

# Rapid Market Assessment – Nepal

DAIRY AND VEGETABLE SECTOR



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# 1. Executive summary

On 11 March 2020, the World Health Organization declared the spread of coronavirus (COVID-19) a pandemic due to the exponential growth in the number of COVID-19 cases and further urged states to take urgent preventive measures for containment, including self-isolation, case monitoring and the dissemination of information related to health and safety practices. Faced with the unprecedented global COVID-19 pandemic, the Government of Nepal announced a nationwide lockdown starting on 24 March 2020. The lockdown has been in effect since, with a series of extensions, the latest one of which is in effect until 14 June 2020. Borders with India and China have been closed since 23 March and a suspension of all international flights has remained in place since 22 March. In addition, all public transport has been suspended since 23 March and the authorities have closed all non-essential services and private businesses.

As the crisis continues, it is taking a heavy toll on the economy, markets and market players alike, with farmers and small and medium-sized enterprises (SMEs) among the hardest hit. In Nepal, agriculture is an important sector, providing employment opportunities to 69%<sup>1</sup> of the population and contributing 27%<sup>2</sup> of gross domestic product. Hence, it is critical that agricultural markets be considered and supported for early recovery in Nepal following the recent crisis.

In late April 2020, the UK Department for International Development's **Commercial Agriculture for Smallholders and Agribusiness (CASA)** worked with key market actors to assess the impact of COVID-19 on the functioning of agricultural markets in the vegetable and dairy sectors. Partners for the rapid market assessments (RMAs) included the Federation of Fruits and Vegetable Entrepreneurs Nepal (FEFVEN) for vegetables, and the Central Dairy Cooperative Association Nepal (CDCAN) and the Dairy Industry Association (DIA) for dairy. These actors not only have extensive networks in their respective industries but also have an important role to play in both delivering and coordinating efforts at early recovery.

Although all provinces were covered, no strict sampling frame was followed. The survey followed a convenience sampling method: our partners interviewed a random selection of milk and vegetable aggregators. Hence, the survey is not strictly representative but does reflect a general picture of the economic hardship experienced by small businesses involved in these sectors. Some of the key findings of this assessment were as follows:

### Assessment of milk cooperatives/collection centres

- Significant decrease in demand for milk: All the milk cooperatives that were surveyed reported a decrease in milk collection, sales and revenue. Almost 40% of the cooperatives reported sales decreases of over 50%, while another 30% reported a decrease of between 25% and 50%, with the rest reporting decreases of up to 25%. The main reasons for the decrease was the closure of local markets and reduced demand for milk from dairy processors.
- Cooperatives struggling to keep operations going: Over 80% of the milk cooperatives had previously completely stopped operations, but the majority of them are now back in operation, albeit at significantly decreased capacities. Almost 35% of the cooperatives had seen revenues decline by over 50%, while another 37% witnessed declines of between 25% and 50%. Moreover, 97% of the cooperatives mentioned that they were extremely concerned about the current situation, while 89%

<sup>&</sup>lt;sup>1</sup> World Bank collection of development indicators. Retrieved from:

https://tradingeconomics.com/nepal/employment-in-agriculture-percent-of-total-employment-wb-data.html

<sup>&</sup>lt;sup>2</sup> Economic survey unveiled by Finance Minister. Retrieved from: https://kathmandupost.com/money/2019/05/28/agricultures-share-in-gross-

- reported that they could sustain operations for only another three months if the current situation persisted.
- Milk cooperatives banking on government support: While none of the cooperatives
  had received any government or other support, over 70% of respondents were
  expecting government support to help them stay in business. Over two thirds of
  respondents mentioned they would need direct grants to stay in business if the crisis
  continued.

### **Assessment of dairy processors**

- The dairy industry is facing an imminent crisis: Many dairy companies in Nepal are now facing an imminent financial crisis and insolvency losses. Overall demand for dairy products has decreased by 70–80% and the demand for processed milk has decreased by almost 50%, leading to huge losses in sales and revenue.
- Disruptions to transport are further compounding the problem: Dairy companies
  are already dealing with reduced demand and sales; limited transport options are
  further limiting their ability to ship finished goods and to transport raw material for
  processing.
- Consumers have negative perceptions of the consumption of dairy products:
   Due to asymmetric information and pre-existing perceptions, there is misinformation in
   the market that the consumption of cold or chilled products increases the likelihood of
   COVID-19 infection. The production of dairy products such as ice-cream and yogurt
   has been halted in many of the dairy companies, with an average decrease in demand
   of over 80% for such products.

### Assessment of vegetable aggregators

- **Decrease in demand for vegetables:** Almost 70% of the markets/cooperatives that were surveyed reported sales decreases of over 50%, while another 17% reported decreases of between 25% and 50%, with the rest reporting decreases of up to 25%. The main reason for the decline was closures of local markets and institutional buyers.
- Vegetable farmers have been hit the hardest: More than two thirds of the collection centres reported a decrease in collection volumes of over 50%. Respondents also mentioned there is low availability of inputs and limited transport options for farmers to bring produce to markets.
- **Disruptions to transport are affecting the whole supply chain:** While the closure of institutional buyers such as hotels and restaurants has had a major impact on vegetable demand, the lack of mobility among farmers and traders is further hampering the local vegetable trade. Although the government has listed vegetables as an essential item, 33% of respondents ranked the transport of vegetables as the main challenge for vegetable farmers, while 94% of respondents mentioned the lack of transport to collect vegetables as the second most pressing concern among traders.

# 2. Overview of CASA

The **CASA programme** seeks to change how investors, donors and governments view and invest in agribusinesses that work with smallholder supply chains. In doing so, CASA will increase economic opportunities for smallholders by:

- a) demonstrating the commercial viability of SME agribusinesses with significant smallholder supply chains and attracting more investment in to these businesses;
- b) deepening the smallholder impact of existing investments made by development finance institutions and impact investors;
- c) enabling poor smallholder farmers to engage with and trade in commercial markets; and
- d) researching and communicating the case for successful engagement with smallholder-linked agribusiness.

