





The eight districts of the mid- and far-western mountains of Nepal are some of the most food insecure areas in the country. Poverty and stunting are much higher there than in other areas and the national average. Recurrence of acute shocks—most recently the 2015/16 winter drought—further erodes resilience. For more information on the food security situation of these areas, please visit the website [www.neksap.org.np](http://www.neksap.org.np)

To track seasonal changes over time, a food security monitoring survey was started in November 2016 and repeated in June and December 2017.

### Key points:

-  There was an overall improvement in household food consumption and dietary diversity from June to December 2017, with a ten percent decrease in households consuming an inadequate diet. The improvement was most notable in the far-western mountains, and can be attributed to increased food supply from the summer crop harvest that preceded the survey.
-  There was an increase in the contribution of remittance and agriculture wage labour as the major source of income for households in December compared to June. Agriculture, however, still remains the major income source.
-  Households surveyed in December reported facing less shocks, using fewer coping strategies and exhibited greater propensity to recover from shocks compared to six months ago in June 2017. However, those living in the mid-western mountains seem to be more chronically vulnerable to facing shocks and food insecurity.
-  Markets in the mid- and far-western mountains are operating normally and prices of staple food commodities have declined.

### Survey methodology

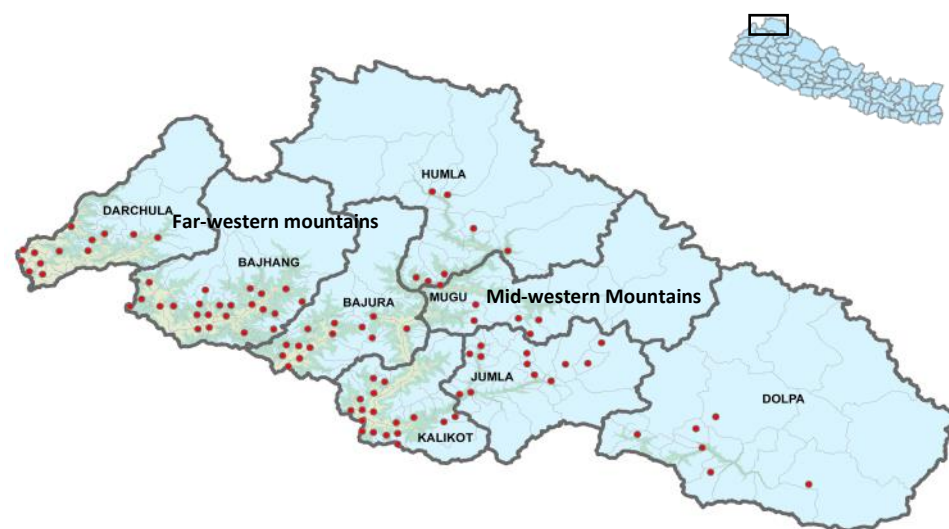
The current findings of the mVAM survey are based on the panel sample of 694 households in the eight districts of mid- and far-western mountains of Nepal (see Map 1); conducted via telephone calls. The panel was established during a face-to-face baseline survey in December 2016, in which the phone numbers of households and traders were collected. Two subsequent follow-up rounds of surveys were conducted by telephone interviews.

During the baseline survey conducted in November 2016, 1470 households were randomly selected and surveyed by via face to face interviews. The survey was repeated in June 2016, where 1395 panel households (from previous baseline survey) were interviewed using dual mode survey approach (368 telephone interviews, 1027 face to face interviews).





The current survey round only includes panel households that were able to be contacted via telephone calls, resulting in a total sample of 694. Hence, the current survey round is not designed to produce representative estimates. However, in order to ensure that the changes in the indicators are comparable with November 2016 and June 2017 and to create a balanced panel sample for accurate change measurement, all the estimates from past 2 survey rounds were re-analyzed with 694 households that were contacted in this current survey round. Hence, all the trend analyses presented in this report are based on a panel sample of 694 households.

In addition to the household survey, 40 traders from markets in close proximity to the sampled households and district headquarters were also interviewed.

