

Workshop on Measuring Illicit Financial Flows Associated with Drug Trafficking in Maldives

6th June 2022, Maldives Police Service, Male' Maldives

Group Exercise – Understanding the methodology to measure illicit drug market value and related IFFs (income generation)

Objective of this exercise: Understand the methodology to estimate illicit drugs flows and the corresponding IFFs. The focus of the exercise is on income generation IFFs emerging from cross-border operations for exchanging illicit drugs. This exercise aims to obtain country-level figures by applying a basic methodology to estimate the illicit drug markets value generated along different drug trafficking routes and in the domestic market. Simulated information on prices and quantities to estimate drugs demand and supply will be used.

Please read the scenario below and follow the guidelines at the end of the scenario to calculate the income generation figures and the total value generated by drugs markets (in terms of revenues and profits).

Please round the results to 2 decimals. You can use a calculator for this exercise.

You will be guided by UNODC to conduct this exercise.

Scenario

- *Trafficking routes*

From the analysis of Maldives seizures data in a given year, it emerges that **100% of the heroin trafficked into Maldives originates from India**. It is known that all the heroin coming from India is sourced from this country and that there is **no production of heroin in the Maldives**. It is also known that **heroin from Maldives is exported to Sri Lanka only**.

- *Domestic consumption and seizures*

Some of the heroin flowing into Maldives is **consumed in the country**. A study reveals that **1.34% of the adult population** consumed the substance at least once in the past year. The size of the adult population (15-64 years old) is **408,436**. The average annual amount consumed per capita is **20 grams**.

It is also known that **220 kg of heroin is seized** in the Maldives, in the same year.

- *Exports*

The rest of the heroin is re-exported to Sri Lanka, location of final consumption (e.g., no heroin is further exported to other countries). From an analysis of Sri Lanka data, it has been detected that **5% of Sri Lanka's heroin seizures come from Maldives**. The 15-64 years old **population of Sri Lanka is 14,100,000** and **0.61% of the adult population**

consumed heroin at least once in the past year. The average annual quantity consumed per capita is also **20 grams**. **Sri Lanka seized 500 kg** of heroin.

- *Prices*

Maldives import price of heroin is estimated at an average of 2,000 USD per kg. Maldives **domestic wholesale price is estimated at 2,500 USD** per kg. The **export price is 2,800 USD per kg.** The **retail price in the country is estimated at an average of 8.5 USD per gram.**

- *Actors*

For the purpose of this exercise, it is assumed that **95% of the persons** who were arrested while **importing heroin** into Maldives are **based in the Maldives** and that **100% of the persons** arrested while **exporting** from Maldives are based in this country.

- *Intermediate costs*

Regarding intermediate costs, it is known that **every kg of heroin consumed in Maldives costs traffickers on average 100 USD.**

The table below summarizes the economic activities of the 3 countries involved in the heroin supply chain described above.

Country	Position in the supply chain	Activities
India	Country of departure	Production Wholesale and retail trade Export
Maldives	Country of transit and destination	Import Wholesale and retail trade Export
Sri Lanka	Country of destination	Import Wholesale and retail trade

Review of the steps to resolve the exercise

Step 1: Review of known data (data collection)

Step 2: Estimate quantities and value

- 2.1 Quantity of heroin consumed in Maldives
- 2.2 Quantity of heroin exported from Maldives
- 2.3 Quantity of heroin imported in Maldives

Step 3: Estimate IFFs (the financial transactions corresponding to imports and exports)

- 3.1. Outward IFFs
- 3.2. Inward IFFs

Step 4. Estimate illicit gross output and illicit net income

- 4.1. Value of the heroin domestic market
- 4.2. Value of the heroin export market
- 4.3. Illicit gross output
- 4.4. Illicit intermediate expenditure
- 4.5. Illicit net income

Step 1: Review of known data (data collection)

Consumption	
Variable	Data
Maldives annual prevalence of heroin (15-64 years-old)	1.34%
Maldives population size (15-64 years-old)	408,436
Average annual quantity consumed per drug user in Maldives	20 grams
Prices	
Variable	Data
Domestic wholesale price	2,500 USD per kg
Domestic retail price	8.5 USD per gram
Import price	2,000 USD per kg
Export price	2,800 USD per kg
Exports/Imports	
Variable	Data
Sri Lanka population size (15-64 years-old)	14,100,000
Annual prevalence of Sri Lanka (15-64 years-old)	0.61%
Average annual quantity consumed per capita in Sri Lanka	20 grams
Proportion of the drugs seized in Sri Lanka coming from Maldives	5%
Proportion of heroin exported from Maldives	100% destined to Sri Lanka
Seizures	
Variable	Data
Quantity of heroin seized in Maldives	220 kg
Quantity of heroin seized in Sri Lanka	500 kg
Proportion of resident international traffickers	
Variable	Data

