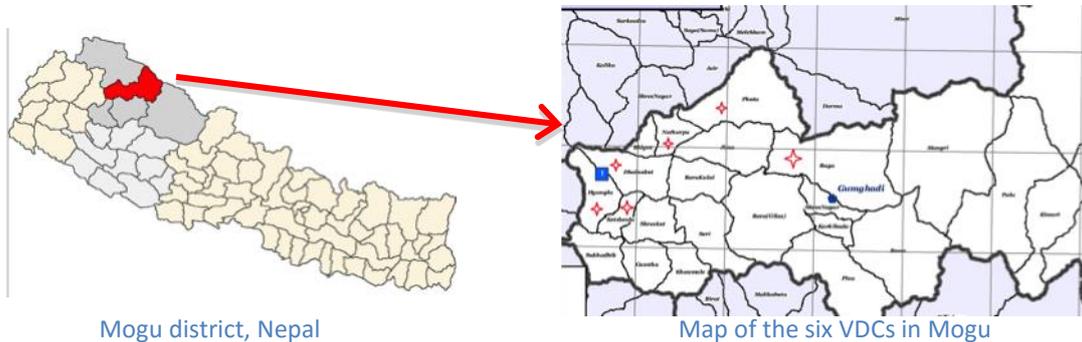


Mugu Baseline Survey

April 2016

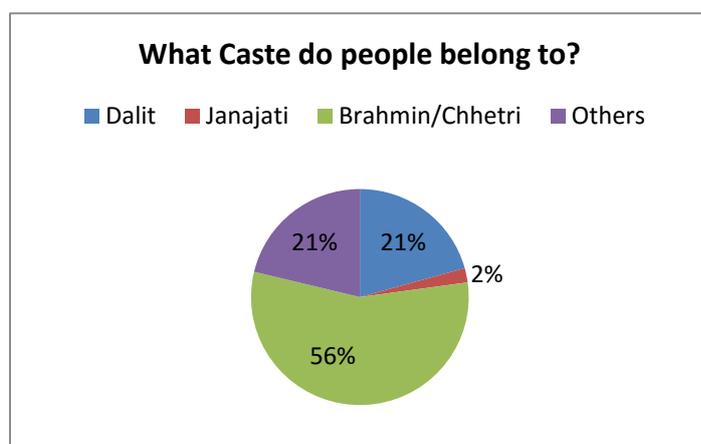


Mugu District is in the mountainous north-western Karnali region of Nepal. Accessed only by mud tracks or by air, Mugu has some of the lowest Human Development Index outcomes nationally, with the district ranked 67 out of 75 in 2011. Its small mountain villages have few or no basic services, meaning that many children are malnourished, maternal nutrition is poor and its people are vulnerable to health problems such as diarrhoea. PHASE projects in this area focus on six Village Development Committees (VDCs), or clusters of villages, in the north and west of the district - Hyanglu, Kotdanda, Nathanpur, Photu, Ruga and Dhainakot.

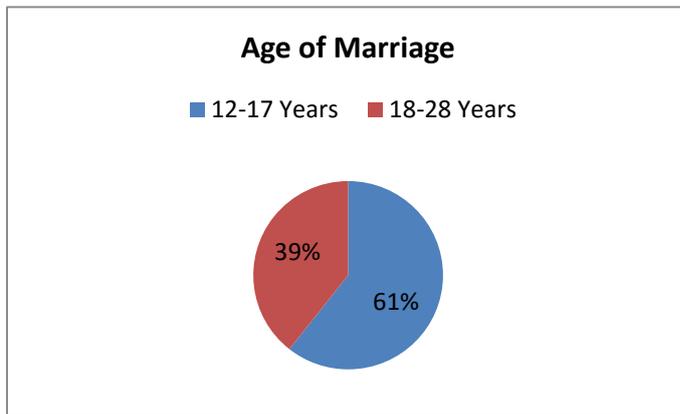


The baseline survey covers three topics – maternal and child health, access to food and farming productivity, and women’s skills – by measuring a number of different indicators within these areas. The survey was carried out by trained PHASE staff conducting door-to-door interviews of women in the six VDCs identified for the project, covering a total of 24% of households.

A total of 542 women were surveyed in the project region in December 2015. Over two-thirds of those surveyed were aged between 20 and 31 (67%), with a further 7% aged under 20 and the remaining 26% over 31. The average household size was 7 with an equal split between male and female.



The majority of those surveyed across the region (56%) were of the Brahmin/Chhetri caste. Only 2% were Janajati and 21% were Dalit (so called “low caste”).



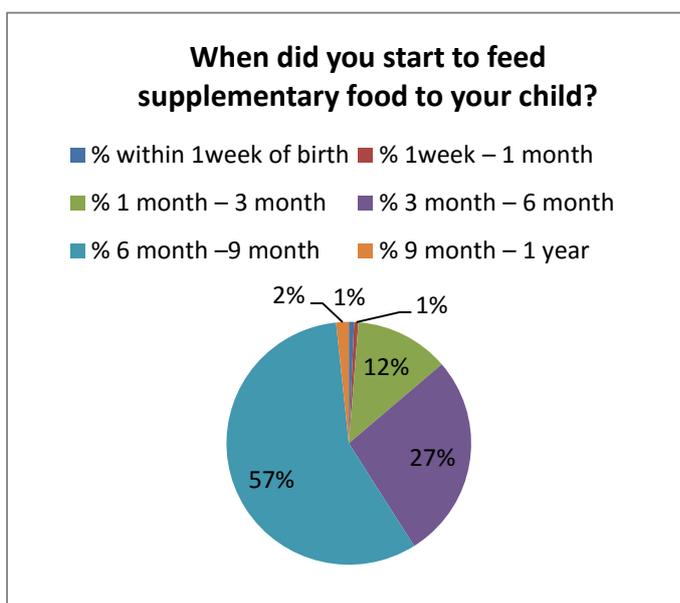
39% of those surveyed married when aged between 12 and 17. 61% married between the aged of 18 and 28. None of those surveyed had married after the age of 28.

