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The U.S. Government's Global Hunger & Food Security Initiative



Feed the Future Nepal Knowledge-Based Integrated Sustainable Agriculture in Nepal (KISAN) II Project
Rapid Market Assessment on Impact of COVID-19 on KISAN II Private Sector Partners and Farmers
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FEED THE FUTURE NEPAL KNOWLEDGE-BASED INTEGRATED SUSTAINABLE AGRICULTURE IN NEPAL (KISAN) II PROJECT

RAPID MARKET ASSESSMENT ON IMPACT OF COVID-19 ON KISAN II PRIVATE SECTOR PARTNERS AND FARMERS

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DISCLAIMER

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BACKGROUND

On March 24, 2020, the Government of Nepal imposed a nationwide lockdown to curb the spread of COVID-19. The lockdown has severely limited human mobility, disrupted supply chains, halted economic activities and crippled the overall economy. Notably, the lockdown has had a significant impact on the supply chain of essential goods, mainly agriculture commodities, and disrupted the efficient functioning of all agriculture supply chain actors (farmers, agrovets, cooperatives, traders and millers). Considering the rising number of cases of COVID-19 in different parts of the country and the risk of mass contagion, the Government is expected to continue with some form of nationwide lockdown in the coming months. Against this backdrop, it is necessary for KISAN II to rapidly assess the impact of the lockdown on project partners (grantees) and their customer base (farmers). More importantly, necessary measures should be taken to decrease their vulnerability to eminent business shocks that could force many to close or scale down their businesses.

At present, Feed the Future KISAN II is working in partnership with 150 small, medium and large agri-businesses to develop and implement innovative business models and/or activities that serve the businesses, and cater to the needs of the farmers. Following the announcement of nationwide lockdown in late March, the majority of KISAN II partners temporarily shut their businesses. In recent weeks, however, many partners have started their business operation as per the directives of the local and federal government. Undoubtedly, the business volume of the partners has taken a major hit, and for many, the cost of business has significantly increased and profits have fallen. Given the diversity of KISAN II partners, in terms of their function, size, location and other business characteristics, KISAN II conducted a rapid qualitative survey of all grantees in KISAN II working area¹ to better understand the impact of the current crisis and the future outlook.

IMPACT ON VARIOUS MARKET PLAYERS

Agrovets

The lockdown imposed by the Government has largely disrupted the supply chain of agri-inputs in Nepal. At present, many of the agrovets are only partially open (limited hours) and reported a 60-80 percentage decrease in sales. This is mainly due to the decrease in the number of customers visiting the agrovet to buy inputs and the limited supply of agri-inputs available. Agrovets are struggling to procure necessary agri-inputs from wholesalers and suppliers, many of whom are outside of the district and/or province. Even in districts which are allowing inter-district trade of agriculture goods, many retail agrovets are unable to stock their inventory because it is not cost-effective to procure small quantity of inputs through hiring of a transport vehicle.

In the short run, the number of farmers buying agri-inputs on credit has increased because farmers have limited access to finance (bank and cooperatives are closed and/or only partially open) and some have not been able to sell their produce. As a result, agrovets are forced to deal with decreased sales, increased cost (mainly transportation), and increasing credit sales to farmers. In the coming months, there is a high risk that farmers will not be able to pay back the credit owed to the agrovets and will not have the capacity and/or willingness to invest in agri-inputs. Small agrovets will be especially vulnerable as

¹ Provinces 3, 5, 6 and 7

they will face a shortage of working capital and will not be able to restock inventory and risk closure.² Closure of smaller agrovets and limited availability of inputs will create a shortage in some districts and result in an increase in price.

Meanwhile, demand for agri-inputs will continue to contract and risk of default will increase in the medium term. There will be a perceived risk of default by all supply chain actors due to uncertainty and decreased demand of agri-inputs, which could trigger more transactions to be conducted in cash and less on credit. In fact, some of the manufacturers have already started tightening credit policies for importers/distributors. Such tightening of credit policies will subsequently trickle down to the wholesalers, retailers and farmers. Consequently, farmers will not easily be able to purchase inputs on credit. Thus, farmers who do not have access to expendable cash or finance will scale down operation, thereby decreasing the amount of inputs purchased. In turn, the income of all the supply chain actors associated with agri-inputs will decline. If this condition persists, many large and wholesale agrovets will also become vulnerable as they will not be able to cover their high operational costs leading to high risk of closure. However, there could be some exceptions. Usually, new companies and wholesalers/retailers, looking to displace established market players and gain market share, might adopt generous credit policies.

Cooperatives

The lockdown has significantly impacted cooperatives since they were not allowed to resume operation during the early weeks of the lockdown and currently are only partially open. The vast majority of KISAN II's partner cooperatives are primarily focused on providing financial services (saving and credit) to its members, of which, only a handful are providing financial services via mobile/tablet. Since the lockdown has severely restricted public mobility, cooperative members have largely not been able to visit the cooperative to conduct transactions. Consequently, the transactions of the cooperatives have decreased significantly, and in some cases, has dropped close to zero. In addition, many farmer members are withdrawing their savings to finance their day-to-day expenses since they have only been able to sell limited quantity of their production, while also receiving lower price due to contracted market demand. For instance, two large cooperatives have witnessed 130% and 100% increase in saving withdrawals, respectively.³ In addition, due to the decreased income of the farmers and travel restrictions due to the lockdown, cooperative members are also not making any saving deposits.

On the credit side, the cooperatives are experiencing a sharp decline in loan demand and loan disbursement. Historically, loan demand is highest during paddy plantation season. But at present, though paddy plantation season has begun, cooperatives are experiencing a decreased demand for loans. Consequently, the lending ratio of cooperatives will take a steep dive during this year's paddy season, a period in which cooperative usually tend to have highest lending ratio. In addition to the depressed loan demand and poor loan disbursement figures, cooperatives are also dealing with poor loan repayment; collection of loan repayment has dropped by an average of 90%. Thus, in an effort to encourage members to increase their loan demand and loan repayment, some cooperatives have introduced discount on interest, flexible repayment rates, offering emergency loans up to NPR 10,000 and are

² For example, one partner agrovet in Rukum are already facing severe shortage of working capital and could be forced to close because they cannot pay the rent for operation of the agrovet.

³ Based on survey findings of cooperative assessment done by Finance Team. Final report is being prepared.

providing door-to-door saving and credit services. But despite these efforts, many cooperatives have not been able to improve their saving and credit performances as members are still not participating in economic activities. In addition, various profit centers (agrovets, collection centers, schools, etc.) of the cooperatives have also not been fully operational during the lockdown, which has further decreased income.

Considering that the economic impact of the lockdown is expected to be felt by the farmers long after the lockdown has been lifted, the financial performance of cooperatives will likely not improve significantly in the coming months. Some cooperatives are already facing severe liquidity crisis. While cooperatives have to typically maintain 10-15% liquidity, the liquidity of many cooperatives have already dropped below the 10% minimum.⁴ If the cooperatives are not able to improve their liquidity status, cooperatives may not be able to pay their installments for the wholesale loan, and their members may not be able to even withdraw their own savings. Given the risks, many cooperatives, particularly smaller cooperatives catering to poor and rural households, will likely find it more difficult to recover from the losses in the near future and thus could collapse.

Traders

Due to the lockdown imposed by the Government, many institutional buyers of agricultural produce (hotels, restaurants, schools and universities) have shut down and consequently the demand of vegetables has drastically decreased. For home consumption, the Government has allowed vegetable retail shops to open for limited hours (early morning and evening), which has further reduced the demand as people are not able to readily buy vegetables. At the same time, limited opening hours, along with the widespread fear of contagion of COVID-19 throughout the agriculture supply chain, has forced many households to increase their consumption of food staples (cereals and processed food) over fresh vegetables. Despite a decrease in demand of fresh vegetables, vegetable traders are facing logistical difficulties in collecting and supplying fresh vegetables to the market due to the limited opening hours and various other travel and transport restrictions imposed during the lockdown. Traders are currently only able to collect vegetables from nearby farmers and supply to the local markets. As a result, traders have experienced 70-90% reduction in sales. However, in Kathmandu, many online grocery delivery businesses have sprouted to capitalize on this market opportunity presented by lockdown and the COVID-19 crisis and are currently delivering fresh vegetables to customers. However, the volume of online delivery is limited and only some traders around Kathmandu are able to collect and supply fresh vegetables to such grocery delivery businesses.

Though the Government has selectively allowed the movement of licensed vehicles within the provinces, which has allowed some of the traders with vehicles to obtain the required paperwork and supply vegetables, the logistical challenges and supply chain disruptions have also increased the post-harvest losses faced by the traders. Many traders have reported that they are only able to sell about 50% of the vegetables collected from the farmers. Owing to the decrease in sales and the increased post-harvest losses, many traders are experiencing a shortage of working capital. In fact, some of the traders have not been able to make timely cash payment to the farmers. At the farmer level, many are facing increased

⁴ Based on survey findings of cooperative assessment done by Finance Team, 15 out of 25 cooperatives (i.e. 57.7%) surveyed has an average liquidity of 3%.

post-harvest loss with scarce markets for their perishable produce. Meanwhile, decreased market demand has reduced the farmgate price of the vegetables. As a result, the income of the farmers has significantly decreased along with their investment capacity. This, along with the shortage of necessary agri-inputs and farmers' increased focus on production of staples for personal food security, could lead to reduced vegetable production in the coming season. Consequently, traders could face shortage of vegetables for collection and sales, which would reduce their sales even further and force some traders to temporarily shut down or scale down their businesses.

Rice Mills

Rice millers have largely been able to operate their business amid the nationwide lockdown. However, the impact of the lockdown on rice mills vary greatly depending on the administrative restrictions of the district they are operating in, the stock of paddy in their warehouse, availability of labor and their access to market.

