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MARKET SYSTEMS RESILIENCE ASSESSMENT: NEPAL

Feed the Future Market Systems and
Partnerships Activity

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ACRONYMS

BHAKARI	Food for Peace Building Hope Along the Karnali River Basin
CLA	Collaboration, Learning and Adaptation
COVID-19	Coronavirus Disease of 2019
CSISA	Feed the Future Cereal Systems Initiative for South Asia
FGD	Focus Group Discussion
GESI	Gender Equality and Social Inclusion
GON	Government of Nepal
IWMA	Integrated Watershed Management Activity
KII	Key Informant Interview
KISAN II	Feed the Future Knowledge-Based Integrated Sustainable Agriculture in Nepal II
MSP	Feed the Future Market Systems and Partnerships Activity
MSR	Market Systems Resilience
PAHAL	Feed the Future Promoting Agriculture, Health, and Alternative Livelihoods
USAID	United States Agency for International Development
ZOI	Zone of Influence

EXECUTIVE SUMMARY

This report summarizes key insights from an assessment of the drivers of market systems resilience (MSR) in target areas of mid-west Nepal within Feed the Future Zone of Influence. This report, alongside three complementary case studies, presents:

- 1) The drivers of market systems resilience (MSR) in the target Feed the Future zone(s) of influence (ZOI).
- 2) Qualitative insights on the role that layered implementation of several Activities in the Mission's portfolio within specific districts may have had in shaping these MSR drivers; and
- 3) A spotlight on several innovative practices from across the targeted Activities that could potentially positively influence the drivers of MSR.

This assessment offers insights into the drivers of MSR and includes a special focus on connecting the market system's resilience capacities with household-level resilience. In these geographic areas, multiple USAID elements (e.g., Feed the Future, Bureau for Humanitarian Assistance) had interventions for at least three years concurrently. The selected USAID-funded Activities include Knowledge-Based Integrated Sustainable Agriculture in Nepal II (KISAN II), Suaahara II, Promoting Agriculture, Health, and Alternative Livelihoods (PAHAL), and the mechanization component of Cereal Systems Initiative for South Asia (CSISA). The assessment was conducted between November 2021 and March 2022, with field work in March 2022 and included desk review and 13 key informant interviews with USAID and Activity staff, as well as approximately two-weeks of field work in Nepal, including observations, interviews, and focus group discussions with dozens of households, private enterprises, local government, and local development implementers in a cross section of districts across Sudur Pashchim, Karnali, Lumbini, and Bagmati. Annex 4 presents the field assessment schedule.

State of the Market System and Resilience

This assessment applied an MSR lens as a useful diagnostic that focuses on how market systems manage risks and analyzes a market system according to eight structural and behavioral domains, identified in the circle of Figure 1 and discussed more in Figure 3. These provide insight into likely responses to known and knowable shocks and stresses, including in Nepal.

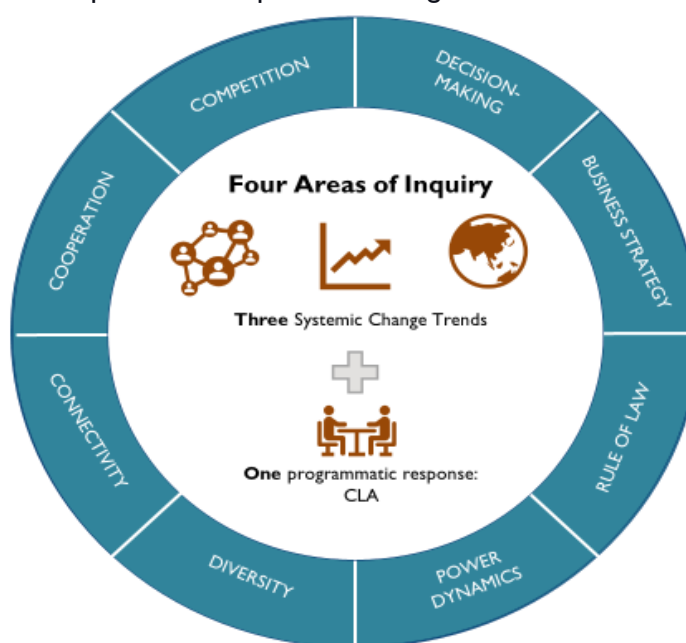


Figure 1: Summary of Analytical Framework

Through this process, the assessment uncovered three systemic change trends, discussed below, that influence the way risks and opportunities are being managed in Nepal. Collaboration, learning, and adaptation (CLA) formed a fourth line of inquiry as a programmatic response that supports leveraging the three systemic change trends to strengthen MSR. These four areas of inquiry were analyzed according to the eight MSR domains.

The three systemic change trends are (i) **Social Safety Nets**, (ii) **Market System Competitiveness and Inclusiveness**, and (iii) **Labor Market Dynamics**. They act as signals to important changes in Nepali market systems and wider society changes that ultimately contribute to the resilience at the national and household level, including in marginalized communities. Each trend is an important signal of a foundational shift in terms of how risks are managed in Nepali society, including how market systems are shifting to better identify, prioritize, and allocate resources in relation to known and knowable risks.

- **Social safety nets** shifting from informal communal mechanisms to more formal, fair, and transparent social safety nets and emergency response services indicate a substantial shift away from the full burden of risks being managed at the community level. Sharing the burden in a formal, fair, and transparent way allows for more rapid recovery when shocks occur. It also creates an environment for households to take on more risks related to their economic activities.
- **Market systems becoming more competitive and inclusive** signals improved capacity to identify, prioritize, and harness national resources to mitigate and neutralize risks that often manifest into shocks and longer-term stresses that have real and damaging effects. Harnessed resources can then be directed in a coordinated manner towards both preparing for and responding to shocks.
- **Migration and labor market dynamics**: Substantial shifts in population location can be very disruptive, affecting market systems and the wider society positively or negatively. Opportunities, for example, lie in the COVID-19 induced shift away from exporting labor to having a large population of younger males looking for work and opportunities within Nepal. Migration patterns are still unfolding, and examples are emerging of both new patterns of behavior, and the slow return to the old "normal" as travel restrictions are eased beyond the most recent COVID-19 wave.

Qualitative Insights on Layered Implementation in Shaping MSR

Using USAID's MSR Framework, the assessment has identified (i) areas in which layering seemed to be present and achieving resilience outcomes, (ii) where sequencing seems to have high potential, and (iii) where some considerations have emerged that might have limited the catalytic effect of USAID's investments. Market systems grow and often change in unpredictable ways, but there are some general characteristics that market systems tend to follow as they become more competitive, inclusive, and resilient. Two key insights from the assessment process are that **sequencing is an essential element** when considering the effectiveness of layering, and there are **specific areas of leverage** when layering and sequencing that should be integrated into the design implementation processes to improve the impact of layering and sequencing.

Sequencing is essential when an Activity works with elements of a market system with the expectation that as change begins to emerge, other Activities can build on and leverage that change. For example,

KISAN II engages with many market actors and most of them will focus on the easiest path for growth, which will not include the most vulnerable communities. But over time, as those firms grow and the vulnerable populations become more connected, the interaction between firms and vulnerable communities will occur more frequently. Activities must apply effective CLA practices to determine when and where the immediate opportunities are to generate the benefits of layered or sequenced interventions.

A **specific area of leverage** to consider is that Activities with no geographic overlap have minimal leverage capacity, since any effects from one Activity would not be likely to impact another Activity. Beyond geography, a market system's narrowly defined boundaries can also limit the leverage that layering can have. For example, while analytics suggest there is commercial potential for maize, it is a relatively narrowly defined market system meaning any vulnerable population not engaged in maize will not be impacted. In contrast, as KISAN II has viewed agricultural inputs as a market system, positive effects are likely to result via knock-on effects for all vulnerable populations active in an agriculture system more broadly defined and encompassing almost all rural communities.

Opportunities to Strengthen MSR to Benefit Target Populations

One key opportunity to strengthen MSR is enhanced layering and CLA across Activities in USAID's portfolio that are designed to work on complementary elements of a market system. For example, PAHAL and BHAKARI have been working on targeting the most poor and vulnerable populations, and their market interactions have a strong subsistence or short-term focus, which is appropriate given the more immediate risks facing these vulnerable populations. KISAN II is focused more on growth, with targets to push a focus on larger, more commercially active parts of the Zone of Influence. As a result, there are areas where there is overlap that leads to effective layering. Notwithstanding, there are important opportunities that did or indeed could emerge, but because cross-Activity CLA was not front of mind in the Activities, adaptations are unlikely to happen.

There are also some misperceptions between Activities and staff that biases the Activities from seizing opportunities:

- Market systems tend to evolve based on the most attractive next opportunity – so it is unlikely that specific market actors are going to jump to the most difficult path for growth. This means interaction and CLA around emerging opportunities can play an important role in quickening the pace of market systems reaching the last mile;
- As they do evolve, quirks of geography, microclimates, or isolation that were once a driving force for vulnerability can become a competitive advantage;
- Basic commodity crops and monocropping are typically risky and unprofitable. Increasing smallholder income and resilience requires effective adaptation to find an appropriate mix for a given community and market system, so how a program is framed becomes important.

USAID Activity Influence on MSR

Nepal is undergoing a substantial change process, especially in the context of how risks are managed. This process is central to how the communities and market actors manage risks related to shocks and stresses.

For the most part, the changes are positive from a competitiveness, inclusivity, and resilience perspective, in that risks are increasingly being managed at the market system and national levels, alleviating the full burden of risk being carried by individuals and communities. USAID could be more focused on supporting the emergence of fair and stable formal local social safety net and emergency response services, aligning its efforts with the shifting domestic trend post federalism in Nepal of an increased reliance on government and public goods.

USAID could consider programming that improves the reliability and trust of more formal social safety net and emergency response services, shifts away from traditional caste-based power dynamics, uses cash as the primary form of formal social safety net, uses technology to limit inefficiencies, and builds up or leverages the market system's capacity and increases the attractiveness of mutual-beneficial commercial relationships.

Part of this systemic shift is a substantial positive change in the role of the private sector, especially in relation to rural and more vulnerable populations in both how those populations generate income, and how products flow to those communities. For example, the advances in connectivity are enabling a more sophisticated trading network of goods and services, which has an impact on both consumption and opportunities for livelihoods that are connected into a national market system. At the same time, the change process is emerging in uneven ways as various factors and forces like sticky social norms, misaligned incentives, and external forces are hindering or slowing the pace of positive change. For example, informal social safety nets that are dependent on following or adhering to communal social norms have negative knock-on effects and are often unfairly distributed. This includes prevailing norms related to rigid social structures around ethnicity, caste, or gender norms.

From a systems-thinking perspective, the uneven and at times unfair progress strongly suggests that increased importance be placed on areas of positive change in Nepal. This could include a focus on positive trends like diversity in agrovet product offering or customer segmentation, opportunities emerging from the diffusion of government power under federalism, or the growing examples of emerging healthy competition and cooperation within market systems. Programming that is sensitive to these trends will be able to build on these organic changes from within Nepal, to increase momentum and make the changes increasingly more attractive.



OVERVIEW & METHODOLOGY

Background

USAID/Nepal, in collaboration with USAID's Bureau for Resilience and Food Security and the Bureau for Humanitarian Assistance, engaged the Feed the Future Market Systems and Partnership Activity (MSP) to conduct an assessment of:

1. The drivers of market systems resilience (MSR) in the Feed the Future zone of influence (ZOI) through a situational analysis/qualitative diagnostic of the market system;
2. Qualitative insights on the role that layered implementation of several Activities in the Mission's portfolio within specific districts may have had in shaping these MSR drivers and enhancing the ability of households to benefit at a maximum level through reduced trade-offs, improved market access, etc.; and
3. Spotlight several innovative practices from across the targeted Activities that could potentially positively influence the drivers of MSR.

This document outlines the assessment findings and key areas for consideration for USAID Nepal in its future programming including:

1. Diagnostic on key structural and behavioral dynamics that define the market systems in the targeted area within a ZOI in Nepal.
2. Implications for both the resilience of the market system and the resilience of actors (primarily households and firms) that engage within the market system.
3. Potential opportunities to strengthen MSR and the benefit for vulnerable households from a more resilient market system, including through geographic and programmatic layering.
4. Short vignettes that illustrate emerging changes in MSR and the role Activities played in contributing (or not) to drivers of MSR.

This assessment offers insights into the drivers of MSR in target areas within part of the Feed the Future zone of influence where multiple USAID elements (e.g., Feed the Future, Bureau for Humanitarian Assistance) had interventions for at least three years concurrently. The study includes a special focus on connecting the market system's resilience capacities with household-level resilience. The selected USAID-funded Activities include Knowledge-Based Integrated Sustainable Agriculture in Nepal II (KISAN II), Suaahara II, Promoting Agriculture, Health, and Alternative Livelihoods (PAHAL), and the mechanization component of Cereal Systems Initiative for South Asia (CSISA).

The study does not reliably measure the current state of resilience in Nepal, nor does it serve as an evaluation of any of the selected USAID Activities; rather, the study aims to highlight potential opportunities to strengthen geographic and programmatic layering, or other innovative approaches, to optimize strengthened MSR.

Research Strategy and Methods

The research has taken place over four phases: a desk research phase, a field research phase, an analysis phase, and a learning phase. The approved research plan¹ outlines each phase in detail, and a summary is provided below.

¹ Field, Michael, Andy Hunter, Caroline Allen, Stuti Basnyet. Nepal Market Systems Resilience Assessment Research Plan. Washington, D.C.: United States Agency for International Development (USAID). Prepared by Vikāra Institute for DAI under the Feed the Future Market Systems and Partnerships (MSP) Activity, 2022.