Maternal and Child Health

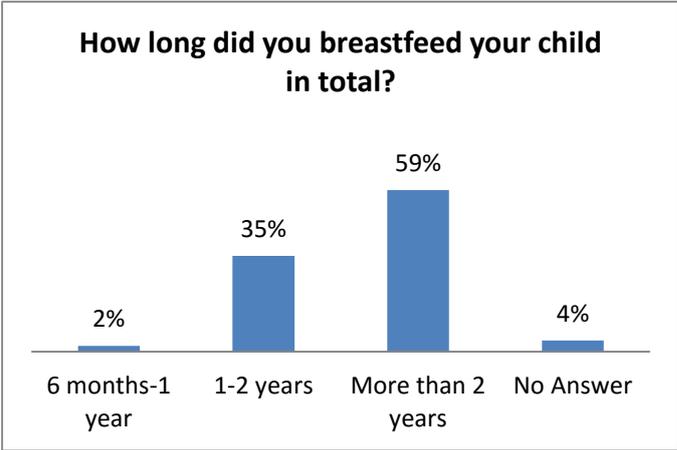
In Mugu, as with many regions of Nepal, mortality rates are very high among children and women of childbearing age. Neonatal deaths are often attributed to lack of access to ante-natal and post-natal health services for women, as well as factors such as malnutrition and anaemia in breastfeeding mothers.



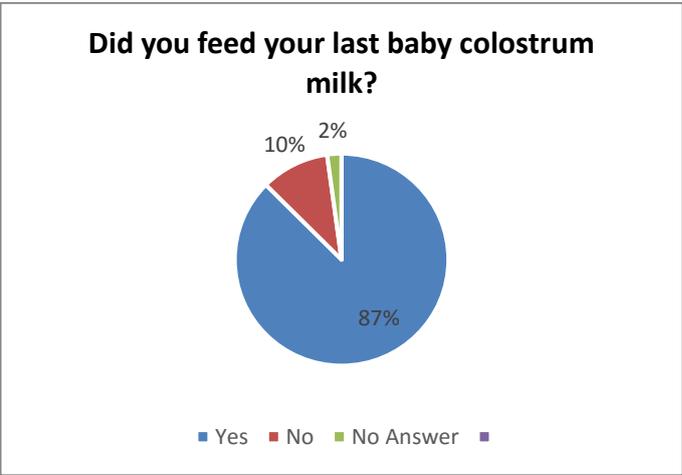
The World Health Organisation (WHO) recommends exclusive breastfeeding up to 6 months of age, with continued breastfeeding along with appropriate complementary foods up to two years of age or beyond. Of those surveyed only 30.75% of children were exclusively breastfed for 6 months. 67.5% were exclusively breastfed for less than the recommended time - 4.6% of those surveyed exclusively breastfed their child for less than 1 month. Only less than 3% exclusively breastfed for more than 6 months.



This is an additional question to cross check responses regarding exclusive breastfeeding: 1% of those surveyed began to feed their child supplementary food within 1 week of birth and a further 1% started within 1 month of birth. The majority (57%) of those surveyed across the region fed their child supplementary food at the age of 6-9 months, whilst a significant proportion (27%) started this when the child was aged 3-6 months.

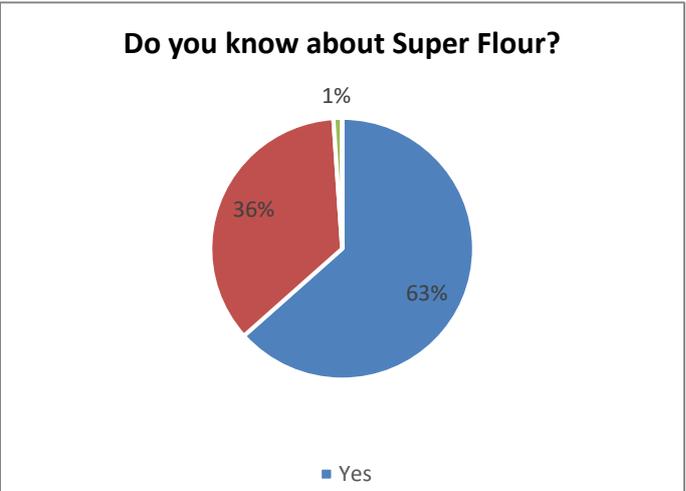


59% of children were breastfed for more than 2 years. 35% were fed for a period of between 1-2 years.



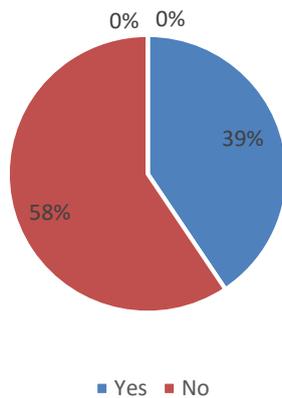
Colostrum is the first milk mothers produce just after they give birth. It is highly beneficial for new-born babies as it is rich in nutrients and protein and helps build babies immune systems. After a few days it is replaced with mature breastmilk. Only 87% of those surveyed fed colostrum to their last babies, whilst 10% of mothers did not.

In Nepal there are a number of common weaning foods used by mothers, some more nourishing than others. Super-flour porridge is made from finely ground roasted cereal grains and pulses and has proven to be one of the most nutritious options; PHASE health staff teach mothers how to make this.



