In [1]:
```
import pandas as pd
import matplotlib.pyplot as plt
```

In [5]:
```
import os
os.listdir()
```

Out[5]:
```
['.ipynb_checkpoints',
 'API_SP.POP.TOTL_DS2_en_csv_v2_40826',
 'API_SP.POP.TOTL_DS2_en_csv_v2_40826.zip',
 'DS_Task_1.ipynb']
```

In [6]:
```
os.listdir("API_SP.POP.TOTL_DS2_en_csv_v2_40826")
```

Out[6]:
```
['API_SP.POP.TOTL_DS2_en_csv_v2_40826.csv',
 'Metadata_Country_API_SP.POP.TOTL_DS2_en_csv_v2_40826.csv',
 'Metadata_Indicator_API_SP.POP.TOTL_DS2_en_csv_v2_40826.csv']
```

In [8]:
```
file_path = "API_SP.POP.TOTL_DS2_en_csv_v2_40826.csv"
```

In [13]:
```
df = pd.read_csv(file_path, skiprows=4)
```

In [14]:
```
df.head()
```

Out[14]:

	Country Name	Country Code	Indicator Name	Indicator Code	1960	1961	1962	
0	Aruba	ABW	Population, total	SP.POP.TOTL	54922.0	55578.0	56320.0	
1	Africa Eastern and Southern	AFE	Population, total	SP.POP.TOTL	130075728.0	133534923.0	137171659.0	1
2	Afghanistan	AFG	Population, total	SP.POP.TOTL	9035043.0	9214083.0	9404406.0	
3	Africa Western and Central	AFW	Population, total	SP.POP.TOTL	97630925.0	99706674.0	101854756.0	1
4	Angola	AGO	Population, total	SP.POP.TOTL	5231654.0	5301583.0	5354310.0	

5 rows × 70 columns

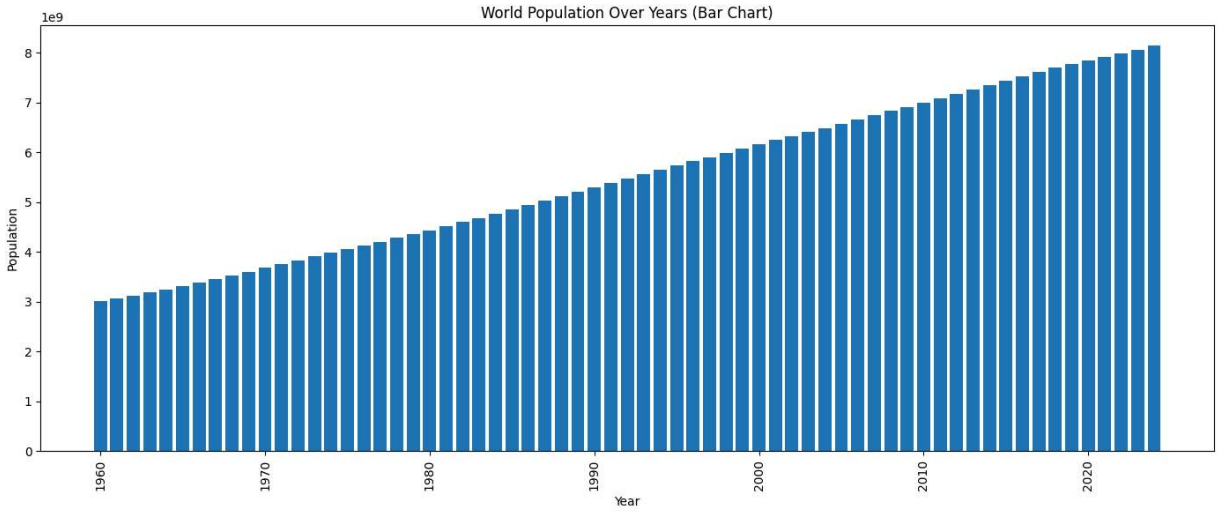
In [15]:
```
world_data = df[df["Country Name"] == "World"]
```

In [16]:
```
year_columns = [col for col in world_data.columns if col.isdigit()]
```

In [17]:
```
year_columns = [year for year in year_columns if int(year) <= 2026]
```