- **Phase 1 - Desk Research:**² During the preparation phase, MSP conducted desk research to extract existing information on selected USAID Activities, key market actor stakeholders, as well as recurring patterns (narratives, stories). In this phase, the research team also conducted 13 key informant interviews (KIIs) with USAID Mission staff, USAID Activity technical leads, and other identified experts. Internally, the research team organized a workshop to further develop the research questions and methodology and prepare for the fieldwork. At this point, the research team defined the key areas of inquiry and MSR domains to be used in the research.
- **Phase 2 - Field Research:** MSP conducted a phased fieldwork approach to be sensitive to the outbreak of the Coronavirus Disease of 2019 (COVID-19) Omicron variant that was taking place throughout Nepal. In February and March, the research team conducted initial research in Kathmandu, both in-person and virtually. The remainder of the fieldwork took place in four districts in the Feed the Future ZOI. This fieldwork included market observations and one-on-one interviews or focus group discussions (FGDs) with a range of stakeholders including households, private enterprises, local government, and local development implementers. Building on the initial USAID KIIs, these interviewees were key to understanding MSR and its relevance to development results.
- **Phase 3 – Analysis and Reporting:** The assessment team then analyzed the data collected in Phases 1 and 2, and held a virtual Key Findings Validation Workshop with both USAID and implementing partners. Assessment findings are now included in this Assessment Report, accompanied by a summary brief and several case studies.
- **Phase 4 - Learning:** Beyond this assessment report, two learning and dissemination events will take place over the summer – one in Kathmandu, Nepal and another in Washington, DC.

The geographic focus area for this research aligns with the Feed the Future Nepal ZOI as it pertains to the focus Activities listed above. [The Feed the Future Global Food Security Strategy Nepal County Plan](#) outlines the ZOI as per Figure 2 below:

² Annex I - Bibliography

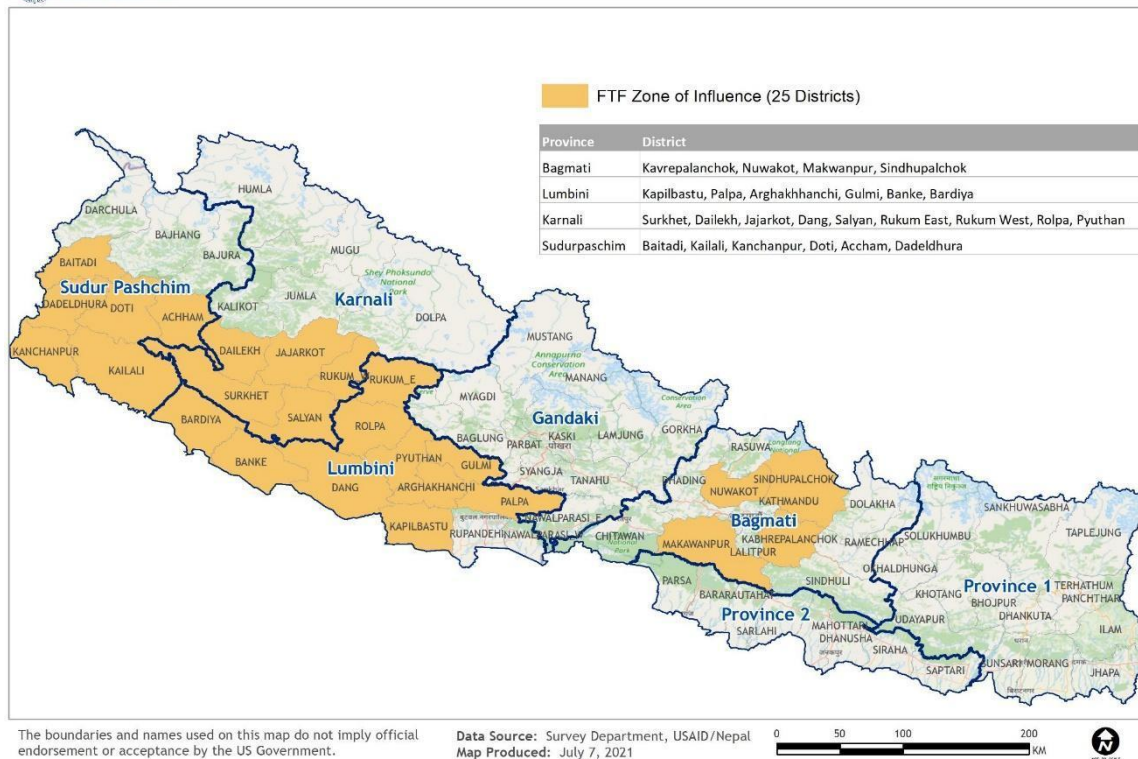


Figure 2: Nepal GFSS Zone of Influence

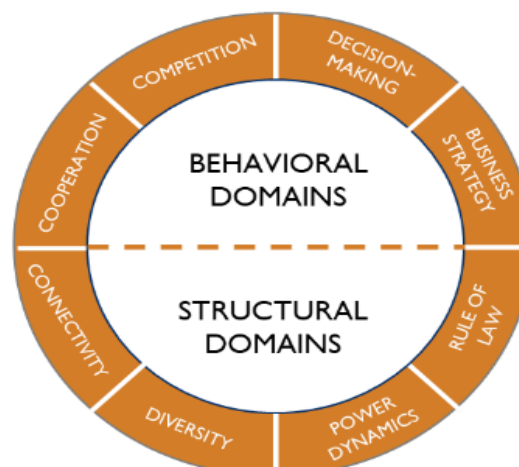
To achieve a representative overview of market system function in the ZOI, the research team developed a geographic focus area for the duration of the assessment and the field research in particular. The Feed the Future Nepal ZOI includes the provinces of Sudur Pashchim, Karnali, Lumbini, and Bagmati, so the field research schedule sample took a cross-section of voices from districts within these provinces. While some very remote interviews did take place, the majority of interviewees were selected from the nearest economic activity hub that services remote areas. The approach presupposes that market-based development activities must build on and leverage change relative to a different aspect of systemic change. For example, KISAN II is working with many market actors and most of them will focus on the easiest path for growth, which will not include the most vulnerable communities. But over time, as those firms grow and the vulnerable populations become more connected, the interaction between firms and vulnerable communities will occur, as firms recognize the potential of different customer segments, including more vulnerable ones.

This study was conducted using mixed methods and building on both secondary and primary research. Additionally, it utilized quantitative research methods informed by desk research and an in-country field assessment. And as mentioned above, the assessment also included a key findings validation workshop with USAID staff and select key Activity representatives to validate the findings during the analysis phase.

[USAID's MSR Framework for Measurement](#) was used as the basis for analysis in this assessment. It is a qualitative diagnostic tool that seeks to examine markets as complex adaptive systems to understand better how market systems respond to shocks and stresses. The MSR Framework integrates issues related to norms that can limit or divide people, whether related to gender, socio-economic status, religion, age,

etc. These barriers between people are identified and explored through structures; connectivity, diversity, rule of law, and power domains, as well as behaviors; competition, cooperation, business strategy, and decision-making, as outlined in Figure 3 below.

Figure 3 (right). The Eight Domains of MSR, Depicted in the [MSR Introductory Brief](#).



Market System's Structural Domains (e.g. how markets are organized)	
<p>DIVERSITY</p> <p><i>How much variety is there in products, sales channels, business models, customer segmentation, etc.?</i></p> <p>Market systems that lack diversity are more likely to be susceptible to a single risk and less able to adapt to shocks and stresses. E.g., if all farmers in a given area only grow one crop and a pest targeting that crop emerges, the whole community will be affected. Markets that exclude women and certain groups limit innovation and market potential.</p>	<p>RULE OF LAW</p> <p><i>Who sets and maintains the rules (informal and formal)? Are they consistent and fair?</i></p> <p>High incidences of corruption, favoritism, cartels, and discrimination undermines MSR as laws, grades, and standards are inconsistently applied and enforced. Systems are more resilient when formal and informal rules are clear, transparent, and applied consistently.</p>
<p>CONNECTIVITY</p> <p><i>Who's trading and talking with whom, why, and how is this changing over time? How and to what extent do market actors interact across geographies, ecologies, and social groups?</i></p> <p>A market system is more able to withstand shocks if market actors have formed new and different types of connections rather than being reliant on only one type of business relationship or geographic area, for example. Systems are more resilient with widespread patterns of business connections that lead to alliances, co-investment, value addition, and increased customer segmentation.</p>	<p>POWER</p> <p><i>Where and how is power concentrated and exercised?</i></p> <p>Rather than using power to attain monopolies or unfair bargaining power, market systems are more resilient when power is wielded for firms to build alliances, incentivize standardization, or co-invest in value addition upgrades. This facilitates more even allocation of risk in the system.</p>
Market System's Behavioral Domains (e.g. norms that shape what most people and market actors do)	
<p>COMPETITION</p> <p><i>To what extent is there rivalry between market actors?</i></p> <p>Competition can be positive or negative depending on how and why it is happening. E.g., market systems are more resilient if competition drives innovation, improved efficiency, and attentiveness to consumer needs, instead of colluding to crush competition.</p>	<p>BUSINESS STRATEGY</p> <p><i>To what extent do business strategies proactively plan for risks? To what extent are they fair and generate customer value?</i></p> <p>Less resilient strategies include maximizing unfair practices such as capturing unfair margins or being unwilling to invest in alliance building or in customer relationships. More resilient business strategies plan for knowable risks and generate value for customers as a strategy for increasing growth.</p>

COOPERATION

How are market actors collaborating to achieve a common purpose or function?

Firms can cooperate by improving their enabling environment, establishing supply chain alliances, undertaking co-branding agreements between exporters, or making agreements to share production capacity. Cooperative relationships can enable collective action on knowable risks.

DECISION-MAKING

To what extent is evidence used to identify solutions?

More resilient systems show patterns of firms and organizations using evidence to inform decisions. This improves, for example, the level of objectivity and rigor of analysis of customers and competitors. The problem-solving ability of firms allows the market system to better identify and address knowable risks related to shocks and stresses and to plan accordingly.

Source: As presented in *Demystifying MSR: An Introductory Brief* (MSP, 2022), adapted from *MSR: A Framework for Measurement* (2019)

Research Hypotheses and Questions

The complete data set, along with interview guides and the field assessment schedule is available in the annexes.³ This section lays out some key areas of inquiry that framed the questions and discussion through the ZOI.

There were six overarching research questions:

1. What is the state of key structural and behavioral characteristics of the target market system, and how is this influencing observable patterns in the market system?
2. To what extent do these patterns affect how the market system and individual actors plan for, respond to, and recover from identified shocks and stressors?
3. Are there examples of layering between Activities that contributed to strengthened MSR and household benefits from MSR? This could include examples of layering to households or actors, or efforts more indirectly layered through systems-level impacts.
4. Where are there strategic opportunities to strengthen MSR in ways that benefit target populations?
5. Have the assumptions made by Activities held true in relation to influencing structural and behavioral characteristics?
6. In what ways have USAID's efforts influenced those characteristics? For example, in the current structure, what are some trade-offs where market dynamics are helpful or where are market dynamics presenting risks or dampening benefits from engagement by certain populations?

During the initial set of KIIs, the team explored a number of areas based on both the structural and behavioral domains set out in USAID's MSR Framework. As a result of discussions and a review of literature, several key areas arose to hone in on during the assessment, and these areas were further examined and developed during the subsequent research phases. By the end of this process, **there emerged four key areas of inquiry, each given a hypothesis, which became the structure of the assessment process and is therefore the basis of this assessment report.** Each of these feeds into the **three objectives of the assessment:** (i) identifying the drivers of MSR, (ii) the role that layered implementation of Activities had in shaping these drivers, and (iii) identifying innovative practices to

³ Annex 2

positively influence MSR. These have become the three systemic change trends, leading to a focus on CLA within USAID programming. The report findings are structured around these four areas before presenting key opportunities for applied learning.

1. Social safety nets and post-disaster response services;
2. Market systems competitiveness and inclusivity;
3. Migration and labor market dynamics; and
4. The incentives influencing activities related to effective layering and collaboration of USAID Activities.

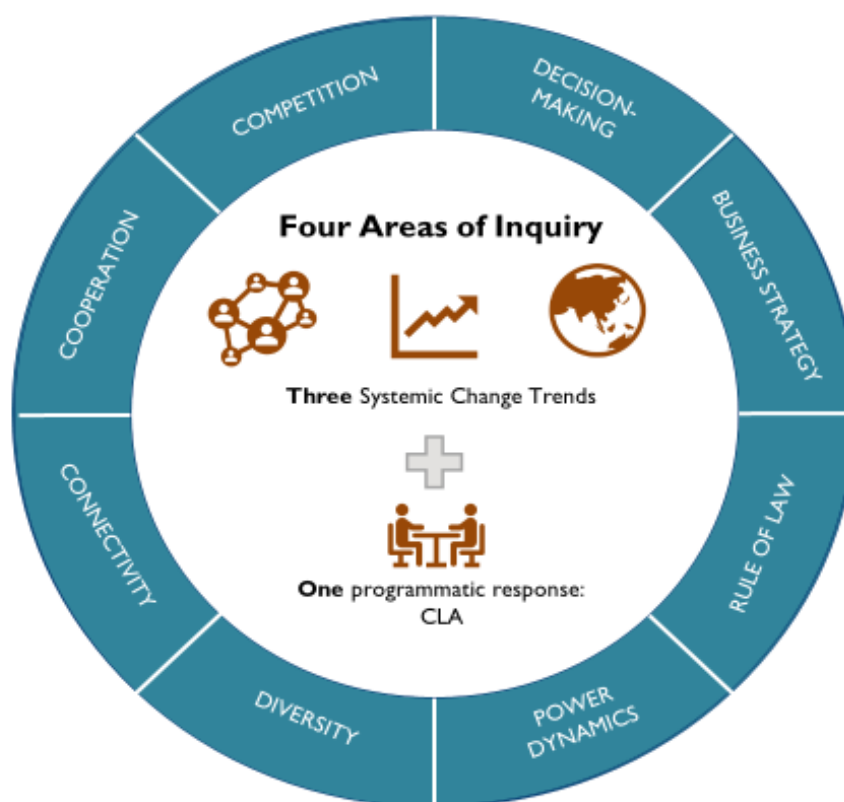


KEY FINDINGS

This section forms the key findings from the assessment, structured by signposting the four areas of inquiry consisting of three systemic change trends and one related to programmatic response suitable for the Nepali context. Key findings are dissected by discussing the subsequent MSR domains as they pertain to each area.