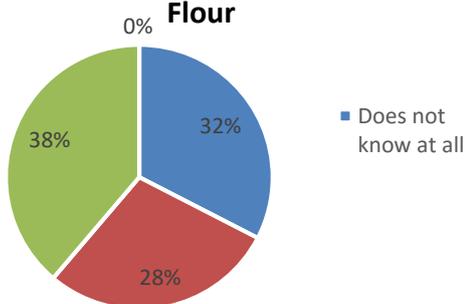
Across the region, 36% of those surveyed did not know about Super Flour, whilst 63% did.

Have you ever used Super Flour for your children?



Of the women surveyed, only 39% of have actually used Super Flour.

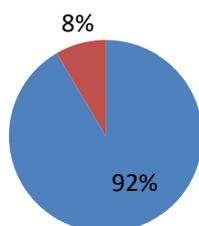
Please explain how to make Super Flour



Only 38% of those surveyed were able to explain how to make Super Flour correctly, or with only very minor mistakes. 28% were able to explain how to make it albeit with major errors. The rest (32%) did not know how to make Super Flour at all.

For a newborn baby, what should you do immediately after the birth?

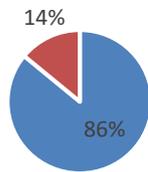
- % mentions drying and wrapping in warm cloth or mentions putting onto mother's naked skin / chest
- % doesn't mention above



92% of those surveyed who responded to this question were able to name some of the necessary steps of taking care of a new born baby: drying and wrapping the baby in a warm clothes or putting the baby onto the mother's naked skin or chest. 9% were unable to mention these steps.

What did you use to cut the cord?

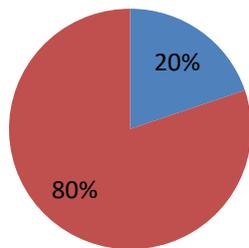
- % mentions clean razor blade or scissors / knife boiled in hot water
- % doesn't mention above



86% of those surveyed who responded to this question across the region mentioned either using a clean razor blade or knife boiled in hot water to cut the cord. 14% did not mention these when explaining how they cut the cord.

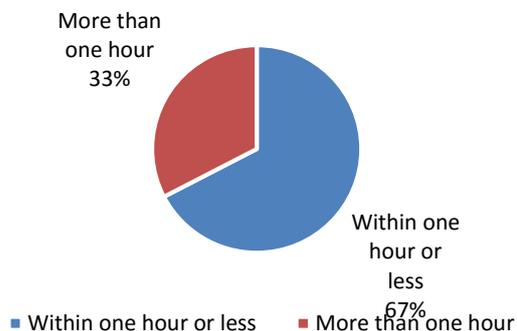
Should you put anything on the cord?

- % antibiotic cream
- % other



80% of those surveyed who answered this question did not mention the need to use antibiotic or Chlorhexidine cream on the cord. Only 20% mentioned the need to do this.

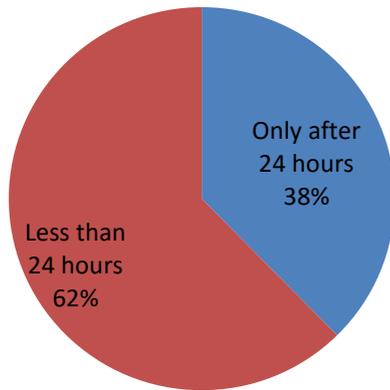
How soon after being born did you breastfeed your child?



WHO recommends that mothers initiate breastfeeding within one hour of birth. Babies should be placed in skin-to-skin contact with their mothers immediately following birth for at least an hour and mothers should be encouraged to recognize when their babies are ready to breastfeed, offering help if needed. This also helps to contract the uterus and prevent post-partum haemorrhage

Only 67% of those surveyed across the region breastfed their child within one hour of the birth.

When should a new born baby first be bathed?

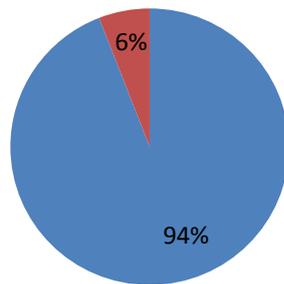


Traditionally, Nepalese women bathe a new born baby before wrapping it in clean clothes. Hypothermia, often caused by early bathing, is a major contributing factor for newborn health problems and death. The national recommendation in Nepal is to not bathe a newborn until 24 hours after birth.

62% of those surveyed believed that a new born baby should be bathed within the first 24 hours of birth, whilst only 38% knew the baby should only be bathed after 24 hours.

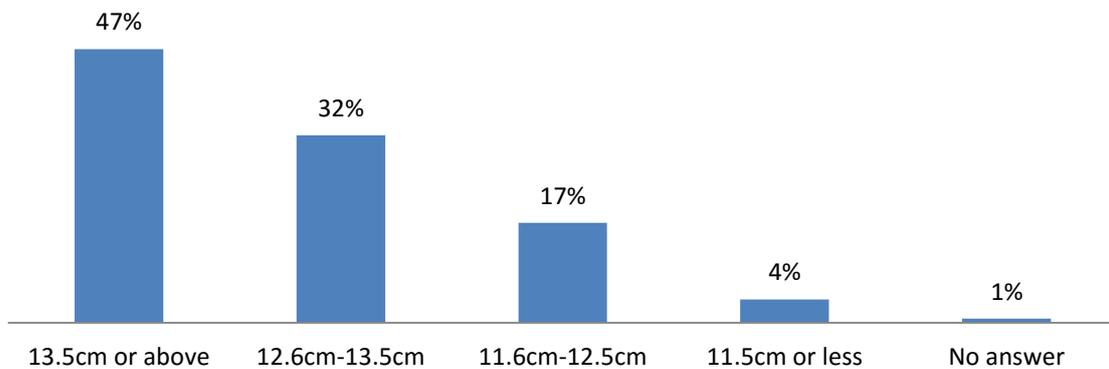
Can you name any danger signs for a baby under 2 months?

