

Methodology Paper for Computing Essential Commodities Price Index (ECPI) by the Maldives Bureau of Statistics

1. Introduction

Inflation is a key macroeconomic indicator that reflects the general increase in prices of goods and services in an economy over a period. While headline inflation, typically measured by the Consumer Price Index (CPI), provides a comprehensive overview of price changes. While the CPI offers a broad look at price changes, it includes everything from daily necessities and household items to durable goods and also services. While Essential Commodities Price Index (ECPI) aims to filter out non-necessities to provide a clearer signal increase in prices of essential goods within the economy. This new index will filter out non-essential items, providing a more focused measure of inflation for vital goods. For a Small Island Developing State (SIDS) like the Maldives, accurate measurement of this "essential commodities" inflation is especially important. Because the Maldives relies heavily on imports and is vulnerable to external events like global price swings and supply chain issues, understanding these specific price movements is key for maintaining price stability and guiding policy interventions.

This methodology paper outlines the approach the Maldives Bureau of Statistics (MBS) will adopt to compute and disseminate Essential Commodities Price Index (ECPI). It builds upon established international practices while considering the specific economic characteristics and data availability within MBS via Consumer Price Index data collection.

2. Objectives

The primary objectives of computing essential commodities inflation by the MBS are:

- Provide a more stable and reliable indicator of underlying inflation of essential goods: To assist policymakers, particularly the Ministry of Economic Development and Trade (MEDT), Ministry of Finance and Planning (MOFP), and Maldives Monetary Authority (MMA), in distinguishing between general consumer price trend and price trend of household essential commodities.

3. ECPI Basket of Goods

The essential commodities inflation measures will be compiled from the existing Consumer Price Index (CPI) basket by identifying the essential commodities and will be compiled and published monthly by the Maldives Bureau of Statistics. The although CPI data is collected across 5 geographical locations in the Maldives and covers a comprehensive basket of goods and services representative of household consumption patterns. The basket of ECPI was identified by Ministry of Economic Development and Trade.

3.1 CPI Divisions and ECPI Divisions

The COICOP classification 2018 has been used in both CPI and ECPI. COICOP 2018 has 13 major divisions.

In CPI 13 divisions are used and further divided into 40 sub-divisions. The sub-divisions are further broken down into 80 classes. In ECPI 4 division are used and these divisions are further

divided into 5 sub-divisions. The sub-divisions are further broken down into 16 classes. See Appendix 2 for a complete hierarchy of these breakdowns with their relative importance.

3.2 CPI and ECPI weights

The items in the CPI basket are reviewed to ensure that representative weights are attached to it in CPI compilations. HIES is used to distribute expenditure to different CPI divisions, sub-divisions, classes and expenditure classes to calculate the weights. The weights used for ECPI is derived from the weights of CPI.