The section is also interspersed with examples uncovered by the assessment team and vignettes and stories highlighted in textboxes to illuminate the context further.

The three systemic change trends were identified because of the way they act as signals to important changes in Nepali market systems and wider society, changes that ultimately contribute to the resilience at the national and household level - including in marginalized communities. Each of these trends is an important signal of a foundational shift in terms of how risks are managed in Nepali society, including how market systems are shifting to better identify, prioritize, and allocate resources in relation to known and knowable risks.



Social safety nets shifting from informal communal mechanisms to more formal, fair, and transparent social safety nets and emergency response services indicate a substantial shift away from the full burden of risks from shocks and stresses being managed at the community level. Sharing the burden in a more formal, fair, and transparent way allows for more rapid recovery when shocks occur and creates an environment for households to take on more risks related to their economic activities. If households know that they do not need to bear the full burden of a future shock through their own informal communal mechanisms, then societies are more able to take on risks in building their businesses or managing their finances.



Market systems competitiveness and inclusivity, where markets are becoming more influential and mature, signals improved capacity to identify, prioritize, and harness national resources to mitigate and neutralize risks that often manifest into shocks and longer-term stresses. As market systems become more inclusive and competitive, they

tend to become better able to harness human, financial, and other resources that can be directed in a coordinated manner towards both preparing for and responding to risks. At the same time, how the system applies that improved capacity is often uneven and often during the process of improving the capacity to harness its resources, tradeoffs emerge that can have negative effects. For example, as market systems become better at engaging and encouraging farmers (i.e., becoming more inclusive) to be more commercial, supportive formal social safety services may not be available, creating a context where farmers perceive a tradeoff between being more commercially oriented or maintaining communal norms related to informal social safety net mechanisms.



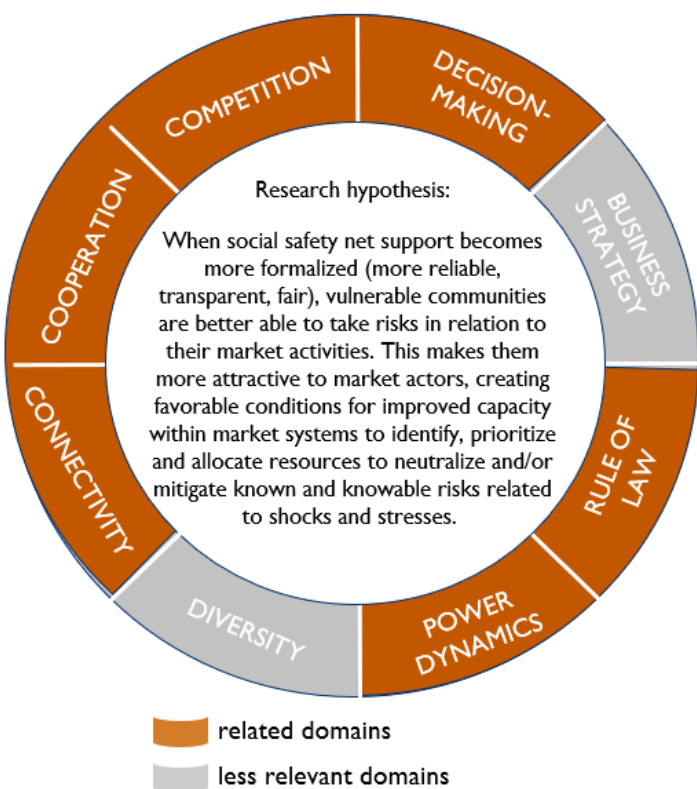
Migration and Labor Market Dynamics, explores how substantial shifts in population location can be very disruptive, affecting market systems and the wider society positively or negatively. Opportunities, for example, lie in the COVID-19 induced shift away from exporting labor to having a large population of younger males looking for work and opportunities within Nepal. This shift is still unfolding, and examples are emerging of both new patterns of behavior, and the slow return to the old "normal" as travel restrictions are eased. Still, a substantial change in available labor will stress market systems. This stressor could be harnessed for positive systemic change through policy adaptation that supports inclusive growth while protecting market-led innovations that respond to the changing needs of Nepali society's marginalized populations. At the same time, a reduction in exported labor immediately reduces remittances. However, it is likely to increase localized investment as savings from returning laborers are invested into new income-generating activities. Of particular importance, market systems need to be able to harness these dynamics in ways that increase the capacity of those systems to identify, prioritize, and allocate resources in response to known and knowable risks and opportunities.



Activity Collaboration, Learning and Adaptation (CLA) forms the fourth line of inquiry and is discussed in this report as a response to the research outlined within the three systemic change trends.



Trend 1: Social Safety Nets and Post Disaster Response Services



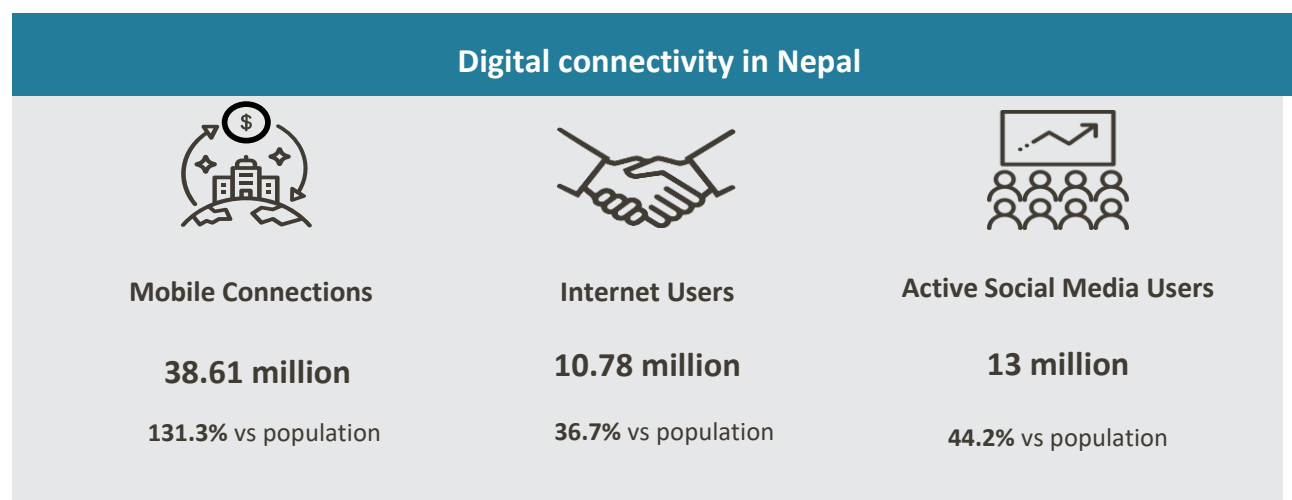
There seems to be a fundamental transition in how Nepal is managing downside risks from informal community-based mechanisms to more formal social safety net and post disaster response services. Typically, such shifts correlate with improved inclusive economic growth, which would be reflected in the connectivity, power, rule of law, competition, cooperation, and decision-making domains.

Connectivity

Connectivity was a critical domain to help the research team understand the changing nature of social safety nets in Nepal. The role of social identity norms was found to limit connectivity between small groups. Manifestations of caste system norms continue to limit interactions; the team attempted to uncover signs that commercial incentives (other incentives related to stresses/shocks) are overcoming caste divisions.

Alternatively, it is clearly observable that connectivity is rapidly changing in Nepal, which is expanding the possibilities for people to communicate, interact, and engage. Connectivity advances in the form of mobile

phone penetration, mobile data services, and rapidly improving road access means that information exchange is on the rise. See the figure below for more information regarding digital connectivity.^{4,5,6}



The assessment observed multiple examples of households acquiring access to social safety net services that would have not been available even a decade ago, such as the Prime Minister's unemployment program⁷, subsidized loans, agricultural insurance, and government managed post disaster response service services.

CONNECTIVITY - VIAMO AND SOCIAL DIGITAL TECHNOLOGY

The impact of mobile connectivity on emergency response has been valuable during the COVID-19 pandemic. During the beginning of the pandemic, Viamo, a social digital technology company, started collecting information from the public through a mobile phone short code information platform. When users dialed the short code, they could obtain information on COVID-19 and be engaged by playing mobile phone games. Through this process, general data of the respondents could be collected. With this system in place, USAID-funded Building Hope Along the Karnali River Basin (BHAKARI) was able to implement its cash for work voucher program with ease, and without duplication due to this access to information.

Remittances are a central pillar in the Nepali economy,⁸ with the centrality of migrant labor influencing almost all areas of the economy and social structure. In discussing connectivity and social safety nets, it is important to note the **influence of mobile communication and digital payment technology on the function of remittances in society**. Firstly, the ease in which payments can be sent and received is a

⁴ Mobile phone penetration rates at 131% of the total population, <https://nepalindata.com/media/resources/items/15/bMIS-2077-Shrawan.pdf>

⁵ Total open road projects of 1440, including 2,210 kilometers of the blacktopped road at the cost of Rs 57.1 billion over three years to 2023
file:///C:/Users/andyh/Downloads/Red%20Book%20Setting%20Matter_1623836699_1623855288.pdf
<https://myrepublica.nagariknetwork.com/news/nepal-plans-to-add-at-least-2-210-kilometers-of-blacktopped-roads-at-a-cost-of-rs-57-1-billion-in-three-years/>

⁶ Gash Malla has run a home stay in at Budar, Doti for 17 years, cited these observable connectivity leaps

⁷ Office of the Prime Minister and Cabinet, <https://www.opmcm.gov.np/en/wp-content/uploads/2021/03/PMEP-Annual-Report-076-77.pdf>

⁸ Remittances make up 25% of GDP, [https://tradingeconomics.com/nepal/remittance-inflows-to-gdp-percent-wb-data.html#:~:text=Remittance%20inflows%20to%20GDP%20\(%25\),compiled%20from%20officially%20recognized%20sources](https://tradingeconomics.com/nepal/remittance-inflows-to-gdp-percent-wb-data.html#:~:text=Remittance%20inflows%20to%20GDP%20(%25),compiled%20from%20officially%20recognized%20sources)

significant factor; a steady reduction in transaction costs⁹ is increasing the frequency of transfers and reducing financial losses.

Multiple sources¹⁰ cited a shift in remittance recipient behavior due to the exposure to social media. Recipients mentioned increased spending on (more sophisticated) mobile phones, clothes, food, and beverages in order to post on social media and keep up with their social networks.

There have been efforts from the government through municipalities like in Nepalgunj, where wives and families of migrant workers are given “household budgeting” training to enable savings and management of finances received through remittances. The family members are also provided mental health counseling sessions and are credited for helping the families in making informed decisions on using, saving, and/or investing the finances.¹¹

Improved road access, especially in the far western districts, is having a **positive impact on the way the Government of Nepal (GON) relief services can access communities in the wake of disaster**. Travel time has been significantly reduced and the carrying capacity of roads has increased as a result of two-lane highways, road grading, and sealed surfaces.

Power Dynamics

Although significant work has been done by the GON in the wake of federalism to design and enact subsidies across the country¹², parts of rural Nepal continue to suffer from high poverty, social exclusion, and elite capture of resources of subsidies and decision-making as also pointed out in the KIIs. The GON’s monopoly in distributing fertilizer is a much-discussed example, but the assessment also uncovered insights into the way cash farm subsidies are administered, producing barriers to access.

Power in terms of household gender dynamics was observable in many interactions. The assessment uncovered examples of progressive thinking around gender roles and decisions about household savings and expenses. While at the same time also finding examples of the opposite, where traditional gender norms were entrenched in money management. Overall, **the assessment suggests that power dynamics are changing, but the process is not linear**.

- As an example of progressive power dynamics at the household level, the team interviewed a vegetable farmer associated with KISAN II. He explained how his wife is responsible for all money management, both within the household and on the farm.
- A counter example was also found¹³ where a male farmer managed five female members of the family to work the farm. Upon arrival, the female household members were actively weeding and tilling on the farm and continued doing so for the duration of the interview. Despite their obvious centrality to farming operations, the male head insisted that the women involved in the farming enterprise didn’t need to have any access to the money or contribute anything to the decision-making process.

⁹ World Bank, <https://data.worldbank.org/indicator/SI.RMT.COST.IB.ZS?locations=NP>

¹⁰ Karuna Onta from FCDO talked about this, but so did interviewees (female bank manager Dhanghadi etc)

¹¹ Uma Thapa Magar, Former Deputy Mayor, Nepalgunj Municipality, Key Informant Interview with MSR assessment team.

¹² International Multidisciplinary Research Journal, https://www.researchgate.net/publication/349018403_AGRICULTURAL_SUPPORT_POLICY_OF_NEPAL_CASES_OF_SUBSIDIES

¹³ Lalji Gharuk, eldest family member at Sabitri Krishi Farming community in Sahara Tole from Janaki Rural Municipality, Banke.

Federalism is also an important dynamic in the changing nature of power in the governmental sense, in that as power is diffused to the regions it has a range of implications on household access to formal social services. This is discussed more in the rule of law section below.



Photo: Bauniya Chadhary, from Jonapur, Kailali showing the research team her vegetable farm

Rule Of Law

The advent of federalism in 2015 is possibly the most pervasive change in the way households access government services. The outworkings of the shift to federalism can be observed in each of the three systemic change trends and beyond, but possibly the most significant being the shift towards more formal social safety nets. The creation of local government functions is generating a monumental change in the way local government interfaces with communities. This assessment uncovered examples of households being able to access essential government services like health services, education, registration of births, deaths, and marriages, or applications for various services. However, political power dynamics and preference to a specific communities or political groups continue to distort the fair allocation of local government resources and services. Small communities, wards, and households report having regular access to information and services, even during times of crisis like COVID-19.¹⁴

As a result of federalism, the municipal governments have discretionary funds allotted for specific sectors, including disaster relief and response, to mobilize the community. The Disaster Risk Reduction and

¹⁴ FGD with Siddhababa farmers group. Farmers of the group received health services, and veterinary and agriculture services during COVID-19 peak from the ward office.