Map 1 mVAM survey areas, December 2017



### Characteristics of surveyed households

-  694 respondents interviewed
-  6.7 members per household on average
-  38.5% illiterate household heads
-  6.7 members per household on average



# Adequacy of food consumption

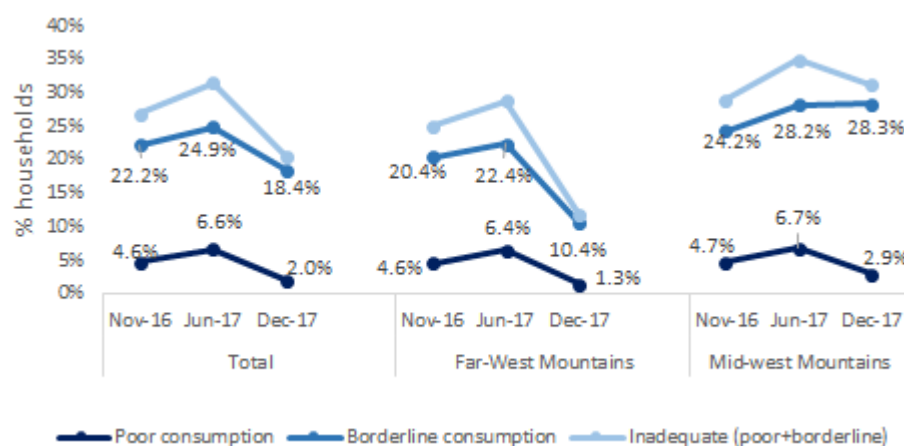
**There was an overall improvement in household food consumption in December compared to June 2017, most notably in the far-western mountains.**

- ◆ The overall mean food consumption score (FCS)<sup>1</sup> of sampled households in the mid- and far-western mountains increased in December 2017, to 59 from 53.8 in June 2017, indicating an improvement in the household food security status. This improvement was most prominent in the far-western mountain regions. The mid-western mountain region registered only a minor improvement (Table 1).
- ◆ The proportion of households facing food insecurity and consuming an inadequate diet (FCS≤42), consequently dropped from 31.6 percent in June 2017 to 20.3 percent in December 2017, amongst which, 2 percent had poor consumption and 18.4 percent had borderline consumption (Figure 1).
- ◆ Female-headed surveyed households reported higher propensity of consuming an inadequate diet (23%) than male-headed households (20%).
- ◆ The observed overall improvement in the household food consumption is mostly attributed to the summer crop harvest that preceded the survey. It is, however, important to note that the food security situation only slightly improved in the mid-western mountains despite a recent harvest, indicating the presence of structural issues resulting in chronic food insecurity in that region.
- ◆ Consumption of dairy products, sugar/honey/sweets and vegetables reportedly increased in December compared to June 2017. While households reported consuming cereals and oils/fats almost everyday, fruits and proteins (meats/fish/eggs) were consumed only about once per week (Table 1).
- ◆ Reliance on own food production increased compared to June; 10 percent more of surveyed households relied on own production to fulfil their food needs in December 2017. This change in main food source is likely attributable to residual food stocks from the summer crop harvest.

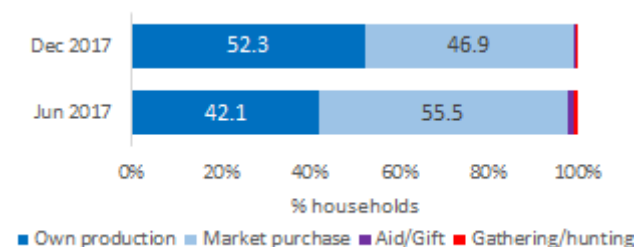
**Table 1 FCS and # of days food groups consumed**

	Jun	Dec
<b>Food consumption score</b>		
FW Mountains	55.6	63.9
MW Mountains	51.6	53.0
Overall	53.8	59.0
<b>No. of days consumed in 7 days</b>		
Cereals	7.0	7.0
Pulses/tubers	5.0	5.6
Milk	2.7	3.2
Meat/fish/eggs	0.8	0.7
Vegetables	4.6	5.4
Fruits	1.0	1.2
Oils/fats	6.5	6.6
Sugar/sweets	4.0	5.0

**Figure 1 Household food consumption trend by region**



**Figure 2 Sources of foods consumed**



1: <https://www.wfp.org/content/technical-guidance-sheet-food-consumption-analysis-calculation-and-use-food-consumption-score-food-s>