While all rice mills have been operating throughout the lockdown period so far, many are not operating at their optimal capacity. Though rice mills have been allowed to operate during the lockdown, the travel restrictions imposed by the Government has led to labor shortages and logistical difficulties. In Banke district, some rice mill has not been able to operate due to labor shortages since laborers are not allowed to travel to the mill. Meanwhile, some rice mill has not faced labor shortage and has thus been operating the mill as normal. The mill has provided identity card to its workers, divided them to work in alternate shift and is abiding with social distancing measures. In fact, these rice millers were able to sell 4 MT of rice to its dealers in Jajarkot during the lockdown. While some millers have been able to operate during the lockdown, the mills only have limited stock of paddy in the warehouses and with their respective *gallawallas*. Meanwhile, many millers have only been able to collect nominal amount of paddy from the farmers. Though the mills have been able to sustain the business operation till date, they are likely to scale down their production as stocks dwindle and procurement from farmers continues to be plagued by logistical challenges due to travel restrictions. However, one food processor in Kailali has adequate stock of paddy to last this season and due to a relaxed travel restriction, it is able to procure paddy easily from traders and farmers as well.

In the meantime, some rice mills have already reduced the scale of their operation in order to reduce cost of doing business due to the lockdown (logistical costs, required health and safety precautions, etc.). One partner rice miller in Bardiya is now operating 3-4 hours a day with only 4 workers who follow social distancing measures. Since many millers are currently operating and/or will be operating at sub-optimal capacity in the near future, they are likely to experience decreased sales and profit. Moreover, most of the rice mills also procure and trade wheat and lentil. But this season, according to our partner rice millers, the collection of wheat has decreased by 80% in Banke, as farmers were not able to harvest the wheat due to travel restrictions and many held on to stocks for food security reasons.

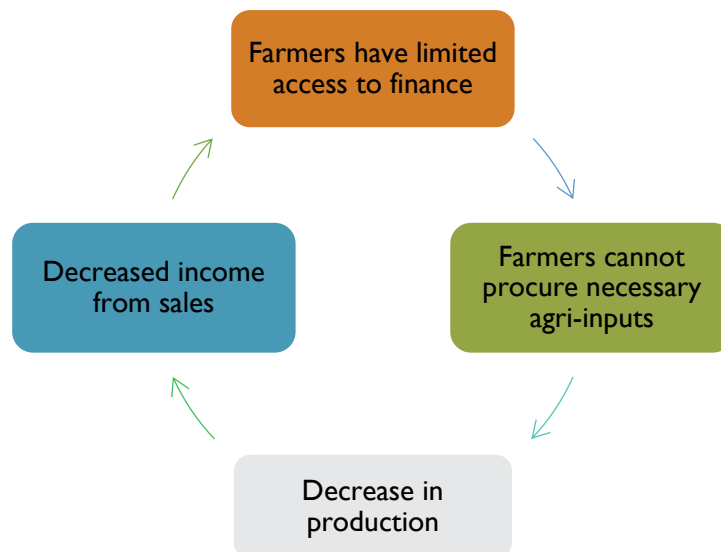
In the coming season, the rice mills fear that the production of medium fine and fine rice varieties will decrease due to the current shortage of seed and fertilizer. Moreover, the income of many farmers has decreased because they were not able to sell their produce, mainly vegetables due to the lockdown. Decreased income along with continued lockdown in the near future will force farmers to store the

paddy for food security. Consequently, the rice mills could face shortage of paddy in the coming season, forcing them to operate at below optimal production capacity. Increased cost, shortage of labor, disruptions in their supply chain and decreased sales could increase the business risk of mills with high loan exposure, forcing them to default on their loans and shutdown business operation.

Crop Farmers

The nationwide lockdown in response to COVID-19 led to the closure of all non-essential businesses and institutions. With the complete shutdown of schools, colleges, offices, restaurants and hotels, the demand for agriculture commodities has plummeted. While some of the demand has been redistributed on a household level, restricted public movement, limited operating hours of local grocery shops and the widespread fear of contagion due to lack of hygiene and traceability in the agriculture food supply chain, has pushed households to switch from consumption of fresh vegetables to staple foods (cereals and processed food). Due to the sudden decrease in demand of fresh vegetables and the logistical challenges faced by producers in accessing the market, the farmgate price of vegetables has significantly decreased compared to previous years. Farmers with weak market linkages and limited access to market in particular, have had to face severe post-harvest losses as they struggle to find buyers for their perishable produce.

On the other hand, the lockdown in India – a major source of vegetables for Nepal – and restrictions on trade between Nepal and India has prompted a decrease in import of agriculture commodities. However, farmers in surplus production areas, namely Bardiya, Kanchanpur and Palpa, have not been able to transport this excess supply to supply deficit areas. While this has led to high losses and decreased income of farmers in excess production areas, food deficit areas have witnessed high food prices. Due to this, farmers who have access to markets have been able to fetch a good price for their produce. For instance, farmers in Banke and Bardiya were able to get on average NPR 35-45 per kg for fresh vegetables. Similarly, in Karnali Province, which has banned the import of agriculture commodities from other provinces, farmers with access to market were able to sell their produce for double the price that they got last year.



While the lockdown has undoubtedly limited farmers' access to the market and consequently reduced their income, travel restrictions and limited operating hours of essential services such as agrovets has affected the farmers' ability to buy necessary agri-inputs. Agrovets are struggling to provide agri-inputs to the farmers since the lockdown has compromised the flow and availability of agri-inputs. At the same time, farmers are also facing difficulty in accessing necessary financial services from cooperatives and banks due to the travel restrictions. As the stock of agri-inputs in the agrovets being to dwindle and the logistics cost increases, agrovets will refrain from providing credit on inputs to farmers. In turn, farmers who do not access to finance, will not be able to procure the necessary agri-inputs. If the farmers fail to get the necessary agri-inputs on time for the upcoming production season, it will have a ripple effect on the overall production and income of the farmers in the coming months. Even if the lockdown is lifted and the market opens up for business as usual, the farmers will not have the requisite produce to sell in the market, which will extend their vulnerability into the post-lockdown period. This could trigger a vicious cycle of poverty where farmers do not have access to finance, cannot procure agri-inputs and consequently cannot produce and sell agriculture commodities to earn income.

Goat Farmers

COVID-19 lockdown has also had an impact on goat farmers, although the impact has been comparatively less than that faced by those involved in crop farming. While the lockdown has led to a shortage of formulated feed, majority of the small- to medium-scale goat farms have been able to rear their goat on a forage/fodder-based diet. Meanwhile, large commercial farms are struggling to provide nutritious balanced diet to the herd. Since local agrovets only have limited stock of livestock medicines, supplements and vaccinations, there is a high risk of loss in the case of diseases outbreak which could affect the overall health of the herd.

Meanwhile, on the marketing front, travel restrictions and limited mobility has heavily impacted the sales of goat (for meat and breeding) and forage/fodder saplings. Consequently, goat farms stocked with breeding animals have been forced to rear them on limited resources. Many are facing a dilemma on whether to castrate the male bucks for meat or continue rearing them for breeding purposes. Furthermore, a majority of technicians are not able to provide buck insemination services due to the shortage in supply of liquid nitrogen (due to travel restrictions). In addition, though farmers are able to sell their goats locally, traders have not been able to transport live goats to the market, leading to shortage of chevon (goat meat) in the market.

WAY FORWARD

- Many grantees are likely to face varying degree of shortage of liquidity and/or working capital as a result of nationwide lockdown. Thus, KISAN II should support the grantees to assess their susceptibility to liquidity and/or working capital issues, and work with them to develop and implement plans to minimize the risk in the coming months.
 - a. KISAN II can identify and form strategic partnerships with financial institutes who can provide loans and inject much needed liquidity for grantee partners facing liquidity problems.
 - b. To help KISAN II partners avoid liquidity and working capital issue, KISAN II needs to work with the grantees to provide a faster payment model to ensure there is no additional strain on their cash flow and ensure partnership activities continue without compromising quality of the deliverables and putting the grantees at additional risk. In addition, activity may need

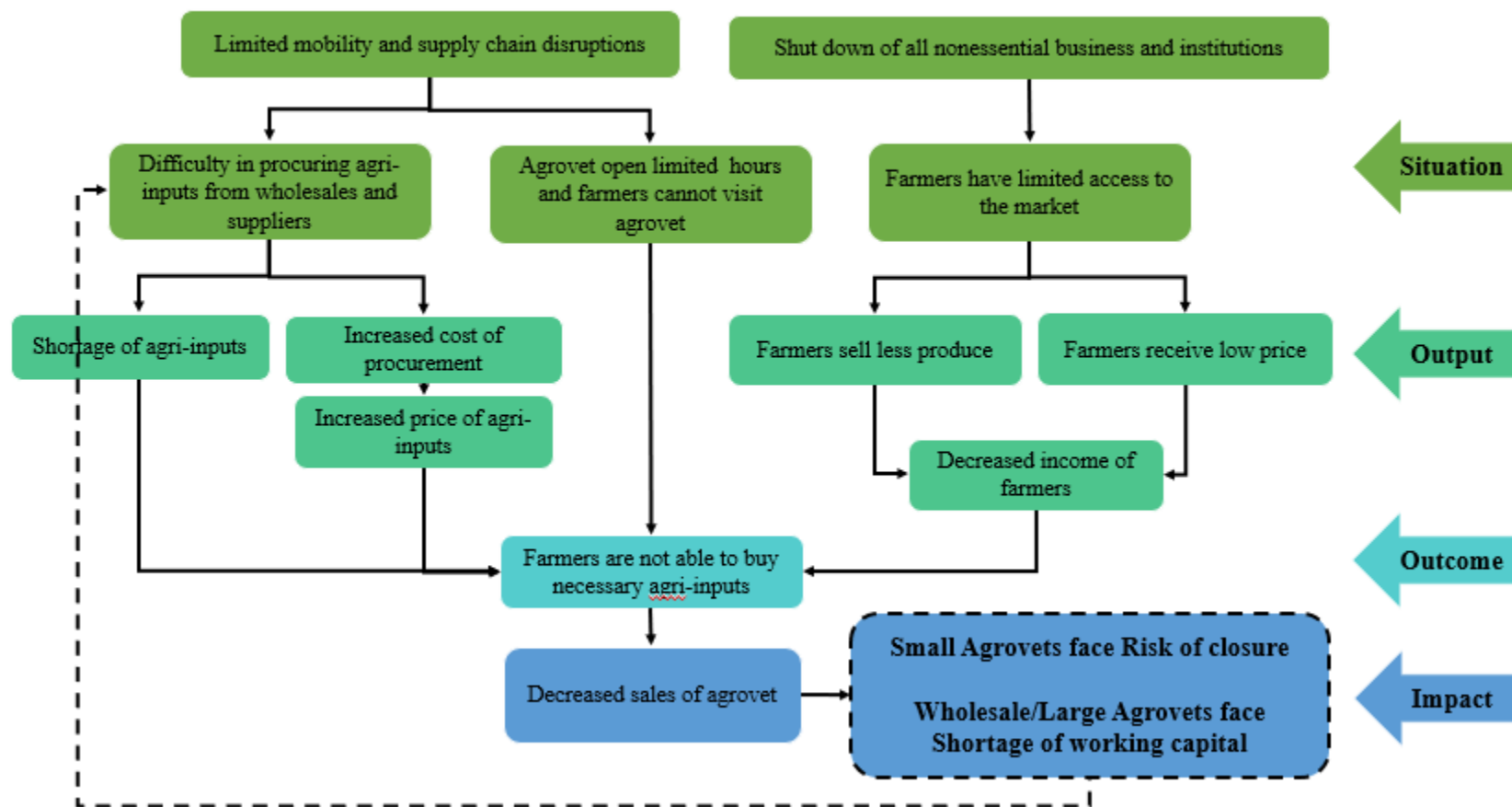
to be modified to ensure each grantee's core function is strengthened to decrease their business and financial risk. The project team should facilitate the grantees to scale-down those partnership activities that do not yield quick business results.