■ Can name at least one ■ Can not name any



94% of those surveyed were able to name at least one danger sign for a baby under the age of 2 months.

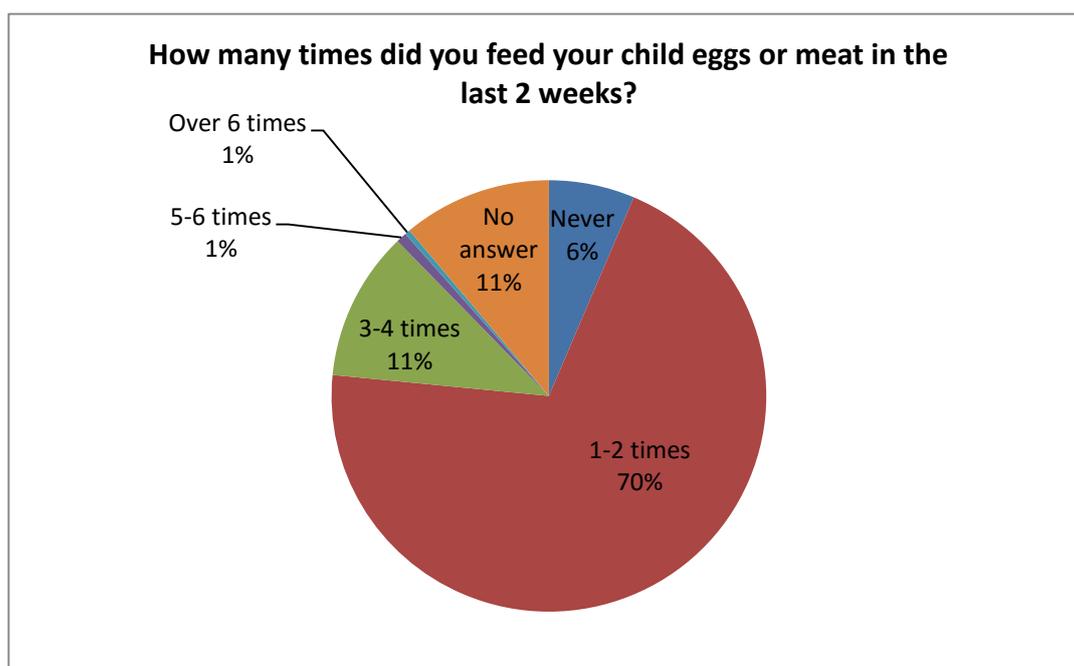
Mid-Upper Arm Circumference- Children aged 6 months to 5 years



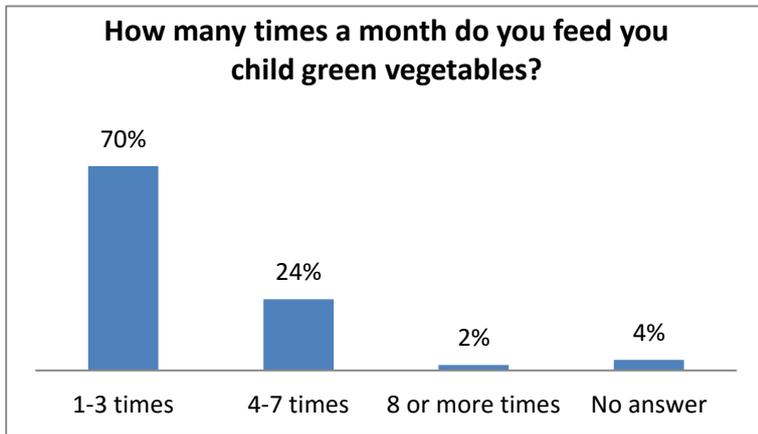
Measuring the Mid-Upper Arm Circumference (MUAC) of young children is a widely used indicator of growth and nutritional standards by international organisations. Readings under 12.5cm are considered to indicate acute malnutrition, with children between 12.6cm and 13.5cm at risk of malnutrition. The MUAC measurement requires little equipment and is easy to perform even on the most debilitated individuals.

In our survey, 936 children between 6 months and 5 years had their mid-upper arm measured. Of the children measured, 47% had a MUAC of 13.5cm or above. However, 32% had a measurement ranging between 12.6cm and 13.5cm and 17% measured between 11.6cm and 12.5cm. Moreover, a small percentage, 4%, measured a circumference of only 11.5cm or less.

The survey worryingly shows that more than 50% of children surveyed are either at high risk of malnutrition or are clinically malnourished. Children who are at risk of malnutrition very quickly fall into the overtly malnourished group when suffering trivial childhood illness such as diarrhoea or viral illness such as measles, chicken pox, etc. 21% of the children surveyed were significantly malnourished, 4% suffering from severe malnutrition, which represents a life threatening condition.



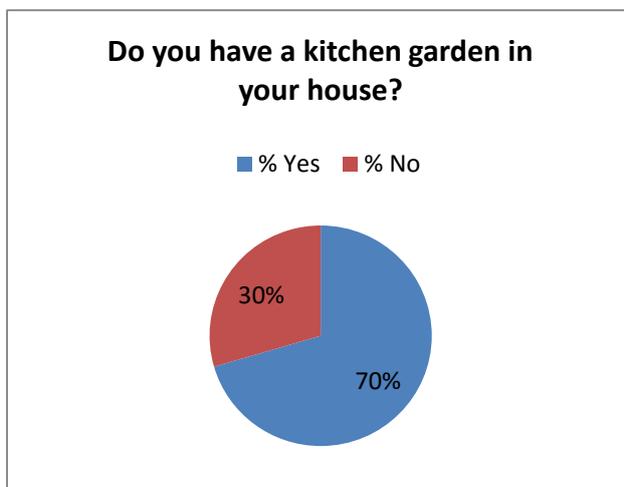
Our survey showed that the majority of women, 70%, fed their children eggs or meat only once or twice during a two-week period. Children only ate these food products 3 times or more in 13% of cases. Furthermore, 6% of mothers answered that they had not fed their children eggs or meat at all during the last two weeks.