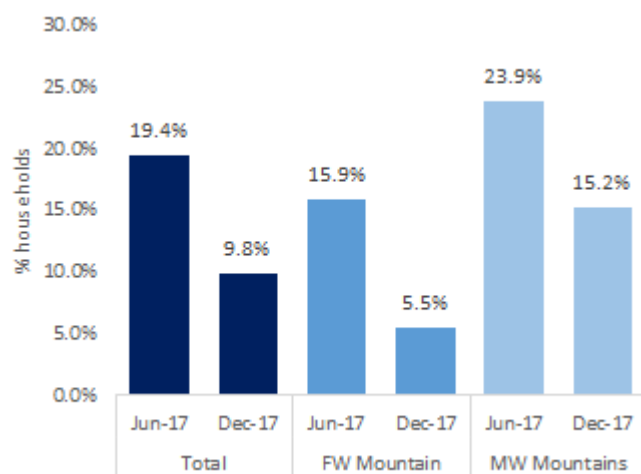


## Diversity of diet

**There was a slight improvement in the number of food groups consumed by households in December 2017 compared to June - particularly among female-headed households.**

- ◆ Households, on average, reported consuming six out of the total eight monitored food groups during the week before being surveyed in December, which is slightly higher than the average reported by households in June 2017.
- ◆ Based on the number of food groups consumed, 9.8 percent of households were classified as having poor dietary diversity in December 2017, which represented a drop of about 10 percent from June 2017, when it was 19.4 percent. As shown in Figure 3, a higher proportion of households in mid-western mountains consumed food with poor diversity (15.2 percent) compared to those in the far-western mountains (5.5 percent).
- ◆ Households with poor dietary diversity consumed less pulses/tubers, dairy products, vegetables, ghee/oil/fats and sugar/honey/sweets compared to the households with acceptable dietary diversity (Table 2). While consumption of staple foods was almost the same (all seven days), consumption of proteins (meat/fish/eggs) and fruits was almost negligible (less than one day) for both groups.
- ◆ Disparity of inadequate food consumption and poor dietary diversity in male- and female-headed households seemingly narrowed from June to December (Table 3). June survey was conducted during the lean period when the difference between male- and female-headed households tends to be higher than during the post harvest period (December survey). This is an indication that **female headed households are more vulnerable to seasonal shocks** than the male headed households.

**Figure 3** Households with poor dietary diversity



**Table 2** Mean number of food groups consumed last week by diet diversity

Food Groups	HHs with poor dietary diversity	HHs with acceptable dietary diversity
Cereals	7.0	7.0
Pulses/tubers	4.5	5.7
Milk/milk prod.	0.1	3.6
Meat/fish/eggs	0.03	0.8
Vegetables	3.4	5.7
Fruits	0.03	1.4
Oil/fats	5.0	6.8
Sugar	1.0	5.4

**Table 3** Inadequate food consumption and dietary diversity, by gender of household head

% of HHs	Poor diversity		Inadequate food consumption	
	Jun 2017	Dec 2017	Jun 2017	Dec 2017
Male	18.6	9.2	30.7	19.9
Female	23.0	12.7	36.1	22.9
M/F Diff	4.4	<b>3.5</b>	5.4	<b>3</b>
Overall	19.3	9.8	31.6	20.3

# Vulnerability: shocks and coping strategies

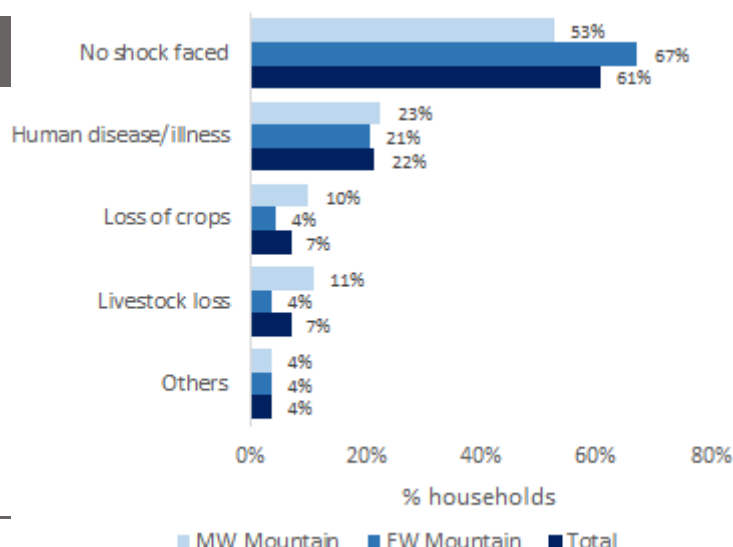
**Lower proportion of households faced shocks and resorted to using coping strategies in December than in June 2017, and also exhibited greater propensity to recover from shocks. The vulnerability remained higher amongst households in the mid-western mountains.**