CASA has three components, two of which (Components A and C) are managed by NIRAS-LTS, in partnership with Swisscontact and CABI. CASA's component B is separately implemented by Technoserve and focuses on technical assistance and investment promotion for larger agri-enterprises on the global development stage. In addition to its three components, CASA has four strategic cross-cutting components:

- gender and social inclusion;
- nutrition and food security;
- · climate change and the environment; and
- animal welfare.

Component A will demonstrate high-impact projects in the three target countries (Malawi, Uganda, and Nepal) leading to: (a) mobilisation of investments for partner agribusinesses (which can include commercially minded farmer associations and cooperatives) for expanded outreach to smallholders; and (b) improved access to markets for smallholders. The ultimate target group for CASA is the 'missing middle' of 'stepping-up' smallholders,<sup>3</sup> i.e. those that wish to engage in commercial agriculture but are largely not engaged to date (including 40% living on less than US\$2/day and 50% women).

Component C is a learning and knowledge-sharing component that will *inter alia* leverage knowledge gains from Component A projects and other research to inform donors and investors about the merits of investing in agribusiness SMEs with significant outreach to smallholders.

<sup>&</sup>lt;sup>3</sup> Stepping-up smallholder farmers are described as those that sell or wish to sell at least 50% of their produce.

# 3. Background to CASA RMAs

The countrywide lockdown imposed in Nepal as a measure to control the spread of the COVID-19 virus has reduced market demand and the supply of both dairy and vegetable products. As the crisis continues, it is taking a heavy toll on markets and market players alike, with farmers and SMEs among the hardest hit.

Although the government has listed dairy products as essential items, the dairy sector has already witnessed a market decline of around 30%.4 In addition, due to the restrictions on travel, dairy businesses are facing challenges in managing the logistics involved to collect milk from their suppliers and delivering it to the market. This, combined with the decrease in demand for processed products, is forcing the dairy industry to reduce its collection as these businesses are struggling to generate enough revenue to cover their working capital. The household consumption of milk, cheese, paneer and butter has only slightly reduced, but due to the closure of industrial consumers such as restaurants, party palaces, banquets, schools and colleges, the sale of dairy products has significantly reduced. Likewise, fear of COVID-19 has decreased the consumption of cold dairy beverages such as ice-cream. Kathmandu, the main market, which usually consumes more than 400,000 litres of milk per day, has seen demand decrease to 280,000 litres per day.<sup>5</sup> Similarly, secondary sources point to the fact that trading in major wholesale vegetable markets across the country has already plummeted by more than 40%.6 The major causes of the decline are the closure of institutional buyers such as those in the food and beverage industry as well as academic institutions. Kalimati wholesale market, the major market that supplies 60-70% of the valley's demand, has seen transactions shrink by almost 50%.7

At the farmer's end, the COVID effect has been even more gruesome. As reported in various print media, farmers who usually made a good return from vegetables and milk sales are now being forced to dump their products as there are only limited buyers in the market.

Given this context, CASA is looking to develop response interventions to support farmers and SMEs involved in the dairy and vegetable sectors. As a first step, CASA conducted a series of RMAs to get first-hand information of the realities on the ground. This information is intended to help CASA develop quick response strategies and activities to help the farmers that depend on milk and vegetable sales for their income. The RMA will also inform strategies to support producer organizations and agribusinesses that are struggling for survival and looking to reestablish themselves.

CASA's RMA has three components:

- 1. **production-level analysis**: to understand the impact on and implications for smallholder vegetable and dairy farmers
- 2. **aggregation-level analysis**: to appraise the impact on operations among milk/vegetable cooperatives and/or wholesalers/retailers
- 3. processor-level analysis: to understand the impact among dairy processors

This document is a consolidated report of the second and third component (Component s2 and 3) of the CASA RMAs. A separate report for Component 1 (the production-level analysis) will be available towards the end of May 2020.

<sup>&</sup>lt;sup>4</sup> https://english.khabarhub.com/2020/27/84554/

<sup>&</sup>lt;sup>5</sup> https://english.khabarhub.com/2020/27/84554/

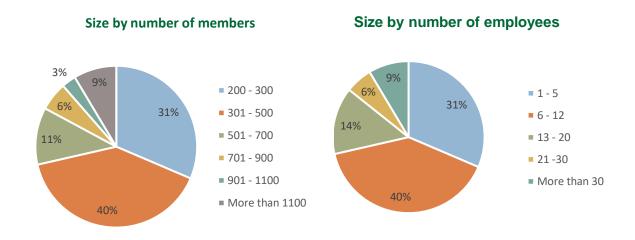
<sup>&</sup>lt;sup>6</sup> https://www.nepalitimes.com/editorial/back-to-the-future-of-farming/

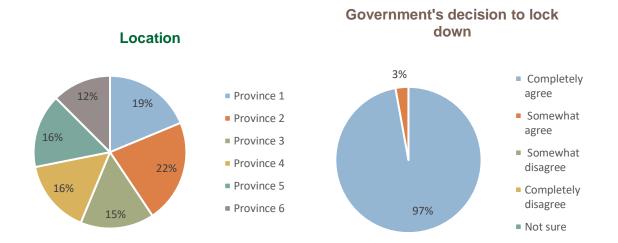
<sup>&</sup>lt;sup>7</sup> https://english.khabarhub.com/2020/10/88167/

# 4. Assessment of milk collection centres

A total of 35 dairy/milk cooperatives<sup>8</sup> across 21 districts were assessed as part of this RMA. The CASA team, in coordination with CDCAN, randomly selected the 35 dairy cooperatives for the survey and developed a checklist/questionnaire to assess them. CDCAN conducted telephone interviews to gather the information as per the agreed checklist.

