



# **National Prevalence Survey on Drug Use - 2019**



**National Dangerous Drugs Control Board  
Precedential task force on Drug prevention  
Sri Lanka Police**



**Drug Free Nation**



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**Compilation of the report**

**Research Division**

**National Dangerous Drugs Control Board**

**2019**

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## **Executive summary**

The non-availability of updated estimation on the number of drug users in Sri Lanka was one of the major problems related to the control of drug abuse. The drug use profile was already captured through number of research studies and surveys conducted by National Dangerous Drugs Control Board (NDDCB) and it was limited to sample frame selected from limited locations. There was a need in conducting national level size estimation survey on drug use population with the above situation.

The NDDCB in collaboration with the Presidential Task Force on Drug Prevention and Sri Lanka Police has done a survey to estimate the drug use population in the country. Island wide size estimation on drug use population would be the foundation for further programme planning and implementation. Also, drug abuse management mechanism would be strengthening with the updated estimation of drug use population in Sri Lanka.

Highly stigmatised and illegal behaviours, such as drug use, can be extremely challenging to survey. Since any single direct or indirect method has inherent limitations in reliably estimating drug use prevalence, a multi-faceted approach was adopted where several methods were combined such as head counting of target population (direct method) and Benchmark-multiplier and Capture-recapture method (Indirect).

## **Key Findings**

- Cannabis is the most commonly used illicit drug, with a prevalence of 1.9 % of the total population of above 14 years. An estimated 301,898 persons are cannabis users.
- An estimated 92,540 or 0.6 % of population of above 14 years are heroin users in Sri Lanka.
- Heroin use among male population (above 14 years) is 1.2% and among female population (above 14 years) is 0.018 percent.
- Approximately 0.2% of total population (above 14 years) are abuse any pharmaceutical drug.
- Polly drug use is common among drug users.
- An estimated 70,862 or 77 % are regular heroin users and 178,643 are regular cannabis users in Sri Lanka.
- An estimated 32.32 % and 40.89 % of male population (above 14 years) are cigarette and alcohol users respectively.

- The highest prevalence of drug use was found in Western province and Colombo district.

## **01. Introduction.**

It was revealed through various sources that there is a systematic progress regarding the usage of drugs and its prevalence among the population of Sri Lanka. Once the official statistical reports being analyzed concerning the number of individuals arrested for drug related offences, number of drugs being arrested, number of individuals who are admitted to rehabilitations centers for treatments for the prevention of addiction, number of individuals imprisoned for the conviction of drug related offences, it is able to be identified that there is a propensity of increasing the prevalence of drugs.

Despite the fact that, there is a possibility to detect a statistical progress under the above-mentioned each of the criteria, it is essential to maintain an updated system of official statistical reports with regard to the number of individuals who utilized drugs. It is indeed imperative to hold an updated Data base consisting the number of individuals who utilize different varieties of drugs and relevant social demographical information, and thus it is able to be delivered a solid basis for the policy formulation process.

By identifying this national stipulation and in light of its relevant facts, this national survey was conducted in collaboration with three major government institutions namely, National Dangerous Drugs Control Board, Presidential Task Force on Drug Prevention and Sri Lankan Police. Through this national survey, statistical values of the population of drug users, prevalence with respect to gender and age level, prevalence of drugs connected to districts and divisional secretariats, prevalence regarding the different varieties of drugs being utilized, are provided in an informative manner. When planning the policy formulation concerning the control of the misuse of drugs and for the essential prevention, treatments and rehabilitations programs, it is able to be eliminated the prevalence of drugs and its respective trends.

### **1.1 Study Background.**

It is able to measure quantitatively the prevalence of the usage of drugs and its respective trends by applying specific indicators. There are two major indicators which are able to be utilized for the respective purpose and they are mentioned below,

- 1). Arrests related to the misuse of drugs.
- 2). Admission for the treatments and rehabilitation services.