- Digital Payment Platforms such as digital wallets should be introduced and promoted amongst grantee partners. Even after the present lockdown ends, any spike in COVID19 cases can bring about additional lockdowns and cripple mobility. Having access to digital financial services would help the grantees to stay competitive and conduct business safely without being hampered by restrictions in mobility.
- Business Development Services can be provided to grantee partners such as rice mills, large wholesale agrovets, feed mills, to help the grantees transition their business operations to make them more efficient in a post COVID-19 market.
- KISAN II's Enabling Environment Component should be mobilized to develop the capacity of respective provincial governments to introduce policies and programs that will benefit all the actors involved in the agriculture eco-system.
- KISAN II can collaborate more closely with umbrella organizations such as trade associations. This would ensure that not only the subset of KISAN II grantee partners, but a majority of the value chain actors, can access resources that will help maintain the market system.
- KISAN II should explore innovative ways to implement activities at grantee and farmer level. In the coming months, large group-based format will not be possible given the increased risk and fear of COVID-19, with implications on safety of the participating farmers. KISAN II and its partners should thus develop alternative models for group-based activities to provide much-needed technical services to farmers while minimizing risk to farmers and trainers.
- Many grantees have reported difficulties on meeting cost-share requirements in their partnership agreements with KISAN II. Therefore, it is important to consider the current situation of grantees and to be flexible in making necessary changes and/or identifying best possible ways to move forward. There will be a demand for changes in the current grant agreements and modifications will be key. It is necessary to ensure that modification procedures and limitations are private sector friendly, not process heavy and most importantly, doable within stipulated timeframe considering different seasonal factors and grantee requirements.
- Given the current crisis situation, there may be some natural displacement of non-KISAN grantees. Improved business performance of KISAN II grantees owing to project activities and/or support could come at the expense of non-grantee businesses, creating a systemic imbalance. Thus, KISAN II needs to ensure a strategy is developed to curb displacement so as not to distort the market.