# 4.1 General characteristics of respondents

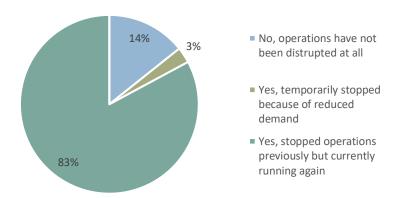




<sup>&</sup>lt;sup>8</sup> The cooperatives selected were required to have at least 200 members to qualify for the assessment. However, three cooperatives had under 200 members (two in Province 7 and one in Province 6); these have also been included in 200–300-member category.

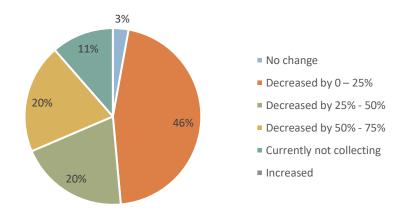
# 4.2 Milk collection

### 4.2.1 Did you at any time stop milk collection due to the COVID crisis?



A majority of the dairy cooperatives (29) had stopped operations initially for a few weeks when the lockdown was announced, but had since re-started operations. Only one of the 35 dairy cooperatives surveyed had suspended operations temporarily and was not collecting milk during the time of the survey. Five dairy cooperatives had not faced any disruptions in operations.

### 4.2.2 Volume of milk collection before and after lockdown

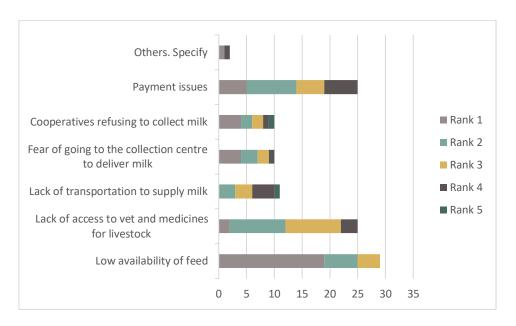


Sixteen collection centres reported a decrease in collection volumes by up to 25%, while a decrease in collection volumes of 50–75% was reported by seven collection centres. Four collection centres had stopped the collection of milk altogether, of which three were in Province 7, where the remaining respondents reported a decrease in collection volumes of at least 50%. Most of the collection centres in CASA's working area, Provinces 2 and 5, reported a decline in collection volume of 25–50%. However, three collection centres, two in Province 2 and one in Province 5, reported a decrease in collection volume of 50–75%. The mean decreases in collection by province were as follows: Province 1 (37.5%); Province 2 (42.9%); Province 3 (22.5%); Province 4 (17.5%); Province 5 (37.5%); Province 6 (31.3%); and Province 7 (87.5%).

40% of respondents ranked low demand for milk from dairy processors as the number one reason for the decrease, while another 23% ranked this as the number two reason. Similarly, 29% of respondents mentioned low demand at the local market as the main reason, with 34%

mentioning this as the number two reason. 20% of respondents ranked lower supply from farmers as the main reason, with similar numbers of respondents identifying it as the number two reason. Lack of transport was also mentioned, but to a lesser extent (by around 12% of respondents).

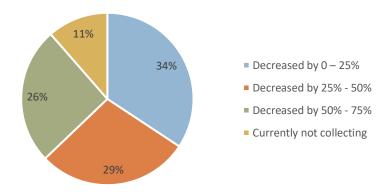
# 4.2.3 Major challenges facing member dairy farmers



Low availability of inputs, specifically cattle feed, was ranked as the number one challenge facing dairy farmers by 54% of respondents; a further 28% placed it at numbers two and three. Issues around receiving prompt payment were ranked as the number one issue by 14% of respondents, with another 40% reporting this as the second and third biggest challenge. 57% of respondents also reported access to vets and medical supplies for livestock as among their second and third biggest hurdles.

### 4.3 Sales and revenue

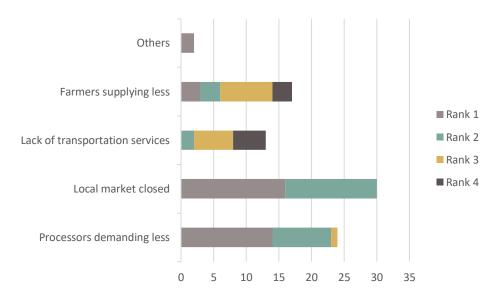
### 4.3.1 Milk sales before and after the lockdown



All the collection centres that were surveyed witnessed declines in sales, with almost 40% of respondents reporting drops in sales of at least 50% and another 29% reporting declines of at least 25%. As with the collection of milk, Province 7 and Province 2 have seen the biggest

decline in sales. 75% of respondents in Province 7 were not selling any milk, while the remaining respondents had witnessed sales decline by at least 50%. Similarly, 80% of respondents in Province 2 witnessed sales decline by at least 50%, with the remaining witnessing declines of 25–50%. All respondents from Province 5 reported a decline of at least 25%, with 40% of them reporting declines of at least 50%. Province 3 was the area faring the best, with 80% of respondents reporting a decline in sales of less than 25%.

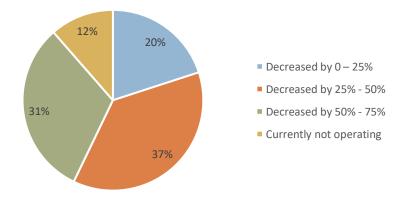
### 4.3.2 Reasons for the decrease in milk sales



Closure of local markets was ranked as the number one and number two contributors to the decline in sales by 46% and 26% of respondents, respectively. Low demand from processors was another significant contributor, with 40% of respondents ranking it as number one and another 40% ranking it as number two. Reduced supply was another contributing factor, with 16% of respondents ranking it at either number one or number two.

Data from the survey also reinforces the consumption trend of milk produced in various locations of the country. Collection centres close to urban and semi-urban areas are dependent on large processors for sales of their product, whereas collection centres located in districts without large urban settlements are dependent on smaller markets and local consumption.