Management Act 2017 has been proclaimed by the GON, outlining the duties and responsibilities of the three levels of government in disaster risk reduction and management.

The **GON provides a special focus on formalizing safety nets through insurance in agriculture.** The GON has been promoting agriculture insurance by subsidizing 80% of the total amount of the premium to be paid by farmers and mandating minimum portfolio size for lenders. FGDs, however, revealed that the product is not popular with lenders or farmers, as it is both unprofitable for lenders and an unwanted expense for farmers. Similar insights came in discussing farm subsidies, which are seen to be largely inaccessible by those who actually need them.¹⁵

Cooperation

In thinking about cooperation as a domain to understand the shifting trends in social safety nets, this assessment looked closely at some of the ways that communities cooperate internally and how this manifests with business in managing shocks and stresses. **Cooperation among households emerged as a key recurring theme in social safety nets, something that is deeply ingrained in Nepali society.** Disaster response processes proved to show some shifts towards more formal social safety nets, like government services, while remaining a central reliance on cooperation among households and community members in the early response period and after. These traditional community support structures are rooted in centuries of history which play an important role in contributing to the resilience of Nepali society, albeit at times also contributing to unequal access to social welfare.

Cooperation - Community disaster response example

The process by which households rely on a blend of both formal and informal social safety nets to cope with shocks was evident in a recent landslide¹⁶ where the very first need that presented was access to shelter in the immediate aftermath. Formal government support services were not able to assist, so households cooperated to share accommodation from those who had not lost their homes. Community members who owned or had access to earth moving equipment were also quick to action in volunteering to clear the roads for access.

As the formal government response emerged, the community had already drawn down multiple layers of informal cooperation to respond. The government response included distribution of food and nonfood items, as well as clean up services. But ultimately, the final cleanup was again driven by informal community cooperation.

The local private sector were said to have played their part in keeping prices relatively stable, rather than looking to extract absorbent margins on the back of scarcity which was surprising as one respondent mentioned in the KII that the traders and the roadside hoteliers would usually increase the prices when the roads were disturbed for a few hours in the event of an accident - which was a usual occurrence given the treacherous road and driving conditions.

¹⁵ Informants explained the reality of barriers to accessing these subsidies, explaining that they rarely reached their intended beneficiaries. Subsidies designed for farmer input purchases were difficult to access from remote rural areas, the very place where they are most needed. In general, the assessment found that the people most likely to access farm subsidies were actually peri-urban dwelling middle class families who were informed, educated and politically connected enough to successfully apply, which reflects an enduring centralization of power in practice (not just on paper, through federalism). Very few informants thought that it was realistic for a legitimate rural farmer to have enough time, awareness, or political standing to access them.

¹⁶ Interview with Padma Gurung, Executive Director of the Integrated Development Society

Different levels of government are able to collaborate as required to provide services to the needy. For example, if a municipality office does not have the budget, but there is a need for relief services, then the municipality links the needy to ward offices or any other level of government who are capable of providing the services. However, multiple interviewees cited a lack of communication between levels of government and within departments that stifled the effectiveness of cooperation.

Decision-Making

Household decision-making is impacted by the increased access to relevant and timely information about everything from market prices to weather patterns and warnings and emergency response plans. Households were shown to have more access to information than in the past and showed examples of using it for improved decision-making processes, often shielding households from expenses or exposing them to higher income opportunities. High out-migration of men for foreign employment and limited livelihood opportunities have resulted in the feminization of the agriculture sector, thereby putting women-led households at the forefront of decision-making. However, significant differences remain in women's access and ownership of assets, including education and access to services. Women beneficiaries of current and past programs visited by the assessment team strongly agreed that interventions that informed and educated women about their rights and entitlements prior to providing them the means to exercise these rights were necessary to enable the change development programs are seeking.¹⁷

Decision-making - Female farmer accessing information to make informed decisions

One female farmer whose husband was working in India reported being connected to up-to-date market information for the produce she was selling by a simple phone call to any number of representatives present in the market. This advance information gave her the ability to make business decisions about when to buy ruminants based on market prices. She cited adequate savings and alternative income such that she was able to hold back on buying and selling decisions in response to market forces.

Women were found to have monthly savings in cooperatives and in the form of jewelry. Women invest in gold and use it as collateral to get credit during emergencies. Such loans are hassle-free and obtained in jewelry shops, but they take as high as 24-36% interest rate per year. Gold loans are also available through banks at lower interest rates, however the terms are ultimately less favorable because the collateral asset valuation process is more complex and ultimately lower. So, people rather opt for the high monthly interest rate from gold retailers.¹⁸

Decision-making - Government rapid assessment and response example

The Local Government Operation Act of 2017, has established local governments as the new and principal focus of governance, shifting significant responsibility for disaster response and risk reduction to municipalities. It also maintains a role for the district assembly in coordination, including with the District Disaster Relief Committees.

¹⁷ At Rajinawa, the assessment team visited a farmer, Koila Khan, whose wife has been managing the household finances. She had ensured that her granddaughters had access to education and made the decision to reinvest the profits from the farm to purchase additional land to scale up farming in the last few years. She has never had a formal education and contributed her knowledge of budgeting and household management to "learning by doing".

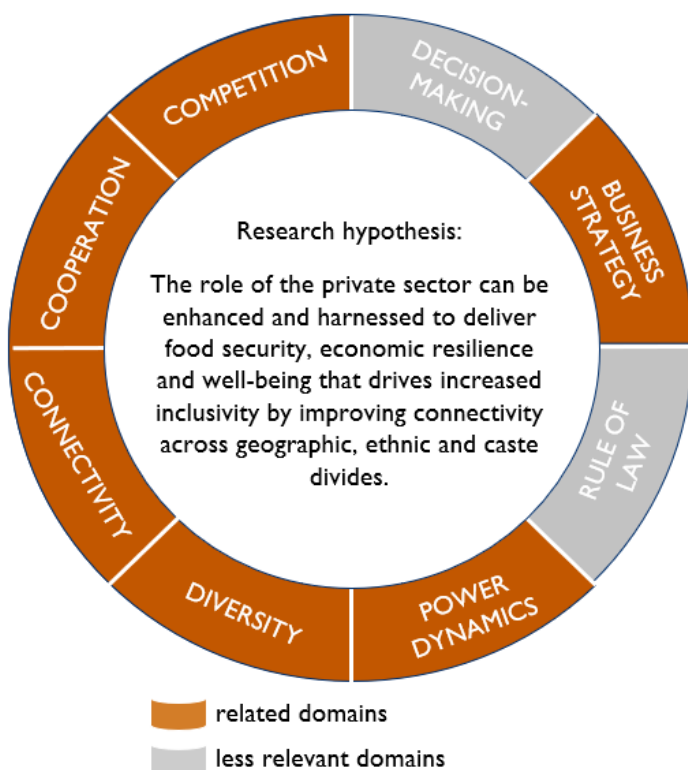
¹⁸ FGD with Banks in Nepalgunj

The apparent shift towards more formal emergency response services can be well observed in an example of the way disaster response services are carried out by local governments.¹⁹ Recently, the local government coordinated efforts to carry out rapid assessments and coordinate and distribute immediate relief to the twelve households that were affected by the 2020 landslides in Dadeldhura District. The incident also highlighted the capacity of the local government organizations to coordinate resources including from the private sector which responded under newly established associations.

¹⁹ Ram Chandra Bhatta, the Head of the Agriculture Knowledge Center in Dadeldhura



Trend 2: Market Systems Competitiveness and Inclusivity



The emergence of competitive and inclusive market systems is essential for a country achieving middle income status and being able to manage risks better. Initial research points to a shifting role of the private sector, which suggests that market systems are becoming increasingly important in Nepal and how it develops. Greater clarity would come from investigations into the connectivity, diversity, power, competition, cooperation and business strategy domains.

Connectivity

When analyzing connectivity, often one looks solely at the qualitative elements of how connectivity combines with other domains related to systemic resilience. But a key insight is that within these qualitative elements lies the differential factor of lowering the cost of connectivity.

The assessment has shown that improved and more extensive road networks reduce the costs of connecting, as does improved and expanded access to digital platforms. There is almost no downside from continuing to reduce costs and ease how market actors and communities connect. At the same time, how connectivity structures combine with other domains including power dynamics, rule of law, diversity, and the behavioral domains determines the extent to which connectivity patterns lead to improved ability to manage risks related to known or knowable shocks and stresses.

In summary, connectivity that combines with other domains, so it is easy (very low cost) to connect, while allowing connections to vary based on changing market and social dynamics is ideal. This is because it allows the overall system to connect the market actors that may not know each other initially but can develop and deliver products and services that mitigate or neutralize the risks that are most important or valued by

communities. Connectivity patterns that are rigid, overly costly, or cannot be prioritized (i.e., define importance and benefit to society) tend to limit the ability of the market system to respond effectively.

Traders revealed that as roads have improved, they have been able to access new markets more efficiently, pointing places further out than the assessment boundaries. The volume of trade and its cost has significantly decreased as bigger trucks from regional centers, including Kathmandu and India are able to reach their destinations more quickly.²⁰ Agrovets, traders, and producers all cited the benefits to their business of improved roads. With better roads, farmers are investing in more vehicles, including women who are newly empowered to ride motorbikes. Less well developed however are the trade flows of produce from remote communities back to the urban centers. While both large businesses houses and remote communities do benefit from the flow of goods to remote communities, more benefit will be realized if the sale of goods and services back to urban centers develops further.

The advantages of mobile phone connectivity were seen everywhere during the assessment, benefiting farmers, agrovets, and traders alike. Multiple farmers cited their use of mobile phones to connect with buyers and suppliers of agricultural inputs. They referenced being able to compare product quality or price data on web-based services and were actively conducting research relevant to their farming enterprise. With the improving mobile phone and internet connectivity and access to smartphones, farmers have been using various applications to access information services related to weather, price, and other information related to farming crops and livestock. Agrovets, in turn, were connected with their farmer customers, taking orders and making sales. But also, agrovets were able to forecast orders to keep stock levels manageable, and then place their orders with suppliers. During interviews with agrovets their phones were ringing all the time, often needing to take short calls to address customer needs or provide after-sales service.

Digital financial connectivity, also underpinned by both mobile phone penetration and data services, was evident throughout the survey area. Interviewees invariably referenced the use of at least some kind of digital financial service. The most common being the mobile payment service known as 'fonepay', the largest brand in the sector, owned by eSewa.²¹ The fonepay platform is interoperable between financial service providers and operates based on a QR code system. This platform was available among merchants of all kinds, from larger product or service firms to tiny street vendors and tea shops.

For more on mobile connectivity, see the **complementary Case Study on Connectivity Trends Among Small Retailers**, which explores how the BHKARI Activity is catalyzing improved connectivity, especially between commercially grounded relationships outside traditional identity-related, friend, and family groups.



²⁰ Tek Gurung, a driver, explained that the previously eight-hour journey time between Dipayal and Dhangadi was reduced to six hours which is a significant cost saving.

²¹ As of June 2017, eSewa and its 150 staff serve 420,398 active customers across Nepal. Its solution is integrated with 51 banks and it offers hundreds of services through its own agent network, which spreads across the country. <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2018/05/eSewa-Providing-digital-payments-for-all-in-Nepal.pdf>

Diversity

Diversity regularly surfaced as a lens with which to investigate the business practices of the private sector, especially agrovets.

Most agrovets were very aware that a large percentage of their customers were women. This is consistent with the demographics of farming communities in the surveyed regions, with able bodied young men often involved in migrant labor. **Agrovets were therefore very used to engaging with female customers and during interviews were naturally able to cite specific purchasing behaviors and characteristics they saw as specific to women.** While most male agrovets were able to cite observations about the consumer behavior of female customers, the prevalence of female staff in agrovets is still in its infancy. Generally, it was observed across sectors that there remains a glass ceiling for women moving to higher value-added roles in the chain.

Diversification in product offering among agrovets was observably relatively consistent. For most high-volume products, agrovets stocked a range of two to three brands of varying quality. This pattern was consistent also among machinery traders, stocking both the more expensive Indian and less expensive Chinese version of the same machine.

Access to climate resilient varieties of seeds for agriculture is improving. Agrovets, government, and development programs are promoting high yielding, drought resistant, pest resistant, and climate resilient varieties of seeds. There has been increasing investment in developing more productive resilient seed varieties.²²

Diversity in the food system was observed as manifesting in multiple ways. Local produce marketing strategies were employed in various circumstances, one example being the Sahajpur, Kailali market located in an area known for its mandarin production. All sellers stocked the local mandarins and advertised them as a premium local product. Strategies like this were observed in multiple wet markets and supermarkets, where local produce was sold alongside its cheaper imported counterpart.

Consumer preferences indicate that in terms of vegetables, local produce is preferred as it is known to be fresher than the Indian imports. The opposite was found to be the case for rice, where imported Indian super fine rice is prized, a specialty aspirational product not largely produced in Nepal.

Evidence of product grading and sorting was observed in most markets, including both wet markets and supermarkets. A number of different types of markets for agriculture produce was observed during the assessment including Bhatbhateni Supermarket where higher end produce was being sold to upwardly mobile consumers.

²² Lokendra Khadka, CSISA

Diversity - Evolution of supermarkets



The supply chain for agricultural products varied according to the products and among rural and urban markets. Supermarkets are gaining popularity in urban areas such as Nepalgunj, with the largest supermarket chain of Nepal being recently established. Average footfall per day varied between 2,000 visitors on weekdays and this number went up to 5,000 visitors per day during the weekends. The supermarket offers a wide range of products, which may not be found in the wet markets, or with street vendors. Convenience and a sense of social status are other reasons for more supermarkets gaining popularity in urban centers. In recent years, there has been a growth of stores selling specialty products from different locations of the country. These stores sell local products such as cereals, legumes, fruits, vegetables, and other products at premium prices, claiming these products to be organically grown or high in nutrition. These products, targeted to premium consumers, have been benefitting the rural community by passing on the price premiums.