Description	ECPI weights			CPI weights		
	Male'	Atolls	Republic	Male'	Atolls	Republic
TOTAL CONSUMPTION EXPENDITURE	100.00	100.00	100.00	100.00	100.00	100.00
FOOD AND NON-ALCOHOLIC BEVERAGES	85.14	85.75	85.46	18.30	31.27	23.49
FOOD	70.94	73.97	72.55	15.43	27.11	20.11
Cereals and cereal products (ND)	7.88	7.24	7.54	2.18	3.39	2.67
Meat (ND)	4.67	3.63	4.12	0.89	1.17	1.00
Fish (ND)	15.01	19.01	17.13	3.11	6.55	4.49
Milk, other dairy products and eggs (ND)	12.51	11.00	11.71	2.38	3.54	2.85
Oils and fats (ND)	1.63	1.64	1.64	0.31	0.53	0.40
Fruit (ND)	11.38	13.77	12.65	2.17	4.43	3.07
Vegetables (ND)	10.22	10.40	10.32	2.00	3.46	2.58
Sugar, jam, honey, chocolate and confectionery (ND)	4.49	3.57	4.00	1.10	1.44	1.24
Food products n.e.c (ND)	3.15	3.71	3.44	1.29	2.59	1.81
NON-ALCOHOLIC BEVERAGES	14.20	11.78	12.91	2.87	4.15	3.38
Fruit and vegetable juices (ND)	1.88	2.15	2.02	0.36	0.69	0.49
Coffee and coffee substitutes (ND)	2.02	2.03	2.03	0.38	0.66	0.49
Tea, maté and other plant products for infusion (ND)	4.97	5.32	5.15	0.95	1.71	1.25
Water (ND)	5.33	2.28	3.71	1.01	0.73	0.90
GAS AND OTHER FUELS	6.43	5.43	5.90	40.75	20.96	32.83
ELECTRICITY, GAS AND OTHER FUELS	3.17	3.57	3.38	4.30	6.77	5.29
Gas (ND)	3.17	3.57	3.38	0.60	1.15	0.82
OPERATION OF PERSONAL TRANSPORT EQUIPMENT	3.26	1.86	2.52	0.70	0.72	0.71
Fuels and lubricants for personal transport equipment (ND)	3.26	1.86	2.52	0.62	0.60	0.61
PERSONAL CARE, SOCIAL PROTECTION AND MISCELLANEOUS GOODS AND SERVICES	8.43	8.82	8.64	4.35	6.23	5.10
PERSONAL CARE	8.43	8.82	8.64	3.87	5.64	4.58
Other appliances, articles and products for personal care (ND)	8.43	8.82	8.64	3.61	5.51	4.37

4. Methodological Approaches for Essential Commodities Inflation

The ECPI basket primarily on essential food items, energy products and personal care products. In the Maldives, food prices are very sensitive to external factors, swinging with international commodity markets, weather patterns, and seasonal changes, largely because the nation heavily depends on imports. Similarly, energy costs are volatile, directly influenced by global oil prices. The ECPI will also incorporate items whose prices are directly controlled or significantly impacted by government policies and subsidies, such as rice, flour, and sugar.

5. Communication and Dissemination

To ensure **clear and transparent communication** of the essential commodities inflation measures, the Maldives Bureau of Statistics (MBS) will implement several key strategies:

5.1 Regular and Timely Publication

The **Essential Commodities Price Index (ECPI)** for Male' will be published within a week after the month. ECPI of the atolls and Republic will be released along with CPI releases, which typically have a 3-4 week lag.

5.2 Publicly Available Methodology

A comprehensive **methodology paper** detailing the computation process will be made publicly available. This ensures transparency and allows users to fully understand how the ECPI is calculated.

5.3 Technical Notes and Explanations

The MBS will also provide regular **technical notes**. These notes will explain any changes in methodology, data revisions, or specific factors that might influence essential commodities inflation, keeping users informed and up-to-date.

6. Conclusion and Future Work

The Maldives Bureau of Statistics is committed to developing and disseminating reliable inflation measures that provide valuable insights into the underlying inflationary dynamics of the Maldivian economy and would like to acknowledge the support provided by MEDT. The initial focus will be on computation of essential commodities inflation exclusively for Male', with continuous evaluation and refinement based on their performance and evolving economic conditions and data need.

Future work may include:

- **Regular review of ECPI weights and basket:** Ensuring that the underlying ECPI basket and weights remain representative of household consumption patterns is crucial for the accuracy of essential commodities inflation measures. The weights and basket used will be revised using HIES 2025-26.
- **Expanding geographical coverage:** The MBS intends to broaden the essential commodities inflation measures to include other regions across the Maldives to those areas where CPI data is currently collected.

- **Harmonization with international standards:** Continuously reviewing and aligning the methodology with international best practices and recommendations from organizations like the IMF and World Bank.

By adopting a rigorous and transparent methodology, the MBS aims to provide a reliable and informative measure of essential commodities inflation, contributing to sound economic policymaking and improved understanding of price stability in the Maldives.

ANNEX

Table 1: Weights by ECPI by product level.