### 4.3.3 Changes in revenue



As with sales, all collection centres that were surveyed reported a decline in revenue as well, with over 40% of respondents reporting decrease in revenues of at least 50%. Around 40% of respondents reported a revenue decline of 25–50%, with the rest reporting declines of up to 25%.

# 4.4 Sustainability and coping mechanisms

# 4.4.1 Coping mechanisms

To cope with the current crisis, decreasing milk collection volumes in line with daily demand was the number one strategy and was applied by almost 50% of the collection centres, with another 17% ranking this as their second option. 23% of respondents had diversified into producing processed products to minimize wastage, including 40% and 29% of the respondents in Province 5 and Province 2, respectively. Around 8% of respondents had diversified their client base by supplying to new areas and 6% reported selling milk at lower prices.

# How are cooperatives adapting to the current crisis?

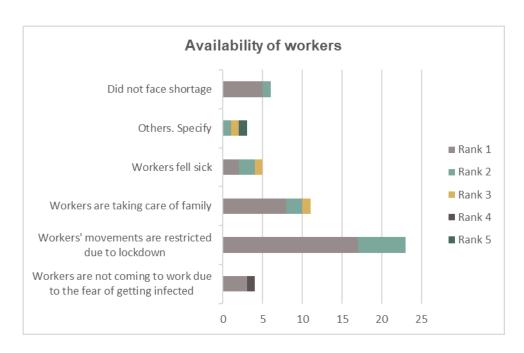


Regarding some of the extreme measures taken during the lockdown, over 20% of respondents reported that they had dumped surplus milk on at least one occasion, while another 15% reported distributing free milk on at least one occasion and 3% reported reducing their labour force. Half of the respondents surveyed did not report having to take any such measures yet.

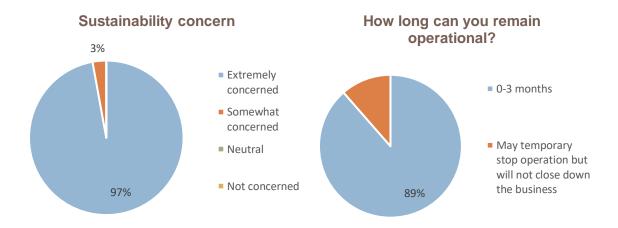
Extreme steps taken during the lockdown	Rank	%
Have not had to take any	1	50
Dump surplus milk	2	21
Reduce labour	5	3
Distribute milk for free	3	15
Others	4	12

### 4.4.2 Availability of workers

All but around 14% of respondents also reported a shortage of workers, with around 65% reporting shortages due to the restrictions on movement and 9% reporting that workers were not coming to work due to the fear of getting infected.



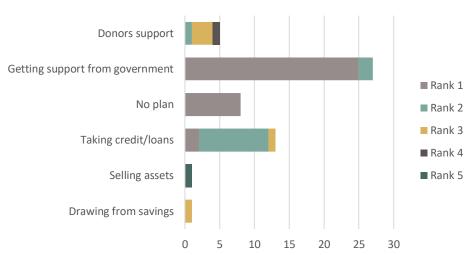
### 4.4.3 Enterprise sustainability



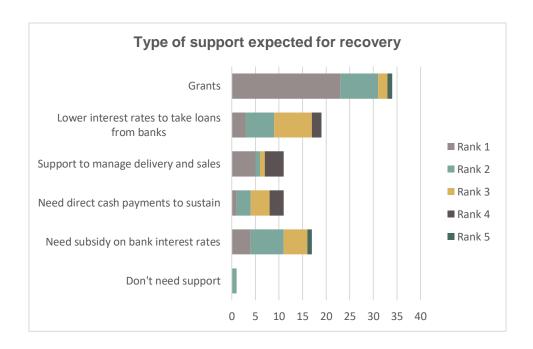
97% of respondents reported that they were extremely concerned about the milk collection centre's sustainability over the next three months, with 89% reporting that they could only stay in operation for another three months if the crisis continued. To date, none of the respondents reported receiving any support from the government or other sources, either at the collection or the farm level.

In regard to immediate plans to start the recovery process, over 70% of respondents reported that they were hoping to get support from the government, while almost 23% reported they had not yet thought of any concrete plans for recovery. Taking out new loans was also mentioned by a significant number of respondents in the event that support from the government did not materialize.





The provision of grants from the government or other sources was by far the number one expectation among collection centres for beginning the recovery process, with over 65% of respondents reporting that a direct grant is the single most critical support required, with another 23% prioritizing grants as the second most important. 11% of respondents had prioritized subsidies from the government on bank interest rates, with 8% prioritizing lowered interest rates in loans from financial institutions as the first option. 14% of respondents also mentioned support to manage delivery and sales as their number one priority.



# 5. Assessment of dairy processors

The RMA among dairy processors used a quantitative approach consisting of a structured questionnaire. Interviews were conducted with key informants from 30 dairy companies. Companies with varying processing capacities and workforce were selected from different provinces, with the coordination of DIA. Due to the current situation, including restrictions on mobility and face-to-face meetings, the data collection was conducted remotely through phone calls. Data was collected from the owners, executive members or senior managers, depending on the willingness and capacity of the members to participate.

