both districts had their children vaccinated at health posts and hospitals, but more mothers in Kavrepalanchok went to health posts while more mothers in Dhanusa went to hospitals. This shows that vaccination camps play an important role in diffusion of vaccinations and that they are particularly active in Dhanusa. Nevertheless, the activities of health posts should not be overlooked (Table 4-5-3-3).

The most common reason for not being able to receive vaccination was "not able to use the service," reaching 74% in Kavrepalanchok and 44.8% in Dhanusa. Along with the problem of

transportation, long distances to the sites of vaccination and, as in the case of Kavrepalanchok, bad road conditions must be taken into consideration in those areas. Resolution of this problem will require an increase in immunization camps and related sites (Table 4-5-3-4).

(4) Oral Rehydration Therapy

Also as mentioned, diarrhoea is common among children and is the leading cause of their death in Nepal. Since a large quantity of body water is lost during diarrhoea, rehydration of water becomes important. In rural areas of Nepal where medical facilities and medicine are in short supply, oral rehydration therapy is an important emergency measure for diarrhoea. For this purpose, Jeevan Jal, which is already commercialized, and a solution made at home by mixing salt, sugar and water, are available.

Table 4-5-4 shows the sources where mothers obtained information about oral rehydration therapy. Regarding those who have heard about oral rehydration therapy, 65.7% out of 1,479 mothers in Kavrepalanchok and 59.1% out of 1,478 mothers in Dhanusa knew Jeevan Jal while 73.2% in Kavrepalanchok and 35.3% in Dhanusa were familiar with the medicine water. More mothers in Kavrepalanchok knew about both oral rehydration solutions. In addition, mothers in Kavrepalanchok were more knowledgeable about the medicine water while mothers in Dhanusa about Jeevan Jal.

Regarding the source of information for oral rehydration solution, 63.9% of 973 effective replies in Kavrepalanchok said they heard about Jeevan Jal on radio announcements and 6.4% from health workers. In Dhanusa, 38.2% of 874 effective replies said they heard about Jeevan Jal from health workers, followed by 19.0% from the radio announcements. Regarding the medicine water, 89.1% of 1,082 effective replies said they obtained the information from radio announcements, followed by 1.7% from family members and 1.4% from health workers. In Dhanusa, 33.7% of 522 effective replies said they heard it on the radio, followed by 33.3% from health workers.

The fact that a large percentage of the people are obtaining information about oral rehydration solution from the radio clearly shows the effect of publicity. Since 17.5% of the mothers in Kavrepalanchok and 20.1% in Dhanusa replied that they use oral rehydration solution for diarrhoea treatment, it was found that they not only know the name but are also using it for treatment. It has been suggested that repeating simple messages on the radio would be a very effective tool for dissemination of information regarding prevention and treatment of diseases.

Moreover, the fact that many women in Dhanusa have obtained information about oral rehydration solution from health workers indicates that there is an active public health program.

In the future, proper information about oral rehydration solution should be repeatedly conveyed by radio publicity, as well as through health workers and mother's clubs.

6. Nutrition and Feeding Habits

Many of our daily actions are performed subconsciously and eating is no exception. Habits originally arise from conscious actions but over time, or by custom, as a result of repetition, they have a tendency to become fixed actions and are performed unconsciously and automatically.

Eating habits are a generalization of our actions which include ways of thinking, likes and dislikes, experiences, selection of food, and interest in eating and are developed under cultural, social, economic, emotional and physiological influences. If people have good eating habits, they will select the best food for their minds and bodies. Bad eating habits are the consequence of eating food of bad quality. It is ignorance about ways to discern appropriate foods as well as the food the body lacks that hampers correction of bad eating habits. However, bad habits could be improved by education and persuasion. If bad eating habits are rectified and good eating habits acquired, one's nutritive condition improves.

Nutrition means that a living thing takes proper materials into the body from the outside in order to metabolize it, and is the term generally used for human beings. The conditions under which men take materials into the body are the nutritive conditions.

From this standpoint, we conducted a questionnaire on eating habits and nutritive conditions in Nepal.

(1) Nutrition and Feeding Habits of Children

Great care is necessary in providing nutrition to infants. A normal baby doubles its birth weight in five or six months, and trebles it before the first birthday. For this increase in body weight nutrition supply is a requisite. Mothers should know that they produce special breast milk called foremilk (colostrum) during the two or three days after delivery. This foremilk contains a larger quantity of protein and salt than ordinary breast milk or cow's milk and also contains certain materials which develop an infant's resistance to infection. In Nepal, however, the custom prevails of not giving babies foremilk because it is considered impure. In fact in Kavrepalanchok, out of 1,279 mothers, 66.1% had responded they had given foremilk to the babies and in Dhanusa, 34.2% of 1,270 mothers reported they had given foremilk. In Dhanusa, there were cases of doctors not recommending foremilk.

Infants require minerals, calcium, phosphorus, and vitamin D in larger quantities than

adults, while they need less protein, vitamins other than D and iron than adults. The necessary quantity of the above nutritive elements can be supplied by drinking large quantities of milk.

Table 4-6-1-1 shows the nutritive conditions of Nepalese children surveyed in Kavrepalanchok and Dhanusa.

An expedient developed by UNICEF was used to judge the nutritive conditions: simply measuring the upper arm girth with a plastic tape and thereby judging the conditions based on the arm girth. The nutritive index of an infant over three months old can ordinarily be expressed using the Kaup index; but since neither scales nor instruments to measure standing height were available, the interviewer applied the UNICEF method.

$$\text{Kaup index} = \frac{\text{weight (g)}}{[\text{height (cm)}]^2} \times 10$$

The survey results show that in Kavrepalanchok of 1,100 surveyed children under five years old, 11.8% suffer from malnutrition and 32.8% from slight malnutrition. In Dhanusa of 970 surveyed children under five years old, 18.8% suffer from malnutrition and 34.6% from slight malnutrition.

In Kavrepalanchok malnutrition was detected in the last child of the family while in the Dhanusa in the second to last child followed by the last child in a very close ratio to that of the second to last child.

It is difficult to say that with only this simple method we can prove the real nutritive conditions, but our eyes also recognized many children who are undernourished. One of the contributing factors to this high ratio of undernourished children in the agricultural areas in both districts may be their eating habits. While they eat rice in sufficient quantities, their intake of animal protein and fat is very limited. We observed Kwashiorkor which is often found in the Gold Coast in Africa, although among a small number of children. Yet this proves that sugar intake is apparently sufficient but that they seldom ingest protein.

We next investigated what kind of food babies are fed. The results are given in Table 4-6-1-2.

Most mothers in both districts feed their babies Dal and rice, followed by rice with milk. These are the two major foods fed to babies. In adition to these two, they are also fed green vegetables. A small number of mothers use a baby food peculiar to Nepal. It is unfortunate that eggs are seldom fed to babies. It is assumed that eggs are considered too expensive and even if eggs are produced at home, they are usually sold. Also meat and fish are not fed to babies. Since these are costly food items in Nepal, it would be economically difficult to feed them to babies. However it is important to continue the introduction of solid foods during the weaning period. Cereals, egg yolks, strained meat, fruits, and green vegetables are recommended for babies in the early months of life.

(2) Nutrition during Pregnancy

An expectant mother must eat sufficient quantities of the appropriate foods for herself, as well as the fetus and its accessory tissue. Pregnancy is a totally different physiological condition than before becoming pregnant; therefore in the process of adjusting oneself to this new condition, food requirements change. On this account, expectant mothers must manage to positively intake good quality protein; minerals such as calcium, phosphorus and iron; and vitamins.

Table 4-6-2 shows the survey results on the foods expectant mothers take to supplement nutrition. In both districts a very small number of expectant mothers, accounting for less than 15% of all surveyed women, eat the foods necessary to supplement nutrition. The major supplementary food they cited in their replies to the questionnaire was protein in Kavrepalanchok, excluding Nala; in Dhanusa, excluding Godar milk. In additon, they eat fruit, ghee (fat) and green vegetables, though in small quantities; in Kavrepalanchok they eat more ghee than other food whereas in Dhanusa more green vegetables. As for eggs, they are eaten a little more in Kavrepalanchok district, within which the intake is especially large in Khopasi. In Dhanusa, in general, very few people seem to eat eggs.

In Nepal there may be no custom whereby expectant mothers eat a lot of animal protein and fat. Or, as will be explained later, bad eating habits of expectant and nursing mothers may be an contributing factor. As mentioned, it is important for expectant mothers to intake the proper nutriments. Among them is protein of good quality. Moreover, one-third or more of the total necessary protein intake must be from animal protein. This is to supply amino acids which are generally not present in vegetable protein. A protein deficiency deteriorates a mother's nutritive condition and causes anemia. Fat, which is not only high in calories but also contains vitamins A, D, E and F, is an important element in pregnancy and puerperium. It has been found that expectant mothers with vitamin A deficiencies have a higher birth rate of congenitally blind children. In India it was reported[3] that a considerable number of congenitally blind babies were born every year due to a deficiency of vitamin A. Pregnant women also need calcium, which is a mineral important for the formation of bones and teeth of a fetus. A daily intake of 1.5g is necessary, but since calcium contained in cereals exists as phythin salt which is not absorbed by the system, calcium should be obtained from other foods. On this account in Nepal it is important to drink plenty of milk; vitamins B and C can be obtained by eating large quantities of green vegetables.

(3) Feeding Habits and Breastfeeding

Since a nursing mother produces milk in amounts as large as 850ml per day, the required nutrition intake during the nursing period is the greatest in adult life. Mothers needs additional energy of approximately 1000 calories, as well as extra protein, iron and vitamins.

Table 4-6-3 reflects the results of the question on supplementary foods to be taken during the nursing period.

In Kavrepalanchok protein was the major supplementary food given in reply in all the health post area; whereas in Dhanusa it was milk. However only 20.8% of the women surveyed intake protein and 12.0% intake milk in Kavrepalanchok while only 21.2% intake milk and 4.4% intake protein in Dhanusa. The survey revealed that only a very limited number of nursing mothers intake necessary nutritives during the nursing period.

With regard to ghee (fat), fruits and green vegetables, the ratio of mothers who eat eggs is even smaller and is almost the same in both districts. Eggs are too expensive and it seems that people cannot afford them.