COICOP_2016	Description	ECPI weights		
		Male'	Atolls	Republic
00	TOTAL CONSUMPTION EXPENDITURE	100.00	100.00	100.00
01	FOOD AND NON-ALCOHOLIC BEVERAGES	85.14	85.75	85.46
01.1	FOOD	70.94	73.97	72.55
01.1.1	Cereals and cereal products (ND)	7.88	7.24	7.54
01.1.1.1	Cereals (ND)	2.36	1.90	2.11
0111101	Normal Rice	1.19	1.27	1.23
0111102	Basmathi Rice	1.16	0.64	0.88
01.1.1.2	Flour of cereals (ND)	0.71	0.92	0.82
0111201	Wheat Flour	0.47	0.67	0.58
0111202	Whole Wheat Flour	0.24	0.25	0.24
01.1.1.3	Bread and bakery products (ND)	3.67	3.37	3.51
0111301	Bread(sliced, loaf)	2.18	1.37	1.75
0111304	Cream crackers	0.44	0.61	0.53
0111305	Marie Biscuits	0.59	0.81	0.71
0111308	Packet Cakes	0.46	0.58	0.52
01.1.1.5	Macaroni, noodles, couscous and similar pasta products (ND)	1.14	1.05	1.09
0111501	Pasta	0.47	0.31	0.39
0111502	Noodles	0.67	0.74	0.71
01.1.2	Meat (ND)	4.67	3.63	4.12
01.1.2.2	Meat, fresh, chilled or frozen (ND)	3.82	2.97	3.37
0112201	Frozen Beef	0.27	0.22	0.24
0112202	Frozen Chicken	3.56	2.76	3.13
01.1.2.5	Meat, offal, blood and other parts of slaughtered animals' preparations (ND)	0.85	0.65	0.74
0112501	Sausage	0.85	0.65	0.74
01.1.3	Fish (ND)	15.01	19.01	17.13
01.1.3.1	Fish, live, fresh, chilled or frozen (ND)	6.37	9.78	8.18
0113101	Tuna	2.64	4.56	3.66
0113102	Reef Fish	3.11	4.94	4.08
0113103	Tuna curry cut	0.63	0.28	0.44
01.1.3.2	Fish, dried, salted, in brine or smoked (ND)	2.01	2.41	2.22
0113201	Dried fish (Hikimas)	0.30	0.36	0.33
0113202	Smoked Fish	1.71	2.05	1.89
01.1.3.3	Fish preparations (ND)	6.63	6.83	6.73
0113301	Fish paste	2.20	2.72	2.47
0113303	Masmirus	0.53	0.46	0.49
0113305	Canned fish	3.89	3.65	3.76
01.1.4	Milk, other dairy products and eggs (ND)	12.51	11.00	11.71