# 5.1 General characteristics of respondents

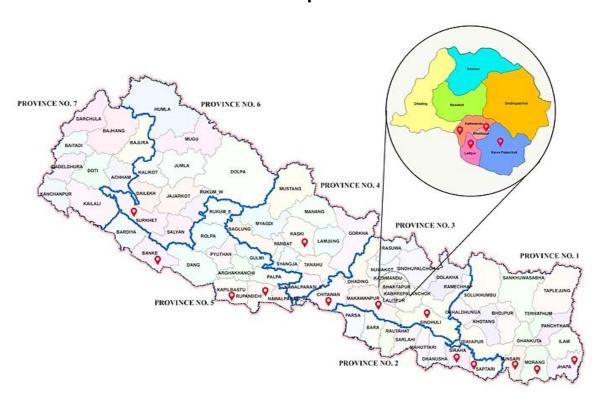
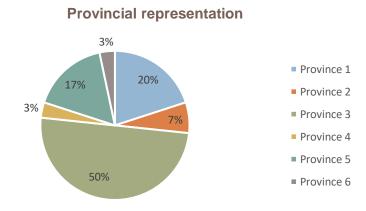
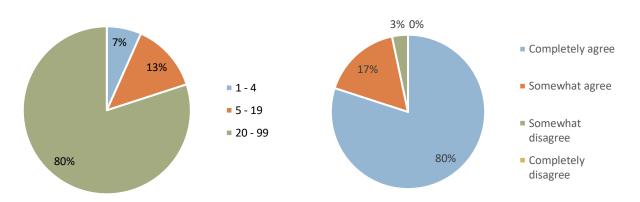


Figure 1: Location of the dairy processors for RMA



### **Number of employees**

### Government decision to lock down

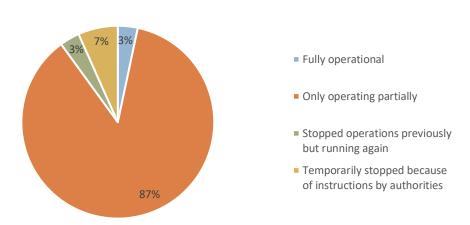


# 5.2 Impact of COVID-19 crisis on dairy businesses

# 5.2.1 Impact on business operations

Out of 30 dairy companies surveyed, only one was fully operational, while 26 were under only partial operation. One respondent had stopped operations previously due to technical problems in production but had since fully resumed operations, while two companies in Nepalgunj were temporarily closed after receiving instructions from the local authority to halt operations.

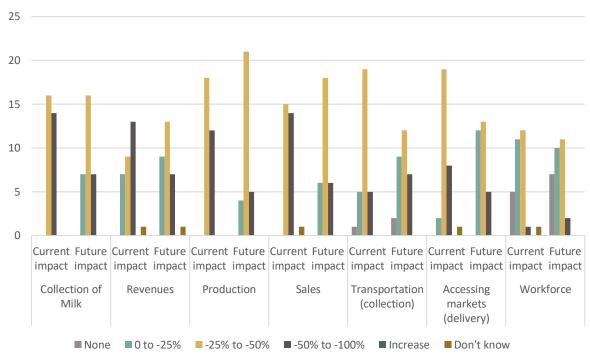




53% of respondents reported decreases in milk collection volumes of over 50%, while the rest reported decreases of 25–50%. The study revealed that the reduction in milk collection has had an adverse effect on the production of dairy products, eventually affecting the sales revenue in a negative way. Production was down by over 50% in 40% of the companies surveyed, while 60% reported decreases of 25–50%. Similarly, half of all the respondents reported a decrease in sales of over 50%, while the other half reported a decrease in sales of

at least 25%. In terms of revenue, about a quarter reported losses of up to 25%, while 44% reported losses of over 50% and 30% reported losses of 25–50%. The impact of the current situation, along with projections for the rest of the year, is shown in the graph below. Overall, a majority of the respondents are expecting decreases in production, sales, and revenues of at least 25% over the next few months, with a significant number of respondents anticipating losses of well beyond 50%. Around a fifth of the respondents are anticipating some job losses.





According to the survey, the overall demand for dairy products has fallen by 70-80% in the

market due to the lockdown and the closure of retail shops, hotels, restaurants and banquets. Similarly, the demand for processed milk has decreased by almost 75%. Dairy products such as ice-cream and yogurt, which are in high demand during summer months, has witnessed a drastic decrease in sales because of the perception among consumers that consuming these products increases the likelihood of contracting common colds and flu. Additionally, due to the asymmetric information regarding COVID-19, there is misinformation in the market that the consumption of ice-cream and other chilled products will increase the likelihood of COVID-19 infection.

# Decrease in demand for key dairy products

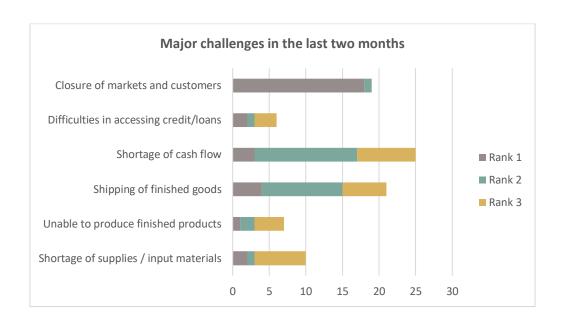
Ice-cream and yogurt: 80– 100%

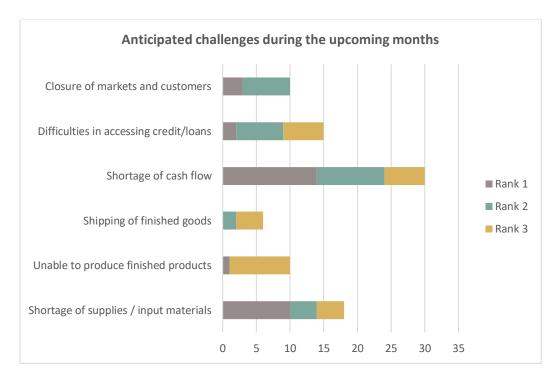
Sweets and other highly perishability products: 80–90%

Processed milk: 40-50%

# 5.2.2 Major challenges faced by dairy processors

The effect of the COVID-19 pandemic and the subsequent lockdown has resulted in an enormous setback to dairy processors. Due to the mandatory closure of market centres and institutional buyers across Nepal, dairy companies face an imminent financial crisis and insolvency losses. Besides concerns around the closure of the major customer base, cash flow problems and difficulties shipping the finished goods are the main challenges currently faced by dairy companies. While the industry is expected to bounce back, many companies are expecting an acute cash flow problem and a shortage of supplies and input material for the rest of 2020.