When examining the eating habits of expectant and nursing mothers, some difference between Kavrepalanchok and Dhanusa are noted: Kavrepalanchok is located in a hilly area whereas Dhanusa is in the plains and yields to India's influence. In Nepal they distinguish foods into two categories, of "hot" (spicy hot) and "cold" (bland). And it is a Nepalese customs that pregnant mothers should not eat cold food. This custom may be one of the contributing factors to the high infant, as well as maternal, mortality rates. Such customs need to be explained by the modern science of nutrition, and bad habits need to be dropped while maintaining the good ones. It may be hard to correct the conventional eating habits, but it is vitally important to reform the consciousness of people in the rural areas by expanding education and improving public health.

We also computed the nursing period using the following formula:

$$\text{Average breastfeeding period} = \frac{\Sigma \cdot M \cdot P}{\Sigma \cdot P}$$

M : length of beastfeeding in months

P : number of mothers per length of breastfeeding in months

Note: The maximum length of breastfeeding is 36 months.

It was found that the average breastfeeding period is 26.3 months in Kavrepalanchok and 26.9 months in Dhanusa. The difference between the two districts is negligible, about 0.6 months. In general, weaning commences between five and nine months of age and is completed between 18 and 24 months of age when infants become able to eat most of the food adults eat. It is best to consider a breastfeeding period suited to the realities of Nepal. In the future an appropriate

guidance on wheaning should be give.

Note)
1) According to the age structure indicator of the population pyramid model, the ratio of population age 0-4 is 14-20%, and the youth population ratio (youth population (0-14)/total population x 100) is 40-49, and youth population index (youth population (0-14)/working age population (15-64) x 100 is 70-75. Atsushi Otomo & Haruo Sagaza, *Population Structure and Labor Force in Asian Countries*, Institute of Developing Economies, 1980, p.16.
2) Atsushi Otomo & Haruo Sagaza, *Dynamics of Population in Asian Nations*, Institute of Developing Economies. 1982, p.130.
3) World Health Organization, *Global Occurrence of Vitamin A Deficency and Xerophthalmia, Report of a Joint WHO/UNICEF/USAID/Helen Keller International Meeting*, World Health Organization Technical Report Series 672, pp. 21-23, 1982

Table 4-1-1   Sex Ratio* by Broad Age Group, Kavrepalanchok and Dhanusa

Age Group	Kavrepalanchok		Dhanusa	
	Whole District**	Survey Area	Whole District**	Survey Area
0 – 14	1,049	1,025	1,123	1,111
15 – 64	1,011	862	1,060	1,020
65 +	1,268	1,112	980	1,238
Total Population	1,035	939	1,083	1,063

Note) * Sex Ratio = Male Population/Female Population x 1000

Source) ** Central Bureau of Statistics, *Population Census-1981, General Characteristics Tables*,
Vol. I-Part 1, Kathmandu, 1984

Table 4-1-2   Population Distribution by 5 Year Age Group and Sex, Kavrepalanchok and Dhanusa

Age group	Kavrepalanchok			Dhanusa		
	Total	Male	Female	Total	Male	Female
0 ~ 4	15.1	16.0	14.2	15.2	14.8	15.6
5 ~ 9	14.2	14.4	14.0	15.4	15.9	14.8
10 ~ 14	13.4	14.2	12.7	11.0	11.8	10.1
15 ~ 19	10.0	9.6	10.4	6.7	7.0	6.3
20 ~ 24	8.2	7.5	8.8	7.7	6.3	9.2
25 ~ 29	6.4	5.9	7.0	8.7	8.7	8.7
30 ~ 34	5.4	5.1	5.7	7.2	6.7	7.8
35 ~ 39	5.0	4.7	5.2	6.5	7.5	5.5
40 ~ 44	5.1	5.3	5.0	4.3	4.3	4.3
45 ~ 49	3.4	3.8	3.0	3.5	3.8	3.1
50 ~ 55	4.5	4.0	5.0	4.5	3.4	5.7
55 ~ 59	2.6	3.0	2.3	3.2	3.2	3.2
60 ~ 64	2.6	2.1	3.0	3.2	3.5	2.9
65 +	4.0	4.4	3.7	2.8	3.0	2.6
Unknown	0.1	0.1	0.1	0.1	0.1	0.0
All ages	100.0	100.0	100.0	100.0	100.0	100.0

Table 4-1-3 Comparison of Age Structure by Broad Age Group, Kavrepalanchok

(%)

Age Group	Whole District* (1981)			Survey Area		
	Total	Male	Female	Total	Male	Female
Youth Population (0 – 14)	40.23	40.4	39.9	42.7	44.6	40.9
Productive Age Population (15 – 64)	56.48	55.8	57.1	53.1	50.8	55.3
Old Age Population (65 and above)	3.49	3.8	3.1	4.0	4.4	3.7
Total Population	307,150	156,218	150,932	8,820	4,270	4,550

Source) * Central Bureau of Statistics, HMG, *Population Census - 1981, General Characteristics Tables*, Vol. I - Part 1, Kathmandu, 1984.

Table 4-1-4 Comparison of Age Structure by Broad Age Group, Dhanusa

(%)

Age Group	Whole District* (1981)			Survey Area		
	Total	Male	Female	Total	Male	Female
Youth Population (0 – 14)	40.2	40.9	39.5	41.5	42.4	40.6
Productive Age Population (15 – 64)	57.1	56.5	57.7	55.6	54.5	56.8
Old Age Population (65 and above)	2.7	2.6	2.8	2.8	3.0	2.6
Total Population	432,569	224,900	207,669	8,427	4,343	4,084

Source) * Central Bureau of Statistics, HMG, *Population Census - 1981, General Characteristics Tables*, Vol. I - Part 1, Kathmandu, 1984.

Table 4-1-5   Marital Status by 5 Year Age Group and Sex, Kavrepalanchok and Dhanusa

(%)

Age Group	Never Married		Currently Married		Widow/Widower		Separated	
	Male	Female	Male	Female	Male	Female	Male	Female
1. Kavrepalanchok								
10 ~ 14	94.9	96.7	1.7	2.1	6.6	6.8	—	—
15 ~ 19	78.9	62.2	15.0	34.0	6.1	3.6	—	0.2
20 ~ 24	38.1	14.0	59.1	84.5	2.2	0.7	—	0.5
25 ~ 29	14.8	3.5	82.0	94.3	2.8	1.3	0.4	0.6
30 ~ 34	5.5	3.1	92.6	90.8	0.9	3.4	0.9	2.7
35 ~ 39	2.5	1.3	94.0	89.0	1.5	7.2	1.5	2.1
40 ~ 44	2.7	3.5	95.1	82.8	1.3	13.2	0.4	0.4
45 ~ 49	0.6	1.5	94.4	73.3	4.3	22.2	0.6	3.0
50 +	1.4	1.7	80.5	55.8	17.4	40.5	0.5	1.6
2. Dhanusa								
10 ~ 14	86.9	74.2	14.6	13.5	10.9	12.3	—	—
15 ~ 19	66.4	18.9	24.7	74.9	8.9	5.8	—	0.4
20 ~ 24	25.8	2.1	70.9	97.9	2.9	—	0.4	—
25 ~ 29	7.1	1.4	87.8	97.2	4.0	0.8	1.1	0.6
30 ~ 34	1.4	0.3	95.5	97.2	2.4	2.2	0.7	0.3
35 ~ 39	0.9	0.4	97.2	93.3	1.2	6.3	0.6	—
40 ~ 44	0.5	—	94.6	92.1	4.8	6.8	—	1.1
45 ~ 49	—	—	94.5	78.9	5.5	20.3	—	0.8
50 +	0.2	0.5	89.1	60.4	10.4	38.9	0.4	0.2

Table 4-1-6   Distribution of Head of Household by Education Attainment and Occupation, Kavrepalanchok

% in the parentheses

Schooling years	No Job	Agri-culture	Labour	Service	Business	Household Work	Others	Not Stated	Total (%)
0	24	566	38	10	8	31	8	8	693 (43.5)
1	14	405	29	68	26	7	18	3	570 (35.8)
2	—	12	2	1	1	—	—	—	16 (1.0)
3	—	21	1	2	4	1	—	—	28 (1.8)
4	—	20	2	5	2	—	—	—	30 (1.9)
5	—	18	1	8	3	—	1	—	31 (1.9)
6	—	13	1	1	3	—	1	1	20 (1.3)
7	—	20	1	5	2	—	—	—	28 (1.8)
8	—	16	—	2	8	—	—	—	26 (1.6)
9	—	6	—	1	1	—	—	—	8 (0.5)
10th Class & Above	1	20	—	59	7	1	—	—	88 (5.5)
Not Stated	—	5	1	—	—	—	—	49	55 (3.5)
Total	39	1,122	76	162	65	40	28	61	1,593
(%)	(2.4)	(70.4)	(4.8)	(10.2)	(4.1)	(2.5)	(1.8)	(3.8)	

Table 4-1-7   Distribution of Head of Household by Education Attainment and Occupation, Dhanusa

% in the parentheses

Schooling years	No. Job	Agri-culture	Labour	Service	Business	Household Work	Others	Not Stated	Total (%)
0	24	468	565	6	34	7	5	7	1,116 (69.1)
1	2	161	42	10	32	2	5	3	257 (15.9)
2	—	8	3	—	1	—	—	—	12 (0.7)
3	—	8	4	—	3	—	—	—	15 (0.9)
4	—	14	1	1	2	—	—	—	18 (1.1)
5	—	10	5	1	1	—	—	—	17 (1.1)
6	—	8	3	2	3	—	—	1	17 (1.1)
7	—	20	2	4	1	—	1	—	28 (1.7)
8	1	7	2	2	2	—	—	—	14 (0.9)
9	—	8	—	1	—	—	—	—	9 (0.6)
10th Class & Above	1	35	2	26	8	1	1	1	75 (4.6)
Not Stated	—	1	1	—	—	—	—	34	36 (2.2)
Total	28	748	630	53	87	10	12	46	1,614
(%)	(1.7)	(46.3)	(39.0)	(3.3)	(5.4)	(0.6)	(0.7)	(2.9)	

Table 4-1-8 Distribution of Household by Possession of Land, Source of Drinking Water and Availability of Latrine, Kavrepalanchok and Dhanusa