01.1.4.3	Other milk and cream (ND)	4.05	4.72	4.40
0114301	Condensed milk	0.62	0.82	0.73
0114302	Milk powder	2.53	3.45	3.02
0114303	Coconut cream	0.90	0.45	0.66
01.1.4.5	Cheese (ND)	0.63	0.33	0.47
0114501	Cheese (ND)	0.63	0.33	0.47
01.1.4.6	Yoghurt and similar products (ND)	1.74	1.17	1.44
0114601	Yoghurt	1.74	1.17	1.44
01.1.4.7	Milk-based dessert and beverages (ND)	4.19	3.00	3.56
0114701	Milo powder	0.80	1.08	0.95
0114702	Milk packet flavoured	3.39	1.92	2.61
01.1.4.8	Eggs (ND)	1.91	1.78	1.84
0114801	Eggs	1.91	1.78	1.84
01.1.5	Oils and fats (ND)	1.63	1.64	1.64
01.1.5.1	Vegetable oils (ND)	1.17	1.35	1.26
0115101	Olive Oil	0.36	0.27	0.31
0115102	Cooking Oil	0.82	1.07	0.95
01.1.5.2	Butter and other fats and oils derived from milk (ND)	0.46	0.29	0.37
0115201	Butter	0.23	0.15	0.19
0115202	Margerine	0.23	0.15	0.19
01.1.6	Fruit (ND)	11.38	13.77	12.65
01.1.6.1	Dates, figs and tropical fruits, fresh (ND)	6.07	8.66	7.44
0116101	Bananas	2.02	1.86	1.94
0116102	Mango	1.63	2.36	2.02
0116103	Papaya/ Falho	0.48	0.54	0.51
0116104	Young Coconut, Kurumba	0.43	1.32	0.90
0116105	Passion fruit	0.27	0.33	0.30
0116106	Coconut (dry nut), Kaashi	1.24	2.24	1.77
01.1.6.2	Citrus fruits, fresh (ND)	1.82	1.98	1.90
0116201	Lime	0.82	0.98	0.91
0116202	Oranges	1.00	0.99	1.00
01.1.6.3	Stone fruits and pome fruits, fresh (ND)	1.26	1.19	1.22
0116301	Apples	1.26	1.19	1.22
01.1.6.5	Other fruits, fresh (ND)	1.58	1.40	1.49
0116501	Grapes	0.94	0.73	0.83
0116502	Watermelon/ karaa	0.64	0.67	0.66
01.1.6.7	Fruit, dried and dehydrated (ND)	0.65	0.54	0.59
0116701	Dates- Dried	0.65	0.54	0.59
01.1.7	Vegetables(ND)	10.22	10.40	10.32
01.1.7.1	Leafy or stem vegetables, fresh or chilled (ND)	0.50	0.26	0.37
0117101	Lettuce	0.50	0.26	0.37
01.1.7.2	Fruit-bearing vegetables, fresh or chilled (ND)	4.36	4.20	4.28
0117201	Green Chilly	0.69	0.90	0.80

0117202	Githeyo Mirus	0.69	0.90	0.80
0117203	Cucumber	0.96	0.72	0.83
0117204	Egg plant, bashi	0.26	0.23	0.24
0117205	Tomato	0.66	0.45	0.55
0117206	Pumpkin, Barabo	0.55	0.48	0.52
0117207	Capsicum	0.28	0.26	0.27
0117208	Bell pepper	0.28	0.26	0.27
01.1.7.3	Green leguminous vegetables, fresh or chilled (ND)	0.58	0.32	0.44
0117301	Beans, Tholhi	0.58	0.32	0.44
01.1.7.4	Other vegetables, fresh or chilled (ND)	2.91	3.57	3.26
0117401	Carrot	0.67	0.74	0.71
0117402	Garlic	0.46	0.58	0.53
0117403	Onion	1.78	2.24	2.03
01.1.7.5	Tubers, plantains and cooking bananas (ND)	0.46	0.51	0.49
0117501	Potatoes	0.46	0.51	0.49
01.1.7.6	Pulses (ND)	0.31	0.33	0.32
0117601	Mugu	0.31	0.33	0.32
01.1.7.9	Vegetables, tubers, plantains, cooking bananas and pulses ground and other preparations (ND)	1.10	1.20	1.15
1179202	Baked beans canned	0.50	0.46	0.48
1179204	Tomato paste	0.60	0.75	0.68
01.1.8	Sugar, jam, honey, chocolate and confectionery(ND)	4.49	3.57	4.00
01.1.8.1	Cane and beet sugar (ND)	0.18	0.30	0.24
0118101	Sugar - White	0.18	0.30	0.24
01.1.8.2	Other sugar and sugar substitutes	0.26	0.30	0.28
0118201	Diabetic sugar	0.26	0.30	0.28
01.1.8.3	Jams, fruit jellies, marmalades, fruit purée and pastes, honey (ND)	0.63	0.53	0.58
0118301	Honey	0.63	0.53	0.58
01.1.8.4	Nut purée, nut butter and nut pastes (ND)	0.98	0.66	0.81
0118401	Peanut butter	0.98	0.66	0.81
01.1.8.5	Chocolate, cocoa, and cocoa-based food products (ND)	2.43	1.78	2.09
0118501	Chocolate Bars	2.43	1.78	2.09
01.1.9	Food products n.e.c (ND)	3.15	3.71	3.44
01.1.9.2	Baby food (ND)	0.91	1.26	1.09
0119201	Baby milk powder	0.62	0.87	0.75
0119202	Baby food	0.30	0.39	0.34
01.1.9.3	Salt, condiments and sauces (ND)	0.66	0.62	0.64
0119303	Tomato Sauce	0.17	0.15	0.16
0119304	Chilli Sauce	0.17	0.15	0.16
0119305	Chilli & garlic Sauce	0.17	0.15	0.16
0119306	Salt	0.15	0.16	0.15