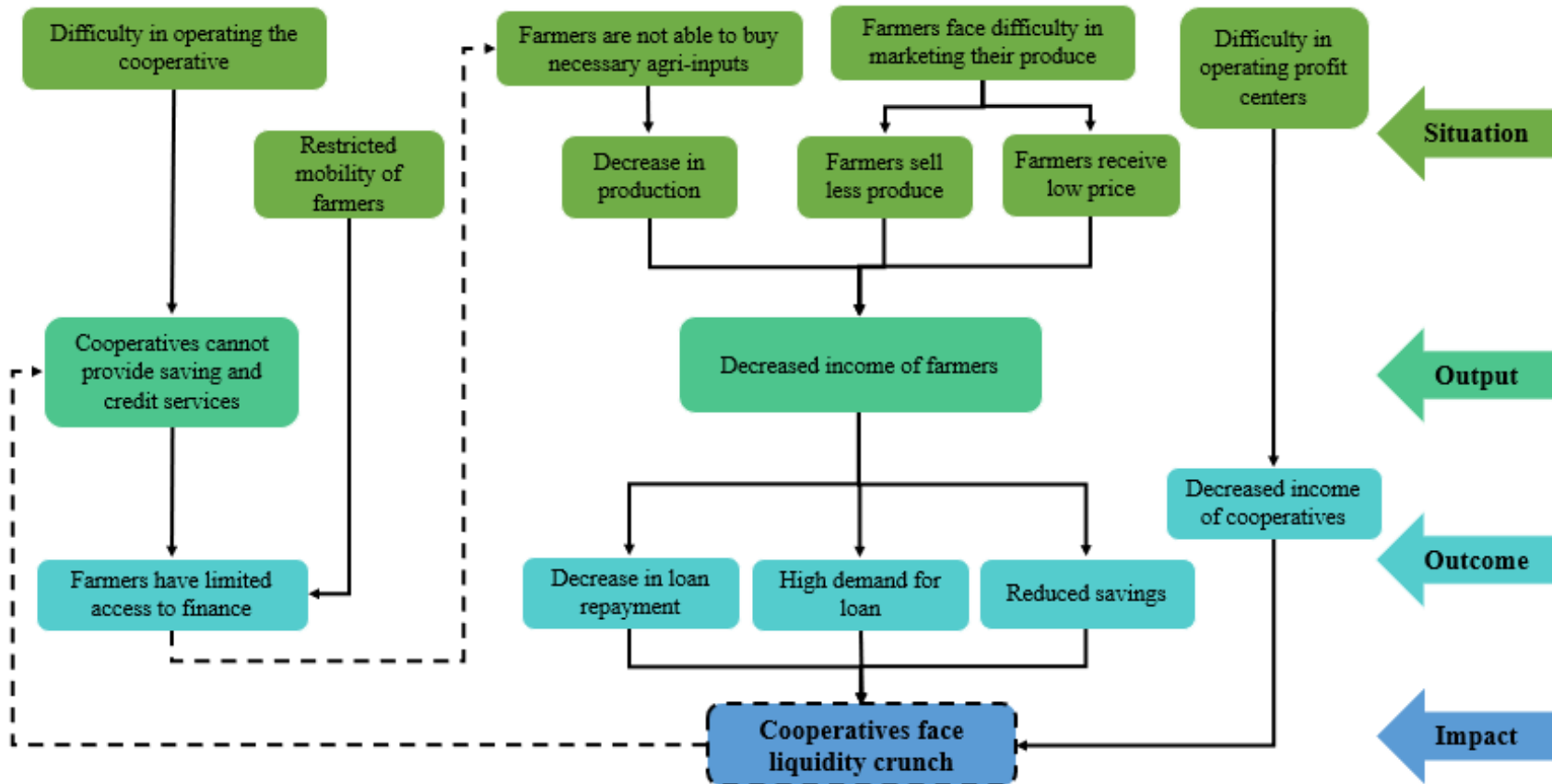
ANNEXES

Annex I: Graphical representation of COVID-19 impact on various actors

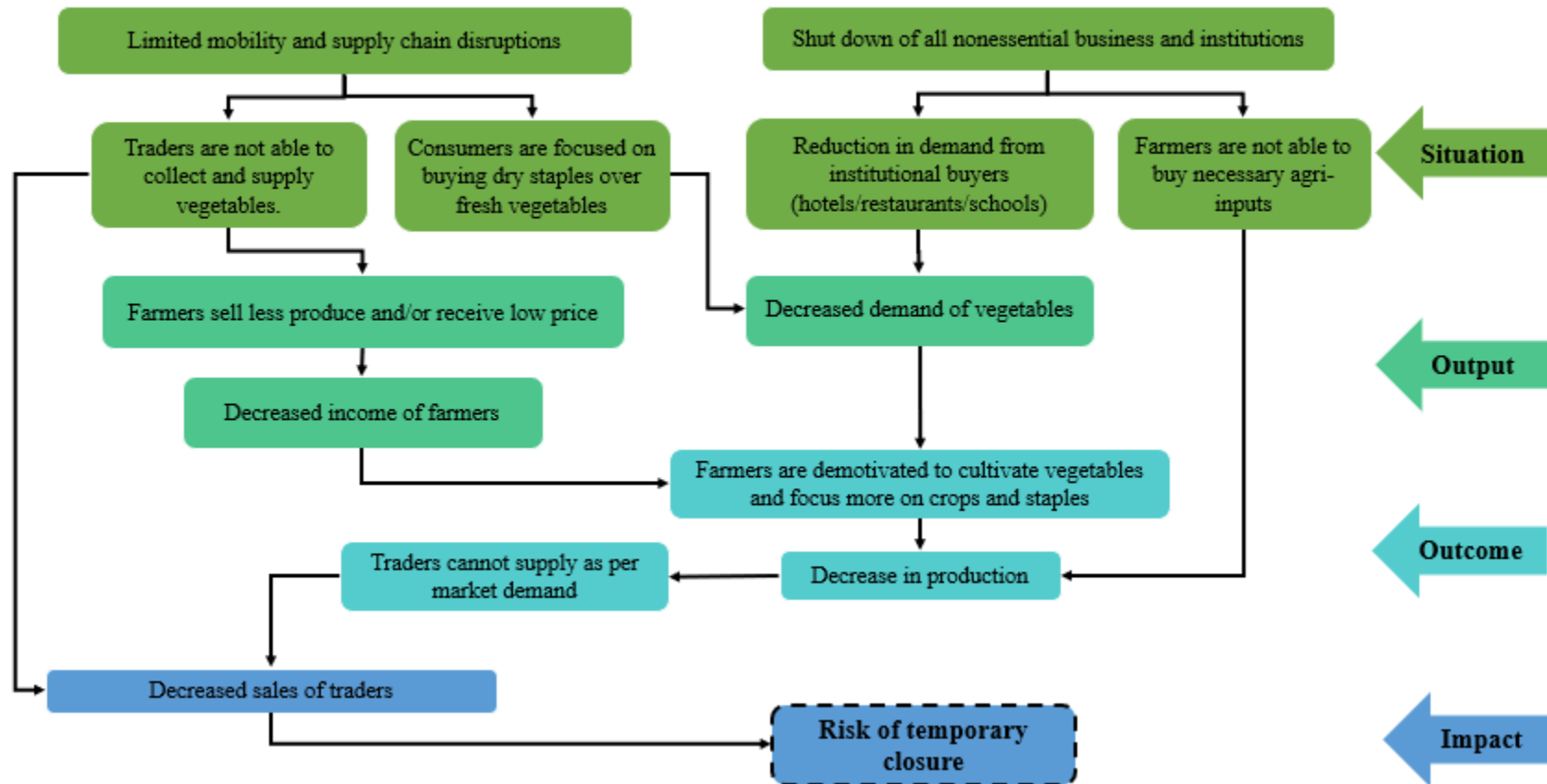
Impact of Covid-19 on agrovets



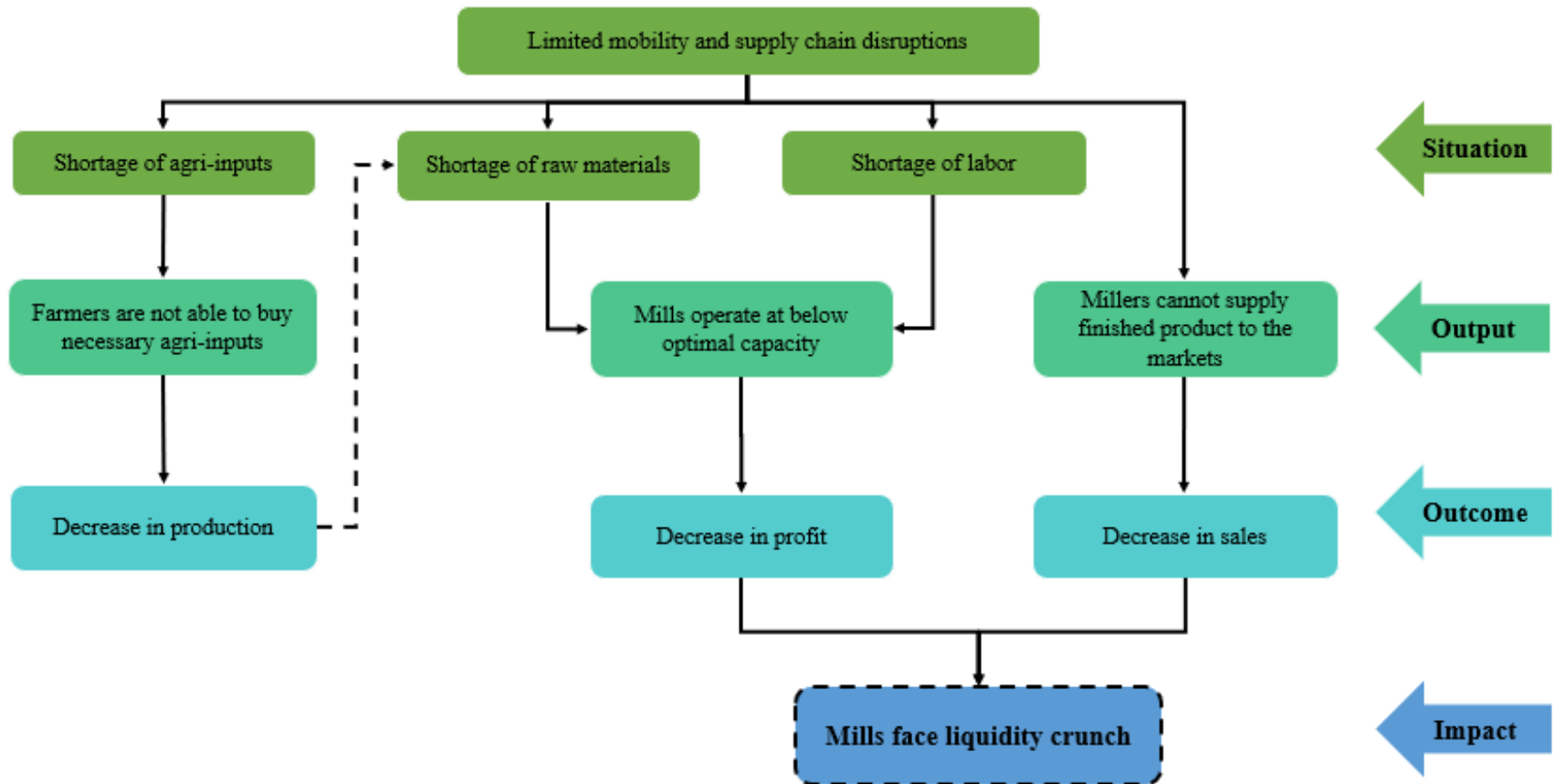
Impact of Covid-19 on cooperatives



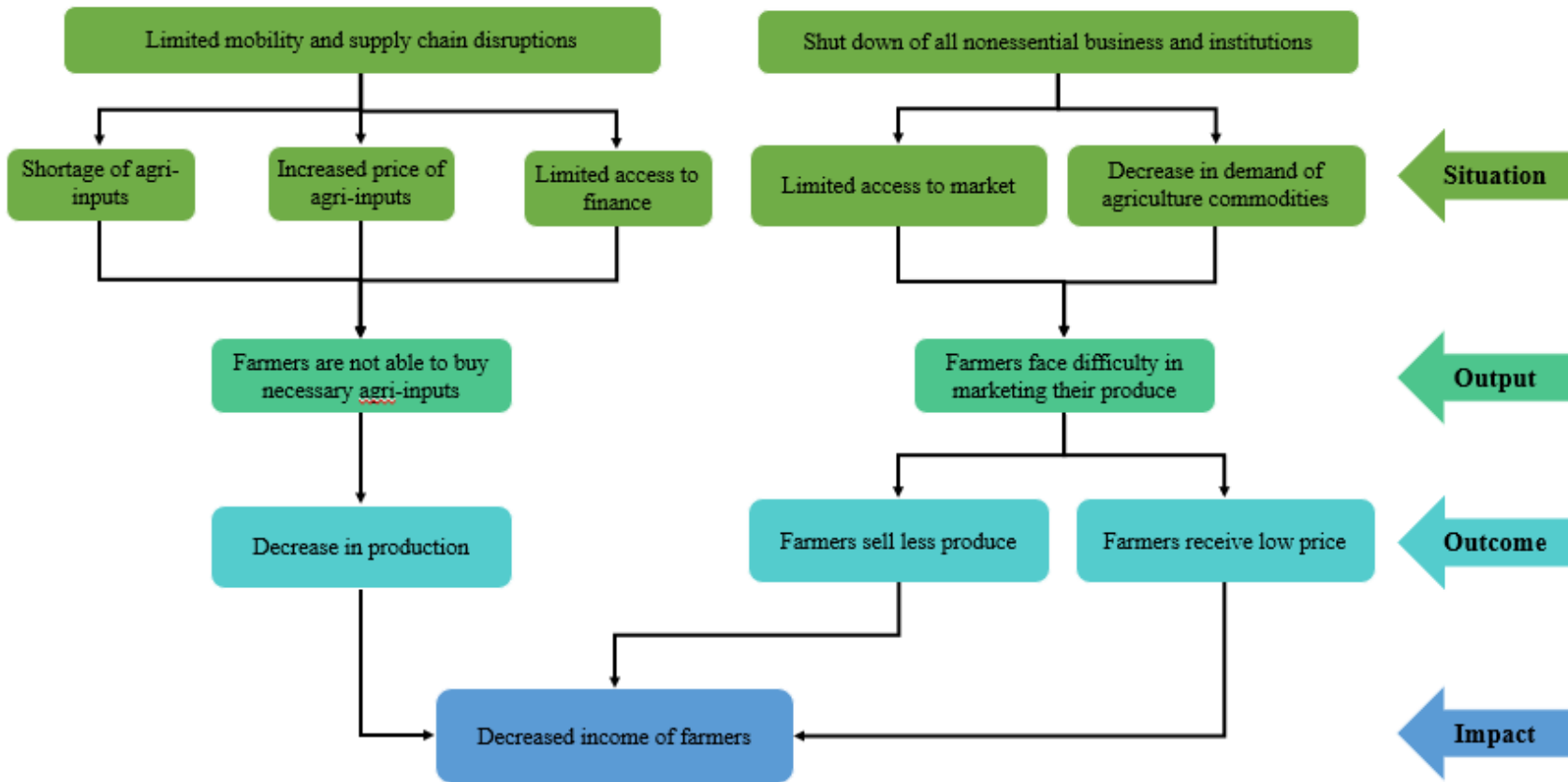
Impact of Covid-19 on Vegetable Traders



Impact of Covid-19 on Millers



Impact of Covid-19 on farmers



Annex 2: KISAN II District-level Impact

BANKE CLUSTER

Banke District	
Current	<ul style="list-style-type: none"> Wholesale agrovets are facing difficulties in importing inputs from India. Agrovets have been providing agri-inputs but the stocks are decreasing. One partner agrovets has procured a pass to deliver agri-inputs to the farmers. Cooperatives are closed and are not conducting any saving and credit activities. Vegetable trader is completely closed and has stopped collection of vegetables. Most of rice millers are closed due to lack of labor, some are in operation but are running out of paddy stock. Livestock farms are selling goat kids to the farmers, but the sale of fodder and forage seeds has been affected since many of his customers are from out of district. Some farmers who are close to the market and have access are able to get a good price for their produce due to curtailing of vegetable import from India.
Future Prospect	<ul style="list-style-type: none"> Wholesale agrovets cannot transport inputs to other districts and will face losses. Small agrovets will not be able to bear the loss incurred. Rice Mills could face liquidity crisis due to loan exposure and high operational cost. Decreased supply of paddy to mills due to decrease in production. Decreased income of farmers due to low production owing to lack of inputs. Farmers with good access to markets will continue vegetable production.
Bardiya District	
Current	<ul style="list-style-type: none"> Wholesale agrovets were closed but now partially open. Retail agrovets have booked the inputs but wholesale agrovets has not been able to transport them to the retailers. There is only limited stock of hybrid rice seed and other inputs. Cooperatives are completely closed and not conducting saving and credit activities. Traders are completely closed and are not collecting vegetables. Our partner rice mill is operating limited hours and is running out of paddy stock. Some farmers who are close to the market and have access are able to get a good price for their produce due to curtailing of vegetable import from India.
Future Prospect	<ul style="list-style-type: none"> Wholesale agrovets will face losses since they cannot transport inputs to retailers. Smaller agrovets risk closure if situation does not improve. Business of the cooperatives will normalize with a year. The lockdown will impact production of vegetables in the coming season and so traders will see decreased business. Rice Mills could face liquidity crisis due to loan exposure and high operational cost. Decreased supply of paddy to mills due to decrease in production. Income of farmers will be decreased as they could not access inputs for the coming season due to the lockdown. Farmers with good access to markets will continue vegetable production.

DADELDHURA CLUSTER

Dadeldhura District	
Current	<ul style="list-style-type: none"> • Agrovets are only partially opened and input sales have reduced by up to 70%. • Cooperatives are not operational but providing saving and credit services for emergency cases. • Sales of maize seed of one partner cooperative is down by 100% (40 lakhs last year). • Farmers are not able to get access to inputs due to closure. • Production area has declined due to insecurity about the market in the upcoming days.
Future Prospect	<ul style="list-style-type: none"> • Most agrovets at risk of closure if the lock down period extends. Stocks will be exhausted in the next 1-2 months if the lock down continues. • Cooperatives will face cashflow problems. Cooperatives are still unclear about the future prospects of what will happen. • Income of farmers will be decreased as they could not access inputs for the coming season due to the lockdown. • Farmers will shift from vegetable production to Maize and Paddy (lowlands) due to shortage of seeds. • Decrease in production of vegetables due to market risks and shortage of inputs.
Baitadi District	
Current	<ul style="list-style-type: none"> • Agrovets are partially open and only have limited stocks of agri-inputs. • Sales of agrovets is down up to 60%. • No deposits in the cooperatives, but loan disbursement and repayment collection are operational. • Farmers have reduced production area reduced due to market uncertainty. • Farmers are suffering from cash problem due to closure of financial institutions. • Farmers are only able to sell small volume of vegetables in the nearby market.
Future Prospect	<ul style="list-style-type: none"> • Agrovets are unclear about future prospects due to high uncertainty. If the present situation continues, agrovets will lose business because farmers will move away from commercial agriculture and switch to subsistence farming. • Most agrovets at risk of closure if the lock down period extends. Stocks will be exhausted in the next 1-2 months if the lock down continues. • Cooperatives are uncertain about future prospects. • Decreased income of farmers since they were not able to access inputs for the coming season.
Doti District	
Current	<ul style="list-style-type: none"> • Agrovets have some stock of vegetable seeds but no maize and rice seed. • Agrovets sales has decreased by up to 80%. • Cooperatives are only open partially but no saving and credit activities. • Cooperative is not able to provide loan to farmers. • Traders are struggling to sell vegetables in the local market due to decreased demand. • Farmers do not have access to inputs (only 50% of farmers are able to buy). • Farmers are not able to sell produce and are receiving low price.