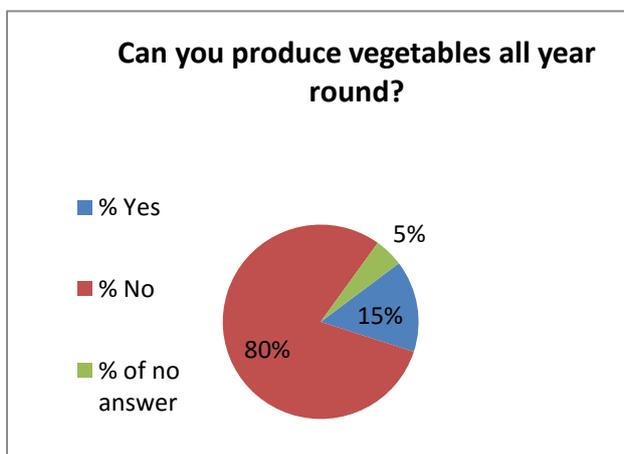
The majority of those surveyed (70%) only fed their child green vegetables between one and three times a month. Only 2% fed their child green vegetables 8 or more times a month.

Access to Food and Farming Productivity

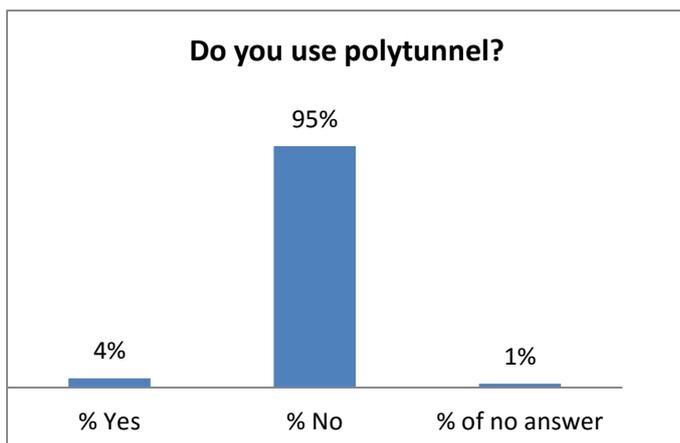
In Mugu malnutrition is a major issue leading to higher than average health care needs, susceptibility to illness and mortality rates. Our experience of working in this region suggests the reasons for poor health and high mortality are complex, but the biggest factors include chronic hunger, related to poor yields and lack of nutritious food; poor childhood feeding practices and low levels of productive and efficient farming techniques. Trading is extremely challenging in Mugu due to lack of road access, distance and terrain; families are dependent on the food they produce.



A significant majority of those surveyed did have a kitchen garden (70%), whilst 30% did not. Our experience in the field shows that these kitchen garden are usually not very extensive and do not yield produce all year round.

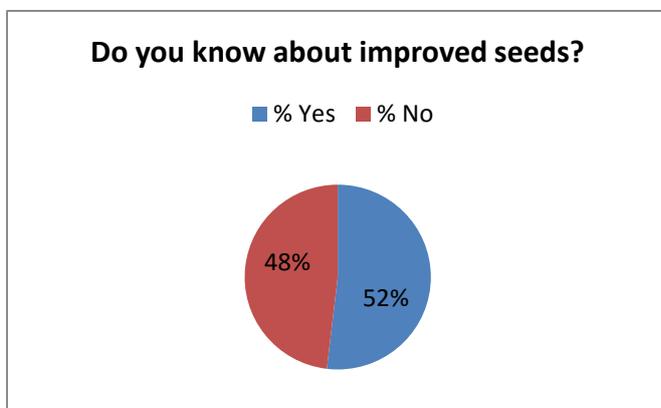
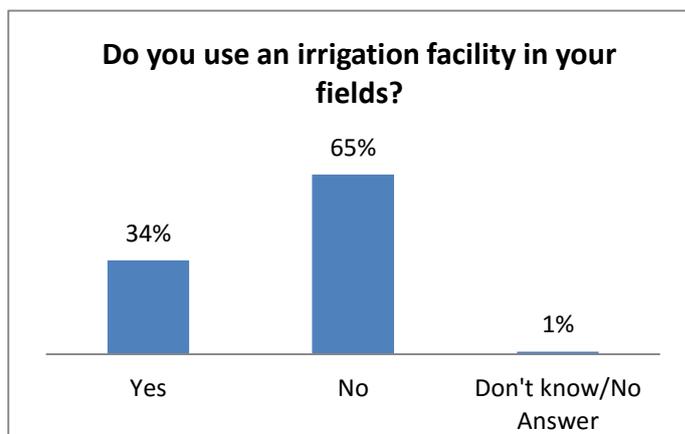


80% of those surveyed reported that they were not able to produce vegetables all year round. Only 15% were able to do so.



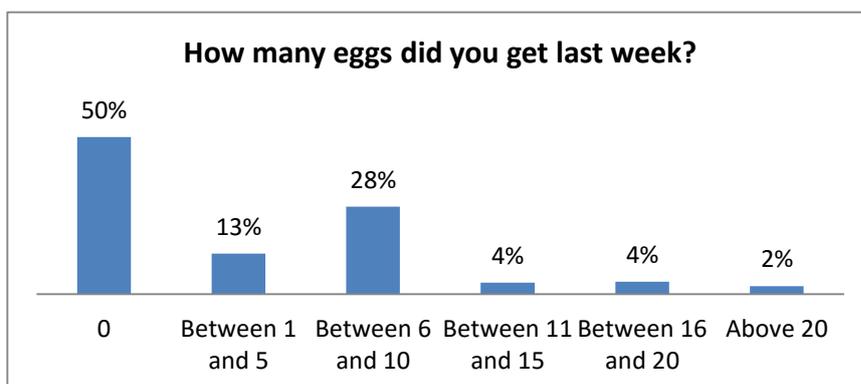
Polytunnels are a simple, relatively low cost technology to significantly increase yields of vegetable crops. Only 4% of those surveyed across the region reported that they used polytunnels.