In [19]:
```
population = world_data[year_columns].T
population = population.rename(columns={population.columns[0]: "Population"})
population.index = population.index.astype(int)
population = population.dropna()
```

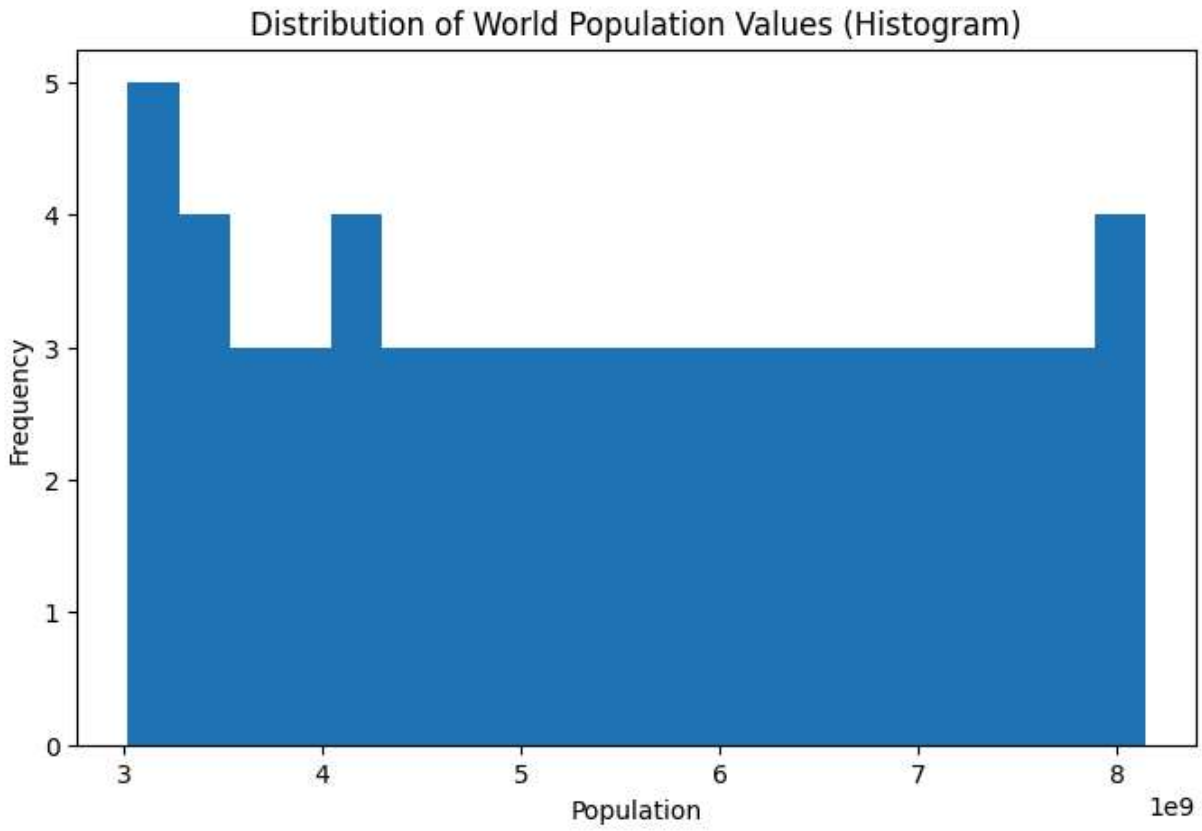
In [22]:
```
plt.figure(figsize=(14,6))
plt.bar(population.index, population["Population"])
plt.xlabel("Year")
plt.ylabel("Population")
plt.title("World Population Over Years (Bar Chart)")
plt.xticks(rotation=90)
plt.tight_layout()
plt.show()
```



In [21]:
```
print(population.tail())
```

```
      Population
2020  7.854748e+09
2021  7.920515e+09
2022  7.989545e+09
2023  8.064058e+09
2024  8.141809e+09
```

In [23]:
```
plt.figure(figsize=(8,5))
plt.hist(population["Population"], bins=20)
plt.xlabel("Population")
plt.ylabel("Frequency")
plt.title("Distribution of World Population Values (Histogram)")
plt.show()
```


Distribution of World Population Values (Histogram)
Frequency
Population
1e9
0
1
2
3
4
5
3
4
5
6
7
8

In [ ]: