

Situation Report on Nepal's Agrifood Systems

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Key messages

Overall assessment: Nepal recorded its highest Consumer Price Inflation (CPI) in September, surpassing any other month in the first eight months of 2023, affecting both food and non-food items. The average national year-on-year inflation rate for food and beverage prices was 8.2 percent, with the highest CPI increase—11.3 percent—observed in Nepal's mountainous regions. This surge in inflation seems to be predominantly driven by a 9.7 percent hike in food and beverage prices. The economic repercussions for the urban and rural poor in Nepal that result from this situation are multifaceted. Rising CPI diminishes the affordability of basic necessities for the poor. To cope with higher prices, poor families might resort to borrowing or develop increased reliance on remittances, the former leading to increased household debt and potential long-term economic strain.

Cereal prices continue to rise: The average prices of cereals and their products increased by 13.4 percent in September 2023. This can partially be attributed to the combined effects of India's export quota and export duty on rice, as more than 90 percent of Nepal's imports come from India. However, the Government of India has also permitted the export 95 thousand tons of non-basmati rice to Nepal¹ and with the onset of rice harvesting season, prices are expected to decline.

For the urban and rural poor in Nepal, and given the importance of rice in the diets, increasing cereal prices are associated with challenges in meeting food insecurity and with economic hardship. Even with the Government of India's exemption to export rice to Nepal, the timing and efficiency of the supply chains and in market disbursement and availability of this will affect the speed at which prices may or may not stabilize. The expected price decline with the onset of rice harvestings may provide some relief, but the extent of this relief depends on how quickly harvested rice become widely available in markets. Time lags that result from inefficiencies in this process could translate into lower than desirable speed at which prices return to more normal conditions. As such, the poor may face a prolonged period of hardship.

Macroeconomic trends and implications for household economic welfare

Key messages: Nepal's inflation rate has hit 8.2 percent in September 2023, the highest rate of the year. The high inflation rate is driven by the rise in prices of food products, especially cereals.

Inflation: In September 2023, Nepal experienced a significant rise in inflation, with the rate peaking at 8.2 percent, marking a 0.8 percent increase from the previous month. This escalation in prices notably affects household welfare, particularly diminishing the purchasing power essential for acquiring fundamental food commodities. Over the same period, there was a substantial year-on-

¹ The Kathmandu Post. Money, 2023. [WWW Document].; 2023. India allows export of 95,000 tonnes of non-basmati rice to Nepal. <https://kathmandupost.com/money/2023/10/18/india-allows-export-of-95-000-tonnes-of-non-basmati-rice-to-nepal> (accessed 10.31.2023).

year hike in food price inflation, reaching 9.7 percent. Such inflationary pressures bear considerable consequences on households, especially those with limited incomes. It could lead to reduced access to essential goods, diminished quality of life, and increased financial strain, making it more challenging for families to meet their basic needs and maintain a stable livelihood in Nepal.

Remittance inflows: From mid-July to mid-September 2023, Nepal experienced a remarkable inflow of remittances, receiving NPR 228 billion (USD 1.7 billion). This represents a 22.1 percent increase compared to the preceding month, and a 17.7 percent increase when calculated in USD. However, during the same period, there was a significant decline in labor permits for foreign employment, dropping by 28.3 percent to 74,455. permits Additionally, the renewal of work permits saw an 18.3 percent decrease, falling to 32,004 in total.

This boost in remittances, despite the fall in renewed work permits, is attributed partially to the depreciation of the Nepali currency in global financial markets. For impoverished Nepali households heavily reliant on remittances, this situation presents a complex scenario. On the one hand, the increase in remittances can provide essential financial support, aiding them in coping with economic challenges, including inflation. On the other hand, the reduction in labor permits signifies diminished opportunities for foreign employment, which could potentially restrict the future flow of remittances and affect the financial stability of these households in the long term. Thus, while the immediate impact may be supportive, the underlying trends necessitate careful monitoring and strategic planning to safeguard the welfare of these vulnerable households.