Power Dynamics

The reality of power and power imbalances in the market system was evident throughout the assessment. Perhaps the standout example being the lack of power among rural and remote consumers, particularly in the far western districts. Consumers in these regions were characterized by a lack of options and little buying power influence. Very few examples of consumer voice aggregation functions, like supermarkets, were established in these regions, and the feedback loop between consumer preference and production is very stifled. Cheap Nepalgunj “medium” rice, for example, was being dumped in the western regions. Even though consumers would cite a preference for super fine rice, the market had determined that it did not matter what they wanted or needed and that customer would get what they were given.

Specialization of agricultural production zones was a recurring theme cited by most local government representatives²³ and the Agricultural Knowledge Centers in both Dhangadhi and Dadeldhura. The initiative was generally accepted as a necessary progression, albeit concerning how the government is looking to centrally control production, with respondents citing the unviable nature of the current farming sector in Nepal.

Power - Government agricultural pocket scheme

The assessment's literature review reveals the history of agricultural production zones dating back to a government initiative from 1995. While on the surface the scheme is both well-known and supported, concerns remain about the impact of government intervention in loss of competitiveness as GON controls what to grow where, which dampens important market signals related to emerging opportunities. Another consistent criticism by systems thinkers is the government's unwillingness to embrace the role of the private sector in Nepali farming. By framing support to farmers as primarily a public good, the GON has inadvertently wielded its power in ways that the private sector interprets as hostile to investment. Additionally, the perception that the GON is inconsistent in its policy positions and enforcement practices creates uncertainty, stifles investment, and at times, leads to specific problems such as counterproductive import duties on products necessary for commercial agriculture.

Federalism is the ultimate example of a central government diffusing power, and the assessment found many examples of local government bodies now mandated to perform functions that the previous central government was unable or unwilling to do. Previously, civil servants would be posted to the local districts by the federal government and often there were no incentives and no repercussions for underperformance or absence at work. The change process is still ongoing, with multiple local governments presenting signs of capacity and resourcing issues constraining them from fulfilling these functions effectively.

Competition

The assessment revealed examples of emerging healthy competition throughout the market system, where firms were increasingly competing with each other for customer loyalty and brand value, with extractive, unhealthy margin capture behavior being less common. For example:

- Farmers are taking on more commercial risk in their farming enterprises²⁴; evidence could be found of successful farming households investing more in their farms, buying or leasing new land or new entrepreneurial pursuits such as changing agriculture sectors to some that require more investment but have potential for higher earnings.
- Increased market activity in rural areas with examples of changing orientation of competition from unhealthy to healthy.

²³ Former Mayor and Deputy Mayor, Nepalgunj Municipality

²⁴ Model Farmer outside Nepalgunj, Sabitri Krishi Farm in Lalji Lalji Gharuk, Shreejansheel Savings and Credit Cooperative

Healthy competition is defined by 1) firms compete based on the value they deliver to customers, staff and suppliers, 2) firm competitive response is internalized to improve performance relative to value delivered, 3) competitive pressures are primarily felt within a function driving performance improvements in how that function works, and 4) civil society, media, government, etc. actively reward and sanction firms that favors firms that deliver value.

Unhealthy competition is defined by 1) firms compete based on how they leverage power (political and market) to gain unfair advantage, 2) firm competitive response is externalized to attack/hurt competitors, 3) competitive pressure is focused on winning transactions, and 4) civil society, media, government, etc. are inactive or reinforce power structures that provide unfair advantage.

- Healthy competition growing between agrovets was acutely observed, as all of those interviewed articulated a business strategy that tended towards value-added transactions with their customers. Agrovets regularly provided examples of promoting quality products with after-sales service or technical assistance, competing on the basis of brand value or customer loyalty, and the reality that cheating behavior is simply not viable as a business strategy.
- Healthy competition in agricultural machinery was observed similarly, where retailers tended to stock various brands to choose from in key equipment like threshers, tillers, etc., and provided on-farm after-sales service.
- Retailers explained their process of talking through differences in products with customers, comparing the quality and price difference between Chinese and Indian machines. They also offered servicing facilities for the equipment purchased from them, even after the warranty period.

Competition in the finance sector showed signs of healthy competition between numerous market actors²⁵, all the while being artificially generated by government interference. For example, there is competition for agricultural loan portfolios based on government incentives for minimum loan size, where sizable fines are applied for noncompliance. There is also regulation around SME loan allocation, where banks are mandated to provide a minimum of 10 loans per branch with a regulated ticket size. Additionally, agricultural insurance, while available from multiple companies, has a range of government requirements attached to it. All insurance companies quickly explained that it was unviable everywhere except some parts of the Terai, and that agricultural insurance is their least profitable portfolio due to the high claim rates, but they were obligated nonetheless to offer it in their product range.

The assessment found that while monopolistic trading examples in products or services do exist, many firms and businesses were instead working hard to compete in the market.²⁶

Examples of sanctioning or rewarding business behavior as driven by individual or aggregate consumer behavior were hard to find, aside from the aforementioned examples of firms moving towards value-based business strategies. There are examples of sanctions and rewards from the government though, like the fact that the Ministry of Agriculture and Livestock Development awards outstanding farmers every year

²⁵ Interviews and FGD's with banks in Nepalgunj and Kathmandu headquarters

²⁶ Man Bahadur Dhami, an agroveter reportedly drove one hour on his motorbike from KI Singh Rural Municipality each morning to open up his store by 7am in Dipayal.

with the President's Award. Similarly, there are trade awards for corporate excellence, that award excellence in 11 corporate sectors, including agribusiness.²⁷

There remains the reality discussed above that Nepali consumers tend to afford Nepali fresh produce a competitive advantage over Indian produce, given its reputation for freshness. But most consumers are bound to price constraints over taste.

The response from more progressive farmers is sometimes to attempt specialization in products that suit certain Nepali microclimates. Mangos, mandarins, and carrot seeds were all found to be examples of local specialization. But for most Nepali smallholder farmers the risk and capital expenditure required for such a transition is out of reach. In any case, even for specialized produce the assessment found that Indian products were making their way to these areas in order to fill supply gaps in the off season.

Cooperation

As the private sector becomes increasingly important in the lives of Nepali citizens, firms and enterprises as well as the relationships between them are becoming more sophisticated. The Nepali government is aware of this and is taking initiatives to encourage cooperation and other forms of investment.

Cooperation along the supply chains - Rice mills investing in suppliers example

Rice millers in Nepal perform three major functions in the value chain. They purchase paddy, mill paddy, and sell rice along with its by-products. The rice milling industry has an important role in the rice value chain for product differentiation and value addition to paddy after the milling process to produce products such as polished rice, beaten rice, etc. Two rice mills - Sahu Rice Mill in Banke and Bina Food Product in Kailali - with co-investment from USAID's KISAN II Activity are also investing in suppliers as a way to improve their competitive position. The rice mills oriented farmers on methods of planting the higher value super fine rice. They also hired an extension worker to provide regular advisory services to farmers regarding sowing methods, use of fertilizers and inputs, and harvesting technology as well as testing advance payment schemes to address farmer liquidity challenges.²⁸ Both the rice mills claimed to have improved their relationship and credibility with the suppliers as evidenced by the increasing number of farmers they work with during the last few years, and continue to gain an assured supply from farmers through the investment.

Cooperation was observed between agrovets in Dipayal where there was observable evidence of them working together. The outworkings of the cooperation were somewhat unclear, in terms of whether their cooperation was leading to value add and efficiency in terms of allocating market share, or in fact cartel behavior. Specifically, interviews uncovered that when one was low on stock or sold out, others were willing to sell and loan stock to each other.

Land fragmentation in Nepal has been considered as a major obstacle in agriculture causing inefficiencies in production, high cost in mechanization, and diminished economic opportunities. Farmers in Dhangadi are practicing agriculture by "crop pooling," a practice where farmers with small plots of lands in the same

²⁷ <https://nepaltradeportal.gov.np/incentives> (website temporarily disabled by GON)

²⁸ Sahu Rice Mill sourced and distributed inputs worth NPR 800,000 (~USD 6,500) during the COVID-19 crisis when the inputs were not readily available in the market

area collaboratively grow the same crops to produce in bulk. The Agriculture Knowledge Center has been promoting this technique, where the farmers also form a group and jointly access subsidies.

Another example of cooperation between market actors along the supply chain is in producing crop seeds. One of the interviewed seed firms, Gate Nepal, collaborates with farmers to produce vegetable, cereal, and lentil seeds. The company produces breeder and foundation seed at their own farm and subcontracts private farms for seed multiplication. The private farms are inspected by government officials before harvest.

Healthy Cooperation is defined by 1) firms cooperate based on joint interests related to delivering value to customers, staff and suppliers, 2) cooperation within a function is balanced with competitive forces to provide advantage to firms that deliver value, 3) cooperation is strong along supply chains and retail distribution networks, and 4) systemic cooperation (i.e., firms agree to play by the same rules) emerges allowing specialized services emerge.

Unhealthy Cooperation is defined by 1) firms cooperate to reinforce power dynamics to that provide unfair advantage, 2) firm cooperation within a function leads to cartel and collusion behaviors normalized, 3) firm cooperation is weak along supply chains and retail distribution networks leading to zero-sum negotiating tactics normalized that reinforce of win-lose outcomes, and 4) systemic cooperation (i.e., firms agree to play by the same rules) is stifled allowing firms with power to bias rules (i.e., and enforcement) in their favor.

There are several associations related to agriculture in Nepal²⁹, where entrepreneurs and businesses of similar nature come together as members to provide a collective voice for betterment of individual businesses. There are associations for seeds, veterinary drugs, most of the agriculture commodities, and market associations. They are mostly active in policy lobbying, commodity promotions, and networking. Some of the agrovets and wholesalers that were interviewed during the survey were part of such associations.

For more on cooperation in the rice sector, see the **complementary case study *Cooperation Along the Rice Value Chain*** which explores the efforts of USAID-funded programming in Nepal, such as KISAN II, PAHAL, and CSISA, to catalyze mindset shifts that lead to more cooperation along the rice value chain.

Business Strategy

The assessment found evidence among a variety of respondents of longer-term thinking in business strategies as well as contentedness with current operations.



²⁹ For example, Nepal Agriculture Federation, Nepal Agriculture Machinery Entrepreneurs Association (NAMEA), Nepal Agricultural Economics Society, Association of Nepali Agricultural Journalists, Seed Entrepreneurs Association of Nepal (SEAN), Nepal Veterinary Association.

Businesses tended to demonstrate a reasonable sense of strategy in terms of forecasting demand for existing products and stocking accordingly. Firms reported finding that new products were sometimes harder to forecast in the first year, but they were quick to harvest sales data for future forecasts. Multiple retailers discussed their strategy of keeping their stock levels relatively low and avoiding the need for overstocking; they seemed to be quite sensitive to demand signals from customers.

In general, stock levels and accounts were managed in an analogue fashion, using notebooks and written ledgers. Those with mobile phone payment systems in place naturally had a digital record but otherwise there were little signs of computer software in use outside of the supermarkets.

For more, see the **complementary case study *Catalyzing Healthy Competition and Cooperation Among Agrovet***. This case explores how KISAN II and other Activities have catalyzed more customer-oriented agrovet, supporting shifts in their business strategies to focus on the value they deliver to customers in order to catalyze changes in the competitive landscape that favors inclusive growth-oriented firms.



Business strategy - Agrovet constrained by price in sales recommendations

One agrovet explained that he stocked 2-3 brands of seeds for a particular vegetable,³⁰ each with different prices and each known to produce a quality yield consistent with the price. The agrovet regularly read literature from seed companies promoting their new products and carefully chose the seeds to stock that he was willing to sell. When asked how he decides which product to sell to farmers, he explained that he was completely constrained by the farmer budget. Farmers almost always bought the product that he recommended for them, but when recommending a higher quality product, they simply could not buy it if they hadn't allocated enough money that season.

The agrovet explained that if he was able to sell a higher quality product to meet the farmer budget, i.e., if a smaller packet of more expensive seeds within the purchasing power of the farmers were made available, then the farmers would be willing to try the upgraded product.

Another overarching business strategy that was observed, especially among agrovet, was the tendency towards seeing the business as an extension of the community within which the business owner lived. In this way, agrovet had their personal social status and community social structures tied up in their business practices, a good indication that their business strategy was not extractive or based on margin capture. One agrovet who introduced the research team to some of his customers, simply left his store unattended while he was absent, unperturbed by any security concerns knowing that he was operating as part of the community. Granted, the sampling methodology of the agrovet that were interviewed is biased towards higher performing firms given the nature of the USAID Activity referrals, but even so, all agrovet interviewed cited that the competition operated the same way, or they simply would not succeed for more than one season.

³⁰ Interview with Man Bahadur Dhimi, Sajan Agrovet, Dipayal.

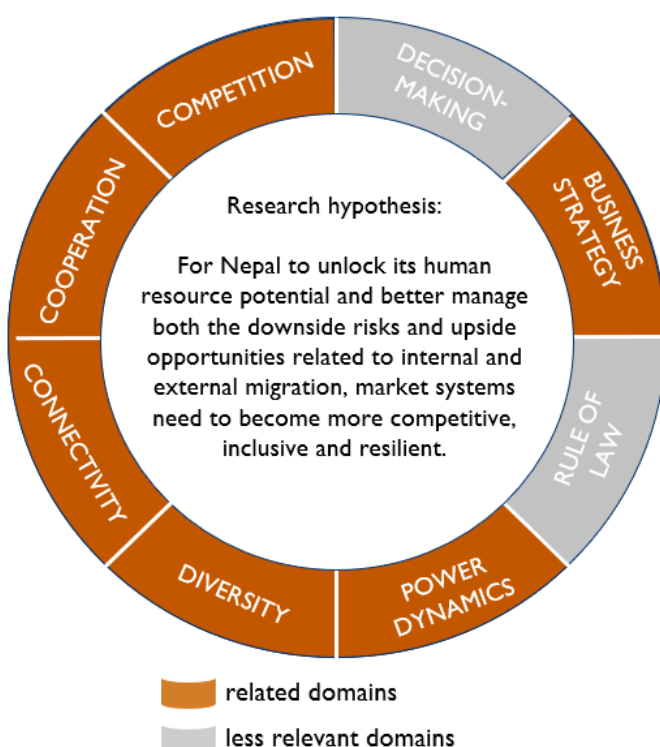
As the Nepali third COVID-19 wave has subsided, many businesses are emerging with digital solutions and online deliveries that were forged during the last two lockdowns. While the practice was mainly limited to restaurant food, fashion, and lifestyle in earlier years, the online market for fresh farm produce is gaining popularity. Fresh produce retailers such as Mato are differentiating themselves through brand positioning and capturing market share with regular offers. Businesses are connecting with consumers through social media pages, and mass SMS information. Product quality assurance through certifications like HACCP, Nepal GAP and ISO 9001 are also gaining traction, a continuation of work that commenced when Nepal joined the WTO in 2004 which signaled the beginning of a range of other standardization processes for the nation³¹.