- ◆ 39 percent of households in the mid- and far-western mountains faced shocks in the six months preceding the survey in December 2017. This marks a significant drop from June 2017, when it was 55 percent. The proportion of households reportedly facing shocks was greater in the mid-western mountains (47.3 percent) compared to the far-western mountains (32.8 percent). This significant difference between these two regions is consistent with previous rounds of survey, and shows that **vulnerability has a spatial correlation, and is a chronic problem in the mid-western mountains.**
- ◆ Of the households that faced shocks, family member illness and loss of livestock were the most reported shocks in this round of the survey, a finding similar to previous survey rounds (Figure 4), which points to poor care practices and lack of health services in these regions. The prevalence of illness has, however, dropped since June 2017, showing a seasonal improvement.
- ◆ Half of the households that faced shocks completely recovered from them, which is almost double than that of June 2017. The ability to recover from shocks varied greatly between the two regions, with larger proportion of households in mid-western mountains (23 percent) unable to recover compared to those in the far-western mountains (9 percent) .
- ◆ **10.9 percent (Table 5) of households reported that they sometimes did not have enough food or money to buy food in the 30 days preceding the survey in December 2017.** This is significantly lower than in June 2017, when it was 28.3 percent. As with other indicators of vulnerability, this indicator also showed a high degree of variability between the two survey strata: 4.9 percent of households in the far-western mountains reported sometimes not having enough food or money to buy food compared to 18.3 percent of households in the mid-western mountains.
- ◆ A lower proportion of households reported having to adopt coping strategies during December 2017 compared to June 2017. The main coping strategy used by households in the mid- and far-western mountains was borrowing money or food from lenders, friends or relatives (table 4).
- ◆ Almost all of the coping strategies, including borrowing money/food, selling animals, eating less have been adopted by a greater proportion of households in the mid-western mountains than those in the far western mountains.

**Table 4 Coping strategies adopted by households**

% of households	June 2017	December 2017
Borrow money/food	24.8	7.5
Sell more animals than usual	2.8	0.9
Sold household assets	0.7	0.1
Sell productive assets	0.3	0.9
Withdraw children from school	1.1	0.1
Harvest immature crops	2.1	0.1
Sell last female animals	0.7	2.0
Reduce portion size	4.4	1.0
Reduce number of meals	4.1	1.4
Eat less preferred food	7.2	3.5
No coping strategy adopted	71.7	89.1

**Figure 4 Types of shocks faced by households**



**Table 5 Households without food or money to buy food**

% of households	June 2017	December 2017
MW Mountains	34.9	18.3
FW Mountains	23.3	4.9
Overall	28.3	10.9



## Household livelihoods

**There was an increase in the contribution of remittance and agriculture wage labour as the major source of income for households compared to June. Agriculture, however, still remains the major income source.**

- ◆ 58.6 percent of surveyed households identified cereal crop production as one of the major sources of income in the mid- and far-western mountains in the four months preceding the survey in December 2017. This was followed by unskilled wage labour activities (32.8 percent) and remittances (31.3 percent).
- ◆ There was an increase in the proportion of households reporting remittance as major income source, from 24.1 percent in June to 31.3 percent in December 2017 (Table 6). The recall period for the December survey incorporates Dashain festival and summer crop harvest, which is when most of the migrant members return home. Income from remittance has almost doubled in the mid-western mountains.
- ◆ More households in far-western mountains are engaged in sustainable livelihood strategies such as livestock farming, salaried employment and skilled labour compared to households in the mid-western mountains (Table 6). It is also quite evident that the **households engaged in sustainable livelihood strategies such as salaried employment, remittances, skilled labour etc. have better food security outcomes than those engaged primarily in unsustainable livelihood strategies** (Figure 5).
- ◆ 11 percent of households in the mid- and far-western mountains had received external assistance from NGOs/INGOs (Table 7). This prevalence was significantly higher in the mid-western mountains (20 percent).