Only 34% of those surveyed used an irrigation facility in their fields. Our experience in the field shows that many people do not have irrigation and the answers to this question may include rain fed irrigation.

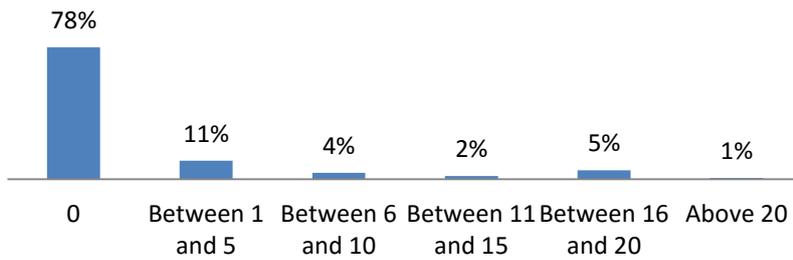


Of those surveyed across the region about half did not know about improved seeds, improved seeds refers to the seed which is higher yield and more insect and pest resistant.

Half of those surveyed did not produce any eggs during the last week. A small percentage, 10%, got 11 eggs or over.



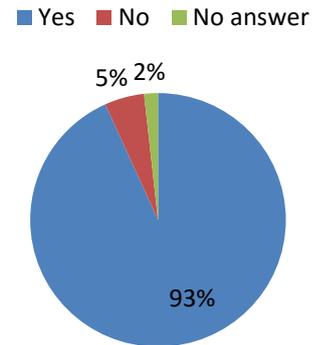
How many eggs did you sell last week?



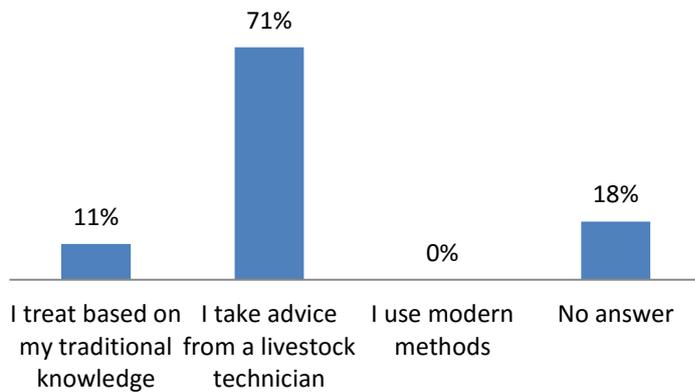
The majority of those surveyed (78%) did not sell any eggs during the previous week. 15% sold between 1 and 10 eggs, whilst only 8% sold over 10 eggs.

The majority of those surveyed (93%) produce their own fodder for their animals. Again this question was worded badly; our experience shows families generally don't produce their own fodder they collect it from the forest. This is very difficult because families have to travel which is time consuming and involves some risk. PHASE will provide fodder plants which farmers can grow more locally.

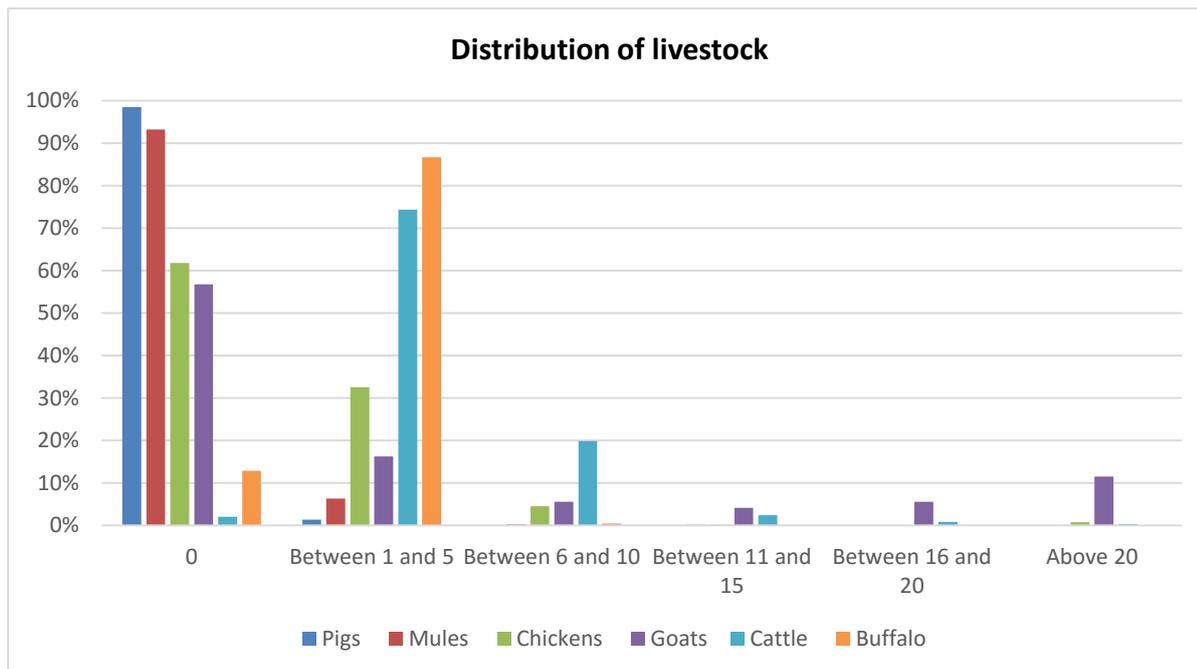
Do you produce fodder for your animals yourself?