In general, market actors did not present as having spent much time on proactive risk planning. There was evidence of businesses thinking about short- and medium-term price fluctuations as well as seasonal or unexpected changes in demand. For example, most retailers preferred to keep their stock levels relatively low in order to preserve cash flow during low demand periods. The possibility of a re-emergence of a COVID-19 lockdown was also on people's minds, but most are choosing to focus on the present, rather than planning for too many risk scenarios.

³¹ Regulation of the safety of food in Nepal began in 1966 by enforcing the food act by the government. Although food safety regulation began as early as 1966, its importance was increased after the 1990s due to increased economic liberalization and international trade and ultimately joining the WTO in 2004. Modern food safety related regulations and policies have been generally formulated following codex principles and guidelines focusing on preventive measures to produce safe food. Most of the new regulations are under three food safety related parent statutory laws namely Food Act 1966, Plant Protection Act 1972 and Animal Health and Livestock Services Act 1998. The animal health and livestock service act 1998 and regulations 1999 have been formed and enforced for healthy production, sale and distribution of animals and their products. And there are several other legislations which directly or indirectly regulate food safety including, The Pesticide Act 1991 and Regulations 1993; Animal Slaughterhouse & Meat Inspection Act 1999 and Regulations 2001. National Conference on Food Science and Technology (Food Conference-2012), 10-11 August, 2012, Kathmandu



Trend 3: Migration and Labor Market Dynamics



The labor market system in Nepal is changing, but in messy ways. Traditional forces and factors that encouraged rural youth to stay within their community are waning, while at the same time, the attractiveness of opportunities to migrate are perceived as growing. For example, opportunities tied to jobs overseas have led to substantial numbers of rural male youth leaving the country. With COVID-19, the flow of labor to other countries was disrupted, which highlighted a mix of misalignments in the various market and interconnected systems that influence how well a society utilizes its human capital to improve risk management related to shocks and stresses. Of particular concern is that Nepal's agricultural market systems are not effectively identifying, prioritizing and allocating human resources in ways to improve competitiveness.

Connectivity

Social norms on mobility seem to be influencing who and how people respond to signals related to economic opportunities outside their local geographies.

As roads and digital platforms have increased, connectivity information flows have also increased. For example, there is increased awareness of the risks of migrating for work, especially related to human trafficking risks.³² Increased connectivity has improved household ability to conduct research on sound financial opportunities for migration.

Diversity

The connectivity advancements mentioned above have resulted in **more diverse choices in terms of migration employment options**. This has also exposed a preference for labor markets in certain countries as correlated with perceived status in home communities³³. Young men, for example, would be more likely seen as successful if they worked in road construction in the Gulf nations, more so than in

³² Safer migration campaigns and programs at the provincial levels were explained by the Nepalgunj Former Deputy Mayor

³³ Interviews in Dipayal, Amargadi and Budar.

India and much more so than staying in Nepal, even though the remuneration and actual work is ostensibly the same. A trend was also observed that people from rural communities were more likely to accept migration opportunities in India, while urban people would hold off for the Gulf nations. Gulf nation migration opportunities did tend to pay a little more, where people could save up to 2,400 USD per year compared to only 2,000 USD in India. This, however, was not applicable to those that were placed within reputed companies in India that offered formal jobs with a contract, as they were paid decent wages and a significant portion of their earnings was saved owing to the cost-effective boarding and food facilities that accompanied positions within such organizations. Interviewees cited that their wages in the first year tended to pay off the loan and then they made their money in years two and three.

Most migrant labor is men, working in construction jobs, but increasingly, women are taking opportunities for domestic housework in Israel, Saudi Arabia, and Jordan (and informally in India)³⁴. In these countries, the GON has negotiated a bilateral agreement on minimum wages which offers some protection to the Nepali women. There was reported to be some stigma associated with returning female migrants, where communities placed an association with sex work, although the link between female migration and sex work is known only to be circumstantial and isolated.

Diversity - Agricultural machinery design and size of agricultural inputs

Another implication on production from migrants being mostly men and women taking on lead roles in agricultural production is in the nature and design of agricultural equipment. Women who remain on farms are unable to operate the heavy machinery necessary for cultivation, resulting in opportunity cost in production. The largest machine retailer in Nepalgunj - Yogesh Machinery P. Ltd. - informed the research team that women do not purchase the heavy machinery he stocks because they're unable to operate them. These machines, power tillers for example, are designed as partially assisted machinery, meaning that they still require the user to apply a large amount of strength to operate effectively.

Similarly, there seems to be a lack of sensitization in terms of dealing with women farmers. During a visit to the government center that was distributing sacks of rice, it was observed that the sacks were 60kgs each and not suitable for women farmers that had to carry them back to their homes on their backs.

Power Dynamics

Natural power imbalances are present in the Nepali labor market between employers and migrants - little job security, collective bargaining agreements, unionization. Many laborers citing job security as a key reason for taking on migrant labor work as opposed to domestic opportunities. Furthermore, the prevalence of migration being largely male is changing the power dynamics of women left in Nepal. This was evidenced by women farmers taking lead roles in farming enterprises. Returning workers tend to come home equipped with experience and savings that empowers some of them to start new, successful farming enterprises.

³⁴ Nepal Migration Labor Report, Ministry of Labor, Employment and Social Security, <https://moless.gov.np/wp-content/uploads/2020/03/Migration-Report-2020-English.pdf>

There is evidence that power dynamics are changing with local government. For example, in response to increasing evidence that communities are aware of and worried about human trafficking and other risks to migration, district administrative offices have started providing safer migration information. They also offer training so migrants find skilled labor work and various programs (i.e, counseling, entrepreneurship, etc.) to support family members that remain in Nepal.

Cooperation

Male-led out-migration has raised the value of women cooperating around their farming business since they have been pushed into new roles as household heads. As a result, farming cooperatives are largely made up of female members. The changing role of women in agriculture has also had a direct impact on customer segmentation for agrovets, financial institutions, and other supply chain actors where women now make up the majority of customers.

Competition

Favoritism towards known applicants in job market opportunities tends to be prevalent, with examples of nepotism cited in some HR processes.

Migration has changed the competitive landscape of labor because the labor market, which is already constrained with lack of supply, is further stretched when the men of the household opt to leave for India or the Middle East for work, leaving the wives, sisters and the parents behind. At the same time, because often in women-led households, women were burdened with the added responsibilities of cooking, cleaning, taking care of the elderly (usually the in-laws) and farming in their land (mostly kitchen gardening with a few chickens, and cows on the side). They are left with little flexibility to pursue opportunities raised by the competitive changes.

Business Strategy

Larger employers tend to favor skilled labor from India over Nepali workers because they are seen as more reliable, better trained, and more hardworking. The assessment team also came across semi-skilled Indian workers from across the border camping out with their families in patches of land. While inversely, there is a typical strategy for Indian companies to bring in Nepali workers for the lower paid unskilled labor jobs.

In Nepali agriculture, it is rare to find someone self-identifying as a full time or professional farmer.³⁵ In general, there is only sufficient work in the limited farming season which results in necessary migration during the off season, or at least some form of alternative labor job like part-time building or local road construction.

Mechanization in agriculture has been a way to reduce drudgery and improve farming efficiency. But not everyone can afford machinery, despite partial subsidies from the government.³⁶ To cash in on this

³⁵ Gauri Chaudhary, Chairperson of Shreejansheel Mahila Cooperative, Attariya

³⁶ Interview with Yogesh Machinery, Nepalgunj

opportunity, farmers in a group from freed Kamaiya³⁷ community are purchasing machinery with money borrowed from the group lending model as the land allotted by the GON for resettlement doesn't allow for them to collateralize against loans. The machinery is rented for a fee to the members of the group as well as other households in the community.

Meanwhile, the large retailers and machinery traders³⁸ are aligning themselves with the government agencies to get their machinery pre-listed on the list of the subsidized equipment. As a result, farmers accessing subsidies automatically ended up purchasing their machinery once their application for subsidy was approved.³⁹

In considering risk planning in relation to the labor market, the assessment observed trends at the household and business level. On the household side, risk to household income and liquidity is very much managed by selling labor. Families are willing and able to send labor abroad when the need for cash income arises. On the other hand, there was little evidence of risk planning in the event of workers being forced to return home, aside from perhaps the savings that were accumulated during the migration period. Businesses tend to manage their risk by offering very little job security to laborers, as circumstances change in a business cycle, labor is considered something that is most easily expendable.

Rule of Law

Rule of law in Nepali migration is evolving, with examples emerging of migration permits and passes, especially for the Gulf state labor market where passports are required. The reality of the open border with India remains, however, where no passport is required. This enables migrants to bypass the fledgling GON systems of tracking, vetting, and training migrants when destined for India.

³⁷ Kamaiya: A community of bonded labor freed in 2000. GON provided 1690 sq. ft. of land to each Kamaiya household for subsistence, after abolishing the system and freeing them from the bondage.

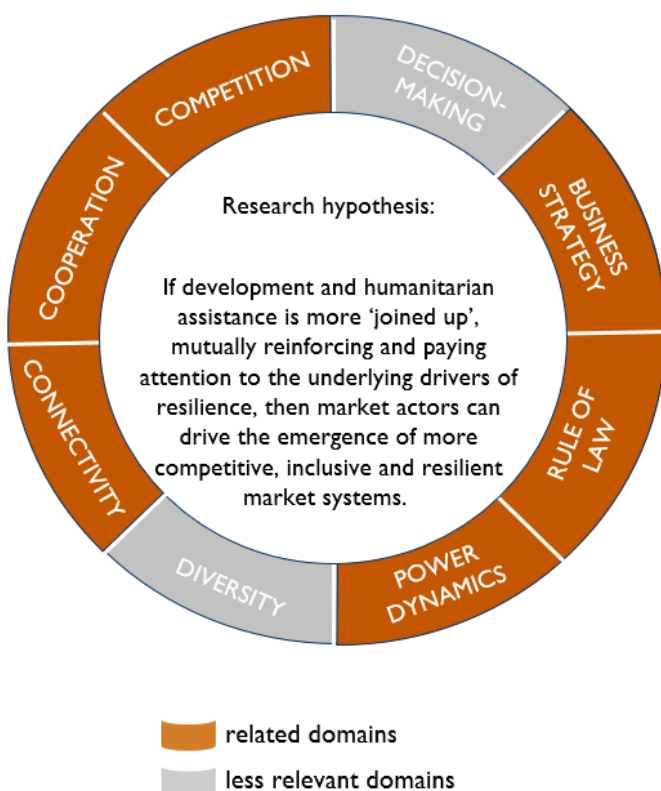
³⁸ Yogesh Machinery, Nepalgunj

³⁹ Some of the individual farmers from the same community who have leased additional land for agriculture, have purchased similar machinery on partial subsidy and loan, and are also providing agri-machinery hiring services to farmers, to plow lands and to harvest produce.



Activity Collaboration, Learning and Adaptation (CLA)

Market systems grow and often change in unpredictable ways, but there are some general characteristics that market systems tend to follow as they become more competitive, inclusive, and resilient. A key initial insight from the assessment process is that sequencing is an essential element when considering the effectiveness of layering.



The fourth area of inquiry is related to various incentives that have emerged during the assessment process that seem to influence activities in ways they apply CLA that are affecting layering. In some cases, incentives related to targets or how narrowly an Activity is framed in contracts and agreements, can encourage or discourage how activities relate and work together or not. As MSR lenses have become more commonplace they have highlighted the importance of resilience across all of USAID's activities, including the potential catalytic effects of layering. As a result, exploring CLA influences have become important elements in applying systems approaches in many Missions. Using the MSR framework to highlight common interests across activities is proving especially helpful as exploring the domains both uncovers and highlights interconnections and interdependencies that link Activity objectives together in compelling ways.

Layering and Sequencing

Markets tend to follow a path that reflects how attractive or beneficial a business function is perceived to be. As such, market actors are unlikely to engage the most remote, high-cost communities unless there is an attractive opportunity that more than compensates for the higher transaction costs and associated risks. In this context, layering can be an effective way for USAID to mitigate the risk gap often associated with vulnerable and remote communities. By working at the community level, one Activity, for example, can catalyze change and identify high-potential opportunities for market actors to engage the community. At the same time, one or more other Activities can work with market actors to quicken their pace of

growth and look for opportunities in locations that are unlikely to be front of mind from a purely commercial mindset.

It should be noted, however, that communities and market systems' evolution is often unpredictable and not at the same pace. This leads to many contexts in which sequencing is a more likely path for USAID to consider for more impact. Sequencing is when an Activity works with elements of a market system with the expectation that as change begins to emerge, other Activities can build on and leverage that change relative to a different aspect of systemic change. For example, KISAN II is working with many market actors and most of them will focus on the easiest path for growth, which will not include the most vulnerable communities. But over time, as those firms grow and the vulnerable populations become more connected, the interaction between firms and vulnerable communities will occur, as firms recognize the potential of different customer segments, including more vulnerable ones. A sequencing approach would see USAID Activities identify this progression and begin to pick up where KISAN II's reach ended, or at the beginning of the point where vulnerable populations are becoming connected with market actors.

