**WORKSHEET 9: CURRENCY EXCHANGE RATES**

**What it is**: Exchange rates are the values of one country’s currency in relation to another currency. Changes in the exchange rate will cause prices to become more or less expensive relative to the prices in the other currency.

**Data requirements**: Nominal current and/or historical price data; corresponding exchange rates between the local currency and an international currency (e.g. USD, Euro). Historical exchange rates can be found online, e.g. <http://www.oanda.com/currency/historical-rates/>

**How to convert local prices to an international currency**:

1. Divide the local prices by the USD or Euro exchange rate:

PriceUSD = PriceLOCAL \* EXCHANGE RATEUSD/LOCAL

**OR**

PriceUSD = PriceLOCAL / EXCHANGE RATELOCAL/USD

1. Graph local prices against international prices.

**Example:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Week** | **SYP** | | | **Exchange rate** | **USD** | | |
| **Cooking oil** | **Rice** | **Cheese** | **Cooking oil** | **Rice** | **Cheese** |
| 1 | 188.3 | 96.7 | 85.6 | 0.0142 | 2.67 | 1.37 | 1.21 |
| 2 | 192.8 | 103.9 | 92.2 | 0.0142 | 2.74 | 1.48 | 1.31 |
| 3 | 193.3 | 112.8 | 92.5 | 0.0142 | 2.75 | 1.60 | 1.31 |
| 4 | 192.8 | 113.1 | 92.2 | 0.0143 | 2.76 | 1.62 | 1.32 |
| 5 | 189.2 | 114.2 | 91.7 | 0.0143 | 2.71 | 1.63 | 1.31 |
| 6 | 191.9 | 115.0 | 92.5 | 0.0143 | 2.74 | 1.64 | 1.32 |
| 7 | 195.0 | 120.3 | 93.9 | 0.0103 | 2.01 | 1.24 | 0.97 |
| 8 | 198.6 | 142.8 | 90.6 | 0.0103 | 2.05 | 1.47 | 0.93 |
| 9 | 193.7 | 138.0 | 112.0 | 0.0103 | 1.99 | 1.42 | 1.15 |
| 10 | 278.3 | 177.5 | 137.5 | 0.0101 | 2.81 | 1.79 | 1.39 |
| 11 | 273.3 | 165.0 | 129.2 | 0.0101 | 2.76 | 1.67 | 1.30 |
| 12 | 275.0 | 177.5 | 141.7 | 0.01 | 2.75 | 1.78 | 1.42 |
| 13 | 279.2 | 175.0 | 145.8 | 0.01 | 2.79 | 1.75 | 1.46 |

**Interpretation:** When analyzing food prices in the local currency, one notices an increase in prices following the intervention (in this case, food vouchers). This may lead the analyst to conclude that the market could not meet the demand generated by the project, causing prices to increase.

Traders participating in the program indicated a significant devaluation in the value of the Syrian Pound relative to the USD right around the time of the first distribution. After prices are converted into USD, the value of commodities in USD terms is relatively stable. Prices decreased at the moment of the change in exchange rate, and returned to their previous levels after traders were able to adjust for the new value of the currency.

From these graphs, it does not appear that price increases are due to local shortages of supplies. In this case, the project might consider pegging the transfer value to an international currency to maintain the intended purchasing power of beneficiaries.