Spotlight: Informal cross -border trade of rice between Nepal and India

Nepal has a long semi-porous southern border with India. A study on informal cross-border trade of rice between Nepal and India was conducted that involved interactions with government officials, industrialists, customs' officers, academicians, traders, and heads of unions. The Nepal–India border crossing at Birgunj and Raxaul serves as the primary point for truck-based transportation of goods between the two countries. This border is porous, lacking fencing and remaining open 24/7, allows people to cross using various modes of transportation. It was observed that local intermediaries, referred to as “*Blackia* (someone who smuggles goods),” frequently transport sacks of rice from India on their two-wheelers, making multiple trips each day across the border. Each bag weighs around 40 kilograms, and these linkmen pay commissions (INR 200 per bag) at multiple checkpoints, both in India and Nepal.

India imposed a ban on the export of non-basmati rice on July 20, 2023, citing its domestic requirements. During a conversation with Nepalese traders in Biratnagar, it was noted that despite trade restrictions, consignments are still being imported into Nepal. It was also observed that opportunistic traders and individuals are making a reasonable profit from these restrictions, though this benefit was not passed on to consumers who continue to experience higher prices. After India's ban on rice exports, rice prices in Nepal surged by NPR 200 (USD 1.51) to NPR 250 per 20-kg bag. This price increase occurred despite sufficient rice stocks in Nepal. Traders have seized on the situation for their benefit, partially and negatively affecting consumers.

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Rice and wheat

Key messages: Rice prices in Nepal were relatively stable in August 2023. However, year-on-year inflation was the highest in Sudurpashchim Province with 35.2 percent.

Rice: In August 2023, the prices of both medium grain and coarse rice in Nepal were relatively stable following a sharp rise in previous month. The medium grain rice in Nepal and Western Province declined marginally in the month of August 2023 compared to the previous month. In contrast, the price of coarse rice in Nepal increased by 1.1 percent. At the provincial level, Sudurpashchim Province recorded the highest spike in the price of both coarse rice (39.9 percent) and medium grain rice (30.6 percent). Since Sudurpashchim Province is one of Nepal's most food insecure provinces, an increase in rice prices will certainly impact the food intake of households with net purchases of rice. The annual demand of milled rice in Nepal is 4.1 million tons² of which more than 90 percent is imported from India. As shown in Figure 1, rice prices in Nepal are higher than in India, and the gap has increased over the last year. The gap may be further increased by the export restriction and export duty of non-basmati rice³.

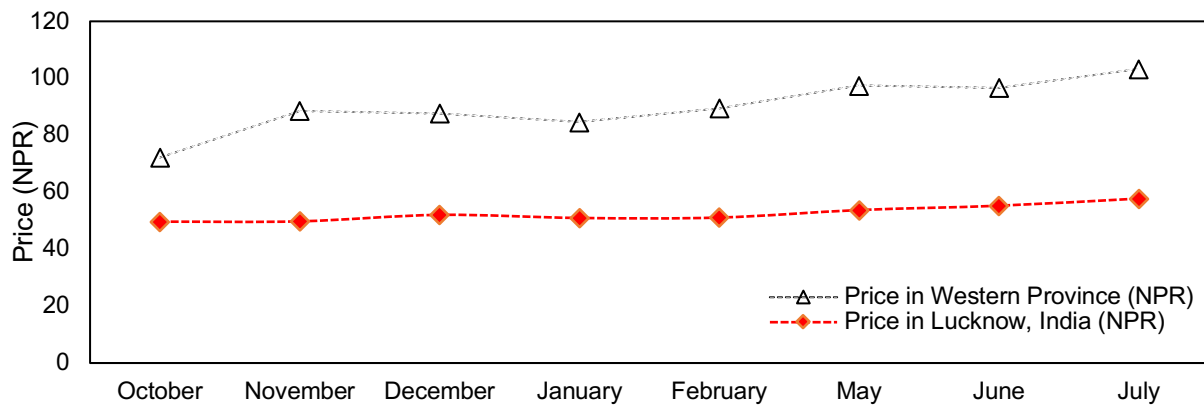


Figure 1: Trends of rice prices in Western Province of Nepal and Lucknow of India from October 2022 to July 2023 shown in Nepali Rupee (NPR) equivalents.⁴

Wheat flour: In August 2023, the price of wheat flour at the national level increased slightly compared to the previous month. This was especially noted in the Western Province, where the prices rose by 2.9 percent. The increase is attributed mainly to international conflicts and the ban on Indian wheat exports, which have shifted global wheat supplies, pushing up prices. Over the year from August 2022 to August 2023, the price of wheat flour surged almost 25 percent. This could also be linked to the substitution effects due to the increased rice prices, where consumers typically switch from more expensive food items to alternative options. Notably, more significant increases were observed in the Western Province, with a price surge of 39 percent over this period.