Future Prospect	<ul style="list-style-type: none"> • Most agrovets at risk of closure if the lock down period extends. • Agrovets stocks will be exhausted in the next 1-2 months if the lock down continues. • Cooperatives will face cashflow problems if lockdown continues. • Income of farmers will be decreased as they could not access inputs for the coming season due to the lockdown. • Reduction in vegetables production area by around 25%.
Accham District	
Current	<ul style="list-style-type: none"> • Cooperatives are partially open in the morning and evening time but due to lockdown members/customer are not coming to their office for deposit money and for loan. • Vegetable collection centers are partially open but due to lockdown customer movement has declined. Some collection centers are offering vegetables collection service if farmers are in contact through the existing group. • Farmers are facing difficulties to procure inputs. • Only those farmers who are close to the market are able to sell their produce.
Future Prospect	<ul style="list-style-type: none"> • Most agrovets at risk of closure if the lock down period extends. • If lockdown is not eased, cooperatives will face cashflow problems. • Income of farmers will be decreased as they could not access inputs for the coming season due to the lockdown. • Production area reduced nearby 30% due to market uncertainty in upcoming months.

DANG CLUSTER

Dang District	
Current	<ul style="list-style-type: none"> • Wholesale agrovets are running out of stock of hybrid rice and maize seeds and are unable to supply to farmers and retailers. • Some large agrovets facing cash flow problems. • All activities of cooperatives have been disrupted. Loan disbursement, interest revenue and saving have all decreased (this is the main season when farmers take loan). • Seed producing cooperative has not been able to receive foundation seed for seed production. • Traders are not able to sell the vegetables collected from farmers and are not able to make cash payment to farmers due to decrease in business. • Farmers are unable to pay their credit. • Farmers are not able to sell their vegetables and are receiving low price.
Future Prospect	<ul style="list-style-type: none"> • Decreased sales of agri-inputs since farmers will have decreased purchasing capacity. • Farmers will not be able to pay back the credit to the agrovets. • Decreased demand of loan from cooperatives as farmers get demotivated from investing in agriculture. • Cooperatives will suffer from decreased saving and poor repayment rate. • Traders will not be able to make timely payment to the farmers. • Traders who were not able to operate during lockdown could lose farmers to other traders that were able to operate during lockdown.

	<ul style="list-style-type: none"> • Decreased production as farmers will be forced to use improve seed of rice and maize. • Limited supply of paddy for rice mills due to decreased production. • There will be decreased production of rice seed due to lack of foundation seed.
Rolpa District	
Current	<ul style="list-style-type: none"> • Agrovets are able to stock agri-inputs because agrovets are easily importing from Dang. • Sales of agrovets have decreased by 50-60% since farmers are not coming to buy inputs. • Some agrovets are facing cash issues since they are buying inputs in cash from new dealers and wholesalers. • Traders have not been able to sell the vegetable collected due to lack of market. However, this is not the peak vegetable season, so the damage has been minimal. • Farmers of are so far able to sell vegetables because of active role of Rural municipality.
Future Prospect	<ul style="list-style-type: none"> • Some agrovets could struggle with maintaining stock due to cash issues. • Decreased sales of agrovets because farmers will be demotivated to invest in agriculture. • Some agrovets will collapse due to cash flow issues (farmers cannot buy in cash and agrovets cannot provide credit). • Farmers will not find market for the produce and will be compelled to sell at low price. • Farmers will invest less in farming due to higher market risk. • Decreased areas of commercial farming, as farmers shift from vegetable to cereal. • Increased infestation of pest and diseases due to lack of inputs and technical services. • Decrease collection and sales of vegetables by traders due to low production and focus on cereals.
Pyuthan District	
Current	<ul style="list-style-type: none"> • Agrovets are open regularly and are supplying inputs from existing stocked to the farmers. But the sales of agrovets has decreased by 50-60%. • Cooperatives are only partially open and only few transactions have been made. • Cooperatives has begun facing liquidity issues. • Cooperatives have been providing seed and fertilizers to farmers in coordination PMAMP. • Low demand of vegetables in the district.
Future Prospect	<ul style="list-style-type: none"> • Shortage of inputs as stock of agrovets begin to decrease. • Agrovets will struggle to provide inputs on credit due to cash flow issues (wholesalers not providing credit to retailers, so retailers not able to provide credit to farmers). • The price of inputs will increase due to disruption of supply chain. • The sales of the agrovets will continue to decrease since farmers will reduce farming area. • One partner agrovets could go out of business due to liquidity crisis. • Less savings will be deposited in cooperatives and new membership will decrease. • Farmers will not be able to make interest payments and the cooperative will not be able to return the saving of the share members due to liquidity issues. • Loan demand will increase but cooperatives will struggle to provide loans. • Cooperative will reduce number of staff to decrease cost. • Cooperative will struggle to operate and will lead to major changes in overall strategy and planning to deal with the crisis.