01.1.9.4	Spices, culinary herbs and seeds (ND)	1.57	1.83	1.71
0119401	Ginger	0.23	0.29	0.26
0119402	Dried Chilli Packed	0.55	0.76	0.66
0119403	Curry Powder Packed	0.79	0.78	0.79
01.2	NON-ALCOHOLIC BEVERAGES	14.20	11.78	12.91
01.2.1	Fruit and vegetable juices (ND)	1.88	2.15	2.02
01.2.1.0	Fruit and vegetable juices (ND)	1.88	2.15	2.02
0121001	Ready made Fruit Juices	1.06	0.46	0.74
0121002	Tang Juice & alike	0.82	1.69	1.28
01.2.2	Coffee and coffee substitutes (ND)	2.02	2.03	2.03
01.2.2.0	Coffee and coffee substitutes (ND)	2.02	2.03	2.03
0122001	Coffee	1.14	0.83	0.97
0122002	Coffee mix(3 in 1 & alike)	0.88	1.21	1.05
01.2.3	Tea, maté and other plant products for infusion (ND)	4.97	5.32	5.15
01.2.3.0	Tea, maté and other plant products for infusion (ND)	4.97	5.32	5.15
0123001	Tea bags	4.97	5.32	5.15
01.2.5	Water (ND)	5.33	2.28	3.71
01.2.5.0	Water (ND)	5.33	2.28	3.71
0125001	Mineral Water	5.33	2.28	3.71
04	HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS	3.17	3.57	3.38
04.5	ELECTRICITY, GAS AND OTHER FUELS	3.17	3.57	3.38
04.5.2	Gas (ND)	3.17	3.57	3.38
04.5.2.2	Liquefied hydrocarbons (ND)	3.17	3.57	3.38
0452201	Gas	3.17	3.57	3.38
07	TRANSPORT	3.26	1.86	2.52
07.2	OPERATION OF PERSONAL TRANSPORT EQUIPMENT	3.26	1.86	2.52
07.2.2	Fuels and lubricants for personal transport equipment (ND)	3.26	1.86	2.52
07.2.2.1	Diesel (ND)	0.22	0.26	0.24
0722101	Diesel Fuel	0.22	0.26	0.24
07.2.2.2	Petrol (ND)	3.04	1.60	2.28
0722201	Petrol	3.04	1.60	2.28
13	PERSONAL CARE, SOCIAL PROTECTION AND MISCELLANEOUS GOODS AND SERVICES	8.43	8.82	8.64
13.1	PERSONAL CARE	8.43	8.82	8.64
13.1.2	Other appliances, articles and products for personal care (ND)	8.43	8.82	8.64
13.1.2.0	Other appliances, articles and products for personal care (ND)	8.43	8.82	8.64
1312001	Tooth brush	0.66	0.55	0.60
1312003	Shampoo	0.46	0.37	0.41
1312005	baby shampoo	0.46	0.37	0.41

1312006	Soap	0.60	0.62	0.61
1312007	shower gel	0.60	0.62	0.61
1312008	baby shower gel	0.60	0.62	0.61
1312009	Tooth paste	0.79	0.84	0.82
1312014	Lotion	0.58	0.58	0.58
1312015	Baby lotion	0.58	0.58	0.58
1312016	Hair Oil	0.37	0.59	0.49
1312019	Diapers/ Nappy	1.91	2.35	2.14
1312020	Sanitary pads, Tampon,	0.79	0.73	0.76