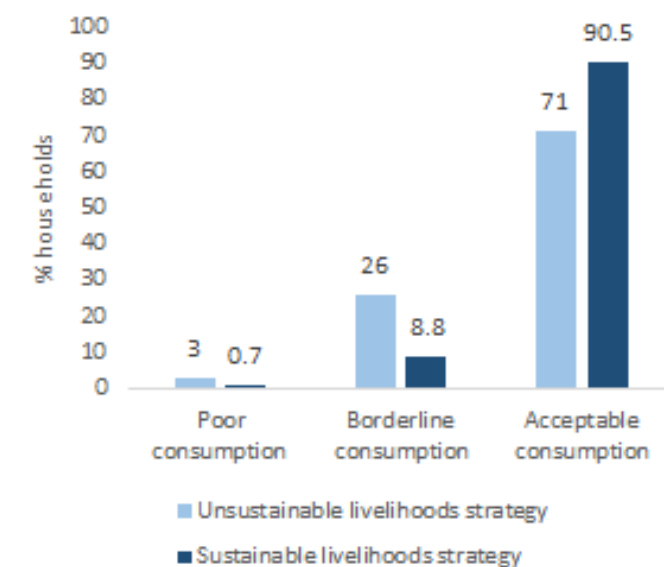
**Table 6** % of surveyed households by major income sources

Major income source types	Overall		FW Mountains	MW Mountains
	June 2017	Dec 2017	Dec 2017	Dec 2017
Agriculture (mostly cereal production)*	68.4	58.6	53.2	65.2
Other unskilled labour (porter, stone worker, etc)**	23.1	32.8	27.7	39.1
Remittances*	24.1	31.3	34.9	26.7
Livestock farming*	23.1	29.6	36.3	21.4
Social benefit schemes**	18.2	24.1	26.1	21.7
Salaried employment (Government/private/NGO)*	19.8	21.1	26.1	15.9
Agriculture wage labour (unskilled)**	10.1	17.7	9.9	27.3
Skilled labour (masonry, carpentry, etc)*	8.3	5.7	9.1	1.6
Trade/shop keeping*	12.0	11.9	13.7	9.6
Sale of non-timber forest products (NTFP)**	5.8	1.9	1.6	2.2
Agriculture (mostly cash/high value crops)*	6.7	10.5	11.3	9.6
Humanitarian/development assistance**	1.9	0.3	0.1	0.6
Other	3.5	1.4	0.5	2.5

\* - sustainable livelihoods strategy

\*\* - unsustainable livelihood strategy

**Figure 5** Food consumption by livelihood strategies



**Table 7** External assistance received as % of households

% households	Received	Not received
FW Mountain	3.9	96.1
MW Mountain	19.9	80.1
Overall	11.0	89.0



## Market situation

**Markets in the mid- and far-western mountains are operating normally, and the prices of staple food commodities have declined.**

- ◆ More than 60 percent traders reported that the supply and demand for food and non-food items either improved or remained stable in December 2017, while 85 percent of traders reported a stable situation in the transportation of goods (Figure 6).
- ◆ Average food commodity prices were lower in the districts with better road access and higher in those districts without. For example, the retail price of coarse rice was almost three times higher in Dolpa (125NPR/kg) and Humla (120.0 NPR/kg) as compared to Bajhang (33.8 NPR/kg) and Darchula (39.0 NPR/kg) in November. Likewise, the retail price of wheat flour was about three times higher in Humla (120.0 NPR/kg) and Dolpa (108.0 NPR/kg) as compared to Bajhang (42.4 NPR/kg) and Darchula (45.9 NPR/kg).
- ◆ The average retail food prices of most monitored food commodities in December were slightly lower than in June 2017 and in November 2016 (Table 8) driven by improved supplies from the harvest of summer crops, increased access to rural roads and stable transportation services.
- ◆ Overall, about 60 percent of traders reported that markets had sufficient stocks to fulfil consumer demand. Twice as high proportion of traders (75%) in the primary markets reported availability of sufficient food stocks located at the district headquarters compared to those in the secondary markets (40.6%) (Table 9).



