

## Situation Report on Nepal's Agrifood Systems

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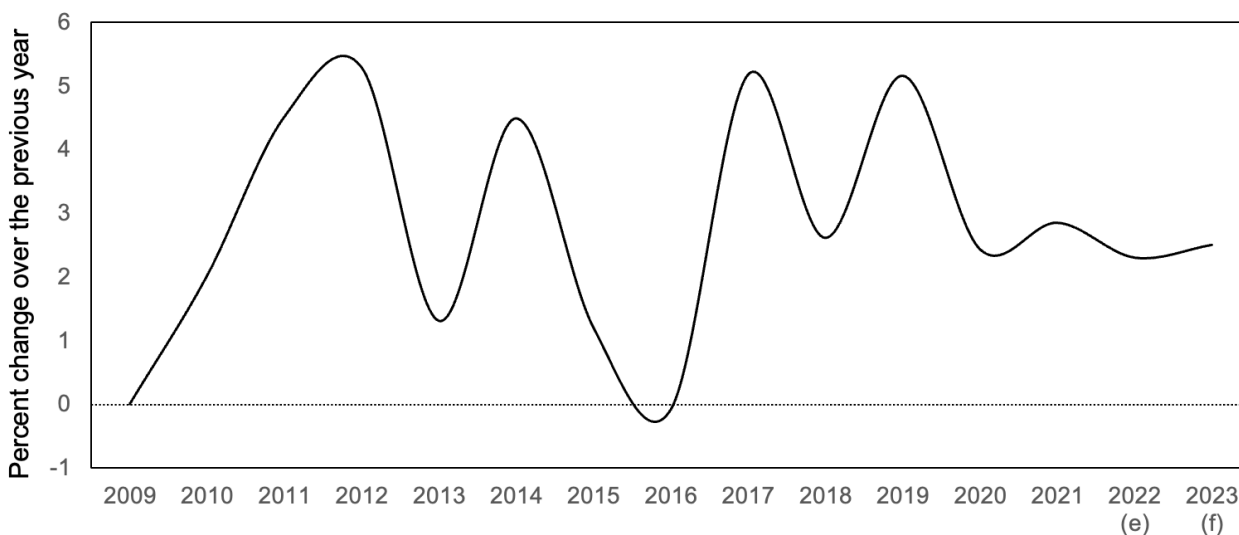
#### Key messages

**Overall assessment:** Nepal's agrifood system remained economically stable during March of 2023. The year-on-year inflation in food and beverage prices has cooled down to 5.6% compared to 7.5% in Feb/March 2022. Field reports however suggest that this downward movement in prices have not yet translated to substantial changes in the cost of consumer and agricultural market goods.

- **Inflation in food and beverage prices is marginally lower than the previous year:** The cost of food and beverages increased by 5.6 percent from March 2022 to March 2023. A sharp 8.8 percent decline in the price of vegetables compared to last year helped lower the inflation in food prices. Food inflation was the highest in the mid-hills and mountains (8.8 percent) and the lowest in the Kathmandu Valley (4.5 percent).
- **Cereal prices remain high even after decent harvests of paddy, maize, and wheat:** Annual inflation in the price of cereals and cereal-based processed foods increased from 9.6 percent in January 2023 and 12.4 percent in February 2023 to 14.4 percent in March despite a small increase in the domestic production of paddy and negligible changes in the projected outputs of wheat and maize compared to the last year. The continuing embargo on the export of broken rice and quotas and on wheat exports by India is partly responsible for the persistently high prices of cereals in Nepal.
- **Agricultural laborers experienced a decline in their real wages:** Wage rates of agricultural laborers increased by 4.7 percent over the 12 months leading up to March 2023, less than the 7.4 percent increase in the overall consumer price index (CPI) and the 5.6 percent increase in food prices. In effect, real wages of agricultural laborers in rural areas have declined. In many areas, the poorest Nepali families may depend on agricultural labor and spend a larger share of their household budget on cereals and cereal products whose prices have increased by 9-14 percent over the past 12 months. The recent rise in consumer prices—the highest since 2016-17— will have the largest negative effect on these households.
- **Stable production despite fertilizer shortages:** Favorable weather conditions and the availability of quality seeds allowed farmers to increase production of paddy and maintain wheat and maize production despite inconsistent chemical fertilizers.
- **Reductions in fertilizer subsidies:** In March of 2023, the Government of Nepal announced a reduction in nitrogen, phosphorous, and potassium fertilizer subsidies alongside a large increase in import of fertilizers from abroad. While farmers already tend to pay higher than subsidized prices for farmers, the dramatic reduction in subsidies could increase prices and potentially introduce further instability in fertilizer markets in the short term. This is anticipated to hurt cash-strapped smallholder farmers the most, with potential negative implications for agrovets who may have insufficiently stocked fertilizers for sale prior to the decreases in subsidy.