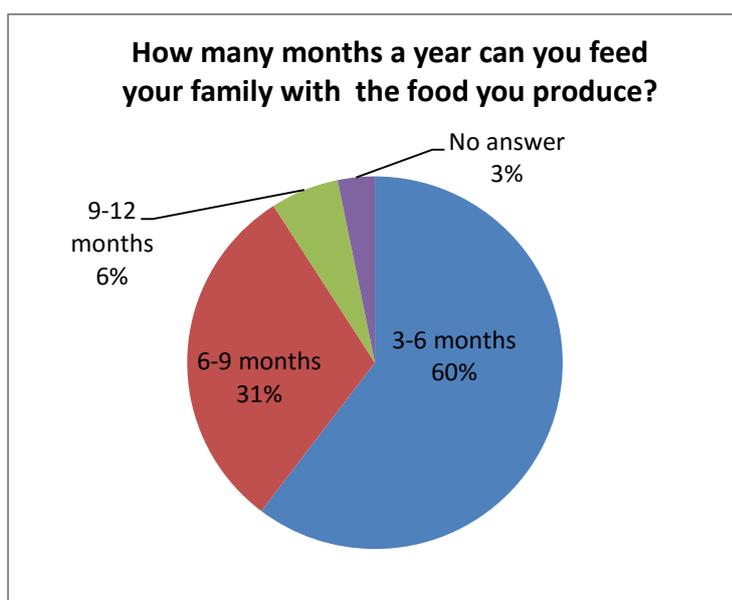
How do you treat your sick animals?



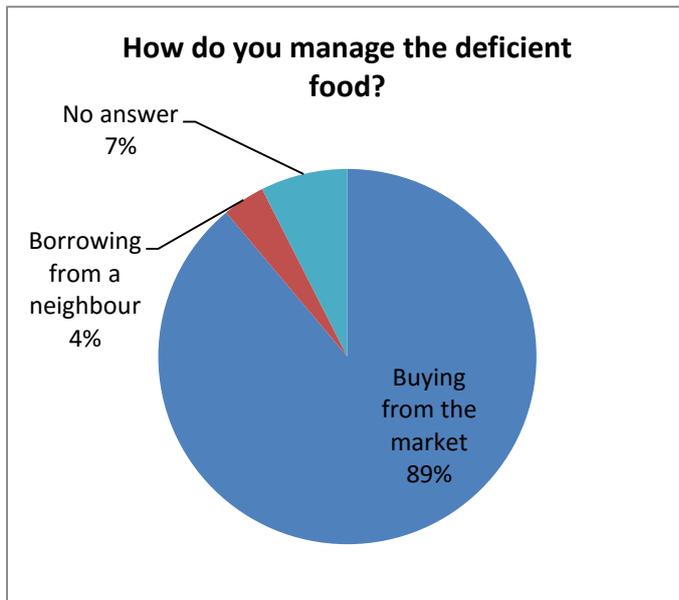
71% take advice from a livestock technician in order to treat their sick animals. None of those surveyed used modern methods and 11% treat their animals based on their own traditional knowledge.



6% of families have between 1 and 5 mules at home. None of those surveyed kept more than 5 mules. 62% of those surveyed did not own any chickens. The majority of chicken-owners only owned between 1 and 5 chickens. Over half of those surveyed did not own any goats at home and 16% owned between 1 and 5 goats. 74% of those surveyed owned between 1 and 5 cattle at home. Only 2% did not own any cattle and 20% owned more than 6. The vast majority of those surveyed owned between 1 and 5 buffalo (87%). 13% of those surveyed did not own any buffalo. None of those surveyed owned more than 5 buffaloes.



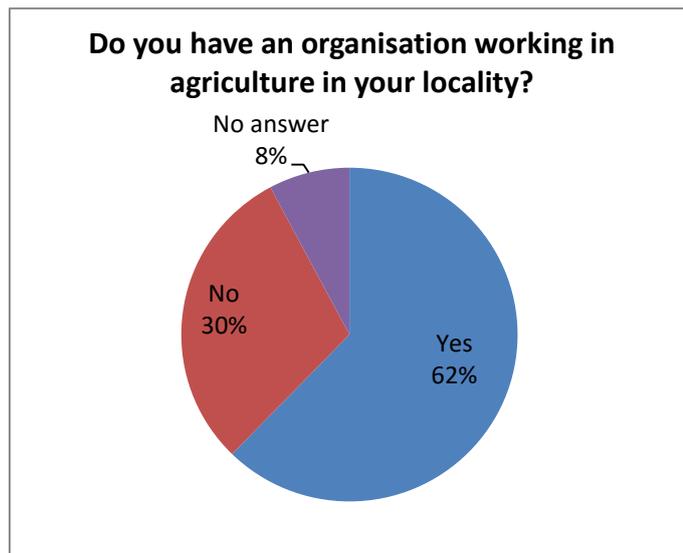
Only 6% of those surveyed are able to feed their families for 9-12 months each year from food they produce. The majority (60%) can only rely on their produced food to provide for their family for 3-6 months, and 31% only have enough produce for 6-9 months of the year, meaning that food must be sourced elsewhere to feed the family.