### For further information

Mr. Ram Krishna Regmi, MoAD [rkrregmi@yahoo.com](mailto:rkrregmi@yahoo.com)

Mr. Ahmad Shah Shahi, WFP [ahmadshah.shahi@wfp.org](mailto:ahmadshah.shahi@wfp.org)

Mr. Sridhar Thapa, WFP [sridhar.thapa@wfp.org](mailto:sridhar.thapa@wfp.org)

Ministry of Agricultural  
Development (MoAD) Singha  
Durbar, Kathmandu, Nepal.  
Tel:+977 1 4211905,4211950

United Nations  
World Food Programme,  
Patandhoka Road, Lalitpur,  
Nepal  
Tel: +977 1 5260607

#### mVAM resources:

Website: [http://vam.wfp.org/sites/mvam\\_monitoring/](http://vam.wfp.org/sites/mvam_monitoring/)

Blog: [mvam.org](http://mvam.org)

Toolkit: <http://resources.vam.wfp.org/mVAM>

Figure 6 Situation of the markets (% traders)

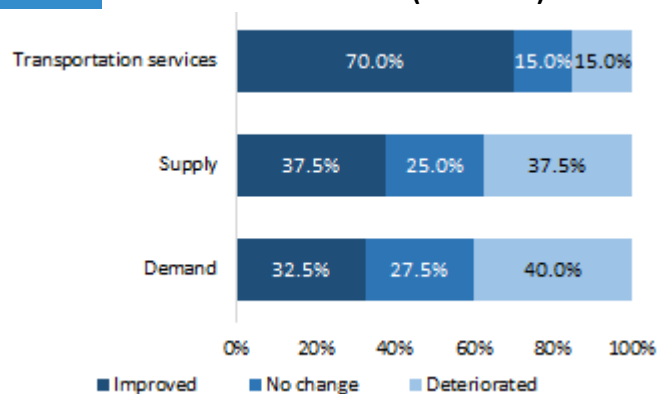


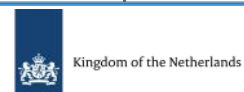
Table 9 Market food availability (% traders)

Market type (% traders)	Sufficient stock	Insufficient stock
Primary DHQ	75.0%	25.0%
Secondary	40.7%	59.3%
Total	60.0%	40.0%

Table 8 Retail prices of food commodities (NPR per kg/ltr)

	District	Coarse rice	Wheat flour	Soybean oil	Broken lentil	Potato	Chicken meat
Far-west Mountains	Bajhang	33.8	42.4	162.0	185.0	31.0	420.0
	Bajura	49.0	59.0	190.0	240.0	45.0	650.0
	Darchula	39.0	45.9	173.3	146.0	30.0	392.9
	Dolpa	125.0	108.0	200.0	280.0	60.0	575.0
Mid-west Mountains	Humla	120.0	120.0	245.0	300.0	55.0	450.0
	Jumla	43.0	46.8	142.0	130.0	20.0	475.0
	Kalikot	40.9	67.3	143.0	150.6	39.0	418.3
	Mugu	50.0	51.0	183.3	140.0	15.0	550.0
Avg price (Nov 17)	<b>Overall</b>	<b>50.4</b>	<b>60.5</b>	<b>166.6</b>	<b>167.4</b>	<b>35.5</b>	<b>450.6</b>
Avg price (Jun 17)	<b>Overall</b>	<b>57.8</b>	<b>64.0</b>	<b>181.7</b>	<b>187.9</b>	<b>40.0</b>	<b>481.0</b>
Price change in Nov. 17 against Jun 17	<b>Overall</b>	<b>-12.8%</b>	<b>-5.5%</b>	<b>-8.3%</b>	<b>-10.9%</b>	<b>-11.3%</b>	<b>-6.3%</b>
Avg price (Nov 16)	<b>Overall</b>	<b>55.3</b>	<b>58.4</b>	<b>175.0</b>	<b>180.2</b>	<b>38.8</b>	<b>422.7</b>
Price change in Nov 17 against Nov 16	<b>Overall</b>	<b>-8.8%</b>	<b>3.5%</b>	<b>-4.8%</b>	<b>-7.1%</b>	<b>-8.5%</b>	<b>6.6%</b>

**Acknowledgements:** This bulletin has been produced by with the technical and financial support of the following partners in Nepal and abroad:



नेपाल खाद्य सुरक्षा अनुगमन प्रणाली  
Nepal Khadiya Suraksha Anugaman Pranali (NeKSAP)  
Nepal Food Security Monitoring System