In the long-term, however, reduced subsidies may be an advantage as world prices for fertilizers slowly decline.

- **Little growth in agricultural GDP:** Growth in Nepal's agricultural GDP has slowed down after COVID-19 to 2-3 percent per year—barely keeping up with the growth in its population. Even before the pandemic agricultural growth was volatile (Figure 1). The agrarian stagnation and volatility in Nepal have negative consequences for both farmers and consumers.



**Figure 1.** Growth (%) in value-added in Agriculture, Forestry, and Fishing in Nepal [2010-2023]. (e) indicates 'estimated' and (f) indicates 'forecasted.' Note: The growth is measured in constant Nepali Rupees. The growth figure for the year 2022 is based on the advanced estimate and for 2023 is on a forecast by the World Bank.

### Macroeconomic trends and implications for household economic welfare

- **Key message:** As with last month, consumer price index in Nepal continued above the 7 percent target put in place by the Nepal Rastriya Bank Limited (RBL) for 2022-23. High cereal prices continue to be a concern. As with the previous month, export restrictions imposed by India and high costs for fuel, which affect transportation of agricultural goods, continue to be key challenges
- **Import restrictions and high interest rates:** Tightening of monetary policy, restrictions on imports that were in effect till January 2023, and high international prices led to a deceleration in the GDP growth in the first half of the financial year 2022-23. The sharp increase in the interest rate by 350 basis points (3.5 percentage points) in 2022 led to slower credit growth for the private sector. Higher cost of funds can discourage new investments
- **Remittance flows:** The total remittance flow from July 2022 to February 2023 was 25.3 percent more than the total inflow between July 2021 to February 2022 in Nepali Rupees and 14.8 percent higher in US Dollars. According to a World Bank survey in 2019, one-third households in Nepal (36%) reported receiving some remittance income. Robust growth in remittance flows should help families sustain their consumption despite higher prices that have been recently observed

- **Salaries & Wage Rates:** On average, salaries and wage rates in Nepal have been growing faster than the consumer price index (CPI). However, this is not true for all types of workers. For example, wages for female and male agricultural laborers grew more slowly than inflation, indicating potential challenges for rural families that rely primarily on selling their labor to neighboring farmers to sustain household food security. 11.5 percent of rural households in Nepal (22.3 percent in the Terai region) rely in some way on the sale of agricultural labor for their livelihoods. These are often among the poorest households in the country, and their real income from wage labor has declined.
- **Current account deficit and foreign exchange reserves:** Recent increase in remittance flows combined with lower imports have helped reduce Nepal's current account deficit to 0.5 percent of its GDP—down from 12.8 percent in the financial year 2022-23. Nepal's foreign exchange reserves of Nepal increased to 10.7 billion USD in March 2023, enough to cover nearly 9.4 months of imports.