When quantitatively measure the prevalence of drugs, it is able to be taken the arrests regarding the drug related offences as one of the major indicators. It is able to witness a clear progress concerning the analysis of the number of individuals being arrested for drug related offences taken for the first quarter from 2015 to 2019. Relative to the 2015, it is evident that there has been an increase associated with the arrests related to Heroin from 54% and arrests related to Cannabis from 5%, during 2018. When analyzed on the number of drugs being arrested, it is able to witness, among the quantity of Heroin being arrested, from 1997 to 2018 (within 27 years of time gap), the highest amount of Heroin (739kg) was reported to be arrested in 2018. Through the means of analysis of data, it is able to detect, the prevalence of the usage of drugs concerning the admission of treatment and rehabilitation services for the addiction of drugs.

when compared to the data related to treatments in the following 5 years, it is able to be identified a progress in the number of individuals who are admitted to the services with regard to treatments.

There are two major policy stipulations emerging with the above-mentioned data analysis regarding the usage of drugs. They are mentioned below,

- 1). How many individuals have involved in the usage of drugs among the total population of Sr Lanka?
- 2). Has the statistical value of the usage of drugs been changing?

Through the means of calculating the number of individuals who utilize drugs, it is able to estimate the impact of the society resulted by the usage of drugs. In addition to the impact being estimated, by comprehending the dynamics regarding drug menace, it is able to suggest major alternatives concerning the prevention of drugs in order to create influential conditions necessary for policy formulations. It is significant to apply pre-estimations with regard to diverse dimensions regarding drug menace for the investments of resources when implementing actions concerning the control of drugs.

As per the Epidemiological definition, there are two major terms associated with the above-mentioned two questions, they can be mentioned as “Incident” and “Prevalence”. “Incident” refers to health problem of some sort or new identifications relevant to prepared risky behaviors and “prevalence” refers to total quantity with the addition of new identifications and pre-made identifications. Calculations Such as ratios/ quantities ought to be taken in to consideration on the basis of the population determined by the geographical areas. And further more calculations ought to be carried out with regard to the indicators of age and gender concerning specific time gaps.

### **1.2 Study objective.**

- To estimate the drug using population regarding the geographical area and through the means of that identifying the prevalence of the usage of drugs.
- To measure comparatively the prevalence of the usage of drugs according to the social demographical factors such as gender and age.
- To estimate statistically on the trends and patterns of the drug using population.

### **1.3 Study methods.**

Following methods are utilized in order to estimate the population who utilize drugs.

- 1). Direct Estimation Method.
- 2). Indirect Estimation Method.

### **Direct Estimation Method.**

Here the drug using population utilizing different varieties of drugs representing all the gramaniladari divisions in island wide was measured by utilizing the method of calculating the population statistically and which is termed as “Head counting of target population”.

Statistical method pertaining to “Target population” was followed in place of “sample surveys” on the basis of the limitations and lack of information regarding illicit drugs such as Heroine/Cannabis found out through the experiences of pre-surveys by conducting “Sample survey/Domestic survey” method. When calculating the number of drug users, few categories and indicators were applied and they can be mentioned as follows,

- Type of drug (Heroine/Cannabis/Alcohol/Cigarette/Other).
- Age (Below 18 years or above 18 years).
- Sexual Orientation.
- Trend of the usage.

This calculation was carried out via drug prevention committees operating at the level of gramaniladari divisions island wide. Through the meeting of drug prevention committees, the number of population of drug users were being calculated considering the awareness and the pre-identification and the utilization of pre-examined model with respect to the number of drug using population. Training programmes were operated in order to minimize the technical errors in regard to the method of calculation, the concentration regarding the ethics and moreover technical errors concerning the same person being calculated repeatedly.