# 5.3 Actions taken during the crisis

The majority of the dairy businesses had taken the following actions in response to this crisis, listed here on the basis of priority:

- 1. Reducing production of goods or services
- 2. Reducing the number of staff
- 3. Negotiating new terms with workers

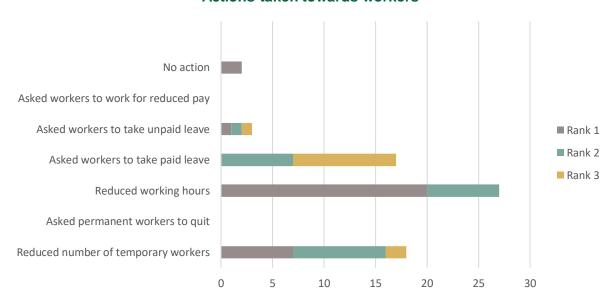
# Actions taken in respose to the crisis



Around 9% of respondents had no idle workers due to the reduced operations while the rest had taken the following actions to address the problem:

- 1. Reduced working hours
- 2. Asked workers to take paid leave
- 3. Reduced number of temporary workers

### Actions taken towards workers



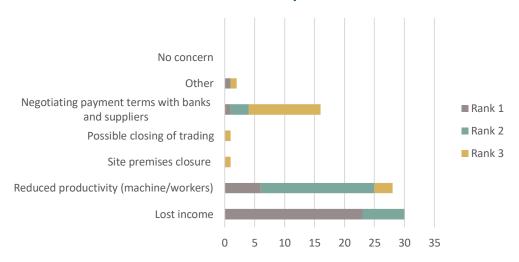
# 5.4 Support needed

97% of respondents mentioned that they were extremely concerned about the current situation, with the rest mentioning they were somewhat concerned. To date, only one company had received support from the government (in the form of a road pass for the movement of workers).

At present, the respondents were mainly concerned about their lost income, reduced productivity and re-negotiating payment terms with banks and suppliers. 75% of respondents

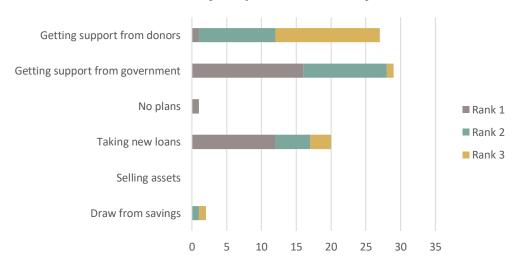
ranked lost income as their number one cause of concern, with the rest ranking it as number two. 20% and 60% of respondents ranked reduced productivity as their number one and two concerns, respectively. The third top concern among dairy companies was negotiating new payment terms with banks and suppliers.



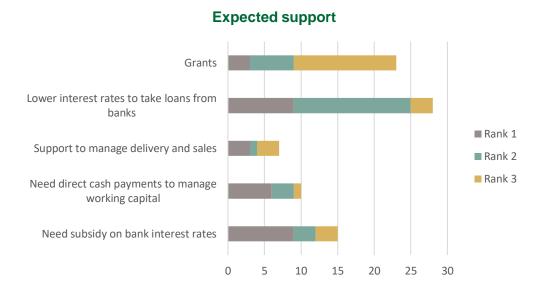


In regard to immediate plans to start the recovery process, over 50% of respondents reported that they were hoping to get support from the government, while 40% reported they would be looking to get new loans. 36% of respondents also mentioned donors and development projects as a secondary source of support, with another 50% mentioning donor support as their third option.

# What are your plans for recovery?



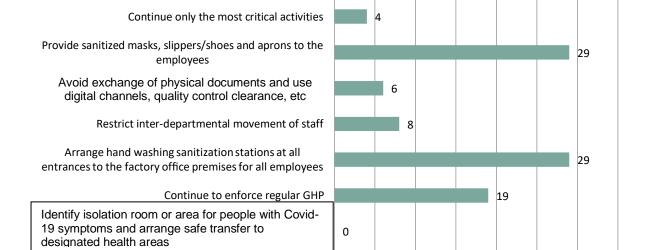
In terms of the type of support expected, 30% of respondents ranked lower borrowing rates as the number one expectation, with another 53% ranking it as number two. 30% of respondents mentioned subsidies on bank interest rates as the priority, with 20% mentioning a direct cash injection to manage cash flow.



# 5.5 Occupational safety and health measures

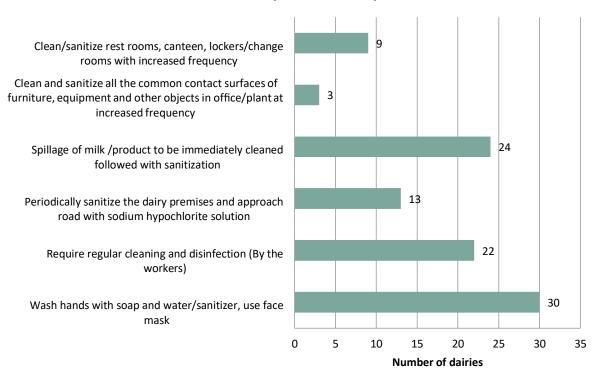
Some of the preventive measures implemented at the management level to ensure the safety of their workers are shown in the figure below.

# Periodically review the situation Maintain close liaison with the relevant local authorities Preventive measures implemented at the management level 23



Preventive measures implemented to maintain cleanliness and sanitation in the processing unit, factory or workstation are shown in the figure below.





Most daily managers have been providing sanitized masks, slippers/shoes and aprons to employees, and have arranged hand-washing and sanitization stations at all entrances of the factory/office premises for all employees, while continuing to conduct periodic reviews of the situation. The study thus suggests that the dairy industry is taking preventive measures to maintain cleanliness and sanitation in its processing units while operating during the COVID-19 crisis; however, it is uncertain whether they will continue to be able to take these measures and operate their businesses if the crisis persists for a longer period of time.