## Recent price fluctuation in food commodities and agricultural inputs

### Rice and wheat

- **Key message:** According to the World Bank's latest Nepal Development Update, Nepal recorded an 8.6 percent increase in the production of rice compared to the previous year. This contrasts with early season concerns that variable rainfall patterns and inconsistent supply of fertilizers could have lowered production. At the time of writing, however, rice prices continue to remain high as markets have not yet adjusted for increased supply. The national average price of coarse rice was 7.6 percent higher than the previous month and it was 4.4 percent higher than the year before. Rice consumers will therefore continue to experience challenges in purchasing rice this month, with potential implications on overall household expenditure.
- **National prices for rice:** Though a cooling down of the price of rice is usually seen in the first few months after the harvest, changes in rice price have not yet occurred in Nepal. This is counterintuitive and may be caused by speculation among rice traders that ultimately affects poor consumers. Rice prices in February 2023 were 7.6 percent higher than in the previous month and 4.4 percent higher than the year before (February 2022), despite the 8.6 percent increase in production in 2022. In February 2023, the Government of India decided against lifting the ban on exports of broken rice and lowering the 20% export tax on white rice. India's decision to extend the curbs on exports of rice and consequent speculation among traders and industry may be a reason for the continuing high prices of rice in Nepal even in the months after the harvest.
- **National prices for wheat:** In 2023, wheat production in Nepal is projected to be 2.2 million tons, as assessed by the Government of Nepal, and 2.1 million tons as assessed by the USDA. Both projections are close to the country's 5-year average production of wheat of 2.07 million tons and indicate some degree of stagnation in wheat production. Currently, the domestic output of wheat is enough to meet the household demand for wheat flour. Nepal nonetheless relies on imports of durum wheat used to produce noodles, bread, and biscuits which contribute to high costs for consumers purchasing these goods. Export restrictions by India — Nepal's

main source of wheat imports —continue to keep prices high throughout the country. Recently, Nepal has made an official request to India to increase the export quota by another 300 thousand tons to ensure adequate availability of wheat flour in the country, though India has not yet formally responded

### Horticultural and select fruit products

- **Key messages:** Nepal's vegetable price index has decreased over the last month, while prices for fruits have increased.
- **Vegetables:** The index of vegetable prices in February/March 2023 was 8.8 percent below the level a year ago and 3.7 percent lower than the previous month. Sharp falls in the prices of potatoes and tomatoes contributed to the decline in the vegetable price index. The availability of cheaper vegetables may to some extent help to mitigate the impact of high and rising prices of cereals and cereal products and milk on household food budgets, although these products are not perfect substitutes and households will likely continue to place their main focus on meeting caloric needs through cereals.
- **Fruit:** Unlike vegetables, the average price of fruits increased by 2.4 percent compared to the previous month and by 7.9 percent compared to the same period in 2022. Among fruits, the price of bananas went up compared to the previous month while apples became somewhat cheaper. The price of fruits and vegetables fluctuates a lot in Nepal due to weak markets and high perishability, underscoring the need for investments in cold storage if price stabilization is a goal.

### Potato

- **National prices:** As expected, the price of red potato declined 17 percent between November and December 2022 following harvests but then increased by 8 percent in January. The rebound, however, was short-lived and prices declined again in February by 13.9 percent at the national level and 15.5 percent in the western provinces in February. The instability in prices could discourage farmers from cultivating potatoes in the subsequent season. Nepal produces 3.3 million tons of potato against the annual demand of 3.7 million tons (91 percent) and imports the rest from India. A bumper harvest and a crash in the price of potatoes in the bordering states of India may have helped bring down prices in Nepal in the early part of the year.

### Tomato

- **National prices:** Across Nepal, tomato prices declined 22.6 percent between January and February 2023. In western Nepal, tomato prices crashed by 24.5 percent. Because tomatoes are highly perishable and difficult to transport, their prices vary widely by season and across different parts of Nepal. As with other higher-value perishables, this also underscores the need for investments in cold chains to extend the period over which tomatoes produced by farmers in Nepal can be sold. Tomato prices in February 2023 were 25.3 percent below the level in February 2022 at the national level and 27.6 percent lower in western provinces.
- **Implications:** Without comprehensive price information and efforts to improve farm management and production planning, farmers often respond to such seasonal gluts and

crashes in the prices of vegetables like tomatoes by allocating less area to the crop in the next season. This can lead to lower output at the overall market level and a sharp increase in consumer prices. Without adjustments in cold chain transport and storage, and improved farm production and market planning – both of which may require policy level interventions – this high volatility in prices hurts both farmers and consumers.