² Choudhary, D., Banskota, K., Khanal, N.P., McDonald, A.J., Krupnik, T.J., Erenstein, O. 2022. Rice subsector development and farmer efficiency in Nepal: implications for further transformation and food security. *Frontiers in Sustainable Food Systems*, 5, p.740546.

³ The Week. 2023. After export ban rice smuggling booms along Indo-Nepal border. <https://www.theweek.in/wire-updates/national/2023/10/15/des3-up-rice-smuggling-nepal.html> (accessed 10.31.2023).

⁴ World Food Programme. 2023. Nepal - Food Prices. <https://data.humdata.org/dataset/wfp-food-prices-for-nepal> (accessed 10.31.2023).

Across provinces in August 2023, Koshi Province recorded the highest monthly increase in wheat flour prices at 3.6 percent, while in Madesh Province, prices declined by 1.8 percent compared to the previous month.

The implications of these price changes impact households' ability to purchase staple foods like wheat. The price increases, influenced by global disruptions and substitution effects due to rising rice prices, could make it more challenging for households, particularly those with limited incomes, to afford essential staples, thereby affecting their food security and overall well-being. Households might be compelled to adjust their consumption patterns, possibly opting for less preferred or less nutritious alternatives to cope with the elevated prices

Spotlight: Rice price implications for urban and rural poor consumers and farmers

The fluctuations in rice prices in Nepal, with a notable increase in the price of coarse rice by 1.1 percent in August 2023, pose challenges to both urban and rural poor rice consumers. Particularly in Sudurpashchim Province, which is one of Nepal's most food-insecure provinces, the 39.9 percent spike in the price of coarse rice and a 30.6 percent increase in medium grain rice prices are likely to impact the affordability of rice as a staple food, thereby affecting food intake and overall nutrition of households reliant on rice purchases. Urban poor consumers might face strained budgets, having to allocate a larger portion of their limited incomes towards purchasing rice or alternatively, reducing their consumption. Rural poor consumers, often more directly exposed to the volatilities of agricultural commodities and with limited access to diverse markets, might find it especially challenging to maintain stable rice consumption levels amidst rising prices.

On the production side, the relative stability in the prices of medium grain rice, with a marginal decline in August 2023, may not significantly influence the revenues of rice producers. However, the sharp increase in prices in Sudurpashchim Province could provide economic benefits to local producers in the short term due to higher selling prices. However, considering that more than 90 percent of Nepal's annual demand for milled rice (4.1 million tons) is imported from India, Nepali rice producers face stiff competition from imported rice. The existing price gap between rice in Nepal and India, coupled with export restrictions and export duties on non-basmati rice from India, may potentially widen the price disparities. Such price differentials could make domestically produced rice less competitive in the market, potentially affecting the economic viability and profitability of rice producers in Nepal, unless measures are taken to enhance the competitiveness of domestic rice production or manage the impact of import dynamics on local markets.

Selected horticultural and fruit products

Key messages: In general, the average prices of key horticultural and fruit crops, such as apples, bananas and potato have declined in September compared to the previous months. Such declines can be attributed in part to Nepal's Dashain festival in which farmers produce more of these crops in order to seize on seasonal markets associated with the holiday, thereby resulting in a lowering of aggregate prices.

Fruits

The price of apple and banana in Nepal declined by 21.9 percent and 3.5 percent, respectively, in August 2023 than July 2023. The decline of the price of apples was even higher in Nepal's Western Provinces with a 39.1 percent in August 2023 compared to a month before. With the onset of harvesting season, the price of apples is also anticipated to further decline. Year-on-year prices for apples increased by 14.0 percent in August 2023 at national level while the price of apples in Western Province increased by 11.2 percent. In August 2023, the highest decline was observed in Jumla, one of the primary apples producing districts in Karnali Province. Similarly, Madesh Province recorded the highest decline in the price of banana (20.0 percent) since the previous month.