### **Indirect Method.**

In addition to the Data of the Calculations conducted at the level of gramaniladari divisions concerning the drug using population, it is also included the existing data concerning the usage of drugs by the respective population and the estimated values are been prepared. By utilizing pre-identified data related to a specific time period, the targeted population was being calculated. There are two main methods being utilized under Indirect methods. They can be mentioned as follows,

- 1). Benchmark- Multiplier Method
- 2). Capture- Recapture Method

#### **1). Benchmark- Multiplier Method.**

when in the making of the estimated values with respect to the prevalence of drug and data systems concerning different indicators and to sub groups associated with targeted population, Fix value and Estimated proportion with respect to the relevant indicators were utilized. Sources utilized for that purpose are mentioned below.

- i). DAMS- Drugs Abuse Monitoring System conducted by the National Dangerous Drugs Control Board consisting of information regarding arrests resulted by drug related offences and details pertaining to admissions of treatments of the respective drug addicts.

ii). Annual data provided by police Narcotics Bureau pertaining to drug related arrests (2014-2018).

iii). Targeted population (drug using population) was utilized as a sample for research studies and data regarding surveys being conducted during 2017/2018 years.

Study regarding prevalence of the usage of drugs and its modern trends. (n = 1079)

Survey regarding the usage of Narcotic and Psychotropic drugs. (n = 2000)

Studies regarding usage of drugs among women. (n = 150)

## 2). Capture- Recapture Method.

Here, by utilizing the lists regarding the targeted population and calculation of the true value by removing the re-entries and through which the drug using population were estimated. There were several sources utilized for this purpose. They are mentioned below,

i). Data file being prepared by the Police Narcotics Bureau regarding the number of arrested individuals with respect to drug related offences, relevant for 5 years.

ii). List of drug users identified in the field by the Out Reach Officers of the National Dangerous Drugs Control Board.

iii). Data file of the arrested drug users reported through police Stations, to the DAMS- Drug Abuse Monitoring System during 2018.

### **1.4 Data preparation and analysis.**

Data preparation was carried out relevant to the calculations conducted under 3 stages at the level of gramaniladari divisions island wide prior to the analysis of data.

- Screening Phase- preliminary examination conducted regarding the Data file which included data concerning all the gramaniladari divisions island wide.
- Diagnostic Phase- Identifying problems exist in the data file.
- Treatment Phase- editing the essential data and steps taken for the settlement of identified problem

For the data analysis related to the survey, SPSS computer software was utilized and in order to prepare estimated values regarding the usage of tertiary data sources, the analysis was conducted on the basis of Benchmark- Multiplier Method and Capture- Recapture Method.

### **1.5 Utility.**

Considering the prevalence of the usage of drugs at the level of districts and divisional secretariats, it is able to utilize these respective data., in order to implement drug prevention programmes and moreover to enforce the currently implementing programmes.

When initiating treatment and rehabilitation programmes, it is imperative to implement these respective programmes by offering the priority to areas with the highest prevalence of drugs. when allocating Investments and provisions to control drug menace it is able to utilize the estimated values in the report consisting of drug prevalence.

In order to conduct the calculation regarding the targeted population and other calculations pertaining to the usage of drugs, these respective numerical values are able to be utilized. In order to control the drug menace, preparing a mechanism by combining government and non-government institutions at local level and in order to implement productive programmes, these data can be utilized as basic foundation.

### **1.6 Attention pertaining to the protection of ethics.**

When the calculations being conducted at the level of gramaniadari divisions, in order to prevent the re-calculations, individuals are being listed nominally and once the final modal papers being completed, data collection was not conducted by exposing any identity of the respective individuals who utilize drugs. it was concentrated on the protection of the secrecy of the individuals who utilize drugs thus their names and other related statistics were not decided to be revealed.

When utilizing the data systems as tertiary sources, it was decided to follow the same theory.