	<ul style="list-style-type: none"> Farmers will receive good price for vegetables due to low production (low availability of inputs and less investment in production by farmers). Seed production will be affected since farmers will not be able to receive loan and inputs.
Rukum District	
Current	<ul style="list-style-type: none"> Shortage of seed (rice, maize, vegetables) in the agrovets. Some agrovets are closed because they have no stock. Many agrovets in the district are very small and are unable to procure inputs from Nepalgunj and Dang, mainly due to transportation issues. Cooperatives are providing financial services but there have been very low inflow of customers. One cooperative has been providing smart mobile banking and 27% of members have been using the cooperative's smart mobile banking. Cooperatives are providing discount on interest rate to members. Collection center is only functioning partially due to low volume of vegetables. One cooperative has been able to provide door to door technical service because the working areas is close to the cooperative. Farmers are unable to sell produce (vegetable) and are getting very low price.
Future Prospect	<ul style="list-style-type: none"> Wholesalers will not provide inputs on credit to retail agrovets. Agrovets will run out of stock since they have not been able to stock their inventory. Agrovets will lose customers to other agrovets that are providing inputs during lockdown. One partner agrovet could struggle to pay rent and close close. Cooperative are expecting around 40% decrease in installment payment and loan disbursement will also be affected since farmers are not taking loan. Cooperative will not be able to provide loans to the farmers due to liquidity shortage. Farmers will be unable to pay the credit to agrovets and interest to cooperatives. It will be vegetable harvest season and if they are unable to sell the produce, farmers will be demotivated and shift away from vegetable farming. Limited market for vegetables in the district, so farmers will struggle to sell vegetables.
Salyan District	
Current	<ul style="list-style-type: none"> Shortage of agri-inputs since agrovets are struggling to procure inputs from out of district. Increased price of agri-inputs due to shortage. Agrovets are struggling maintain stock due to cash shortage. Many wholesalers and suppliers are not providing credit to retail agrovets. Sales of agrovets has decreased by 50-60%. Operation cost of agrovets has increased due to transport cost and safety measures. More farmers are procuring inputs on credit. Cooperatives are partially open and have started to face liquidity issues. Cooperatives have started to provide incentives to farmers for loan repayment (10% discount if paid by Ashadh).
Future Prospect	<ul style="list-style-type: none"> Many agrovets could collapse due to less business and cash issues. Farmers will not be able to make credit payment to agrovets. Cooperatives will see increased demand of non-productive loan from members. Cooperatives may not be able to return savings to the members due liquidity crisis.

	<ul style="list-style-type: none"> • Cooperatives will look to decrease human resource to reduce cost. • Cooperatives will not be able to provide loan to members due to liquidity issues. • Many farmers will not be able to make interest payments to cooperative. • Decrease in production of vegetables due to lack of inputs and technical services. • Farmers will decrease cultivation area and shift from vegetable to cereal production.
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KAILALI CLUSTER

Kailali District	
Current	<ul style="list-style-type: none"> • Agrovets are partially open and their business has decreased by 70-90%. • There is adequate stock of rice and maize seed. A partner agrovet has sufficient stock of pesticide and micronutrient for coming season and in coordination of AKC they have procured FAW related pesticide. • Cooperatives are partially open but many cooperatives are not able to fulfill the loan demand of their members due to liquidity crunch. • Two of our partner cooperatives have decided to return up to NPR 10,000 of savings per person. • Traders are not able to import vegetables from India. • A partner processor has 40% more stock of rice compared to last year, and they do not have any problem in procuring more rice from farmers. • Artificial Insemination in goat is halted due to lack of Liquid Nitrogen. • Farmers not able to sell their produce in market and some are selling in their own villages.
Future Prospect	<ul style="list-style-type: none"> • The sales of agrovets will decrease and large agrovets will face financial crisis. • A wholesale agrovet will have difficulty in repayment of its loan (NPR 2 cr). • Cooperatives may face liquidity crisis. • Some cooperatives that are partially dependent on remittance will be impacted (60% of member's family of one cooperative in Bauniya is abroad and most likely will return). • Farmers would not be able to get agri-input smoothly, which will reduce their production and reduce savings. • Majority of farmers will reduce their area for vegetable farming and new farmers who have just entered vegetable production will most likely stop farming.
Kanchanpur District	
Current	<ul style="list-style-type: none"> • The agrovets are partially open and their business has decreased by 80-90%. • There is a shortage of vegetable seeds, pesticides, micronutrient and fertilizer. • Cooperatives are only partially open, due to which farmers are not able to withdraw their money or get loan to invest in agriculture. • Cooperatives are providing discount on interest payment, and have provisioned to provide crisis loan for agriculture and health services up to NPR 25,000. • A cooperative has signed an agreement with rice zone on procurement of grading machines (20 lakh) and establishment of warehouse (27x79 fit size – 1 crore) in 50 percent cost share. • AI services in goat and cattle has been halted due to lack of liquid nitrogen.

	<ul style="list-style-type: none"> • JTA staff is in touch with farmer via phone and providing, technical support over phone. • Farmers are receiving 50% subsidized seed through Bellauri municipality (345 MT) and in collaboration with AKC and Rice Zone (350 MT).
Future Prospect	<ul style="list-style-type: none"> • The sales and profit of agrovets will be hampered. • The financial transaction of cooperatives will reduce and may enter financial crisis. • Farmers will not have access to agricultural inputs which will reduce their production and reduce savings. • Farmers may receive higher price for vegetables as there will be a shortage in market. • Farmers will decrease vegetable farming due to current crisis of market.

KAPILVASTU CLUSTER

Arghakhanchi District	
Current	<ul style="list-style-type: none"> • Agrovets are unable to stock their inventory due to restriction of inter-district trade. • Agrovets do not have stock of rice/maize seed and only limited vegetable seed stock. • The stock of fertilizers (DAP and Urea) is also limited. • The sale of agrovets is down as high as 80% in some cases. • Cooperatives are completely closed, so not saving, credit activities. • Some cooperatives have been supplying seed and other inputs to farmers (limited). • Silsila cooperative is using its vehicle as agriculture ambulance. • Farmers are receiving low price for the produce. • Farmers do not have access to vegetable and rice seeds. • External factors (rain, hailstorm) is disturbing harvesting, sowing and marketing activities.
Future Prospect	<ul style="list-style-type: none"> • Severe shortage of agri-inputs in some agrovets • Sharp fall in sales of agrovets due to lack of stock. • Loan repayment and saving will slowly resume. • Agrovets and cooperatives will not be able to conduct field activities without financial support. • Limited farmer engagement in agriculture activities due to market uncertainties. • Farmers will face problem accessing market to sell produce. • Production of maize and vegetables will decrease due to the lack of availability of inputs.
Gulmi District	
Current	<ul style="list-style-type: none"> • Agrovets are partly open, but sales have decreased by as much as 80%. • Agrovets only have limited vegetable seed stock. • Agrovets have enough rice seed but the price has increased by 25%. • Cooperatives are experiencing increased loan demand but savings have decreased. • Extension workers are providing technical services via phone (limited field visit). • Farmers are selling vegetable but there is very little demand so the price is low.
Future Prospect	<ul style="list-style-type: none"> • There will be shortage of agri-inputs (seeds and fertilizers) in the near future. • There will be less demand of inputs due to decreased farmer income. • Agrovets will struggle to pay bank loans and will face cash issues in procuring inputs.

	<ul style="list-style-type: none"> • Agrovets and cooperatives will not be able to pay their staff due to reduced business. • Cooperative will begin to mobilize lead persons in the field to collect savings. • Loan repayment will increase along with loan demand. But many farmers will struggle to make interest payments due to reduce income. • Farmers will not invest in agriculture due to less sales and low price received this season. • Farmers will seek market guarantee for their produce before production. • Production of vegetable will decrease due more focus on cereals and personal food security.
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Kapilvastu District

Current	<ul style="list-style-type: none"> • There is severe shortage of agri-inputs in agrovets, and the sales have decreased by up to 75%. • A wholesale agrovet has been successful in procuring inputs from Birgunj. However, business has nonetheless decreased by 30-35%. • A partner rice mill is functioning and has enough paddy in storage.
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Future Prospect	<ul style="list-style-type: none"> • Agrovets will struggle to maintain stock and remain operational • The price of inputs will rise significantly due to shortage and farmers will be unable to procure necessary inputs. • Our partner rice mill will not be able to meet market demand due to shortage of paddy and will only be able to meet limited demand due to low stock and difficulty in procurement. • Farmers will not have adequate money to invest in agriculture so loan demand could rise. • Farmers will shift from vegetable to cereal production due to lack of market.
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Palpa District

Current	<ul style="list-style-type: none"> • Agrovets have adequate stock and are providing agri-inputs to farmers. However, the sales have nonetheless decreased by 30-65%. • Some agrovets are providing field based technical services. • Cooperatives are not functional but providing technical support through mobile. • Vehicle of the cooperatives are being used for relief efforts.
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Future Prospect	<ul style="list-style-type: none"> • Stock of agri-inputs will decrease but should be adequate. • Agrovets will continue to experience decreased sales. • Cooperatives will face liquidity crisis and will not be able to provide loan to farmers. • Farmers could be demotivated to do vegetable farming due to difficulty in sales. • Farmers will change cropping pattern and focus on safer crops (cereals and some less perishable vegetables). • Farmers will continue to face difficulty in getting technical services, which will lead to decreased production.
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KATHMANDU CLUSTER

Sindhupalchowk District

Current	<ul style="list-style-type: none"> • The sales of agrovets has decreased by 70% and there is a shortage of inputs (seeds and fertilizer and other agri-equipment).
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	<ul style="list-style-type: none"> Majority of the cooperatives are partially open with minimal financial transactions. Some of the cooperatives are providing minimal credit facilities to the costumers while the members are not savings. One partner cooperative has coordinated with the local Government to increase agriculture production and is supporting to develop the district agricultural policy. Farmers are receiving technical services through ICT and some nearby farmers receive door-to-door services. Farmers of Sindhupalchowk are able to sell only within district and the import of vegetables from Kathmandu is halted.
Future Prospect	<ul style="list-style-type: none"> There will be a shortage in inputs. Cooperatives may not be able to provide the loans as demanded. Cooperatives will suffer from decreased saving, poor repayment and may face liquidity crisis. Price of vegetables may increase as farmers will be demotivated to produce vegetables.
Kavrepalanchowk District	
Current	<ul style="list-style-type: none"> The sales of agrovets has decreased by 60-70%. A wholesale agrovet has stock of up to 75%, but is not able to replenish it Agrovet/cooperatives are not able to supply inputs as per the demand. A partner cooperative is currently supplying maize seed, fertilizers and inputs. Majority of the cooperatives are partially open (10-4 pm). Some cooperatives have zero financial transactions while some cooperatives has up to 50% financial transaction. Some members of some cooperatives are depositing 10-20% of savings. The vegetable market is only open for 3 hrs and are currently facing 70-80% loss. Many traders of vegetable market are directly buying vegetables from farmers. Majority of the farmers are not able to sell their vegetables and those who are able to have received a low price compared to last year.
Future Prospect	<ul style="list-style-type: none"> Wholesale agrovets may not be able to import agricultural products so the stock will decrease. Vegetable and other crop production will decrease with less supply of inputs and the increased infestation of pest and disease. The demand of loan will increase, but cooperative may not have the ability to provide loans as demanded. There will be an increase in loan defaulters. Members of cooperatives will reduce their savings as their source of income decreases. Price of vegetables may increase with the decrease in production. Agriculture production will be decrease and the farmers income also decreased. Farmers are not interested to enter commercial farming and have reduced their area of production.
Nuwakot District	
Current	<ul style="list-style-type: none"> Although some of the agrovets have been able to manage stocks, their sales of input have decreased by 50-80%.