Potato

There was a slight decrease in potato prices nationally and in the Western Province in August compared to the previous month. However, when looking at the year-on-year prices, there was an increase. Nationally, this increase was modest at 1.0 percent, while in the Western Province, prices rose by 2.2 percent. Compared to cereals, potato prices remained relatively stable.

For resource-poor farmers in Nepal, the marginal decrease in potato prices might slightly affect their revenue. However, since the decrease is minor, it might not have a substantial impact on their overall earnings. The year-on-year increase, although slight, could be beneficial for these farmers, potentially offering them a better return on their produce over time. For poor consumers, the relative stability of potato prices compared to cereals could be somewhat advantageous. It could allow these consumers to substitute potatoes for cereals in their diets, providing an affordable alternative for nutritional sustenance. This substitution could be particularly helpful in managing household expenses, maintaining dietary diversity, and ensuring food security among economically-disadvantaged groups in Nepal.

Tomato

In August, the average price of tomatoes at the national level rose by 7.3 percent, with variations observed across different provinces. For example, in the Western Province, there was a decline of 6.1 percent compared to the previous month. This decrease was influenced by a significant 8.0 percent drop in prices in the Karnali Province. Conversely, in Bagmati Province, there was a notable price surge of 42.5 percent, bringing the tomato price to NPR 132 in August 2023, up from NPR 123 in the previous month. Since tomatoes are climacteric foods, significant provincial variations in prices were evident.

The implications of these price fluctuations could impact farmers' willingness to cultivate tomatoes in Nepal. The increase in the average national price might encourage farmers to consider tomato cultivation as a potentially profitable venture, although investment costs for this management-intensive crop may be preventative for some farmers. Provincial variations in tomato prices, as seen in the significant price drops in places like the Western and Karnali Provinces, might also make farmers cautious due to the unpredictability of returns on their investment. Such price volatility could affect farmers' decision-making and planning regarding the cultivation of tomatoes in situations where sufficient market and price information reaches farmers through farmer-to-farmer networks, traders, and the media, possibly leading them to consider other, more stable, agricultural

products for cultivation to mitigate risks associated with price fluctuations.

Edible oils

Key messages: The prices of edible oils (mustard and soybean oils) are declining in Nepal, which is likely to be the result of India's policy of levying 5.0 percent Krishi Kalyan Tax on imports from Nepal stimulating domestic price competition and causing a reduction of prices within Nepal.

Price variation in edible oils: The prices of mustard and soybean oils substantially declined in August 2023 compared to the previous month. In Nepal's Western Provinces, the price of mustard oil dropped 12 percent from August 2022 to August 2023, while the national average fell 17 percent over this period. Gandaki Province recorded the highest annual decline in mustard oil by 30.7 percent, while Bagmati Province observed the largest annual decline in soybean oil by 31.2 percent.

Reductions in edible oil prices hold particular significance for Nepali diets. Cooking oils play a crucial role in Nepalese cuisine, as they are an essential ingredient in a wide range of traditional dishes. Moreover, during festive seasons like Dashain, Tihar, and Chhath, the consumption of edible oils tends to increase significantly, as these oils are integral for preparing special festive meals and treats. Therefore, the substantial drop in edible oil prices is expected to have a positive impact, especially on lower-income households, as it helps ensure their access to these vital cooking ingredients during these important cultural celebrations.

Agricultural inputs

Fertilizer price: Field data collected by USAID Feed the Future implementing partners in October 2023 reveals notable challenges faced by farmers in Nepal concerning fertilizer availability and market price information. During this period, the price of urea ranged from NPR 20 (USD 0.15) to NPR 23 (USD 0.17) per kilogram, while DAP prices fluctuated between NPR 49 (USD 0.37) and NPR 54 (USD 0.41) per kilogram. Potash prices exhibited an even wider range, spanning from NPR 20 (USD 0.15) to NPR 40 (USD 0.30) per kilogram.

Of concern is the observation that in October 2023, urea and potash prices experienced a decline of 1.6 percent and 8.1 percent, respectively, compared to the previous month. Meanwhile, the price of DAP remained relatively stable. This scenario presents a complex set of challenges for farmers in Nepal, notably the dual problems of fertilizer scarcity and inadequate market price information. Fertilizer scarcity – which is common in Nepal – can severely hinder agricultural productivity, as farmers may struggle to access the essential nutrients required for crop growth. This scarcity can be exacerbated by factors such as supply chain disruptions, transportation issues, and limited availability at agricultural input retailers and cooperatives, all situations that are partially but not entirely dependent on price trends.