Proportion of resident drug exporters in Maldives	100%
Proportion of resident drug importers in Maldives	95%
Intermediate costs	
Variable	Data
Drug storage cost per kg in Maldives	100 USD per kg

Step 2: Estimate quantities

2.1. Quantities of heroin consumed in Maldives

- **Number of heroin users in Maldives:**

= Maldives adult population x Annual prevalence rate in Maldives

$$= 408,436 \times 0.0134$$

$$= 5,473 \text{ users}$$

- **Consumed quantity in Maldives:**

= Number of users x quantity consumed per capita

$$= 5,473 \times 20 \text{ grams}$$

$$= 109,460 \text{ grams} = 109.46 \text{ kg}$$

2.2. Quantity of heroin exported from Maldives

Recalling that Sri Lanka is the only country where heroin crossing Maldives is exported, it follows that:

- **Number of heroin users in Sri Lanka:**

= Sri Lanka adult population x annual prevalence rate in Sri Lanka

$$= 14,100,000 \times 0.0061$$

$$= 86,010 \text{ users}$$

- **Quantity of heroin consumed in Sri Lanka**

= Number of users x quantity per capita

$$= 86,010 \times 20 \text{ g}$$

$$= 1,720,200 \text{ grams} = 1,720.2 \text{ kg}$$

- **Quantity of heroin outflowing from Maldives to Sri Lanka**

Bearing in mind that there are no other heroin exports from Sri Lanka to other countries, Sri Lanka total demand is given by:

(Sri Lanka consumption + Sri Lanka seizures) x Proportion coming from Maldives

$$= (1,702.2 \text{ kg} + 500 \text{ kg}) \times 0.05$$

$$= 2,220.2 \text{ kg} \times 0.05$$

$$= 111.01 \text{ kg}$$

○ **Quantity of heroin exported from Maldives**

Heroin exports = Quantity of heroin outflowing x proportion of resident exporters

$$= 111.01 \text{ kg} \times 100\% = 111.01 \text{ kg}$$

2.3. Quantity of heroin imported in Maldives

Bearing in mind that there are no other heroin exports from Maldives to countries other than Sri Lanka, and that no heroin is produced in Maldives, the total imports of heroin in Maldives are calculated as:

Heroin inflow = Consumption + Seizures + Exports

$$= 109.46 \text{ kg} + 220 \text{ kg} + 111.01 \text{ kg}$$

$$= 440.47 \text{ kg}$$

Heroin imports = Heroin inflow x proportion of resident drug importers in Maldives

$$= 440.47 \text{ kg} \times 0.95 = 418.45 \text{ kg}$$

Step 3: Estimate IFFs

3.1. Outward IFFs

Outward IFFs = Heroin imports x import price

$$\text{Outward IFFs} = 418.45 \text{ kg} \times 2,000 \text{ USD}$$

$$= 836,900 \text{ USD}$$

3.2. Inward IFFs

Inward IFFs = Heroin exports x export price

$$\text{Inward IFFs} = 111.01 \text{ kg} \times 2,800 \text{ USD per kg}$$

$$= 310,828 \text{ USD}$$

Step 4. Estimate of illicit gross output and illicit net income

4.1. Value of the heroin domestic market

Value of the domestic market = Quantity consumed in Maldives x retail price

$$= 109,460 \text{ grams} \times 8.5 \text{ USD/gram}$$

$$= 930,410 \text{ USD}$$

4.2. Value of the heroin export market

Value of export market = Inward IFFs = 310,828 USD

4.3. Illicit gross output

illicit gross output = Value of the domestic market + value of the export market

= 930,410 USD + 310,828 USD

= 1,241,238 USD

4.4. Illicit intermediate expenditure

Intermediate costs = Heroin consumption x storage per kg

= 109.46 kg x 100 USD per kg

= 10,946 USD

4.5. Illicit net income

Illicit net income = illicit gross output – intermediate costs

Illicit net income = 1,241,238 USD – USD 10,946 USD

= 1,230,292 USD