Land Holding (Ropani)	Number of Household (%)	Source of Drinking Water (%)							Availability of Latrine (%)
		1 Kuwa Pond	2 Khola River	3 Kaldhara Tap	5 Tube-well	6 Dhungedhara Spring	7 Inar well	8 Others	
1. Kavrepalanchok									
0	34 (2.1)	38.2	—	47.1	—	2.9	—	—	14.7
1 ~ 4	486 (30.5)	32.1	7.6	38.1	0.6	15.8	0.4	5.3	16.5
5 ~ 9	366 (23.0)	38.3	7.9	39.1	—	11.5	—	3.3	20.2
10 ~ 14	230 (14.4)	32.2	6.1	44.3	—	15.7	0.4	0.9	26.1
15 ~ 19	153 (9.6)	39.2	9.8	32.0	—	17.0	0.7	1.3	17.0
20 ~ 24	87 (5.5)	36.8	8.0	41.4	—	12.6	1.1	—	23.0
25 ~ 29	53 (3.3)	22.6	9.4	45.3	—	17.0	1.9	3.8	32.1
30 ~ 34	37 (2.3)	27.0	2.7	43.2	—	24.3	—	2.7	35.1
35 ~ 39	15 (0.9)	26.7	—	46.7	6.7	6.7	—	13.3	13.3
40 +	73 (4.6)	38.4	1.4	43.8	1.4	13.7	—	1.4	11.0
Not Stated	59 (3.7)								13.6
Total	1,593	33.3	6.8	38.5	0.3	14.1	0.4	3.1	19.6
2. Dhanusa									
0	443 (27.4)	—	1.4	—	54.0	0.2	41.5	2.5	0.2
1 ~ 4	318 (19.7)	0.6	—	6.6	40.3	0.3	47.5	4.4	0.3
5 ~ 9	222 (13.8)	0.9	1.8	1.8	42.8	0.5	46.8	5.4	0.5
10 ~ 14	156 (9.7)	1.3	2.6	4.5	46.2	—	42.9	2.6	3.2
15 ~ 19	50 (3.1)	—	—	—	54.0	2.0	42.0	2.0	2.0
20 ~ 24	61 (3.8)	1.6	4.9	1.6	42.6	—	49.2	—	0.0
25 ~ 29	98 (6.1)	1.0	5.1	2.0	33.7	1.0	54.1	2.0	4.1
30 ~ 34	40 (2.5)	2.5	—	—	25.0	—	67.5	5.0	5.0
35 ~ 39	69 (4.3)	1.4	2.9	1.4	56.5	1.4	36.2	—	10.1
40 +	120 (7.4)	0.8	0.8	4.2	46.7	0.8	45.8	0.8	20.8
Not Stated	37 (2.3)								
Total	1,614	0.7	1.5	2.5	45.0	0.4	44.5	2.9	2.9

Table 4-2-1   Age Distribution of Eligible Women and Mean Age of
Respondents, Kavrepalanchok and Dhanusa

% in the parentheses

Age Group	Kavrepalanchok	Dhanusa
~ 14	3 (0.2)	1 (0.1)
15 ~ 19	132 (9.0)	137 (9.3)
20 ~ 24	272 (18.5)	283 (19.2)
25 ~ 29	288 (19.6)	304 (20.7)
30 ~ 34	231 (15.7)	281 (19.1)
35 ~ 39	192 (13.1)	196 (13.3)
40 ~ 44	174 (11.9)	138 (9.4)
45 ~ 49	86 (5.9)	96 (6.5)
50 +	3 (0.2)	—
Unknown	86 (5.9)	35 (2.4)
All Age	1,467 (100.0)	1,471 (100.0)
Mean Age	30.83	31.37

Table 4-2-2 Distribution of Eligible Women by Education Attainment and Age, Kavrepalanchok and Dhanusa

%, number of respondents in the parentheses

Age Group	Kavrepalanchok					Dhanusa				
	Illiterate	Literate without education	Educated	Not Stated	Total	Illiterate	Literate without education	Educated	Not Stated	Total
~14	100.0	—	—	—	100.0(3)	100.0	—	—	—	100.0(1)
15~19	86.4	2.3	11.4	—	100.0(132)	90.5	—	9.5	—	100.0(137)
20~24	89.3	2.2	8.5	—	100.0(272)	91.5	1.1	7.4	—	100.0(283)
25~29	90.3	2.8	6.9	—	100.0(288)	96.4	0.3	3.3	—	100.0(304)
30~34	94.8	1.3	3.9	—	100.0(231)	95.0	1.1	3.9	—	100.0(281)
35~39	93.2	4.7	2.1	—	100.0(192)	95.9	1.0	2.6	0.5	100.0(196)
40~44	97.7	1.1	0.6	0.6	100.0(174)	95.7	1.4	2.9	—	100.0(138)
45~49	98.8	—	1.2	—	100.0(86)	97.9	1.0	1.0	—	100.0(96)
50+	100.0	—	—	—	100.0(3)	—	—	—	—	—
Unknown	3.5	—	—	96.5	100.0(86)	8.6	—	—	91.4	100.0(35)
All Ages	87.2	2.1	5.0	5.7	100.0(1,467)	92.5	0.8	4.4	2.2	100.0(1,471)

Table 4-2-3　Mean Age at Marriage, Mean Duration of Cohabitation and Age of Effective Marriage of Eligible Women by Educational Attainment, Kavrepalanchok and Dhanusa

	Illiterate	Literate without education	Educated	Total
1. Kavrepalanchok				
Age at Marriage	15.42	16.28	15.19	15.43
Mean Duration of Cohabitation (years)	0.22	0.50	0.06	0.22
Age of Effective Marriage	15.64	16.78	15.25	15.65
2. Dhanusa				
Age at Marriage	13.32	12.57	14.68	13.37
Mean Duration of Cohabitation (years)	1.90	1.75	0.31	1.84
Age of Effective Marriage	15.22	14.32	14.99	15.21

Figure 4-2-1　Age Specific Marital Fertility Rate, Kavrepalanchok and Dhanusa

ASMFR ($^o/oo$)

300

250

200

150

100

50

Kavrepalanchok

Dhanusa

15-19　20-24　25-29　30-34　35-39　40-44　45-49　(Age)
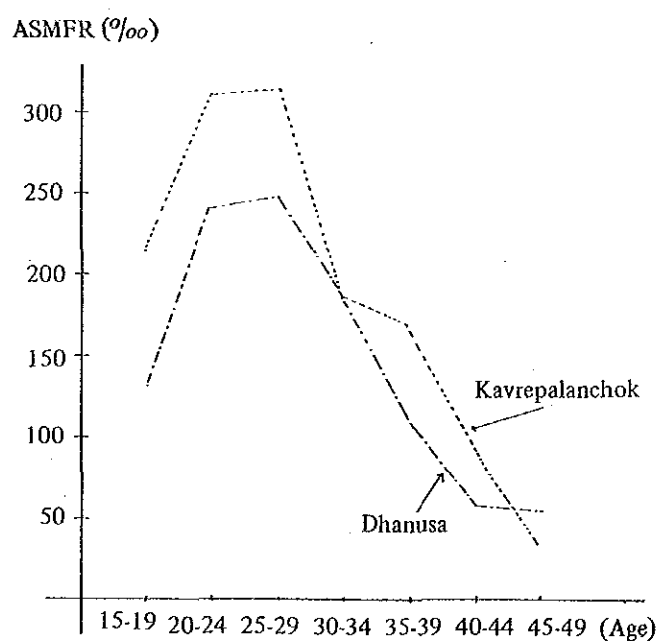
Table 4-2-4   Distribution and Mean Number of Children Ever Born by Age of Eligible Women,
Kavrepalanchok and Dhanusa

1. Kavrepalanchok

Age group	0	1	2	3	4	5	6	7	Total	Mean number of children
15 ~ 19	67.7	26.8	4.7	0.8	—	—	—	—	100.0 (127)	0.4
20 ~ 24	24.0	35.1	28.4	8.9	3.0	0.4	0.4	—	100.0 (271)	1.3
25 ~ 29	4.5	12.5	25.4	22.7	19.9	10.8	3.8	0.4	100.0 (287)	2.9
30 ~ 34	2.3	1.8	8.7	21.6	29.4	17.0	13.3	6.0	100.0 (218)	4.1
35 ~ 39	4.3	3.7	4.3	12.9	17.2	21.5	23.3	12.9	100.0 (163)	4.6
40 ~ 44	5.5	3.1	3.1	15.6	10.9	18.8	21.9	21.1	100.0 (128)	4.7
45 ~ 49	1.7	—	11.9	18.6	8.5	20.3	13.6	25.4	100.0 (59)	4.7
Total	14.7	14.3	15.4	15.1	14.0	11.2	9.2	6.1	100.0 (1,253)	3.0

2. Dhanusa

Age group	0	1	2	3	4	5	6	7	Total	Mean number of children
15 ~ 19	64.1	28.2	5.3	1.5	0.8	—	—	—	100.0 (131)	0.5
20 ~ 24	26.1	38.2	22.5	7.9	4.3	0.4	0.7	—	100.0 (280)	1.3
25 ~ 29	8.6	13.2	23.0	28.6	15.1	8.2	2.6	0.7	100.0 (304)	2.7
30 ~ 34	4.4	6.7	14.8	19.6	23.7	16.3	8.9	5.6	100.0 (270)	3.6
35 ~ 39	2.7	4.4	9.9	12.1	23.1	21.4	14.3	12.1	100.0 (182)	4.3
40 ~ 44	7.4	—	5.8	12.4	14.9	22.3	19.8	17.4	100.0 (121)	4.6
45 ~ 49	1.2	1.2	9.4	9.4	11.8	25.9	25.9	15.3	100.0 (85)	4.9
Total	15.3	15.4	15.5	15.2	14.1	11.5	7.7	5.3	100.0 (1,373)	3.0

Table 4-2-5   Mean Number of Currently Living Children and Ideal Number of Children by Educational Attainment of Eligible Women, Kavrepalanchok and Dhanusa

	Illiterate	Literate without education	Educated
1. Kavrepalanchok			
Number of currently living children	2.90	2.35	2.68
Ideal number of children	3.07	2.94	2.72
2. Dhanusa			
Number of currently living children	2.35	2.67	2.92
Ideal number of children	3.27	2.45	2.95