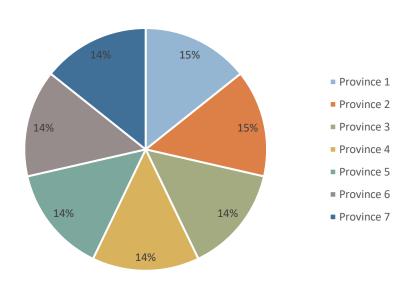
# 6. Assessment of vegetable collection centres

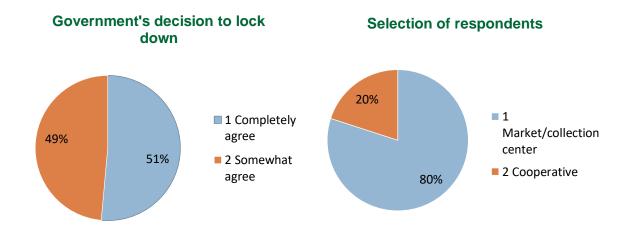
A total of 35 vegetable markets/cooperatives<sup>9</sup> across 35 districts were assessed as part of this RMA. The CASA team, in coordination with FEFVEN, randomly selected the 35 vegetable markets/cooperatives for the survey and developed a checklist/questionnaire to assess them. FEFVEN conducted telephone interviews to gather the information as per the agreed checklist.

# 6.1 General characteristics of respondents

Out of the 35 respondents, 80% were market/collection centres, while 20% were vegetable cooperatives. 51% of respondents completely agreed with the government's decision to lock down, while the rest somewhat agreed with the decision.

# **Provincial representation**

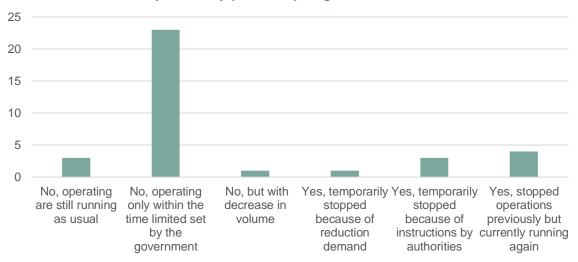




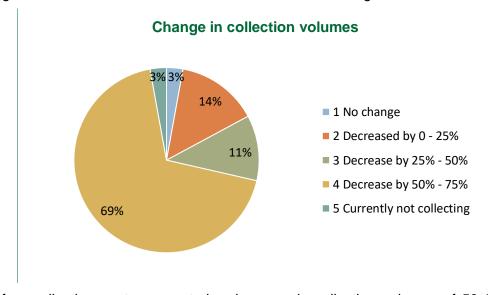
<sup>&</sup>lt;sup>9</sup> The cooperatives selected were required to have at least 200 members to qualify for the assessment.

# 6.2 Impact on vegetable collection





Only 9% of the collection centres that were surveyed had temporarily suspended operations and were not collecting vegetables during the time of the survey. 12% had initially stopped operations for a few weeks, when the lockdown was first announced, but had since re-started operations, while 66% of the collection centres reported operating only within the time limit set by the government. Some of the respondents also reported that they have now started operating outside of the market/collection centres, but are trading at much lower volumes.



Twenty-four collection centres reported a decrease in collection volumes of 50–75%, four reported a decrease of 25–50%, while a decrease in collection volumes of 0–25% was reported by five collection centres. One collection centre reported no change in collection volumes, while one reported they had stopped collection altogether.

The closure of local markets and institutional customers such as hotels and restaurants has led to a significant drop in demand for vegetables as 94% of respondents cited low demand as the number one reason for the decrease in collection. 94% of respondents also picked a lack of transport to collect vegetables as the number two reason for the decreased collection volumes.

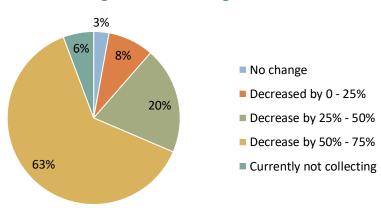
# 6.3 Major challenges facing member vegetable farmers

Major challenges facing member vegetable farmers	Rank	%
Low availability of inputs	1	29
Lack of access to advisory services	4	13
Lack of transport to supply vegetables	2	33
Fear of going to the market to deliver vegetables	3	25

According to the respondents, lack of transport to take vegetables to the market was the number one challenge facing vegetable farmers. 29% of respondents also mentioned the low availability of inputs as a major challenge, while 25% reported fears among farmers on visiting marketplaces as another challenge facing vegetable farmers.

# 6.4 Impact on sales, revenue and prices



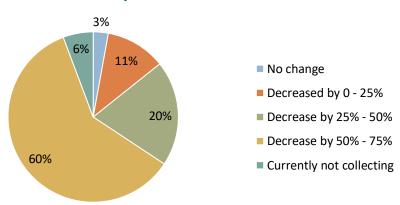


Most collection centres surveyed witnessed decreased sales, with 63% of respondents reporting decreases of 50–75% and another 20% reporting decreases of 25–50%. Similarly, 9% of respondents reported decreases of at least 25%, with only 3% reporting no change.

Reasons for decrease in vegetables sales	Rank	%
Low demand from consumers	1	39
Local market closed	2	32
Lack of transport services to deliver vegetables	3	29

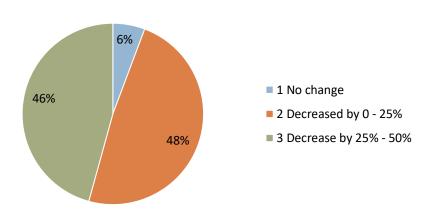
Regarding the reason for low sales, low demand from consumers was ranked as number one by 39% of respondents, while the closure of local markets was ranked as number two. 29% of respondents also identified the lack of transport to move products as a significant reason for low sales.