From the perspective of this MSR assessment, the key to constructive integration (of layering and sequencing) is that Activities must apply effective CLA practices to determine when and where the immediate opportunities are to generate the benefits of layered interventions or where sequenced interventions are more likely to gain traction.

Leverage in Layering

Emerging during the initial interviews and fieldwork is the additional element of an Activity's leverage capacity relative to layering. For example, Activities with no geographic overlap have minimal leverage capacity since any effects from one Activity would not be likely to impact another Activity. Beyond geography, a market system's narrowly defined boundaries can also limit the leverage that layering can have. For example, while analytics suggest there is commercial potential for maize, it is a relatively narrowly defined market system meaning any vulnerable population not engaged in maize will not be impacted. In contrast, as KISAN II has viewed agricultural inputs as a market system, positive effects are likely to result via knock-on effects for all vulnerable populations active in an agriculture system more broadly defined and encompassing almost all rural communities.

The influencing capacity within a market system is also an important area of potential leverage. As KISAN II learned to effectively engage rice millers, which have substantial influencing capacity in terms of the competitiveness of the rice market system, the potential for KISAN II to catalyze positive layering opportunities increased substantially. An additional leverage point is the approach an Activity takes. Approaches that are more catalytic or designed to create change within the market system that leads to ongoing change are more likely to eventually have knock-on effects. This is especially true where there is likely to be a time lag in sequencing between when an initial intervention occurs and when an effect happens in another geography, related market system, or in more rural and less commercial farming communities.



ACTIVITY INFLUENCE ON MSR

Using an MSR Framework, the assessment has identified (i) areas in which layering seemed to be present and achieving resilience outcomes, (ii) where sequencing seems to have high potential, and (iii) where some considerations have emerged that might have limited the catalytic effect of USAID's investments.

Competition

- KISAN II is catalyzing a shift in agrovets' focus away from solely capturing a margin to delivering value to customers. Through this shift, KISAN II is also catalyzing a change in the competitive landscape. This change in competitive landscape can be a substantially more effective lever as

having agrovets that are customer-oriented signals to other agrovets the commercial benefits of delivering value to customers. With this, the pace of systemic change is quickened and leads to better returns on layering investments.

- KISAN II is also shifting the way rice millers engage their farmers as suppliers to better improve their competitive position. This can be seen as rice millers supported by KISAN II have generated solid growth, other rice millers have started to adopt better supply chain management practices as well. The pace of systemic change has increased, improving the returns on layering investments.
- Additionally, Pant Agrovet in Khajura offers a 10% commission on sales of products from their store to a junior agricultural technician who works for another agrovet. This agrovet mentioned KISAN II as having taught them this marketing technique of incentivizing sales beyond his own employee. Promoting competitive business practices like these catalyzes positive change.
- An agricultural machinery subsidy program by GON was promoted by CSISA in Kailali province. CSISA worked with returnee migrants during COVID-19 to help them start their business as an agri-machinery hiring service provider. CSISA provided some subsidy for the purchase and linked 60 returnee migrants to financial institutions to obtain loans for agri-machinery, which seems to be catalyzing the emergence of various services like land preparation. The emergence of such services tends to increase the efficiency of equipment purchased, making it more accessible to smallholders.

Cooperation

- KISAN II worked with local agrovets and rice millers to improve their engagement of poor farmers as customers and suppliers, respectively. In market systems terms, this type of cooperation is fundamental and leads to improved outcomes for vulnerable populations that initially were supported by PAHAL and are now being supported by USAID'S follow-on Activities. The rice mills that were initially supported with grants were later provided with technical support by CSISA on sowing and harvesting technologies - which they in turn disseminated through their farming supply chains. During the trainings, CSISA also provided the farmers with factsheets on 'New Technologies in Rice Plantation'.⁴⁰
- Integrated Watershed Management Activity (IWMA) is a joint Activity undertaken by 5 USAID Activities in the region (PAHAL, SAAHARA, Hariyo Ban, PAANI, and KISAN II). This Activity was piloted in one community with 40-50 households, with each Activity drawing on their unique expertise to improve water security for these households through better coordination and integration of USAID Nepal's Feed the Future Environment and Resilience Activities. IWMA aimed to improve coordination, cooperation, and collaboration among selected USAID-funded Activities that focus on improving water security and sustainable watershed management.⁴¹
- The assessment found USAID logos appearing on equipment in supported private sector services, which can indicate that USAID favors a specific business over another business. Market systems approaches avoid this risk by focusing on improving how equipment providers compete on the value they deliver to smallholders.

⁴⁰ KII with Lokendra Khadka, CSISA program, Dhangadi

⁴¹ IWMA - Enabling collaboration to improve water security. Nepal Case Study. <https://winrock.org/wp-content/uploads/2021/08/SWP-IWMA-Nepal-Case-Study-6-3-2020.pdf>

Connectivity

- While connectivity can be messy and influenced by many factors and forces, USAID Activities are catalyzing improved connectivity, especially between commercially-grounded relationships (i.e., relationships outside traditional identity/friends-and-family groups).
- The USAID Activities working with the most vulnerable have an expectation that Activities working with market actors or systems would push firms to move directly toward engagement with their vulnerable populations, but market realities often slowed when and how market actors engaged the most rural and vulnerable populations, suggesting that intentionally planning for sequencing would be useful.
- The Activities catalyzing roads and mobile communications networks are an excellent example of a sequencing opportunity that is paying off in USAID programming. As roads and mobile phone networks reach more remote communities, the transaction cost for market systems to engage those communities decreases significantly. This was observed via the increasing market activity and mobile services being accessed by communities that were previously underserved.

Power Dynamics

- One consideration that emerged is that some Activities focused on changing market power dynamics by encouraging farmer group formation so that farmers can negotiate from a position of power as they now have more crops to sell. While initially this makes sense, from a market system competitiveness, inclusivity, and resilience perspective, this is likely to be counterproductive as it maintains and even reinforces problematic win-lose power dynamics tied to transactions.
- USAID Activities, including KISAN II, that focused efforts on agrovets and rice millers' ability to wield market power to generate value addition seemed to improve the effects of layering.
- USAID Activities that worked with local Government to ensure shifts in political power from federalism led to value addition benefits accruing to local constituents (including vulnerable populations) seems to have improved resilience, inclusivity, and competitiveness in market systems.

Business Strategy

- KISAN II's approach to working with firms on improving their growth, especially with agrovets and rice millers, seems to bolster the positive effects of layering and sequencing USAID Activities. Specifically, in supporting firms to integrate alliance, trust, and relationship building as core to their business strategy. As a result, market actor resilience also tended to improve because maintaining relationships, even at the expense of short-term commercial performance, seemed to be an important indicator of effective management of COVID-19.

An additional example of how CLA is working well is the monthly or bi-monthly district level or regional level meetings. In these meetings, each Activity hosts on a rotating basis and all coordinators of the programs meet to present project updates and discuss possible ways to collaborate.⁴²

⁴² A list of some tangible examples of areas where the projects are collaborating are included in Annex 2.



KEY OPPORTUNITIES FOR APPLIED LEARNING

For Donors

Improving Layering: Layering is a reframing of effective CLA across Activities that are designed to work on complementary elements of a market system. For example, PAHAL and BHAKARI have been working on targeting the most poor and vulnerable populations, and their market interactions have a strong

subsistence or short-term focus, which makes sense given the more immediate risks facing these vulnerable populations. KISAN II is focused more on growth, with targets to push a focus on larger, more commercially active parts of the zone of influence. As a result, there are areas where there is overlap that leads to effective layering. Notwithstanding, there are some important opportunities that did or indeed could emerge, but because cross-Activity CLA was not front of mind in the Activities, adaptations are unlikely to happen. There are also some misperceptions between Activities and staff that biases the Activities from seizing opportunities:

1. Market systems tend to evolve based on the most attractive next opportunity – so it is unlikely that market systems or specific market actors are going to jump to the most difficult path for growth. That is to say, strategies that aim to see market systems engage or incorporate the most vulnerable populations often have to start with strategies that engage other more commercial areas first;
2. As market systems evolve, quirks of geography, microclimates, or isolation that were once a driving force for vulnerability can become a competitive advantage. For example, growing hybrid seeds is better in more isolated areas. Interaction and CLA around emerging opportunities and how they fit, can therefore change a location from a costly to a high returning opportunity; and
3. Typically, the most compelling commercial opportunity that will encourage market systems to engage and develop mutually beneficial relationships with more rural or vulnerable populations, does not include basic commodity crops or any one single crop. Therefore, **how a project is framed will often guide how it adapts**. For example, it may make more sense to reframe objectives related to building effective commercial relationships that quicken the pace of a range of market systems to see value in rural and vulnerable populations; as opposed to more narrowly focusing on product defined systems.

Considerations for Accountability: Accountability and careful evaluation of USAID Activities creates incentives that can be harnessed to improve layering. Some specific examples of where changes in oversight could improve layering, include:

- **Technical strategy and tactics:** Activities could be assessed based on the application of good market systems practices that include facilitation, learning, and adaptation. Assessments should focus on systemic change, amplifying, and leveraging internal systemic change processes, and opportunities to reinforce them as a desirable practice.
- **CLA at a portfolio level:** Activities should be assessed based on their contribution to the catalytic change objectives defined at a USAID portfolio level. These would include teamwork, shared learning, and shared implementation.
- **Shared performance metrics:** Use shared metrics that include measurement processes that are wrapped into joint evaluations and assessments that cut across layered Activities. Experience suggests that including more systemic joint metrics, like the influence from end-consumers on market systems or improvements to the competitive landscape in favor of value addition, can encourage more effective CLA between Activities.

There are some important levers that USAID could consider for improving outcomes from layering, by considering increasing leverage from layering and sequencing:

- Create geographic overlap that allows for market systems Activities to engage the market system where momentum for change emerges. This often is not in the same geographies where the rural communities actually live, even though these changes directly affect their communities. At the same time, it is important to maintain the systemic change objective related to poverty reduction or inclusive growth, that focuses on rural and vulnerable populations in keeping with the national trends across Nepal towards overall poverty reduction.⁴³
- Generate market systems boundaries that create multiple paths for improved structural and behavioral elements of systemic resilience. While market systems approaches have evolved with an assumption that boundaries should be crop-focused, increasingly, systems-thinking approaches are shifting to think differently about boundaries, including greater consideration being placed on relational considerations. For example:
 - Shifting from a crop-specific boundary to a wider category, like from seeds towards retailing inputs, or from tomatoes towards horticulture supply chains.
 - Shifting from a function-specific boundaries that focus for example only on processing or farming. These function specific boundaries for an Activity can run counter to what MSR would suggest is more central, which is the relationships that connect and bind the functions together, as opposed to inadvertently reinforcing an adversarial trading perception that guides market actors.
 - Shifting from a commodity crop where lots of people are involved, but margins require scale efficiencies, to a higher-value crop that has more compelling commercial incentives in favor of relationship building.
- Applying catalytic, systems thinking approaches that are specifically designed to maximize internal change processes that lead to ongoing change. For example, working with seed companies to improve their ability to monitor brand representation through their distribution channels. As a stronger brand drives increased sales, this change process will be reinforced and become internalized as a beneficial element of core business.
 - Especially in regard to layering and sequencing, market systems approaches should focus on maximizing the positive effects that grow over time or that increase the impact of layering and sequencing of Activities.

⁴³ Between 1996 and 2011, the proportion of households living in extreme poverty fell from 46 to 15 percent. <https://openknowledge.worldbank.org/bitstream/handle/10986/32355/134956.pdf?sequence=1>

For Programming

Role of Formal Social Safety Nets and Emergency Response Services: USAID could be more focused on supporting the emergence of fair and stable formal local social safety net and emergency response services. Aligning its efforts with the shifting domestic trend post-federalism in Nepal of an increased reliance on government and public goods. Specifically, USAID could consider programming that:

- Reduces the reliance on informal social safety nets that are dependent on following or adhering to communal social norms that have negative knock-on effects and are often unfairly distributed. That is, those tied up in rigid social structures around ethnicity, caste or gender norms.
- Shifts away from power dynamics related to both central and local government patronage. This limits interest and effectiveness of formal social safety nets and response services.
- Uses cash as the primary form of social safety net or response service.
- Uses technology to limit inefficiencies. That is, programming strategies that overcome accessibility or connectivity issues due to Nepal's terrain and offer better prioritization based on need.
- Builds up or leverages the market system's capacity, so that cash can solve most immediate challenges through commercial supply chain processes.
- Increases the attractiveness of commercial relationships, especially relationships that cross identity barriers like caste, ethnicity, gender, and age.