Moreover, poor market price information could compound these challenges. In ideal market situations, farmers would rely on accurate and timely price information to make informed decisions about fertilizer purchases and crop planning. Insufficient access to reliable market price information

and on stocks of available fertilizer, which is common in Nepal, can lead to suboptimal choices, increased production costs, and reduced profitability. To address these issues, it is crucial for policymakers and agricultural stakeholders in Nepal to prioritize measures that ensure a consistent and affordable supply of nutrients to farmers. Additionally, efforts to enhance the dissemination of up-to-date market price information may be beneficial in empowering farmers to make more informed crop management choices.

Energy

Key messages: In October 2023, Nepal's Oil Corporation (NOC) decreased per liter petrol price from NPR 180.5 (USD 1.36) to NPR 169.5 (USD 1.27) in Nepalgunj and Dhangadi districts of Sudurpashchim province. Conversely, the price of per liter petrol in Kathmandu was NPR 172 (USD 1.29) throughout October, but this price was lowered by the NOC on October 31 to NPR 164 (USD 1.23). per liter. Similarly, the per unit price of diesel in Nepalgunj and Dhangadi decreased from NPR 170.5 (USD 1.28) to NPR 165.5 (USD). The declining price charged by the Indian Oil Corporation among the reasons for declining petroleum prices in Nepal. The reduced price of diesel is anticipated to help farmers to prepare and irrigate their fields for sowing of winter season crops as November approaches.

Acknowledgements

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Data sources

Data sources for this brief includes the World Food Program for food prices, [Nepal Oil Corporation \(noc.org.np\)](http://noc.org.np) for fuel prices, the Nepal Rastra Bank for the CPI, budget shares from Ministry of Finance, remittance flows, and other macroeconomic data. The field reports provided by USAID/Nepal's Nepal Seed and Fertilizer (NSAF) and KISAN II Activities.

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Annexes
Annex I: Percentage change in food commodity price (NPR/Kg) in Nepal.

Commodity	Western Provinces					Nepal (National Level Data)				
	Aug-22	Jul-23	Aug-23	August 2022- August 2023	July 2023 to August 2023	Aug-22	Jul-23	Aug-23	August 2022- August 2023	July 2023 to August 2023
	(NPR)	(NPR)	(NPR)	(percent change)	(percent change)	(NPR)	(NPR)	(NPR)	(percent change)	(percent change)
Rice (coarse)	56.8	67.3	66	16.3	-1.9	54.6	62.7	63.4	16.3	1.1
Rice (medium grain)	87.8	98	97.2	10.7	-0.8	78	88.7	88.3	13.2	-0.5
Wheat flour	67.2	90.3	92.9	38.2	2.9	68.8	87.8	89.3	29.7	1.6
Apples	197.9	361.1	220	11.2	-39.1	241.5	353.3	275.9	14.2	-21.9
Bananas	171	169.5	165.8	-3.1	-2.2	154.5	148.5	143.3	-7.2	-3.5
Tomatoes	116.1	136.5	128.2	10.4	-6.1	99.3	122.6	131.5	32.4	7.3
Potatoes	49.7	51.7	50.8	2.2	-1.8	51.4	52.8	51.9	1	-1.7
Pumpkin	80.4	67.2	60.6	-24.6	-9.9	70.5	63.6	64.1	-9	0.8
Carrots	124.1	134.1	140.9	13.5	5	128.1	127.3	135.7	5.9	6.5
Cabbage	59.9	55.8	58.9	-1.7	5.6	63	47.4	57.9	-8.1	22.1
Lentils (broken)	188	188.2	189.3	0.7	0.6	175.6	170.6	172.8	-1.6	1.3
Beans (black)	193.3	192.8	197.7	2.3	2.5	180.7	191.1	197.7	9.4	3.5
Chickpeas	155.8	143.9	154.8	-0.6	7.6	143.5	127.9	140.9	-1.8	10.2
Oil (mustard)*	354.8	300.7	311.8	-12.1	3.7	348.1	275.8	288.5	-17.1	4.6
Oil (soybean)*	324.6	258.5	242.5	-25.3	-6.2	305.4	239.6	232.6	-23.8	-2.9
Milk*	102.5	130.4	133.8	30.4	2.6	97.6	118.1	119	21.9	0.7
Eggs**	21.2	20.8	21.2	-0.4	1.5	19.4	19.8	20.1	3.4	1.6
Fish	466.1	598.9	527.3	13.1	-12	420.2	517	468.1	11.4	-9.5
Meat (chicken)	515	543.6	555.8	7.9	2.3	447.9	478.7	482.8	7.8	0.9