## Banana

- **National prices:** National average banana prices were 5.5 percent higher in February of 2023 than a year ago and 11.2 percent higher than the previous month. Among major food groups, fruits saw the biggest jump in their prices (7.9 percent) after cereals and cereal products (14.4 percent) in February 2023. Despite being crucial for improved human nutrition, fruits are, however, are a relatively small component of the Nepali diet. An average Nepali family spends only 2.1 percent of its monthly household budget and 4.7 percent of its food budget on fruits. As a result, even a sharp increase in their prices has a relatively small impact on overall inflation and inflation in food prices.
- **Price information for Western Nepal:** In Western Nepal, banana prices were 11.4 percent compared to January 2023 and nearly 20 percent higher compared to December 2022. At the end of 2022, prices were unusually low probably because of a small increase in local production. Over the previous 12 months, banana prices rose by 7.8 percent in Western Nepal. This is much higher than the food price inflation (5.6 percent) or the inflation in the price of fruits (7.9 percent), though as indicated for fruits generally, the relatively low share of banana in household consumption baskets indicates that sharp prices will not overly affect poverty levels.

## Edible oils

- **Key messages:** There was a marginal (3.7 percent) decline in the price of edible oils and *ghee* (clarified butter) in Nepal in February/March compared to a year ago. Dropping world prices of edible oils has helped lower their prices in Nepal too. Nepal's data systems report the price index of animal fat and edible oils as one group. This can obscure insights on both edible oil and animal fat markets. While edible oil is becoming cheaper, the global prices of animal fat (*ghee* or clarified butter) are increasing, with potential ramifications for the supply of key nutrients in household diets.

## Soybean oil

- **National prices:** Soybean oil prices in Nepal went down by 3.6 percent in February compared to the year before. Nepal is almost entirely dependent on imports of soybean oil, and imports much larger quantities of soybean (and palm) oil than its domestic requirements. The bulk of the imported oil (80 percent) is re-exported to India after some light processing or refinement. Importantly, Nepal's export of refined oil attracts zero import duty in India, meaning that processors and exporters can gain substantially from trade. In 2021, India lowered tariffs on the import of raw edible oils to bring domestic prices down for consumers. This change in India's trade policy – which opened India up to imports from many different countries in addition to Nepal – led to a sharp drop in Nepal's exports, and compromised income for oil traders,

processors, and exporters. In 2021, edible oils accounted for 53 percent of the total value of Nepal's exports.

### Mustard oil

- **National prices:** The price of mustard oil is down by 3.6 percent compared to the previous month and is currently 9.5 percent below the price in February 2022. As the harvest approaches, the price of mustard and rapeseed oil is expected to decrease, which is of benefit to consumers but may lower income for farmers strongly reliant on oilseed production for income.
- **Price information for Western Nepal:** From January to February, the price of mustard oil went up by 2.2 percent in the western provinces of the country. Mustard oil was 2.2 percent cheaper in this region compared to last year. The remoteness of the western provinces can sometimes slow down the price transmission of commodities imported into the region from other parts of Nepal and the rest of the world.