89% of those surveyed reported that they dealt with a lack of food by buying from the market. None of those surveyed borrowed from family members, but 4% borrowed from neighbours. The amount of family income spent on food is very high in Mugu. In this region people raise a cash income through working in local construction - both individual homes and community infrastructure – there are several cash for work programmes and also food for work programmes

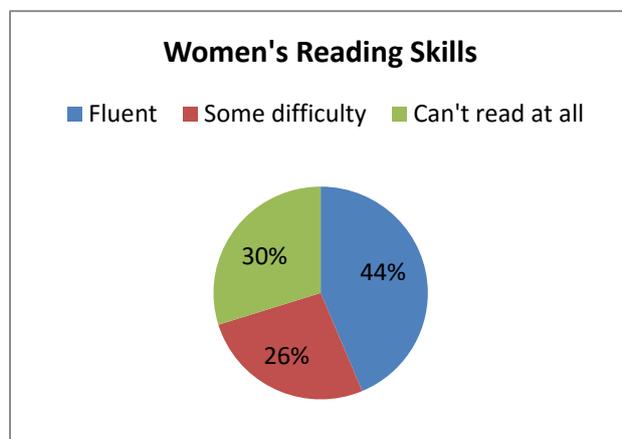
run by NGOs. Some members of the community trade Non-Timber Forest Products (NTFPs), mostly medicinal plants.

The majority (62%) of those surveyed did have an organisation working in agriculture in their locality, while 30% reported that they did not. However, even where there are other NGOs, these don't cover the whole population and are not present all year around as the PHASE team will be.



Women's skills

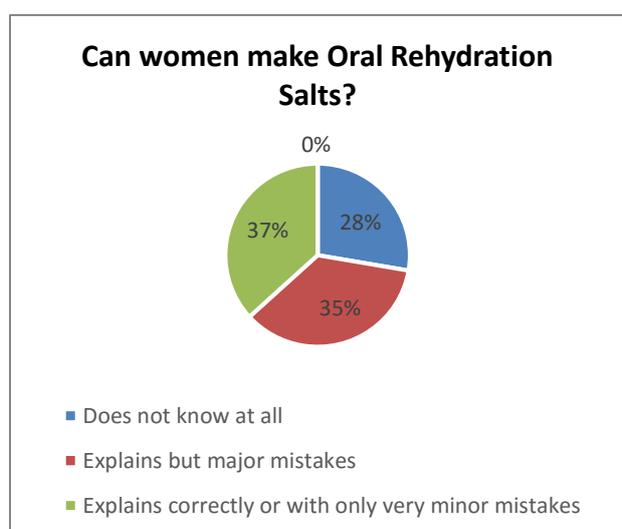
Of the 542 women surveyed in Mugu only 6% had achieved the School Leaving Certificate (equivalent to GCSE's in UK).



Of those surveyed only 44% of women could read fluently. 26% read with difficulty and 30% cannot read at all.

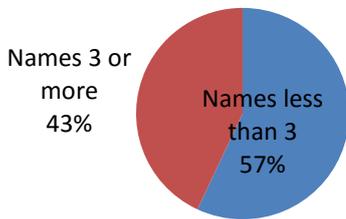


70% of those surveyed had not received any training in either maternal or child health that year.



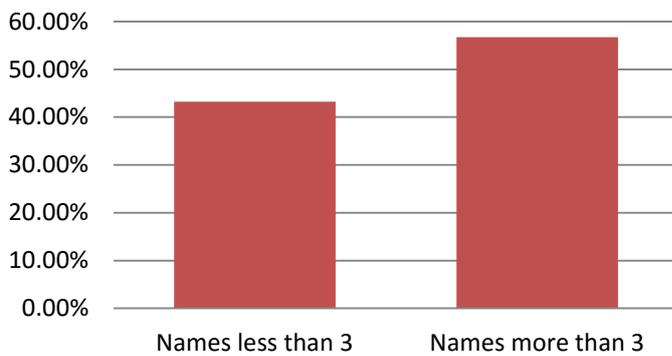
Oral Rehydration Salts are an easy to prepare, effective but basic medicine that can prevent complications from diarrhoea. 35% of those surveyed made major errors when explaining how to make ORS whilst a further 28% did not know how to make ORS at all. The rest (37%) were able to explain how to make ORS correctly or with very minor mistakes. – This means that there is a high need for training and education.

Can you name any danger signs for children between 2 months and 5 years?



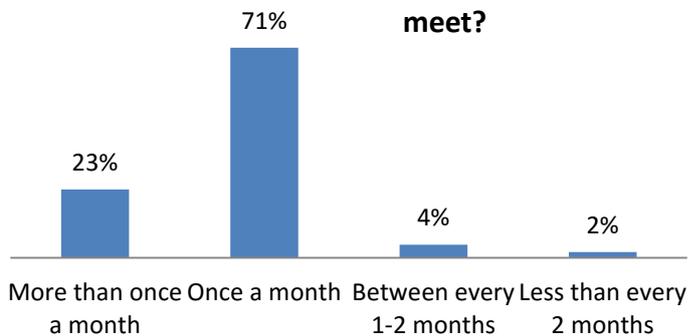
Among the same women, the majority of those surveyed could *not* name 3 danger signs for children between 2 months and 5 years. Only 43% were able to name 3 or more.

Can you name any danger signs in pregnancy?



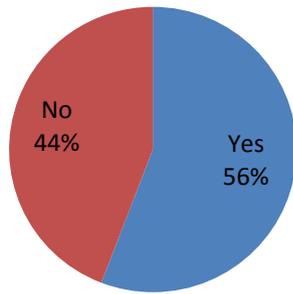
In addition, only 57% of the women surveyed were able to name 3 danger signs in pregnancy.

How often does your women's group meet?



Of the four communities where women reported that they belonged to women's groups – Hyanglu, Kotdanda, Nathanpur and Photu – the majority of the groups met only once a month, whilst only 23% of groups met more often. 6% of those interviewed responded that their women's group met less than once a month.

Have you got a target to raise funds in the group?



Of the four communities where women reported that they belonged to women's groups - Hyanglu, Kotdanda, Nathanpur and Photu - 44% of the groups had no target to raise funds.

72% of those who said their women's group did not have a target to raise funds reported that the group did plan to start the saving credit this year.

If no, do you have a plan to start the saving credit scheme this year?