Table 4-2-6   Distribution of Children Desired by Age of Eligible Women, Kavrepalanchok and Dhanusa

1. Kavrepalanchok   (%)

Age group	0	1	2	3	4	5	6	7	Mean number of children
15 ~ 19	0.8	1.6	35.9	41.4	14.8	3.9	1.6	—	2.9
20 ~ 24	—	1.5	32.0	48.3	16.4	1.5	0.4	—	2.9
25 ~ 29	0.3	1.7	31.9	43.4	17.7	3.5	1.4	--	2.9
30 ~ 34	0.4	0.4	23.2	39.0	30.7	4.4	1.3	0.4	3.2
35 ~ 39	--	0.5	30.1	34.7	25.9	4.7	3.1	1.0	3.2
40 ~ 44	1.1	1.1	22.4	40.8	28.7	2.3	2.3	1.1	3.2
45 ~ 49	1.1	--	18.4	35.6	35.6	5.7	2.3	1.1	3.4

2. Dhanusa   (%)

Age group	0	1	2	3	4	5	6	7	Mean number of children
15 ~ 19	3.1	0.8	9.3	65.1	20.2	0.8	0.8	—	3.0
20 ~ 24	—	0.4	13.4	64.6	17.7	2.5	0.4	1.1	3.1
25 ~ 29	0.3	2.0	9.4	56.5	26.4	4.0	0.7	0.7	3.2
30 ~ 34	0.7	1.8	9.1	49.8	31.6	5.5	1.5	—	3.3
35 ~ 39	—	0.5	9.2	57.9	25.6	6.2	0.5	—	3.3
40 ~ 44	2.9	—	4.3	56.4	27.1	7.1	0.7	1.4	3.4
45 ~ 49	—	2.3	5.3	36.6	19.1	33.6	3.1	--	3.9

Table 4-2-7   Additional Number of Children Desired by Number of Living Sons, Kavrepalanchok

(%)

Currently Living Sons	Number of additional sons desired					Number of additional daughters desired				
	0	1	2	3	4+	0	1	2	3	4+
0	10.4	33.2	50.0	2.6	3.9	43.5	39.6	13.0	0.5	3.4
1	54.2	31.4	8.6	0.8	5.1	74.5	16.6	3.5	0.3	5.1
2	91.8	2.3	4.1	—	1.7	90.7	6.1	0.9	0.3	2.0
3	98.4	1.1	0.5	—	—	92.9	6.6	—	0.5	—
4	98.2	1.8	—	—	—	98.2	1.8	—	—	—
5+	97.3	2.7	—	—	—	97.3	2.7	—	—	—
Total	60.0	18.7	17.4	0.9	2.9	73.8	18.2	4.8	0.4	2.8

Table 4-2-8   Additional Number of Children Desired by Number of Living Sons, Dhanusa

(%)

Currently Living Sons	Number of additional sons desired					Number of additional daughters desired				
	0	1	2	3	4+	0	1	2	3	4+
0	11.3	11.7	60.6	7.4	9.0	36.4	46.3	7.9	1.1	8.3
1	37.1	30.7	18.8	1.6	11.9	60.9	24.5	2.5	0.9	11.2
2	89.9	4.2	4.5	0.9	0.6	89.8	5.8	1.2	0.3	2.9
3	95.6	0.7	—	2.2	1.5	96.3	2.2	—	1.5	—
4	90.9	—	2.3	2.3	4.5	88.4	2.3	2.3	4.7	2.3
5+	80.0	6.7	—	—	13.3	86.7	—	—	—	13.3
Total	49.3	14.3	26.0	3.3	7.1	64.7	23.7	3.6	1.0	7.0

Table 4-3-1　Distribution of Respondents by 'Heard of Contraception' by Method of Contraceptives and Age

Age	METHODS OF CONTRACEPTION (%)								Total	Number of Samples	Number of Eligible Women who have heard of at least one method
	Pill	Condom	IUD	Injectable	Vesectomy	Laparoscopy	Traditional Method	Others			
1. Kavrepalanchok											
15~19	21.6	9.9	10.1	14.5	21.6	21.8	0.5	—	100.0	385	94
20~24	21.3	8.3	8.7	15.3	22.2	23.0	0.9	0.2	100.0	926	234
25~29	21.2	8.0	8.8	15.7	22.6	22.9	0.8	—	100.0	987	245
30~34	20.4	9.3	9.3	15.6	22.2	21.6	1.0	0.5	100.0	793	195
35~39	21.8	7.8	8.7	14.1	23.6	22.9	0.7	0.4	100.0	669	175
40~44	22.6	7.9	8.8	12.8	24.0	22.5	0.9	0.5	100.0	579	154
45~49	21.6	7.8	9.0	14.5	23.1	22.7	0.8	0.4	100.0	255	67
Total	21.4	8.4	9.0	14.8	22.7	22.5	0.8	0.3	100.0	4,594	1,164
2. Dhanusa											
15~19	16.8	10.6	3.1	10.9	26.5	31.0	1.1	—	100.0	358	113
20~24	16.8	9.5	3.6	12.4	26.9	30.2	0.5	0.1	100.0	862	260
25~29	17.7	8.6	2.9	11.5	27.7	30.6	0.7	0.2	100.0	919	285
30~34	19.7	8.6	2.2	11.8	27.2	29.5	0.9	—	100.0	907	269
35~39	16.7	7.5	2.8	10.8	28.6	33.4	0.2	—	100.0	545	182
40~44	17.3	6.6	1.9	13.6	28.5	30.4	1.7	—	100.0	411	126
45~49	15.2	7.1	2.5	12.4	29.7	32.2	0.7	0.4	100.0	283	91
Total	17.5	8.5	2.8	11.9	27.7	30.8	0.7	0.1	100.0	4,285	1,326

Table 4-3-2 Distribution of Respondents by Ever-Use of Contraception by Method and Age

Age	METHODS OF CONTRACEPTION (%)								Total	Number of Samples
	Pill	Condom	IUD	Injectable	Vasectomy	Laparoscopy	Traditional Method	Others		
1. Kavrepalanchok										
15~19	60.0	—	—	—	20.0	20.0	—	—	100.0	5
20~24	28.6	14.3	—	17.1	22.9	17.1	—	—	100.0	35
25~29	20.0	1.5	—	7.7	40.0	30.8	—	—	100.0	65
30~34	14.9	—	1.5	6.0	40.3	37.3	—	—	100.0	67
35~39	13.7	1.4	1.4	4.1	49.3	28.7	—	1.4	100.0	73
40~44	18.2	3.0	3.0	1.5	53.0	21.2	—	—	100.0	66
45~49	30.8	—	7.7	15.4	23.1	23.1	—	—	100.0	13
Total	19.1	2.8	1.5	6.5	42.3	27.8	—	0.3	100.0	324
2. Dhanusa										
15~19	6.3	6.3	—	6.3	25.0	50.0	6.3	—	100.0	16
20~24	18.9	10.8	—	2.7	16.2	51.3	—	—	100.0	37
25~29	10.2	—	2.0	4.1	4.1	79.6	—	—	100.0	49
30~34	12.1	3.0	1.0	2.0	3.0	78.8	—	—	100.0	99
35~39	6.8	2.7	—	2.7	11.0	76.7	—	—	100.0	73
40~44	9.1	2.3	—	—	20.5	68.2	—	—	100.0	44
45~49	—	—	—	—	17.4	82.6	—	—	100.0	23
Total	10.0	3.2	0.6	2.3	10.6	73.0	0.3	—	100.0	341

Table 4-3-3 Distribution of Respondents by Current Use of Contraception by Method and Age

Age	METHODS OF CONTRACEPTION (%)									Total	Number of Samples
	Pill	Condom	IUD	Injectable	Vasectomy	Laparoscopy	Traditional Method	Others	Not Using		
1. Kavrepalanchok											
15~19	–	–	–	–	2.2	2.2	–	–	95.6	100.0	45
20~24	1.0	2.0	–	6.1	8.1	6.1	–	–	76.8	100.0	99
25~29	1.7	0.8	–	2.5	21.7	16.7	–	–	56.7	100.0	120
30~34	2.6	–	–	1.7	23.3	21.6	–	–	50.9	100.0	116
35~39	2.7	–	–	–	32.4	18.9	–	0.9	45.9	100.0	111
40~44	3.3	–	1.1	–	38.0	15.2	–	–	42.4	100.0	92
45~49	5.7	–	–	5.7	8.6	8.6	–	–	71.4	100.0	33
Total	2.3	0.5	0.2	2.1	22.0	14.6	–	0.2	58.3	100.0	618
2. Dhanusa											
15~19	–	8.3	–	–	16.7	33.3	–	–	41.7	100.0	24
20~24	–	3.3	–	1.7	10.0	31.7	–	–	53.3	100.0	60
25~29	–	–	–	–	3.7	72.2	–	–	24.1	100.0	54
30~34	2.0	–	–	–	3.1	79.6	–	–	15.3	100.0	98
35~39	1.4	–	–	1.4	11.1	77.8	–	–	8.3	100.0	72
40~44	–	–	–	–	20.0	66.7	–	–	13.3	100.0	45
45~49	–	–	–	–	16.0	76.0	–	–	8.0	100.0	25
Total	0.8	1.1	–	0.5	9.5	65.9	–	–	22.2	100.0	378

Table 4-3-6　Distribution of Respondents by Current Use of Contraception by Number of Current Living Children