### Agricultural inputs and access to finance

- **Key messages:** High increases and variation in fertilizer prices among markets in Nepal are expected in Nepal as markets react to the March 2023 announcement that the Government of Nepal will reduce fertilizer subsidy rates. This could hurt cash-strapped smallholder farmers significantly over the coming months.
- **Fertilizers:** Farmers had to pay higher prices for lower quality and informally imported fertilizers from India over the last winter season. The government of Nepal has allocated significantly more resources (NPR 49 billion compared to NPR 38.5 billion in 2022-23) for the purchase of chemical fertilizer in the coming financial year. How this will balance announcements of subsidy reductions remains unclear at this time.
- **Subsidy reduction:** As announced by government, subsidy reduction for nitrogen (urea) will go down from 80 percent to 64.5 percent of its price while the subsidy on diammonium phosphate (DAP) will be reduced 52.4 percent from 60 percent and on muriate of potash (MoP) from 59 percent to 46.1 percent. As a result of this decision, the official price of urea is expected to increase from Rs. 14 to Rs. 25 per kg. DAP's price will rise from Rs. 43 to Rs. 50 per kg and Potash will sell at Rs. 40/kg compared to Rs. 31 per kg before the policy change. Markets are reacting quickly. Official prices of fertilizers are going up in Nepal even as prices of Urea, DAP, and MoP are showing a steady downward trend in the international market.
- **Implications of subsidy reduction:** Field reports from USAID's Implementing Partners suggest that chemical fertilizers were already selling at higher than official prices in Nepal even before the reduction in the subsidy levels was announced. In March 2023, urea was being sold at NPR 27.5 per kg in the local markets, DAP at Rs. 57 per kg, and MoP at Rs. 44 per kg. The availability of DAP and MoP was limited even at these high prices. The government's decision to import more fertilizers may help reduce the scarcity during June-August (the main season for paddy cultivation when the demand for chemical fertilizers is at its peak in Nepal), though the changes in subsidy are still expected to increase prices across markets more generally, with potentially significant consequences for cash-strapped farmers.

- **Agrovets and input suppliers:** There was no observed change in the price of agricultural inputs and planting materials this month except for hybrid maize seeds whose prices increased from NPR 512 per kg in February to NPR 527 per kg in March. Field observations suggest that most agrovets have sufficiently stocked seed required to operate their business normally. Wholesale agrovets supply goods to retailers only after payment and have largely stopped selling agricultural inputs to farmers on credit. Cash flow is an issue, as farmers and agrovets have experienced a decrease in their savings due to inflation and they seek loans from banks, cooperative, microfinance institutions, and individuals, despite high interest rate. The machinery suppliers and dealers have also complained about the reduction in their sales of farm machines.
- **Cooperatives:** As with previous months, most cooperatives are still struggling to repay loans as scheduled due to a decrease in their savings resulting from inflation over the past months.
- **Formal banking institutions:** Private companies still experience challenges getting loans from banks and other financial institutions. Credit growth to the private sector has slowed from 2.8 percent in July 2022 - February 2023 compared to the same period of the previous year. The credit squeeze is a direct outcome of the tighter monetary policy adopted by Nepal's Central Bank (The Nepal Rastra Bank) to bring inflation under control. While well intentioned, this policy also squeezes parts of the economy and has added extra burden to entrepreneurs and aspiring entrepreneurs in agricultural markets.
- **Coping mechanisms of rural households:** Observations from the field continued to suggest that Most households are cutting back their purchases and increasing the consumption of home-grown products. The poorest farmers remain engaged in more off-farm employment – buttressed by recent increases in remittance flows – to help them cope with the increased cost of commodities and meet their livelihood needs.

## Energy

**Key messages:** The price of diesel went down from NPR 175 per liter in February 2023 to NPR 165 in March. The lower price of diesel may help cool down inflation. Petroleum products are the largest imports of Nepal and are linked to the cost of agricultural production (for land preparation, irrigation, and mechanized harvesting) and transport of agricultural goods, particularly in the Terai. Their falling prices in the world market will could help improve Nepal's trade balance, but it may take time until agricultural markets adjust accordingly

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## Data sources

The source for this brief includes the World Food Program WFP for food prices, globalpetrolprice.com for fuel prices, the Nepal Rastra Bank for the CPI, budget shares, remittance flows, and other macroeconomic data, the World Bank Nepal Development Update (April 2023) for trends in credit flow, USDA reports for projections of wheat production, and the World Bank Household Risk and Vulnerability Survey (HRVS) for household occupations and reliance on remittance income in addition to price information and field reports provided by USAID/Nepal's Implementing partners, notably the Nepal Seed and Fertilizer (NSAF) Project and KISAN II.

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