






Ginger farming in Nepal. Photo: Amit Rudro for CRS

Inclusive Warehouse Receipt Financing Pilot for Ginger in Nepal

TECHNICAL BRIEF, KEY RESULTS AND LESSONS LEARNED

Background

The Government of Nepal (GoN) has identified ginger as one of the top 15 value chains due to its potential for reducing poverty, generating income, positively impacting the environment, and promoting inclusion and gender equity. Globally, Nepal is the third-largest producer of ginger, with Palpa district being a major production hub. Despite strong export potential, smallholder and women farmers often struggle to achieve higher profitability due to three main reasons:

-  **Low Prices During Harvest:** Ginger prices are often low during harvest season (as low as \$0.3-0.4 per kg in 2019), forcing farmers to sell at lower prices due to lack of safe storage options and storage losses of up to 30% using traditional methods.
-  **Immediate Cash Needs:** Farmers need cash post-harvest for consumption, debt repayment, and purchasing inputs for the next season, limiting their ability to hold produce for better prices.
-  **Inclusion Barriers:** Smallholder and women farmers particularly suffered from low profitability due to small marketable surplus, low quality of produce, lack of access to formal finance, safe storage and marketing support.

Pilot Concept

To address these barriers, CRS and Caritas Nepal piloted Inclusive Warehouse Receipt Financing (IWRF) in Tansen rural municipality, Palpa district. The Agriculture Development Strategy (ADS) 2015-35 of GoN recommends IWRF as an agricultural finance product to facilitate profitable commercialization. Under this model, farmers use their produce as collateral to obtain credit from financial institutions, with the produce stored in secure warehouses to reduce storage losses.



Key Stakeholders

-  **Tansen Rural Municipality:** Provided land and 50% co-funding to match CRS contribution for warehouse construction, covering operational expenses for five years, and provided technical and monitoring support through their agriculture staff.
-  **Milansar Samajik Udhayami Mahila Sahkari Sanstha Ltd:** A women-led cooperative responsible for warehouse operations, including stock inspection, quality control, and providing market price information to farmers. The cooperative also provides loans against the value of stored stock. So, it plays a dual role in warehouse management and credit provision.
-  **Farmer Groups:** Lead creating awareness about IWRF, facilitated grading & collective transportation.
-  **Nepal Agricultural Research Council – Ginger Research Program (NARC GRP):** Provided technical support for warehouse design and management.

The project developed a comprehensive Standard Operating Procedures (SoP) for agricultural produce storage, approved by the municipality. A “Management Committee” was formed, consisting of representatives from the cooperative, ward, and municipality, meeting regularly to monitor progress.

The Inclusive Warehouse Receipt Financing Process



Key Results

Performance Indicator	Value
Demographics	
# of farmers participating in WRF pilot	39
Male/female	10 F/ 29 M
Average Age of participant	51 years (range 27-73 years)
% of participants who are not cooperative members	71%
Operations	
Total ginger stored	4904 kgs
Average ginger stored per farmer	126 kg (range 83-284 kg)
Average storage loss per farmer (%)	13%
Average duration of storage	2 months
% of farmers taking loan against stock	34%
Average loan size	NPR 8,923 (\$66)
Loan repayment rate	100%
Financials	
Total value of ginger stored	NPR 4,65,833 (\$3,480)
Average value of ginger stored per farmer	NPR 11,944 (\$88)
Average value of ginger sold per farmer	NPR 16,711 (\$124)
Average storage cost for full storage duration	NPR 442 (\$3.3)
% change in price per kg from storage to sale	72%
Increase in net profit %	36%

Key Results (continued)

-  **Negotiation Leverage:** IWRF has strengthened farmers' negotiation leverage, reducing distress selling.
-  **Municipality Support:** Encouraged by first-year results, the municipality allocated additional budget for FY25 to provide financial incentives to farmers.
-  **Replication Potential:** The municipality is willing to replicate IWRF in other locations.
-  **Use of Loans:** Farmers used loans to buy quality agricultural inputs for the next season.
-  **Timely Harvesting:** IWRF enabled timely harvesting, allowing farmers to plant second crops like mustard.
-  **Women's Role:** Women reported having more spare time as ginger storage responsibilities shifted to the warehouse.



Ginger farming in Palpa, Nepal, faced setbacks due to 'Rhizome Rot.' This image shows farmers cultivating the new 'Kapurkot-01' variety by NARC. Women farmers treat the soil with 'Trichoderma' to control the disease. Photo by Jaya Upadhaya/Caritas Nepal

“For years, we've struggled with the middleman taking a large portion of our earnings. It's always been difficult to get a fair price for our hard work. But when I heard about the Ginger Storage and Warehouse Receipt Funding Project, I felt like there was finally a way out. Now, we can store our ginger, receive some money in advance (which I used to lease land for commercial vegetable farming), and wait for the right market conditions, all without relying on middlemen. This project has given us hope for better returns.”

—Mrs. Harikala Ghimire
Ginger Farmer and mother of two children
from Bagnaskali, Nepal

Lessons learned

-  **Inclusion Strategy:** IWRF is an agriculture financial product which is generally considered suitable for semi-commercial, commercial farmers and traders having large surplus stock. The project's inclusion strategy of encouraging smallholder and women farmers with minor surplus production (up to 50kg) to pool their produce and register under one farmer name for IWRF has ensured inclusion and benefited marginal farmers.
-  **Cooperative Engagement:** The project's intentional inclusion strategies engaged smallholder and women non-members, leading to their first cooperative experience. This positive engagement offers a chance to include them as formal members and shareholders.
-  **Storage Period:** The average storage of periods of two months was shorter than expected, thus requiring better planning and awareness in the next cycle to increase storage period to 3-4 months.
-  **Marketing Support:** Cooperatives's support on market price information sharing and selling was highly appreciated, motivating farmers to use IWRF.
-  **Production Skills:** Integrating extension activities to improve production and post-harvest management is crucial.
-  **Seed Protection:** Training farmers in seed protection practices using organic alternatives can enhance seed security, productivity and profitability.

Conclusion and Way Forward

The pilot project demonstrated IWRF's potential to facilitate financial inclusion and increase profitability for smallholder farmers. With innovative and locally appropriate strategies, IWRF can be made more inclusive and accessible for women and smallholder farmers. CRS intends to consolidate these results, share learnings, and facilitate policy interventions to scale IWRF as prioritized in the ADS of GoN.



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