	<ul style="list-style-type: none"> • Most of the cooperatives are either closed or open for few hours. Their financial transactions are negligible. • One partner cooperative sold 60 MT of rice seed outside the district, and demand for rice and maize seed is increasing. They are getting fertilizer from 'Agriculture Input Company' and 'Salt Trading Corporation' and have sold 120 bags of fertilizers in 15 days. • One cooperative is collecting and selling about 2 MT vegetables/day in Kathmandu. • Sales of vegetables has decreased by 70%, and only farmers nearby traders/agrovets are able to access these services. • A partner rice mill has processed rice in stock and their sales have decreased. • Forge and fodder are readily available for goat farmers. • Goat farmers are not able to sell their goat and their cost of production is increasing. • great impact for farmers who depend through vegetable selling. They are not getting market and is in scarcity of finance • Semi commercial farmers are only able to sell around 16% of their produce. • Farmer have decreased the vegetable plantation, but the area of rice and maize is constant.
Future Prospect	<ul style="list-style-type: none"> • Some Agrovets and cooperatives may diversify their business to reduce impact of pandemic. • Demand of agriculture loan will increase and it will be difficult for cooperative to provide loans. • It will be difficult for Rice Mill to collect rice in the upcoming season • Farmers may be hesitant to sell their dry produce and stock up • As farmers will not be able to sell the vegetables currently in their field, they will be less capital to buy inputs for next season. • Farmers will plant more cereals and staples over vegetables. • Due to limited supply, farmers may plant low variety paddy seed, which may decrease the overall production
Makwanpur District	
Current	<ul style="list-style-type: none"> • Agrovets are open 6 to 9am with limited flow of the farmers causing decrease in the sale as well as difficulty sourcing and supplying inputs. • The sales of wholesale agrovets has decreased by 80% • Financial transactions in cooperatives have decreased by 80 - 95%. • Some cooperative has diversified its profit center and is selling FMCG products. • Goat Farm is not able to sell its buckling/doeling for breeding purpose • Farmers have received less price (35%) and are not able to sell their vegetables
Future Prospect	<ul style="list-style-type: none"> • Agrovets will be able to supply inputs in minimal quantity • Cooperative may face liquidity crisis as saving will decrease and demand of loan will increase. • Goat farmers may reduce the production of animals as they are not able to sell buckling/doeling.

	<ul style="list-style-type: none"> • Due to low seed availability, farmers will opt for improved/local variety over hybrid variety. • As the market slowly opens, farmers will be able to sell their produce • Commercial vegetable farmers may decrease by 25% while semi/non-commercial farmers may divert to other crops.
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SURKHET CLUSTER

Surkhet District	
Current	<ul style="list-style-type: none"> • Agrovets are running out of stock. They have no stocks of seed, biofertilizer, pesticides, plastic, drip irrigation etc. They are trying to receive Rice seed from Nepalgunj. • Agrovets sales have reduced by 70% per day. • Cooperatives are not functioning but providing saving and credit business for emergency. • Cooperative is planning to provide rice seed and fertilizer on subsidy to their members. Some are supporting to the farmers for vegetable marketing. • Vegetable traders in Surkhet are partially open for 2-3 hours a day. Traders are selling to Mugu, Kalikot and Jumla district but cannot fulfill as per demand. • Goat farm has reduced its operation time and sold only 26 goats. They have stock of feed for coming two months and he is managing from local available cereals feed and natural grazing too. The goat farm is regularly providing breeding services. • Some farmers with access to markets are able to get a good price for their vegetables. • Most farmers are not able to move to get inputs from agrovets, to move to the market to sell their produce and go to the co-operative for financial transactions.
Future Prospect	<ul style="list-style-type: none"> • Most agrovets at risk of closure if the lock down period extends. • Cooperatives will face cashflow problems and may not be able to continue operation. • Grantees will face difficulties in cost share activities to be implemented. • Traders feel that even if the lock down is eased within the Karnali Province and vehicle movement is allowed, they can recoup losses. • Income of farmers will decrease due to lack of agri-inputs for production. • Farmers with good access to markets will continue vegetable production as they are motivated by the high price they received this season.
Dailekh District	
Current	<ul style="list-style-type: none"> • Agrovets do not have sufficient stock of inputs and are facing difficulty in importing input from Surkhet and Nepalgunj. • Agrovets sales has reduced by 80% per day. • Cooperative could not operate its regular financial service. • Cooperative that operated agrovets could not sell Agri inputs to the farmers as it does not have sufficient stock of agri-inputs (fertilizer). • Proprietor and Vet JTA of goat farms are providing required information and technical services through mobile phone. However, they cannot get feed, medicine and other minerals from market. The farm could not purchase breeding bucks as planned, so it has to stop the cross-breeding program in goats.

	<ul style="list-style-type: none"> • Some farmers with access to markets are able to get a good price for their vegetables.
Future Prospect	<ul style="list-style-type: none"> • Agrovets cannot supply sufficient amount of inputs to farmers resulting in decrease in business and profit loss. • It will be difficult to retain the field staff and may hamper in cost contribution in upcoming milestone activities. Most agrovets facing increasing risk of closure. • Decrease in deposits and liquidity crunch will affect cooperatives' ability to provide cost share contribution in upcoming milestone activities. • Live weight of goat could decrease and there could be high incidence of diseases. • Income of farmers will be decreased as they could not access inputs for the coming season due to the lockdown • Some farmers with access to markets are able to get a good price for their vegetables.
Jajarkot District	
Current	<ul style="list-style-type: none"> • Agrovets are partially opened but the sale of inputs sale of agrovets has decreased. • This is peak agriculture season but agrovets do not have enough stock of agri-inputs. • Cooperatives are partially opened and is providing limited services related to remittance, withdrawal, emergency loan disbursement. • Due to a closure of Karnali Province borders, some farmers with access to markets are able to get a good price for their vegetables. • Farmers are not facing any problem in sales of vegetables; farmers have received better price than last season. • Most farmers are not able to move to get inputs from agrovets, to move to the market to sell their produce and go to the co-operative for financial transactions.
Future Prospect	<ul style="list-style-type: none"> • Agrovets will utilize their technical effort to work in such condition but difficult to cope with the situation in coming days. Agrovets will plan to use more IT tools like mobile phone, SMS. Closure will disturb the supply chain of Agri. inputs and may be difficult in receiving and supplying of agri-inputs. If lockdown will be continued by this same modality, there will be shortage of seeds and pesticides and hamper the agrovets business and will be reduced. • If savings are not collected, there will be a big problem for co-operatives and could lead to income loss and business will be critical. • Due to impact on input supply, production area will be reduced. If vegetable is not done due to lack of input supply than Maize will be planted

Annex 3: KISAN II Snapshot Survey on COVID-19 Effect on Private Sector Partner Service Delivery to Farmers (April 2020)

I. INTRODUCTION

As of the nation-wide lockdown due to COVID-19 on March 24, 2020, Nepal has been experiencing profound economic shocks including to agricultural operations, which have come to a partial halt. To understand the current and future effect of COVID-19 in terms of input supply and output marketing for targeted crops (rice, lentils, maize, vegetables and goats), KISAN II undertook a micro-survey of its grantee partners⁵.

II. METHODOLOGY

Two types of respondents (organizational and farmers) were included in this survey. A total of 35 KISAN II grantee partners were surveyed (agrovets, traders, cooperatives and rice millers) from various KISAN II clusters. KISAN II adopted purposive sampling to ensure representation of all types of organizations in the sample. Three farmer-respondents representing commercial, semi-commercial and subsistence farming were selected from each grantee. It was intended to interview 105 farmers, but due to unavailability of seven farmers, 98 farmer surveys were conducted by phone. The allocation by types of organization is as follows:

Table I.1. Number of grantees and farmers selected for interview

Type of Organization	Grantees		Farmers	
	Number	Percentage	Number	Percentage
Agrovet	17	42.5	47	47.9
Cooperative	12	34.3	33	33.8
Miller	2	5.7	6	6.1
Trader	4	17.1	12	12.2
Total	35	100	98	100

III. RESULTS AND DISCUSSION - GRANTEE SURVEY

Business Opening Status

Table I.2. Grantee business opening status

Business counter status	Number	Percent
Open	21	60
Closed	8	23
Partially open	6	17
Total	35	100%

⁵ This survey was conducted on 12-15 April 2020

Sixty percent of the KISAN II grantees have managed to open their business, however 40% either could not continue opening their business or opened partially only, indicating that farmers served by 14 grantees had difficulty in accessing required inputs and extension services from the counter (Table 1.2). Out of 21 firms, one third were able to open their shop during morning hours only (7 AM-12 PM); 47% remained opened during daytime (10 AM-5 PM); and one was able to open during evening hours (5-7 PM).