* denotes unit in liter, ** denotes unit in per piece Source: World Food Programme

Annex II: Percentage change in food commodity prices across provinces of Nepal.

Commodity	Koshi Province		Madesh Province		Bagmati Province		Gandaki Province		Lumbini Province		Karnali Province		Sudurpashchim Province	
	August 2022- August 2023	July - August 2023	August 2022- August 2023	July - August 2023	August 2022- August 2023	July - August 2023	August 2022- August 2023	July - August 2023	August 2022- August 2023	July - August 2023	August 2022- August 2023	July - August 2023	August 2022- August 2023	July - August 2023
Rice (coarse)	28.6	8.4	18.4	13.2	15	-1.1	-5.4	2.5	31.2	6.2	-0.3	-9.4	39.9	5.5
Rice (medium grain)	28.6	15.4	23	NA	-2	-11.7	22.8	2.9	8.8	-0.5	3.5	-4.7	30.6	2.1
Tomatoes	153.8	22.2	56.2	6.4	38.7	42.5	35	35	-8.3	8.6	7.3	-8	42.5	3.6
Wheat flour	31.8	3.6	12.5	-1.8	22.3	0.2	14.5	3.8	52	1.3	27.1	1.6	46.4	1.5
Apples	17.3	4.5	50	-12	7.1	3.4	31.1	16.8	17.8	1	-4	-70.6	5.9	-24.1
Bananas	NA	5.9	16.7	-20	-24.3	-9.8	-23.7	-1.7	6.9	4.1	-2.4	2.1	-12	-17
Potatoes	5.7	-5.1	-9.7	3.7	2.1	3.5	6.5	-5.7	-8.3	10	4.2	-4.6	-7	-2.4
Cabbage	-11.1	26.3	-21.7	38.5	8.3	80.6	-23.5	62.5	0	10	0.8	-2	-8.7	16.7
Carrots	11.1	8.7	27.9	0	-25	5.3	50	28.6	-50	15.9	26.9	-3	NA	NA
Pumpkin	5.9	12.5	50	41.2	23.1	14.3	-30.8	-35.7	-10	8	-39.1	0	5	-20
Beans (black)	19.8	4.3	14	1.8	31.1	8.1	2.6	2.6	5.7	-0.6	-5.8	1	16.1	7.6
Chickpeas	10.3	1.4	4.3	9.1	-10.7	11.1	-12.3	4.2	13.4	-1.3	3.5	16.2	-6.3	1.4
Lentils (broken)	-7.8	0.2	-3.2	0	-3.7	1.6	-7.4	1.9	5.3	1	-6	1.1	5.9	-0.5
Mustard oil	-10	4.7	-23.7	-1.4	-29.2	14.8	-30.7	-13.4	-20.8	-4.3	-8.9	-3.1	-12.2	10.3
Soybean oil	-14.6	0	-18.7	0.8	-31.2	4	-19.8	3.3	-25.1	-10.5	-19.8	2.4	-31.8	-13.5
Eggs	9.1	0	-9.4	6.7	28.9	-0.9	10.8	2.5	-3.6	1.9	-6.1	12.1	13.7	-12.6
Fish	4.2	NA	4.8	-8.3	9.1	-12.7	-7.4	NA	-8	-8	10.5	-6.2	8.3	-21.2
Chicken meat	10	2.3	-3.9	-11.7	17	1.7	-4.3	-4.3	7.6	0	3.3	1.7	21.4	-0.5
Milk	6.2	-2.9	13.5	-1.7	13.8	2.3	9.6	7.2	15.4	0	50	9.3	2.6	0

Source: World Food Programme. N/A Indicates not applicable.