Number of Living Children	METHODS OF CONTRACEPTION (%)									Total	Number of Samples
	Pill	Condom	IUD	Injectable	Vasectomy	Laparoscopy	Traditional Method	Others	Not Using		
1. Kavrepalanchok											
0	–	–	–	–	4.7	–	–	–	95.3	100.0	64
1	1.5	1.5	–	5.9	2.9	1.5	–	–	86.6	100.0	68
2	2.4	2.4	–	2.4	17.1	11.0	–	–	65.9	100.0	82
3	1.6	1.6	0.8	1.6	27.6	16.5	–	0.8	50.4	100.0	127
4	3.0	3.0	–	3.0	29.7	14.9	–	–	49.5	100.0	101
5	–	–	–	1.4	33.8	18.3	–	–	46.5	100.0	71
6	5.0	5.0	–	–	22.5	20.0	–	–	52.5	100.0	40
7+	12.0	12.1	–	3.0	9.1	15.2	–	–	60.6	100.0	33
2. Dhanusa											
0	–	–	–	–	–	9.1	–	–	90.9	100.0	22
1	–	–	–	3.0	3.0	12.1	–	–	75.8	100.0	33
2	2.2	2.2	–	–	6.7	51.1	–	–	37.8	100.0	45
3	–	–	–	1.2	5.8	80.2	–	–	11.6	100.0	86
4	1.3	1.3	–	–	7.7	85.9	–	–	5.1	100.0	78
5	2.6	2.6	–	–	10.3	76.9	–	–	10.3	100.0	39
6	–	–	–	–	5.0	80.0	–	–	15.0	100.0	20
7+	–	–	–	–	–	85.7	–	–	14.3	100.0	7

Table 4-3-4 Distribution of Respondents by Their Future Intention to Use Contraception by Method

Age	METHODS OF FAMILY PLANNING (%)								Total	Number of Samples
	Pill	Condom	IUD	Injectable	Vasectomy	Laparoscopy	Others	Don't Know		
1. Kavrepalanchok										
15~19	25.8	–	1.6	14.5	22.6	32.3	–	3.2	100.0	62
20~24	17.7	1.4	–	8.5	31.2	36.9	2.1	2.1	100.0	141
25~29	21.4	0.8	–	15.1	19.8	38.0	3.2	1.6	100.0	126
30~34	20.0	2.9	1.4	14.3	28.6	28.6	1.4	2.9	100.0	70
35~39	26.8	2.4	–	22.0	19.5	29.3	–	–	100.0	41
40~44	35.3	–	5.9	35.3	5.9	11.7	5.9	–	100.0	17
45~49	25.0	25.0	–	50.0	–	–	–	–	100.0	4
Total	21.7	1.5	0.7	14.5	24.3	33.4	2.0	2.0	100.0	461
2. Dhanusa										
15~19	3.7	–	–	–	9.3	77.8	3.7	5.6	100.0	54
20~24	2.3	–	–	3.0	2.3	88.0	0.8	3.8	100.0	133
25~29	5.7	–	–	4.1	4.9	78.9	2.4	4.1	100.0	123
30~34	6.0	–	1.2	6.0	2.4	79.5	2.4	2.4	100.0	83
35~39	6.7	–	–	4.4	4.4	84.4	–	–	100.0	45
40~44	17.6	–	–	5.9	11.8	64.7	–	–	100.0	17
45~49	20.0	–	20.0	–	–	40.0	20.0	–	100.0	5
Total	5.2	–	0.4	3.7	4.3	81.1	2.0	3.3	100.0	460

Table 4-3-5 Distribution of Respondents by Reason for Not Using Any Method of Contraception

Age	REASONS FOR NOT USING CONTRACEPTIVE METHODS											Total	Number of Samples
	Desire for More Children	Desire for Son	Desire for Daughter	Health Reason	Religious Reason	Husband's Dis-approval	Separa-tion	Menopause	Sterility	No Con-traceptive Methods	Others		
1. Kavrepalanchok													
15~19	87.9	7.7	–	1.1	–	–	–	–	1.1	–	1.1	100.0	91
20~24	64.7	19.6	1.1	0.5	0.5	1.0	2.5	1.0	–	2.9	4.9	100.0	204
25~29	33.0	30.9	2.5	11.5	2.6	2.6	1.6	–	1.0	6.8	7.3	100.0	191
30~34	10.1	17.1	5.4	28.7	0.7	2.3	3.9	–	2.3	13.2	16.3	100.0	129
35~39	7.1	13.3	1.8	31.9	1.8	6.2	3.5	1.8	7.1	9.7	15.9	100.0	113
40~44	4.3	3.3	–	26.1	6.5	1.1	2.2	13.0	10.9	14.1	18.5	100.0	92
45~49	2.0	6.0	–	16.0	6.0	–	2.0	38.0	20.0	8.0	2.0	100.0	50
Total	34.8	17.1	2.3	14.8	2.1	2.1	2.3	4.0	3.9	7.4	9.4	100.0	870
2. Dhanusa													
15~19	77.3	2.7	–	–	0.9	0.9	1.8	–	–	–	16.1	100.0	110
20~24	69.5	17.7	0.8	–	2.9	2.1	–	–	0.4	0.8	5.8	100.0	243
25~29	47.7	28.3	1.7	5.5	3.4	3.0	–	–	1.7	1.3	7.6	100.0	237
30~34	37.0	19.6	1.6	11.4	4.3	4.3	–	0.5	5.4	1.6	14.1	100.0	184
35~39	18.9	15.6	1.6	18.0	8.2	6.6	–	9.8	5.7	0.8	14.8	100.0	122
40~44	13.4	11.0	2.4	6.1	6.1	9.8	–	25.6	15.9	–	9.8	100.0	82
45~49	4.3	11.8	–	8.7	4.3	5.8	–	39.1	17.4	–	8.7	100.0	69
Total	45.1	17.7	1.2	6.4	4.0	3.9	0.2	5.8	4.5	0.9	10.3	100.0	1,047

Table 4-4-1   Number of Deaths by Age and Its Distribution by Age

Age	Number of Deaths by Age		Distribution by Age (%)	
	Kavrepalanchok	Dhanusa	Kavrepalanchok	Dhanusa
0	44	43	36.7	37.1
(1 – 4)	(12)	(18)	(10.0)	(15.5)
1 – 14	23	28	19.2	24.1
15 – 64	34	18	28.3	15.5
65 +	19	27	15.8	23.3
Total	120	116	100.0	100.0

Table 4-4-2   Death Rate by Age Group
$(^o/oo)$

Age Group	Kavrepalanchok	Dhanusa
0	148.1	170.6
0 – 4	42.1	47.7
1 – 14	6.6	8.6
15 – 64	7.3	3.8
65 and above	53.2	114.9
All Ages	13.7	13.9

Table 4-5-1-1   Distribution of Respondents with Regard to What They Usually Do When Someone in the Household is Sick — by Panchayats Covered by Each Health Post

%, number of respondents in the parentheses

Name of place	To treat	Not to treat	Not stated	Total
1. Kavrepalanchok				
Bhumlutar	93.6	1.7	4.7	(406)
Dapcha	91.4	0.4	8.2	(279)
Khopasi	90.1	1.0	8.8	(477)
Nala	98.4	0	1.6	(304)
Total	93.0 (1,364)	0.9 (13)	6.1 (89)	(1,466)
2. Dhanusa				
Godar	96.9	1.8	1.3	(391)
Godhaghas	98.8	0.6	0.6	(309)
Sabaila	95.7	1.9	2.4	(468)
Tarapatti	91.7	2.0	6.3	(303)
Total	95.9 (1,410)	1.6 (24)	2.5 (37)	(1,471)

Table 4-5-1-2   Distribution of Respondents by Reason for Not Treating the Patients by Panchayats Covered by Each Health Post

(%)

Name of Health Post	Financial Problems	No belief in Treatment	Long distance	Bad treatment in Health Institution
1. Kavrepalanchok				
Bhumlutar	46.2	23.1	7.7	15.4
Dapcha	7.7	0.0	0.0	7.7
Khopasi	30.8	15.4	15.4	7.7
Nala	0.0	7.7	0.0	7.7
Total	84.7	46.2	23.1	38.5
2. Dhanusa				
Godar	20.8	4.2	0.0	0.0
Godhaghas	4.2	0.0	0.0	4.2
Sabaila	20.8	8.3	4.2	8.3
Tarapatti	16.7	0.0	0.0	8.3
Total	62.5	12.5	4.2	20.8

Table 4-5-1-3   Distribution of Respondents by Place Contacted for Treatment by Panchayats Covered by Each Health Post

%, number of respondents in the parentheses

Name of Health Post	Hospital/ Health Center	Doctor/ Nurse/ other HW	Dhami Jankri	Kaviraj	Quack	Others	Not Stated	Total
1. Kavrepalanchok								
Bhumlutar	58.6	1.0	34.8	—	—	0.8	4.8	(399)
Dapcha	56.7	3.5	30.1	0.4	1.4	—	7.8	(282)
Khopasi	56.3	4.2	27.4	1.3	1.5	0.6	8.6	(474)
Nala	45.4	3.9	40.8	4.3	3.6	0.7	1.3	(304)
Total	54.8 (799)	3.2 (46)	32.8 (478)	1.4 (20)	1.5 (22)	0.5 (8)	5.9 (86)	(1,459)
2. Dhanusa								
Godar	40.2	34.5	1.3	—	12.4	10.1	1.6	(386)
Godhaghas	43.9	50.3	0.3	3.2	1.3	0.6	0.3	(310)
Sabaila	42.8	42.1	0.6	—	10.4	1.9	2.2	(463)
Tarapatti	44.2	45.5	0.7	1.0	1.7	0.3	6.6	(301)
Total	42.6 (622)	42.5 (621)	0.8 (11)	0.9 (13)	7.2 (105)	3.5 (51)	2.5 (37)	(1,460)

Table 4-5-1-4   Distribution of Respondents by Knowledge of Diarrhoea by Age, Kavrepalanchok and Dhanusa

Age group	Kavrepalanchok		Dhanusa	
	Have knowledge	%	Have knowledge	%
~14	2	100.0		0.0
15~19	105	86.8	91	72.8
20~24	252	93.3	235	84.5
25~29	277	95.8	255	85.0
30~34	220	94.8	235	85.8
35~39	188	97.4	171	88.6
40~44	167	96.5	114	83.8
45~49	80	92.0	78	83.0
50~	3	100.0		
Total	1,296	94.4	1,180	84.1

Table 4-5-1-5   Distribution of Respondents by Their Knowledge About the Symptoms of Diarrhoea, Kavrepalanchok and Dhanusa