With decreased sales, all but one collection centre reported a negative impact on revenues. 21 out of the 35 respondents reported losses in revenues of 50–75%, while another seven reported losses of 25–50%. Four respondents reported losses of up to 25%, with two not currently generating any revenue at all.

Impact on price



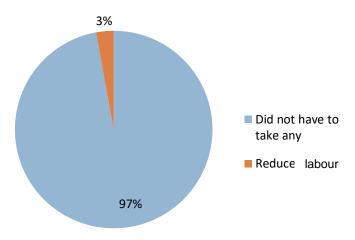
94% of the collection centres that were surveyed reported falling prices of vegetables, with around half (16) of the respondents reporting a decrease in prices of 25–50%, while 17 respondents reported price decreases of 0–25%. Only two respondents reported no change in the price of vegetables.

# 6.5 Sustainability and coping mechanisms

# 6.5.1 Coping mechanisms

To cope with the current crisis, collecting and selling vegetables based on demand alone was the number one strategy applied by almost 94% of the collection centres, with another 86% reporting that their secondary strategy was selling vegetables at a lower price. 26% of respondents reported diversifying sales channel (online sales, marketing and delivery) as a third strategy.

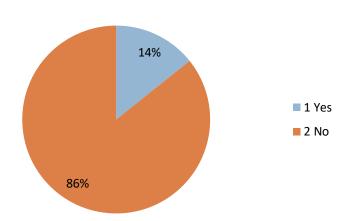




### 6.5.2 Availability of workers

Only five respondents reported facing a shortage of workers, with the rest reporting that they did not face any. The main reasons behind the shortage of workers were that workers were restricted in their movements or quarantined, or that workers had to take care of family because of the lockdown.

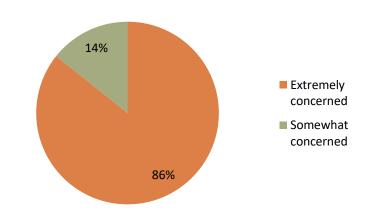


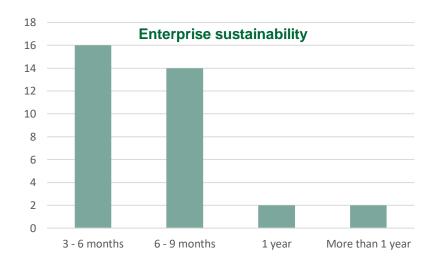


### 6.5.3 Enterprise sustainability

Thirty out of the 35 respondents reported that they are extremely concerned about the sustainability of the vegetable collection centre over the next six months. Similarly, 14% of respondents reported that they are somewhat concerned about the sustainability of the vegetable collection centre over the next six months.

### Sustainability concern





46% of respondents reported that they could stay in operation only for another three months if the crisis continued. Similarly, 40% could stay in operation for up to 3–6 months. Just 6% of respondents reported that they could stay in operation for one year or more.

In regard to immediate plans to start the recovery process, 43% of respondents ranked drawing from saving as the number one option. Similarly, 24% of respondents ranked getting support from government as the second option, while 18% ranked taking credit/loans as the third.

Recovery plans	Rank	%
Drawing from savings	1	43
Taking credit/loans	3	18
Getting support from government	2	24

Finally, in terms of expected support to start the recovery process, 33% of respondents mentioned subsidies on bank interest rates, while 26% mentioned support to manage delivery and sales of vegetables. Similarly, 23% of respondents mentioned lower interest rates to take

loans from banks, while 21% of respondents mentioned a direct cash injection as their expectation.

Type of support expected for recovery	Rank	%
Need subsidy on bank interest rates	1	30
Need direct cash payment to manage working capital	4	21
Support to manage delivery and sales	2	26
Lower interest rates to take loans from banks	3	23

# 6.6 Recommendations

To address the immediate, short-term and long-term impacts of COVID-19 on the vegetable sector, the following measures have been recommended by a range of stakeholders during the assessment:

- Shortening supply chains by establishing direct purchasing lines between producer
  and consumer cooperatives while reducing the risk of inflated food prices can help
  transform economies in the medium to long run towards more sustainable production
  and consumption. In particular, connecting online companies/supermarkets/marts
  directly with vegetable trading cooperatives would be beneficial.
- Where the country's domestic production is being left to rot in farmers' fields, vegetable imports were not stopped, though the government has imposed import restrictions amid the COVID-19 lockdown. Door-to-door sales of local vegetables along with transport provision should be facilitated. The recent initiative of the agriculture-ambulance<sup>10</sup> for collection of local vegetables brought in by Province 5 could prove to be very beneficial in this dire situation.
- Due to the interruption in the collection and supply chain, there will be a shortage of vegetable seeds and fertilizers for use in the coming season. Support to farmers for seeds and fertilizers, and encouraging farmers to use improved seeds and investing in farmer seed production, could reduce the dependency on imports.
- The use of local plants to produce organic pesticides and manure from municipal waste are ways to reduce import dependency. The government should provide a subsidy in terms of seeds, fertilizers and pesticides to farmers for the upcoming season.

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<sup>&</sup>lt;sup>10</sup> <u>https://www.heifer.org/blog/during-covid-19-lockdown-nepal-cooperative-connects-farmers-and-customers-with-innovative-agri-ambulance-.html</u>



Commercial Agriculture for Smallholders and Agribusiness

The CASA programme makes the commercial and development case for investing in agribusinesses that source produce from smallholders. It does this by demonstrating how this can be done effectively, by bridging evidence gaps and by ensuring investors and policymakers have access to the right information and people to make inclusive agribusiness models succeed.

By showcasing successful models for businesses that source produce from smallholders and pulling together the evidence base supporting the commercial and development impact of their business models, CASA will attract more investment into the sector, boosting economic growth and raising demand for smallholder produce.

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