### **1.7 Technical limitations.**

- Among the epidemiological studies despite the fact that the usage of drugs being studied, it is not able to utilize the modal for diagnosis of deceases in detecting the usage of drugs.
- In the view of the fact that majority of the drug users are found to be Poly Drug Users, representation of Poly Drug Users in each of the estimated values.
- Since the usage of illicit drugs is considered to be a social impertinence, in surveys specially in calculations relevant to targeted population, limitations are able to be emerged.
- Despite the fact that General population survey is used as general technique for the gathering of information pertaining to the drug using population, via domestic surveys, data related to the usage of Heroin and cannabis have been revealed to be limited. Therefore, in place of domestic surveys method of calculating the targeted population at the level of gramaniadari divisions was utilized. And furthermore, Indirect Methods pertaining to estimation of prevalence was also being utilized.

## 02. Results

In this paragraph, estimation values regarding the population of drug users in Sri Lanka are included under the following indicators.

- 1). By sex.
- 2). By age level. (Below and above 18 years)
- 3). By the types of drugs. (Cigarette/Alcohol/Heroin/Cannabis/Other/Tablets)
- 4). By geographical area. (at the level of Provinces, Districts, and Divisional secretariats)

During the past 12 months, in the estimation values regarding drug using population, individuals who utilize at least single type of drug once were included and furthermore, Poly Drug Users are represented.

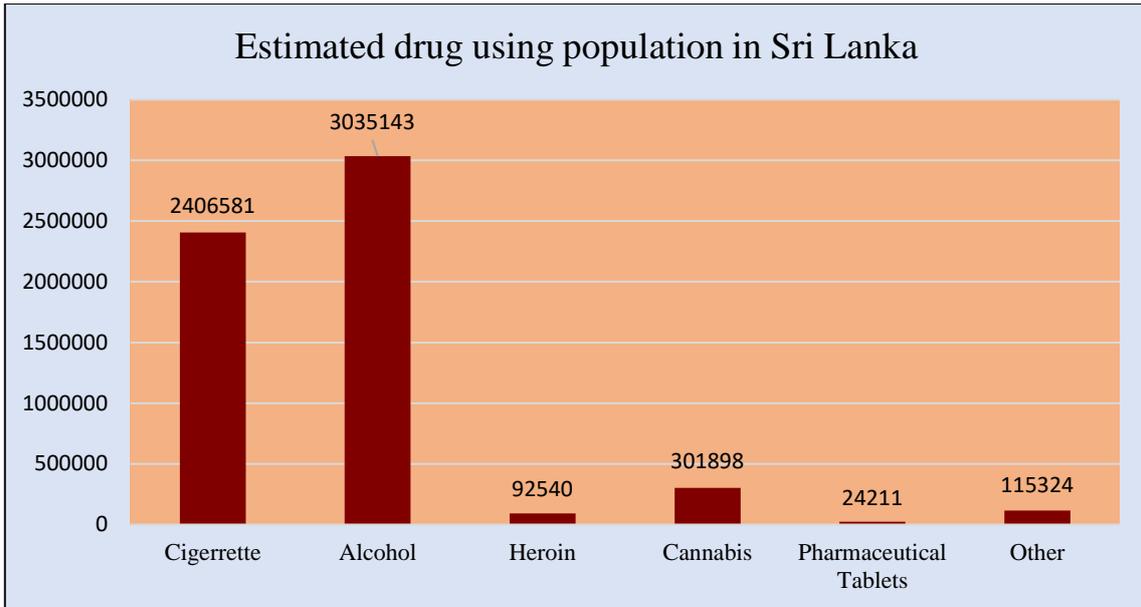
### 2.1 Estimated population of drug users in Sri Lanka.