%, number of respondents in the parentheses

Age group	Indigestible food eaten	Superstition	Stomack disorder	Stale food	Dirty food	Food with flies	Stagnant water	Don't know the reason	Total
1. Kavrepalanchok									
~14		100.0							100.0 (1)
15~19	7.5	13.4		14.9	6.0	6.0	1.5	50.7	100.0 (67)
20~24	14.0	12.7	4.0	13.3	9.3	8.0	0.7	38.0	100.0 (150)
25~29	9.3	14.5	2.3	11.6	8.1	11.0	1.2	41.9	100.0 (172)
30~34	12.1	10.7	2.1	12.9	8.6	6.4	2.1	45.0	100.0 (140)
35~39	9.4	15.0	1.6	11.8	11.8	8.7	0.8	40.9	100.0 (127)
40~44	12.3	14.9	1.8	14.0	7.0	13.2	0.9	36.0	100.0 (114)
45~49	8.8	8.8	3.5	12.3	3.5	10.5	1.8	50.9	100.0 (57)
50 +	50.0			50.0					100.0 (2)
Total	11.0	13.3	2.3	12.9	8.3	9.1	1.2	41.9	100.0 (830)
2. Dhanusa									
15~19	25.0	4.2		29.2	8.3			33.3	100.0 (24)
20~24	20.7	12.6		12.6	5.7			48.3	100.0 (87)
25~29	18.2	10.4		19.5	2.6		1.3	48.1	100.0 (77)
30~34	20.4	14.6	1.0	19.4	2.9	0.2	1.0	40.8	100.0 (103)
35~39	19.7	9.9	4.2	15.5	7.0			43.7	100.0 (71)
40~44	12.5	15.0	2.5	17.5	7.5			45.0	100.0 (40)
45~49	32.1	14.3	3.6	17.9			3.6	28.6	100.0 (28)
Total	20.2	12.1	1.4	17.7	4.7	0.2	0.4	43.3	100.0 (430)

Table 4-5-1-6 Distribution of Respondents by Their Attitude Towards Type of Treatment of Diarrhoea, Kavrepalanchok and Dhanusa

%, number of respondents in the parentheses

Age group	No treatment	Jeevan Jal	Salt-Sugar water	Moden medicine	Ayurvedic medicine	Other traditional treatment	Other treatment	Don't know treatment	Total
1. Kavrepalanchok									
~14				100.0					100.0(2)
15~19	4.9	10.8	4.9	19.6	5.9	29.4	11.8	12.7	100.0(102)
20~24	4.9	16.2	6.5	25.1	6.5	25.5	8.9	6.5	100.0(247)
25~29	3.3	17.8	6.5	25.5	9.5	24.7	10.9	1.8	100.0(275)
30~34	2.7	15.1	2.7	21.0	8.7	34.7	12.8	2.3	100.0(219)
35~39	6.5	8.1	1.6	32.4	7.6	24.9	15.7	3.2	100.0(185)
40~44	3.0	9.6	3.0	25.3	4.2	34.9	15.7	4.2	100.0(166)
45~49	5.1	7.6	1.3	29.1	7.6	34.2	15.2		100.0(79)
50+				66.7		33.3			100.0(3)
Total	4.2	13.3	4.2	25.5	7.4	28.9	12.5	4.1	100.0 (1,276)
2. Dhanusa									
15~19	3.4	17.0	1.1	36.4	6.8	3.4	14.8	17.0	100.0(88)
20~24	5.7	20.0	1.3	43.0	7.0	3.9	11.7	7.4	100.0(230)
25~29	5.6	17.5	1.2	46.4	6.3	3.2	14.7	5.2	100.0(252)
30~34	4.3	20.3	2.2	43.3	8.2	2.6	13.0	6.1	100.0(231)
35~39	4.2	22.2	0.6	43.1	6.0	1.8	15.0	7.2	100.0(167)
40~44	1.8	15.9	2.7	49.6	5.3	5.3	17.7	1.8	100.0(113)
45~49	3.9	11.7		55.8	3.9	2.6	14.3	7.8	100.0(77)
Total	4.5	18.7	1.4	44.8	6.6	3.2	14.1	6.8	100.0 (1,158)

Table 4-5-1-7   Distribution of Respondents by Incidence of Eye Problem and Nightblindness to Children by Panchayats Covered by Each Health Post

(%)

Name of Health Post	Morbidity rate of any eye problems	Type of Diseases						Night blindness
		Conjuncti- vitis	Xeroph- thalmia	Blindness after birth	Born blind	Tracoma	Others	
1. Kavrepalanchok								
Bhumlutar	12.7	43.2	2.3	—	—	—	54.5	0.3
Dapcha	10.6	63.0	3.7	3.7	—	3.7	25.9	1.4
Khopasi	6.7	40.7	0.0	—	3.7	3.7	51.9	1.1
Nala	11.6	50.0	3.1	—	—	9.4	37.5	0.4
Total	10.1	48.5	2.3	0.8	0.8	3.8	43.8	0.8
2. Dhanusa								
Godar	2.0	14.3	14.3	—	14.3	—	57.1	1.7
Godhaghas	10.1	42.9	7.1	—	—	—	50.0	6.3
Sabaila	10.8	48.4	9.7	9.7	—	—	32.3	3.5
Tarapatti	12.4	31.3	3.1	—	—	3.1	62.5	9.5
Total	7.7	39.2	6.2	3.1	1.0	1.0	49.5	4.9

Table 4-5-1-8   Incidnece of Diarrhoea, Measles, Worms, Whooping Cough, Diphtheria and A.R.I. Children Under Five by Panchayats Covered by Each Health Post

%, number of respondents in the parentheses

Name of Health Post	Diarrhoea	Measles	Worms	Whooping Cough	A.R.I.	Diphtheria
1. Kavrepalanchok						
Bhumlutar	69.3	10.3	42.2	39.2	46.0	6.0
Dapcha	69.8	17.8	37.3	41.8	38.6	3.2
Khopasi	71.5	21.3	37.5	26.4	38.8	4.3
Nala	78.2	25.1	43.1	28.9	33.7	6.5
Total	72.0 (861)	18.9 (850)	40.1 (856)	33.5 (856)	39.7 (853)	5.1 (849)
2. Dhanusa						
Godar	64.1	8.4	21.4	11.8	17.8	1.4
Godhaghas	70.3	12.7	46.5	25.3	77.1	4.8
Sabaila	56.9	10.9	21.4	20.0	31.3	1.6
Tarapatti	65.1	9.8	30.1	22.3	62.9	1.2
Total	63.3 (832)	10.4 (818)	28.4 (830)	19.4 (829)	44.0 (831)	2.1 (797)

Table 4-5-1-9 Distribution of Children by Type of Treatment Received for Diarrhoea, Measles, Worms, Whooping Cough, ARI and Diphtheria of Last Child, Kavrepalanchok and Dhanusa

Number of respondents, % in the parentheses

	Not Treated	At Home	H.P./ Hospital	FP Clinic	Dhami/ Jhankri	Kaviraj/ Vaidya	Others	Total
1. Kavrepalanchok								
Diarrhoea	122 (21.0)	96 (16.5)	158 (27.2)	2 (0.3)	121 (20.8)	39 (6.7)	43 (7.4)	581
Measles	72 (48.6)	37 (25.0)	19 (12.8)	—	8 (5.4)	5 (3.4)	7 (4.7)	148
Worms	47 (18.8)	35 (14.0)	68 (27.2)	22 (8.8)	17 (6.8)	19 (7.6)	42 (16.8)	250
Whooping Cough	74 (30.7)	44 (18.3)	78 (32.4)	1 (0.4)	6 (2.5)	18 (7.5)	20 (8.3)	241
A.R.I	134 (43.6)	48 (15.6)	63 (20.5)	1 (0.3)	27 (8.8)	16 (5.2)	18 (5.9)	307
Diphtheria	8 (22.9)	7 (20.0)	8 (22.9)	—	3 (8.6)	4 (11.4)	5 (14.3)	35
Total	457 (29.3)	267 (17.1)	394 (25.2)	26 (1.7)	182 (11.7)	101 (6.5)	135 (8.6)	1,562
2. Dhanusa								
Diarrhoea	72 (14.8)	185 (38.0)	41 (8.4)	8 (1.6)	2 (0.4)	52 (10.7)	127 (26.1)	487
Measles	38 (49.4)	30 (39.0)	3 (3.9)	—	—	1 (1.3)	5 (6.5)	77
Worms	29 (15.3)	62 (32.6)	16 (8.4)	3 (1.6)	8 (4.2)	22 (11.6)	50 (26.3)	190
Whooping Cough	34 (23.8)	42 (29.4)	10 (7.0)	—	1 (0.7)	22 (15.4)	34 (23.8)	143
A.R.I	96 (28.6)	133 (39.6)	15 (4.5)	2 (0.6)	4 (1.2)	23 (6.8)	63 (18.8)	336
Diphtheria	4 (28.6)	7 (50.0)	1 (7.1)	—	—	—	2 (14.3)	14
Total	273 (21.9)	459 (36.8)	86 (6.9)	13 (1.0)	15 (1.2)	120 (9.6)	281 (22.5)	1,247

Table 4-5-2-1 Distribution of Currently Pregnant Women by Place of Delivery Desired, Kavrepalanchok and Dhanusa

%, number of respondents in the parentheses

Place of delivery desired	Kavrepalanchok	Dhanusa
Hospital	5.4	0.9
Health Post	0	2.6
At home	93.2	96.5
Total	100.0 (148)	100.0 (115)

Table 4-5-2-2 Distribution of Respondents by Palce of Delivery of Last Child by Panchayats Covered by Each Health Post

%, number of respondents in the parentheses

Name of Health Post	Hospital	Health Post	Home	Others	Total
1. Kavrepalanchok					
Bhumlutar	5.0	0.3	94.7		100.0 (337)
Dapcha	3.6	0.9	95.5		100.0 (223)
Khopasi	3.8	1.1	95.1		100.0 (369)
Nala	3.4	0.4	96.2		100.0 (261)
Total	4.0	0.7	95.3		100.0 (1,190)
2. Dhanusa					
Godar	1.2		98.8		100.0 (336)
Godhaghas	3.1	0.4	96.6		100.0 (261)
Sabaila	3.1	0.5	96.4		100.0 (388)
Tarapatti	5.0	1.2	93.8		100.0 (241)
Total	2.9	0.5	96.6		100.0 (1,225)

Table 4-5-2-3 Distribution of Respondents by Place Where They Went for Check Up During Pregnancy by Panchayats Covered by Each Health Post

%, number of respondents in the parentheses

Name of Health Post	Hospital	Health Post	T.B.A.	Others	Total
1. Kavrepalanchok					
Bhumlutar	82.1	14.3		3.6	100.0 (28)
Dapcha	72.7	9.1		18.2	100.0 (11)
Khopasi	82.1	7.7	2.6	7.7	100.0 (39)
Nala	82.8		4.3	13.0	100.0 (22)
Total	82.0	8.0	2.0	8.0	100.0 (100)
2. Dhanusa					
Godar	76.9	7.7		15.4	100.0 (13)
Godhaghas	50.0	5.6		44.4	100.0 (18)
Sabaila	30.4	26.1	4.3	39.1	100.0 (23)
Tarapatti	57.1	14.3		28.6	100.0 (21)
Total	50.7	14.7	1.3	33.3	100.0 (75)

Table 4-5-2-4 Distribution of Respondents Who Were Satisfied With the Check-up, Kavrepalanchok and Dhanusa

number of respondents, % in the parentheses

Name of Health Post	Hospital	Health Post	T.B.A.	Others	Total
1. Kavrepalanchok	74 (90.2)	6 (75.0)	2 (100.0)	7 (87.5)	89 (89.0)
2. Dhanusa	29 (76.3)	9 (81.8)	0 (0.0)	23 (92.0)	61 (81.3)

Table 4-5-2-5   Distribution of Respondents by Reasons for Having Check Up by Panchayats
Covered by Each Health Post

%, number of respondents in the parentheses

Name of Health Post	Regular check-up	Due to complication	Both	Total
1. Kavrepalanchok				
Bhumlutar	35.7	57.1	7.1	100.0 (28)
Dapcha	53.8	46.2		100.0 (13)
Khopasi	41.5	51.2	7.3	100.0 (41)
Nala	52.2	30.4	17.4	100.0 (23)
Total	43.8	47.6	8.6	100.0 (105)
2. Dhanusa				
Godar	64.3	14.3	21.4	100.0 (14)
Godhaghas	60.9	34.8	4.3	100.0 (23)
Sabaila	47.8	43.5	8.7	100.0 (23)
Tarapatti	47.6	52.4		100.0 (21)
Total	54.3	38.3	7.4	100.0 (81)

Table 4-5-2-6   Distribution of Respondents by Types of Check-up by Panchayats Covered by Each Health Post

%, number of respondents in the parentheses

Name of Health Post	Weighted	Blood pressure	Urine exam	Chest	Use of Stethoscope	Others	Number of Respondents
1. Kavrepalanchok							
Bhumlutar	57.1	64.3	64.3	46.4	57.1	10.7	(28)
Dapcha	76.9	84.6	69.2	84.6	15.4	15.4	(13)
Khopasi	51.2	63.4	58.5	51.2	26.8	26.8	(41)
Nala	52.2	47.8	43.5	69.6	39.1	17.4	(23)
Total	56.2	62.9	58.1	58.1	36.2	15.2	(105)
2. Dhanusa							
Godar	50.0	71.4	64.3	71.4	42.9		(14)
Godhaghas	21.7	47.8	30.4	30.4	39.1	21.7	(23)
Sabaila	30.4	43.5	39.1	69.6	39.1	30.4	(23)
Tarapatti	19.0	38.1	33.3	42.9	57.1	9.5	(21)
Total	28.4	48.1	39.5	51.9	44.4	17.3	(81)

Table 4-5-2-7 Distribution of Respondents by Types of Persons Who Advised for Medical Check During
Pregnancy by Panchayats Covered by Each Health Post

%, number of respondents in the parentheses

Name of Health Post	Health worker	Spouse	Family Member	Friend	Others	Total
1. Kavrepalanchok						
Bhumlutar	6.9	6.9	62.1	13.8	10.3	100.0 (29)
Dapcha	—	25.0	41.7	25.0	8.3	100.0 (12)
Khopasi	5.0	10.0	65.0	7.5	12.5	100.0 (40)
Nala	4.5	18.2	72.7	—	4.5	100.0 (22)
Total	4.9	12.6	63.1	9.7	9.7	100.0 (103)
2. Dhanusa						
Godar	30.8	7.7	53.8	7.7		100.0 (13)
Godhaghas	5.6	22.2	66.7		5.6	100.0 (18)
Sabaila	4.2	12.5	79.2		4.2	100.0 (24)
Tarapatti		9.5	71.4	4.8	14.3	100.0 (21)
Total	7.9	13.2	69.7	2.6	6.6	100.0 (76)

Table 4-5-2-8 Distribution of Respondents Who Reported About Contents Which Were
Talked by Health Worker, Kavrepalanchok and Dhanusa

Kavrepalanchok		Dhanusa	
Contents of Talking	Ratio (%)	Contents of Talking	Ratio (%)
Immunization	7.5	Talk about F.P.	65.5
Talk about F.P.	7.4	Diarrhorea/ORT	34.9
Diarrhoea/ORT	5.7	Health of Children	34.1
Medicine	4.9	Immunization	31.2
Health of Children	4.7	Worms	28.8
Health Education	4.7	Medicine	27.8
Worms	4.6	Birth Spacing	24.5
ARI	4.3	Pre & Postnatal Care	22.1
Birth Spacing	4.1	Breastfeeding	21.2
Pre & Postnatal Care	3.9	Nutrition	19.6
Breastfeeding	3.6	Health Education	18.7
Nutrition	3.5	ARI	17.6
Posters/Pamphlets	1.4	Posters/Pamphlets	9.9

Table 4-5-3-1　Distribution of Respondents by Source of Knowledge About Immunization by Panchayats Covered by Each Health Post

%, number of respondents in the parentheses

Name of Place Health Post	Health Worker	Spouse	Family Member	Friends	Radio	News Paper	Mothers' Club	Immuni. Camp	Others	Total
1. Kavrepalanchok										
Bhumlutar	12.9	1.4	1.4	0.7	3.4	–	0.3	52.4	27.6	(294)
Dapcha	10.3	3.4	1.7	0.9	7.8	–	–	50.4	25.4	(232)
Khopasi	5.8	3.4	1.7	1.2	7.8	–	0.2	53.9	26.0	(412)
Nala	6.1	3.8	1.1	2.3	9.1	–	–	57.4	20.2	(263)
Total	8.5	3.0	1.5	1.2	7.0	–	0.2	53.6	25.0	(1,201)
	(102)	(36)	(18)	(15)	(84)	–	(2)	(644)	(300)	
2. Dhanusa										
Godar	7.1	1.5	2.2	0.6	–	–	0.6	80.6	7.4	(325)
Godhaghas	8.6	1.4	1.1	0.7	0.4	–	0.4	63.2	24.3	(280)
Sabaila	4.5	2.4	0.8	0.3	–	0.3	0.5	80.7	10.6	(378)
Tarapatti	9.9	0.4	–	0.7	–	–	–	39.2	26.7	(273)
Total	7.2	1.5	1.0	0.6	0.1	0.1	0.4	72.8	16.3	(1,256)
	(91)	(19)	(13)	(7)	(1)	(1)	(5)	(914)	(205)	

Table 4-5-3-2 Incidence of Immunization (B.C.G., Measles, D.P.T., Polio) To Children Under Five by Panchayats Covered by Each Health Post

%, number of respondents in the parentheses

Name of Place	B.C.G.	Measles	D.P.T.					Polio				
			0	1	2	3	Total	0	1	2	3	Total
1. Kavrepalanchok												
Bhumlutar	52.3 (67)	46.6 (61)	33.1	45.2	16.1	5.6	(124)	54.1	31.1	11.5	3.3	(122)
Dapcha	47.3 (43)	62.1 (54)	34.4	44.1	11.8	9.7	(93)	43.8	31.5	15.7	9.0	(89)
Khopasi	55.6 (84)	57.2 (87)	24.5	42.3	20.2	12.9	(163)	48.7	28.5	12.0	10.8	(158)
Nala	63.5 (54)	51.8 (44)	35.6	31.7	17.8	14.9	(101)	51.0	23.0	11.0	15.0	(100)
Total	54.5 (248)	54.1 (246)	31.0	41.2	17.0	10.8	(481)	49.7	28.6	12.4	9.4	(469)
2. Dhanusa												
Godar	93.1 (161)	75.6 (121)	6.8	26.0	22.6	44.6	(177)	8.5	27.8	19.3	44.3	(176)
Godhaghas	90.7 (127)	54.1 (72)	14.7	14.0	20.3	51.0	(143)	17.5	17.5	19.6	45.5	(143)
Sabaila	83.1 (152)	68.6 (120)	11.8	24.6	26.7	36.9	(187)	24.2	24.2	21.0	30.6	(186)
Tarapatti	97.0 (131)	65.3 (79)	12.1	14.3	21.4	52.1	(140)	15.8	18.7	18.7	46.8	(139)
Total	90.5 (571)	66.6 (392)	11.1	20.4	23.0	45.4	(647)	16.6	22.5	19.7	41.1	(644)

Table 4-5-3-3 Distribution of Children Immunized by Place of Taking Immunization by Panchayats Covered by Each Health Post

%, number of respondents in the parentheses

Name of Health Post	Hospital	Health Post	Immuni. Camp	FP Clinic	Others	Not Stated	Total
1. Kavrepalanchok							
Bhumlutar	8.0	9.9	63.0			19.1	100.0 (162)
Dapcha	3.7	19.6	54.2		0.9	21.5	100.0 (107)
Khopasi	3.8	3.8	66.0	0.5	0.5	25.4	100.0 (209)
Nala	9.4	9.4	70.8		2.8	7.5	100.0 (106)
Total	6.0	9.4	63.9	0.2	0.9	19.7	100.0 (584)
2. Dhanusa							
Godar	5.6	3.6	82.6		0.5	7.7	100.0 (195)
Godhaghas	15.2	2.4	75.0		0.6	6.7	100.0 (164)
Sabaila	2.4	1.4	84.9		0.9	10.4	100.0 (212)
Tarapatti	8.0	1.7	76.4			13.8	100.0 (174)
Total	7.4	2.3	80.1		0.5	9.7	100.0 (745)

Table 4-5-3-4 Distribution of Respondents by Reason for Not Immunizing The Children by Panchayats Covered by Each Health Post

%, number of respondents in the parentheses

Name of Health Post	Service not available	Cost	Not accessible	Don't know the source	Service not needed	Don't know necessity	Total
1. Kavrepalanchok							
Bhumlutar	68.8	3.1	7.8	4.7	10.9	4.7	100.0 (64)
Dapcha	73.7	2.6	5.3	5.3	7.9	5.3	100.0 (38)
Khopasi	70.3	5.4	2.7	8.1	9.5	4.0	100.0 (74)
Nala	84.7		8.5	1.7	1.7	3.4	100.0 (59)
Total	74.0	3.0	6.0	5.1	7.7	4.2	100.0 (235)
2. Dhanusa							
Godar	63.6			4.5	27.3	4.5	100.0 (22)
Godhaghas	39.1	8.7	13.0	8.7	30.4		100.0 (23)
Sabaila	48.6	2.7	10.8	8.1	21.6	8.1	100.0 (37)
Tarapatti	26.1	4.3	13.0	8.7	34.8	13.0	100.0 (23)
Total	44.8	3.8	9.5	7.6	27.6	6.7	100.0 (105)

Table 4-5-4   Distribution of Respondents by Source of Knowledge About Jeevan Jal and
Medicine Water, Kavrepalanchok and Dhanusa

(%)

Source of Information	Jeevan Jal		Medicine Water	
	Kavrepalanchok	Dhanusa	Kavrepalanchok	Dhanusa
Health Worker	6.4	38.2	1.4	33.3
Spouse	2.6	1.1	0.6	1.5
Family Member	3.2	9.8	1.7	8.2
Friend	2.2	4.1	0.9	3.6
Radio	69.3	19.0	89.1	33.7
Newspaper	0.1	0.4	—	0.4
Mother's Club	0.2	1.6	0.2	1.3
Others	16.1	25.7	6.2	17.8

Table 4-6-1-1   Distribution of Nutritional Status of Children by Birth Order,
Kavrepalanchok and Dhanusa

%, number of respondents in the parentheses

	Malnourished	Slightly undernourished	Well nourished	Total
1. Kavrepalanchok				
Last Child	13.6	33.2	53.2	(810)
Last but one Child	6.8	32.0	61.3	(266)
Last but two Child	8.3	29.2	62.5	(24)
Total	11.8	32.8	55.4	(1,100)
2. Dhanusa				
Last Child	21.7	35.9	42.4	(766)
Last but one Child	6.8	29.3	63.9	(191)
Last but two Child	23.0	38.5	38.5	(13)
Total	18.8	34.6	46.6	(970)

Table 4-6-1-2 Distribution of Respondents by Type of Food Given to Children as Weaning Food by Panchayats Covered by Each Health Post

1. Kavrepalanchok

%, number of respondents in the parentheses

Bhumlutar	(408)	Dapcha	(283)	Khopasi	(480)	Nala	(305)	Total	(1,476)
Dal & Rice	75.5	Dal & Rice	75.3	Dal & Rice	70.0	Rice with Milk	84.9	Dal & Rice	75.0
Rice with Milk	70.3	Rice with Milk	68.6	Rice with Milk	65.0	Dal & Rice	81.6	Rice with Milk	71.3
Green Vegetable	19.9	Green Vegetable	36.0	Green Vegetable	27.5	Green Vegetable	23.0	Green Vegetable	26.1
Khichadi, Jaulo	19.4	Khichadi, Jaulo	19.1	Khichadi, Jaulo	17.9	Khichadi, Jaulo	10.2	Khichadi, Jaulo	16.9
Sarbottam Pitho	7.1	Dried Beans	7.1	Sarbottam Pitho	5.8	Dried Beans	4.9	Dried Beans	5.3
Dried Beans	5.9	Sarbottam Pitho	2.1	Dried Beans	4.6	Meat & Fish	3.6	Sarbottam Pitho	4.7
Meat & Fish	5.4	Khir	1.4	Meat & Fish	3.8	Sarbottam Pitho	2.3	Meat & Fish	3.7
Egg	3.4	Fruits	1.4	Fruits	2.7	Egg	2.3	Egg	2.4
Fruits	2.7	Meat & Fish	1.1	Egg	2.5	Khir	2.0	Fruits	2.1
Khir	0.2	Egg	0.7	Khir	0.6	Fruits	1.0	Khir	0.9

2. Dhanusa

%, number of respondents in the parentheses

Godar	(394)	Godhaghas	(314)	Sabaila	(472)	Tarapatti	(303)	Total	(1,483)
Dal & Rice	92.6	Dal & Rice	95.2	Dal & Rice	93.6	Dal & Rice	87.1	Dal & Rice	92.4
Rice with Milk	50.3	Rice with Milk	32.2	Rice with Milk	62.7	Rice with Milk	44.6	Rice with Milk	49.2
Khichadi, Jaulo	39.3	Green Vegetable	16.9	Khichadi, Jaulo	23.1	Khichadi, Jaulo	25.7	Khichadi, Jaulo	26.2
Green Vegetable	17.8	Khichadi, Jaulo	14.6	Green Vegetable	16.1	Green Vegetable	12.5	Green Vegetabel	16.0
Meat & Fish	13.5	Fruits	0.6	Khir	12.3	Fruits	2.3	Meat & Fish	7.1
Sarbottam Pitho	12.7	Khir	0.3	Meat & Fish	9.5	Meat & Fish	2.3	Khir	5.6
Fruits	10.2	Dried Beans	0.3	Fruits	5.5	Sarbottam Pitho	1.7	Sarbottam Pitha	5.3
Dried Beans	9.1	Meat & Fish	0.3	Sarbottam Pitho	5.1	Khir	1.7	Fruits	5.1
Egg	5.6	Sarbottam Pitho	—	Dried Beans	3.2	Dried Beans	0.3	Dried Beans	3.6
Khir	4.8	Egg	—	Egg	2.3	Egg	—	Egg	2.2

Table 4-6-2 Distribution of Respondents by Type of Additional Food Taken by Pregnant Women by Panchayats Covered by Each Health Post.

1. Kavrepalanchok

%, number of respondents in the parentheses

Bhumlutar (408)		Dapcha (283)		Khopasi (480)		Nala (350)		Total (1,476)	
Protein	16.2	Protein	11.7	Protein	18.1	Ghee	14.8	Protein	15.4
Ghee	9.8	Milk	8.1	Milk	9.4	Protein	13.4	Milk	8.9
Milk	9.1	Fruits	7.4	Fruits	8.3	Milk	8.5	Fruits	7.7
Fruits	6.7	Ghee	3.9	Beans	6.0	Fruits	8.2	Ghee	6.1
Beans	3.4	Beans	3.5	Ghee	5.6	Green Vegetable	3.3	Beans	4.1
Green Vegetable	2.7	Green Vegetable	2.1	Green Vegetable	5.4	Beans	2.6	Green Vetetable	3.6
Egg	1.7	Egg	2.1	Egg	5.4	Egg	1.6	Egg	3.0
Others	15.2	Others	15.9	Others	16.7	Others	8.9	Others	15.4

2. Dhanusa

%, number of respondents in the parentheses

Godar (394)		Godhaghas (314)		Sabaila (472)		Tarapatti (303)		Total (1,483)	
Protein	10.9	Milk	15.0	Milk	11.9	Milk	16.5	Milk	12.3
Milk	7.6	Fruits	7.0	Protein	6.6	Protein	7.3	Protein	7.8
Green Vegetable	6.3	Protein	6.1	Fruits	4.0	Fruits	5.0	Fruits	4.9
Fruits	4.1	Egg	1.9	Green Vegetable	2.1	Green Vegetable	1.7	Green Vegetable	3.0
Ghee	2.0	Green Vegetable	1.6	Ghee	1.3	Beans	1.7	Ghee	1.2
Egg	1.3	Ghee	0.6	Beans	0.8	Egg	0.7	Egg	0.9
Beans	–	Beans	0.3	Egg	0.2	Ghee	0.7	Beans	0.7
Others	3.0	Others	15.3	Others	10.6	Others	14.2	Others	10.3

Table 4-6-3　Distribution of Respondents by Type of Additional Food Taken by Breastfeeding Mother by Panchayats Covered by Each Health Post.

1. Kavrepalanchok

%, number of respondents in the parentheses

Bhumlutar	(408)	Dapcha	(283)	Khopasi	(480)	Nala	(305)	Total	(1,476)
Protein	20.3	Protein	16.3	Protein	21.3	Protein	24.9	Protein	20.8
Ghee	12.7	Milk	12.4	Ghee	11.7	Milk	12.8	Milk	12.0
Milk	11.8	Ghee	11.0	Milk	11.5	Ghee	12.1	Ghee	11.9
Green Vegetable	5.6	Green Vegetable	7.8	Green Vegetable	6.0	Green Vegetable	3.6	Green Vegetable	5.8
Fruits	3.9	Fruits	4.9	Fruits	6.0	Beans	3.0	Fruits	4.4
Beans	2.9	Beans	3.9	Beans	5.8	Fruits	2.0	Beans	4.1
Egg	2.0	Egg	2.5	Egg	2.3	Egg	1.0	Egg	2.0
Others	20.6	Others	29.0	Others	25.0	Others	29.8	Others	25.5

2. Dhanusa

%, number of respondents in the parentheses

Godar	(394)	Godhaghas	(314)	Sabaila	(472)	Tarapatti	(303)	Total	(1,483)
Milk	8.9	Milk	33.8	Milk	18.0	Milk	29.4	Milk	21.2
Protein	5.3	Beans	3.5	Green Vegetable	5.1	Protein	6.6	Protein	4.4
Green Vegetable	5.3	Protein	2.9	Protein	3.2	Beans	5.0	Green Vegetable	3.8
Fruits	2.3	Fruits	2.5	Fruits	1.9	Fruits	3.6	Fruits	2.5
Egg	1.0	Egg	2.2	Beans	1.5	Green Vegetable	2.3	Beans	2.3
Ghee	0.8	Green Vegetable	1.3	Egg	0.4	Egg	1.0	Egg	1.1
Beans	0.3	Ghee	0.3	Ghee	0.4	Ghee	1.0	Ghee	0.6
Others	12.4	Others	40.1	Others	20.3	Others	29.0	Others	24.2