Market Competitiveness: USAID could focus programming on systemic change that leads to increased competitiveness, inclusivity, and resilience, moving forward with Nepali society along a path toward large group institutions. USAID could consider:

- Change at the competitive landscape level to favor value delivery to mass market, which is typically defined by mid to lower income segments. Programming should focus on fostering:
 - Feedback, in the extent to which market actors are responding to customers and the interests or needs of society more broadly;
 - Investment in marketing and branding at end customer level to differentiate products based on quality and brand value;
 - Competitive response patterns that focus on value addition as strategic advantage, as opposed to tactics that focus on hurting competitors, protecting power or capturing margins;
 - Cooperation patterns among market actors that favor value addition versus power accumulation, for example, industry alliances based on quality of efficiency rather than cartel behavior;
 - Mechanisms that can increase trust and transparency to underpin transactions between 'unknown' groups, for example grading or industry standards; and

- The role of civil society, media, disputes resolution, and government that reinforce competitive landscape changes in favor of value addition to customers.
- Retail distribution shifts toward a greater emphasis on the largest customer segment (mid and lower income segments), competing on customer value and expanding into new segments or geographies. Programming should foster stronger retail functions, including a greater focus on marketing, branding, product diversification, and specialization. Programming should also incentivize greater scale efficiencies, improved customer data capture, and usage norms.
- Supply chain management shifts toward quality assurance and performance-based management that would be guided by alliance-based business strategy and investment patterns. Encourage business strategy decisions that are responsive to end customer needs and wants. Entrepreneurial ecosystems that shift toward customer value and wealth creation via firm value or shared risk investment. Build links to financial systems in order to generate more commercial and equitable sharing of risks vs reward.
- How initiatives around finance, technology, business services, and skill development market systems need to be engaged as a market system in and of themselves, if inclusive growth is to fully emerge.
- To make the system more inclusive, the enabling environment should include some support beyond specific policies that lead to an improved capacity to change over time. These in turn lead to ongoing improvements in the competitive landscape. In particular, support to catalyze shifts in media, civil society, and government so they are more effective at rewarding and sanctioning market structures and behavior that lead to improved competitiveness, inclusivity and resilience.
- Farmer coordination can be encouraged in USAID programming, because we know that farmer cooperation, especially related to the inherent inefficiencies of smallholders, is essential. However, for good cooperation to emerge as the dominant behavior pattern, it needs to manifest from within the system and generate multiple different organizational structures as opposed to projects simply forming farmer groups in a vacuum.⁴⁴

Labor market dynamics and migration: USAID could focus programming on leveraging progress in market competitiveness to catalyze improvements in the labor market supporting functions. This could include functions like vocational/educational, job/career placement services or connectivity between private sector and these services, etc. Additionally, USAID can support mechanisms that smooth out the fluctuating nature of labor market dynamics in Nepal, making adjustments as necessary in response to emerging trends towards in or out migration. USAID could consider:

- Improving the connectivity, effectiveness, and feedback loops related to key labor market functions, which may include human capacity (i.e., education vocation training, job training, etc.),

⁴⁴ See Annex 3 for a more detailed exposition.

signals related to skills that are increasing/decreasing in value, connectivity functions like job placement services, etc. These all can smooth the volatility of labor markets.

- Harnessing the labor market disruptions to encourage or increase the pace of positive change, such as the changing roles and responsibilities of women in rural communities that, in part, is the result of exported labor trends. USAID could support policy adaptations, market-led innovations, social movements, etc. that emerge out of migration disruptions, but could catalyze greater inclusivity.
- Catalyzing more effective support services that minimize negative effects from unexpected shocks or stresses. These shocks can be caused from disruptions in the labor market, such as when COVID-19 sharply reduced opportunities for Nepalis to work overseas, in turn immediately reducing remittances and creating a liquidity crisis for many families. USAID can support the emergence or improvements in social safety net services (i.e., skills training, employment insurance, job placement, etc.), civil society support functions (i.e., training, transition support, job placement, etc.) and improved market responsiveness (i.e., training, education, mentoring, apprenticeships, etc.).
- Catalyzing a more dynamic and inclusive entrepreneurial eco-system that can provide a more robust and viable pathway for Nepali. This would include segments of the populations that have to adapt in response to a disruption such as returning migrants. USAID could support the emergence of private capital sources, entrepreneurial support services (i.e., incubators, accelerators, transaction advisors, etc.), and public awareness or education of alternative financing options (i.e., equity, shared risk mechanisms, non-bank finance, etc.)
- Catalyzing various public and private support services and functions that can smooth-out disruptions related to labor market dynamics and migration. USAID could support improvements in financial services, media, dispute resolution mechanisms, public transport, digital platforms, shelter (both short and long-term). These would ease the movement of people in response to moving work or other shocks.



CONCLUSION

Nepal is undergoing a substantial change process, especially in the context of how risks are managed. This process is central to how the communities and market actors manage risks related to shocks and stresses. For the most part, the changes are positive from a competitiveness, inclusivity, and resilience perspective, in that risks are increasingly being managed at the market system and national levels, alleviating the full burden of risk being carried by individuals and communities. This in practical terms means the burdens are being more fairly shared. There is also a substantial positive change in the role of the private sector, especially in relation to rural and more vulnerable populations in both how those populations generate income, and how products flow to those communities.

At the same time, the change process is emerging in uneven ways as various factors and forces like sticky social norms, misaligned incentives, and external forces are hindering or slowing the pace of positive change.

From a systems-thinking perspective, the uneven and at times unfair progress strongly suggests that increased importance be placed on areas of positive change to increase momentum and make the changes increasingly more attractive.

ANNEX I - BIBLIOGRAPHY FOR DESK RESEARCH

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ANNEX 2 - EXAMPLES OF COLLABORATION AND LAYERING AMONG USAID ACTIVITIES

- KISAN II provided its private sector traders directory to SUA AHARA II staff for use by Village Model Farmers (VMFs) for household marketing of surplus vegetables. KISAN II partners linked VMF to KISAN II grantee groups for vegetable production and marketing, while also providing training materials for vegetable value chain to VMFs.
- KISAN II collaborated with SUA AHARA II to align with their nutrition materials with KISAN II business literacy program (BLP) short course curriculum to further disseminate nutrition information and behavior change activities.
- KISAN II also enrolled potential VMFs in KISAN II's BLP program.
- SUA AHARA II provided orientation on 1000 Golden Days by VMF to KISAN II farmer groups (farmers customers of the KISAN II's grantee businesses/cooperatives).
- A CSISA trained engineer facilitated operation and maintenance training of machineries to KISAN II farmers (farmers customers of the KISAN II's grantee businesses/cooperatives).
- CSISA supports trials of seeds and agro-machineries, which are promoted by market actors that are supported by KISAN II and NASF.
- KISAN II and NASF worked together for the promotion of new seed varieties of rice, maize and lentils through demonstrations in farmers' fields.
- NASF and CSISA have been working together to catalyze greater innovation in the seed market system in developing seed varieties.
- Developed knowledge products on Fall Armyworm, IPM and best management practices in vegetables, rice and maize together with Feed the Future NIPM and NASF.
- Layering/sequencing between farming communities supported by PAHAL and agrovets supported by KISAN II in Dadeldhura district. An example of activities done through collaboration among PAHAL, Hariyo Ban and KISAN II work can be seen in Jogbudha of Dadeldhura district.
- Farmers who receive nutrition information and training from SUA AHARA are linked to the partner cooperatives that are supported by KISAN II.
- CSISA supports trials of seeds and agro-machineries, which are promoted by market actors that are supported by KISAN II and NASF.
- CSISA had supported KISAN II to demonstrate agro-machineries like rice seedling transplanter.
- CSISA team in Nepal provided the capacity building for Joint Rice Intervention Program (co-program on fine rice between KISAN II and GON) stakeholders in case of scale-appropriate farm mechanization.

- KISAN II requested CSISA to provide an orientation program on different types of farm mechanization to government officials from Sudurpaschim and Lumbini Provinces in support of JRIP.
- CSISA staff trained government staff (AKC, PMAMP) on different operational models of mechanization service provision in JRIP. The overall goal of this event was to familiarize the different models of service provisions of farm mechanization in Nepal.
- An online training on “business management” for the custom hiring centers (CHCs) and individual service providers was organized by the KISAN team and the training event was provided by the CSISA team. Several individual machinery service providers (SPs) and representatives from CHCs participated in this training program. The training aimed to help the participant in effectively managing the machinery so that they can provide the renting services and make mechanization services lucrative.
- CSISA assisted KISAN II and rice mills in developing technical equipment and business model for machinery fleet services relevant to 2020 rice season (under JRIP).
- Farmers Groups receive training and other technical support from BHAKARI and receive input support from SUAHAARA;
- Layering/sequencing BHAKARI is mobilizing private actors supported by KISAN II for supplying breeding bucks to the livestock groups;
- PAHAL-supported improving water access and management for agricultural activities were initiated by SUAHAARA II;
- KISAN II and SUAHAARA II supported for the expansion of agricultural inputs and supply networks to more remote areas identified and initiated by PAHAL;
- Suaahara II has a partners’ forum which holds regular meetings;
- A joint program called IWMA (integrated watershed management activities) was developed under PAHAL, Hariyo Ban, and Paani. On this platform a plan was developed and implemented in Jhimruk and Rangun river watershed. While these areas are not targeted under BHAKARI, the learnings are being utilized under BHAKARI, specifically replication of the bio-engineering work;
- PAHAL initiated bio-engineering techniques to mitigate landslide, slope stabilization and water source protection in its last year (2019); we are now rolling this out under BHAKARI across our target districts. We can see an exemplary work of this initiated in the Nauli Community of Rakam, Aathbis -Dailekh, where bamboo crib wall along with wattling, fascine and brush layering were applied and is being demonstrated as a learning lab for technology demonstration. The work was collaborated with Paani and now with the local government for replication.

ANNEX 3 - GROUP FORMATION EXTENDED NOTE

Farmer cooperation, especially related to the inherent inefficiencies of smallholders, is essential for market system competitiveness, inclusivity, and resilience. From an MSR perspective, it is important to consider why more effective cooperation is not happening at the farmer level.

In some cases, there are assumptions about the 'bad intentions' of the private sector that influences how activities encourage farmers to cooperate with a focus on improving negotiating power, which often reinforces adversarial perspectives and mistrust between farmers, traders and processors. It seems that such assumptions about the intentions of the private sector are changing, but this perspective was observed, nonetheless. It is also important to consider the diversity of organizational structures, since healthy market systems need to have multiple organizational structures (i.e., limited liability, coops, associations, agreement/contracts, business models, informal groups/agreements, etc.) through which market actors, including farmers can more effectively cooperate.

One key takeaway was that good cooperation between smallholder farmers is essential as it is critical for commercial relationships to form that lead to mutual benefits accruing over time, but cooperation is different from organizational structure. Another related takeaway was that for good cooperation to emerge as the dominant behavior pattern it needs to manifest from within the system and generate multiple different organizational structures as a way to improve competitiveness, inclusivity and resilience of market systems.

Therefore, the message is not that farmer cooperation is unimportant but rather that we need to see that cooperation emerging from within the system.

That means, implementing organizations should consider ways to catalyze or incentivize market-based initiatives that will encourage cooperation – rather than simply forming producer groups in a vacuum.

ANNEX 4 - FIELD ASSESSMENT SCHEDULE

No	Stakeholder	Project/ Relevance to the assignment	Town/Village	District	Province
1	KISAN II field office program team	KISAN II	Dhangadi	Kailali	7, Sudurpashchim
2	Kisan agrovet centre	KISAN II and CSISA	Dhangadi	Kailali	7, Sudurpashchim
3	Shreejansheel cooperative	KISAN II	Kanchanpur	Kanchanpur	7, Sudurpashchim
4	Agriculture Knowledge Centre - Kailali	Cross-cutting	Dhangadi	Kailali	7, Sudurpashchim
5	Local Vegetable Farmer	Cross-cutting	GETA, Dhangadi	Kailali	7, Sudurpashchim
6	SUAAHARA II field office program team	Suaahara II	Dhangadi	Kailali	7, Sudurpashchim
7	Shreejansheel Women's Development Multipurpose Cooperative	KISAN II	Attariya	Kailali	7, Sudurpashchim
8	Siddhababa Farmers' Group (FGD with Women's group)	KISAN II	Attariya	Kailali	7, Sudurpashchim
9	CSISA Field Staff	CSISA	Dhangadi	Kailali	7, Sudurpashchim
10	Baadi Community (FGD with Women's group)	Suaahara II	Lamki	Kailali	7, Sudurpashchim
11	Custom Hiring Service Provider	CSISA	Ghodaghodi	Kailali	7, Sudurpashchim

12	Deputy Manager, Standard Chartered Bank, Nepalgunj	Cross-cutting	Nepalgunj	Banke	5, Lumbini
13	Sahu Rice Mill	KISAN II	Nepalgunj	Banke	5, Lumbini
14	Subha Laxmi Store, Kohalpur Vegetable Market	KISAN II	Kohalpur	Banke	5, Lumbini
15	Agri-insurance companies (FGD)	Cross-cutting	Nepalgunj	Banke	5, Lumbini
16	Surya Agrovet	KISAN II	Khajura	Banke	5, Lumbini
17	Sabitri Krishi Farm	Cross-cutting	Khajura	Banke	5, Lumbini
18	Commercial Banks (FGD with focus on Agri- lending)	Cross-cutting	Nepalgunj	Banke	5, Lumbini
19	Yogesh hardware Store	Cross-cutting	Nepalgunj	Banke	5, Lumbini
20	Bhatbhateni Supermarket	Cross-cutting	Nepalgunj	Banke	5, Lumbini
21	Former Mayor, Nepalgunj Municipality	Cross-cutting	Nepalgunj	Banke	5, Lumbini
22	Former Deputy Mayor, Nepalgunj Municipality	Cross-cutting	Nepalgunj	Banke	5, Lumbini
23	Pant Agrovet Centre	Suaahara and KISAN II	Khajura	Banke	5, Lumbini
24	Beneficiary Vegetable Farmer	KISAN II	Khajura	Banke	5, Lumbini
25	Bina Food Product (Rice Mill)	KISAN II	Tikapur	Kailali	7, Sudurpashchim

26	Local Fruits/Vegetable Trader	Cross-cutting	Sahajpur	Kailali	7, Sudurpashchim
27	Dipendra Agro Vet	Cross-cutting	Sahajpur	Kailali	7, Sudurpashchim
28	Satellite Collection Center	PAHAL	Aalitaal	Dadeldura	7, Sudurpashchim
29	Chetana Sana Kisan Cooperative	PAHAL, SUSAHARA, OXFAM - DRR	Aalitaal	Dadeldura	7, Sudurpashchim
30	Integrated Development Society	Cross-cutting	Amargadi	Dadeldura	7, Sudurpashchim
31	Agriculture Knowledge Centre - Dadeldhura	Cross-cutting	Amargadi	Dadeldura	7, Sudurpashchim
32	Rural Women's Development and Unity Center (RUWDUC)	PAHAL, SUSAHARA	Amargadi	Dadeldura	7, Sudurpashchim
33	Sajan Agrovat	PAHAL	Dipayal	Doti	7, Sudurpashchim
34	Beneficiary Livestock Farmer	PAHAL	Dipayal	Doti	7, Sudurpashchim
35	Beneficiary Vegetable Farmer	PAHAL	Dipayal	Doti	7, Sudurpashchim
36	Pipal Chautari Guest House	Cross-cutting	Budar	Doti	7, Sudurpashchim