Input Supply Management

Table 1.3. Stock of key input supplies at agrovet and wholesale agrovet

Seed stock	Number	Percent	Agrochemicals stock	Number	Percent
Cereal seed	2	7.7	Pesticide	18	69.2
Vegetable seed	8	30.8	Fertilizer	6	23.1
Both	16	61.5	No stock	2	7.7
Total	26	100	Total	26	100

Sixteen firms had stock of both cereal and vegetable seeds; 8 firms stocked vegetables seeds only. Besides, 24 firms have adequate stock of agrichemicals and fertilizers; 2 firms do not have stocked any agriculture chemicals (Table 1.3).

Table 1.4. Expected duration of agricultural inputs stock at agrovet and wholesale agrovet

Agri-inputs stock available for:	Number	Percent
1-2 weeks	15	57.7
3-4 weeks	8	30.8
More than 4 weeks	3	11.5
Total	26	100

Asked about the stock of the seeds and agrochemicals, 88% of the firms have stocked agriculture inputs for maximum 1 month only, indicating a need to coordinate with private seed companies, wholesalers, and MOALD for availability of inputs for standing crops like rice, maize lentils, cauliflower, cabbage, cucumber, bitter gourd, tomato, eggplant, and okra (Table 1.4)

Table 1.5. Number of grantees receiving inputs from their wholesalers

# of grantee receiving inputs from their wholesaler	Number	Percent
No	18	69.2
Yes	8	30.8
Total	26	100.0

Sixty-nine percent of inputs supplier grantees are not getting inputs from their wholesaler suppliers, resulting in disruption of input supply to KISAN II farmers. In turn, this supply chain disruption is resulting in reduced crops production and sales. (Table 1.5).

Table 1.6. Number of grantees contacting farmer customers

# of grantees contacting farmers for input and extension services	Number	Percent	# of grantees contacting farmers by mobile phone	Number	Percent
Providing inputs and extension services	30	86	By mobile	23	76.6
Not providing inputs and extension services	5	14	By visiting field	7	23.4
Total	35	100	Total	30	100.0%

A total of 86% of grantees are providing regular inputs and extension services to farmers, out of which 77% have used mobile for delivering extension services. This was possible due to 95% of grantee extension staff (JTAs) remaining in the field. (Table 1.6)

Completion of Grant Activities During Lockdown

Table 1.7. Grant activities completion plan

Grantee plan to complete activities	Numbers	%
Accelerate work after lockdown	19	54.4
Continue activity during lockdown	8	22.9
Request modification of activities	8	22.9
Total	35	100

55% of the grantees will accelerate work after lockdown to complete planned activities and 23% are planning to complete activities during lockdown through one-on-one visits and/or consulting by mobile. Another 23% will require modification in their agreed plan with KISAN II (Table 1.7).

SUMMARY FINDINGS

Business Operations

- ✓ 60% of grantees are managing to remain open during lockdown period, 17 % are partially open, and 23% of grantees are closed. As a result, some farmers served by these grantees are facing problems in getting input and services on time.

Input Supply Management

- ✓ Cereal seeds stock is very limited (7.7%); grantees are better stocked with vegetable seeds (61.5%)

- ✓ Adequate pesticides are in stock (69.2%) but chemical fertilizers are less stocked (23.1%) and 7.7% have not stocked anything. 88% of the grantees have stocked agriculture inputs for a month maximum.
- ✓ 69% of grantees are not receiving inputs from their wholesaler.
- ✓ 86% grantees are providing input services to farmer customers, of which 77% are providing extension service by mobile.
- ✓ 23% of the grantees are thinking to re-plan their activities considering COVID 19 lockdown and will ask KISAN II for contract modification.

IV. RESULTS AND DISCUSSION – FARMERS’ SURVEY

A total of 98 farmers (customers/clients of 35 grantees) participated in telephone interview. The findings are illustrated as follows:

Agriculture Field Operations

All farmers are able to go work in the field; however, they plan either in morning or evening hours depending on movement restriction/relaxation according to local administration. It means the effect of lockdown is different from palika to palika. With stricter orders by local administration, lentils and vegetables crops (cucumber, tomato and cauliflower) have not been not harvested on time. Some farmers noted that the vegetables were not harvested because aggregators were not coming to collect produce due to low demand and low price in far markets.

Agri-Input Management

Table 2.1 Agri-inputs supply status for farmers

Agri-inputs availability at store counter	Number	Percent
Not available	55	56.1
Available	43	43.9
Total	98	100

Only 44% farmers are getting necessary agriculture inputs, with 56% of farmers not receiving agriculture inputs from agrovet or cooperative (Table 2.1).

Table 2.2 Farmers contacted by grantees for extension services

Contacted for extension service	Number	Percent
Yes	77	78.6
No	21	21.4
Total	98	100

79% of farmers shared that they are being contacted by their respective private sector grantee for extension service, out of which 87% used mobile and SMS to deliver extension services (Table 2.2).

Vegetable production and sales

Table 2.3. Number of farmers selling vegetables

Vegetable Sales	Number	Percent	Market place	Number	Percent
Limited quantity	46	46.9	In nearby villages	66	82.5
Yes	34	34.7	Sell to traders	5	6.3
No	18	18.4	Traders come to field	9	11.2
Total	98	100	Total	80	100

81% of the small farmers could sell vegetables while 18% could not sell their produce even in nearby market. Out of the farmers who sold their vegetables, 83% sold in nearby villages but 17% sold their produce to traders (Table 2.3). This trade issue may result in lower overall production and sales of vegetables per household in 2019/20.

Table 2.4. Number of farmers expecting traders to buy vegetables

Expecting Traders in Field	Number	Percent
After relaxing in lockdown	48	92.3
Need to deliver vegetables to traders	4	7.7
Total	52	100

Ninety-two percent of the farmers expect traders to come to their field after lockdown restriction is over, whereas 8% are still taking vegetables to traders to sell their vegetables despite tight lockdown (Table 2.4).

Table 2.5. Constraints in vegetables marketing

Constraints in marketing vegetables	Number	Percent
Traders shop/collection center closed	26	26.5
No traders and/or transportation available	16	16.3
Selling in local market and trader	19	19.4
Less demand in market	18	18.4
Less produce to sell	19	19.4
Total	98	100

Twenty-seven percent of farmers are facing difficulties due to collection center and trader business closure and 19% have difficulty in selling even in local market. 16% reported lack of traders and transportation facility as their constraint. Further, demand reduction (18%) and less volume of production (19%) are other constraints. (Table 2.5)

Table 2.6 Vegetable price compared with last year and postharvest loss

Sale Prices	Number	Percent	Post-harvest losses	Number	Percent
Higher	17	22.0	Yes	39	39.8
Lower	30	39.0	No	59	60.2
Same	30	39.0	Total	98	100
Total	77	100			

Most of the farmers (78%) got same or lower price compared with the same crop same time last year. Only 22% farmers received a higher price due to import restriction, proximity to wholesale market, and easy access by vegetables supply chain operators.

Data shows that 40% of farmer vegetables have had post-harvest loss of vegetable in field. At the time of interview cucumber, brinjal, cabbage, tomato, bottle gourd, chilli, bitter gourd and onion were the main standing crops. (Table 2.6)

Table 2.7 Farmers transport facility

Farmers transport	Number	Percent	Means of Transportation	Number	Percent
Having transport	17	17.3	Using Motorcycle	29	35.8
			Using Tricycle	3	3.7
No transport	81	82.7	Using Mini Truck	3	3.7
			Manual (not mechanical)	46	56.8
Total	98	100	Total	81	100

83% of the farmers do not have private transport and so they have to depend on public transport for taking their produce to market. This causes delay in reaching market with quality deterioration, which fetches a lower price. Among those who have no transport of their own, 57% carry vegetables manually and 36% use motorbikes for vegetables transportation. (Table 2.7)

Collaboration with local government

Some palikas are supporting farmers to sell vegetables by allowing vegetable producers to take their produce to market, providing agriculture ambulance services and motivating traders to collect vegetables from farmers field. In addition, some farmers have received relief food support, health and hygiene equipment, and transportation passes to sell vegetables in and out of the district.

SUMMARY FINDINGS

Agriculture field operation

- ✓ 100% farmers are able to do work in field at KISAN II working areas, despite restriction.

Agriculture input management

- ✓ Only 44% farmers are getting necessary agriculture inputs, but 56% farmers are facing problem to get necessary agriculture inputs from agrovet or cooperative.
- ✓ 79% farmers shared that they are being contacted by their respective grantee for extension service, out of which 87% used mobile and SMS to deliver extension serves.

Production and sales

- ✓ 81% of the small farmers could sale vegetables, however, 18% could not sale their produce even in near market and some of them distributed to their neighbors or processed for long term usage. Out of the farmers who sold their vegetables, 83% sold in nearby villages with 17% selling to traders.
- ✓ 27% farmers are facing difficulties in selling vegetables due to collection center and traders' shop being closed; 19% have difficulty in selling even in local market.
- ✓ A majority of farmers (78%) got same or lower price compared with the same crop at same time last year.
- ✓ 40% of farmer vegetables have post-harvest losses in field.
- ✓ 83% of the farmers do not have private transport and so they have to depend on public transport for taking their produce to market. Among those who have no transport of their own, 57% carry vegetables manually and 36% use motorbikes for vegetables transportation.

Collaboration with local government

- ✓ Some palikas are supporting farmers to sell vegetables by allowing vegetable producers to take their produce to market, providing agriculture ambulance services, and motivating traders to collect vegetables from farmers field.

CONCLUSION

Despite the government's decision in April and early May to ease the flow of agricultural inputs, the ground reality varies greatly from place to place. Some cooperatives that sell agro-products, agro-vet suppliers, agricultural markets, dairies, and vegetable markets have tried to open their outlets under strict control of local administration. Since lockdown, erratic rainfalls, hailstorms, lack of farm machinery and labor has affected the harvest of vegetables, and other winter crops, and farmers may suffer the loss of "ready to harvest" crops.