#### Estimated population who utilize drugs in Sri Lanka by sex.

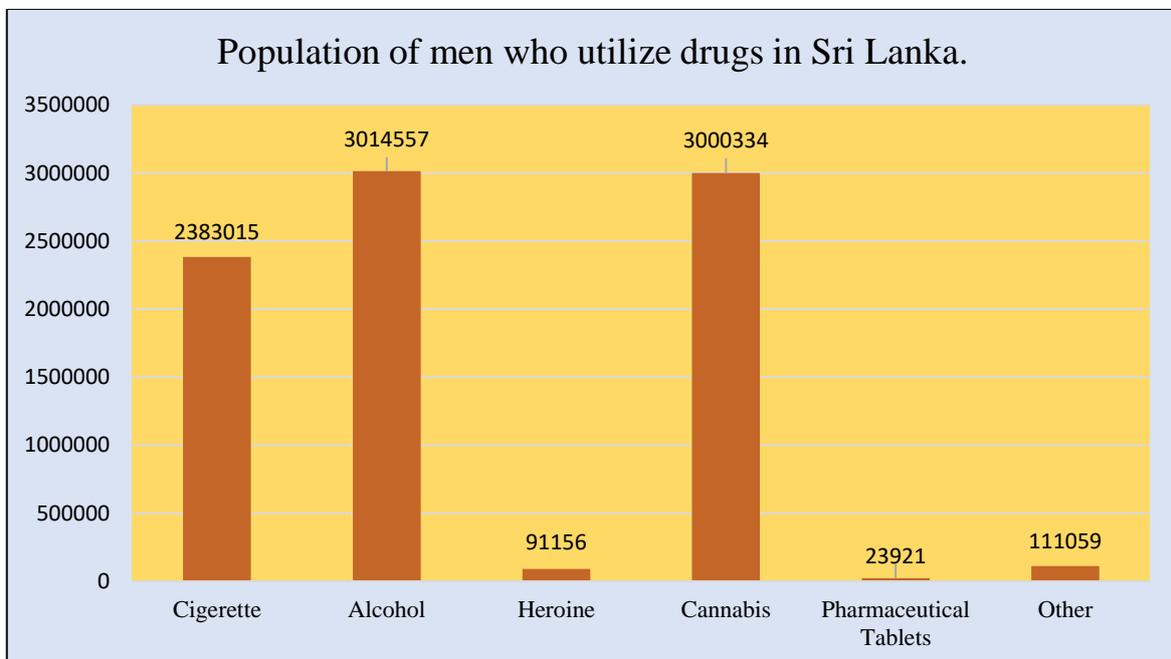
Drug type	Female	Male	Total
Cigarette / Tobacco products	23,566	2,383,015	2,406,581
Alcohol	20,586	3,014,557	3,035,143
Heroin	1,384	91,156	92,540
Cannabis	1,564	300,334	301,898
Pharmaceutical Tablets	290	23,921	24,211
Other	4,265	111,059	115,324

**Poly Drug Users are represented in the above estimation values. In the category entitled as “other”, drugs that represent Amphetamine category such as Ecstasy, stimulants, Cocaine, methamphetamine, Cannabis related productions such as hashish/madanamodaka, types of production made by using arecanuts such as Babul, Mawaa, non-smelling types of drugs are included.**

It is able to witness a high prevalence in the usage of legally controlled types of drugs such as Cigarettes and Alcohols among men and women and moreover when considering the usage of drugs among women, it is evident that there is a high propensity concerning the usage of productions pertaining to Cigarettes and Tobacco.



As stated by the above estimation values, it is able to be identified a highest prevalence in the usage of illicit drugs such as Cannabis. Secondly, Heroin is able to be identified as the second most utilized type of drug which showed the second most high prevalence among the usage of drugs. Among the number of drugs utilized by the estimated drug using population, Poly Drug Usage can be identified as a common feature and moreover they utilize one or more drugs at a time concurrently. Specially among individuals who utilize Heroine, it is able to be identified a propensity of misusing Tablets.



Regarding the misuse of Heroine, Cannabis and Tablets, it can be witnessed a minimum prevalence among women relative to the population represented by men.



**2.2 Estimated drug using population. (Total population as a percentage representing above 14 years in Sri Lanka)**

**Estimated population of drug users relative to the total population as a percentage.**

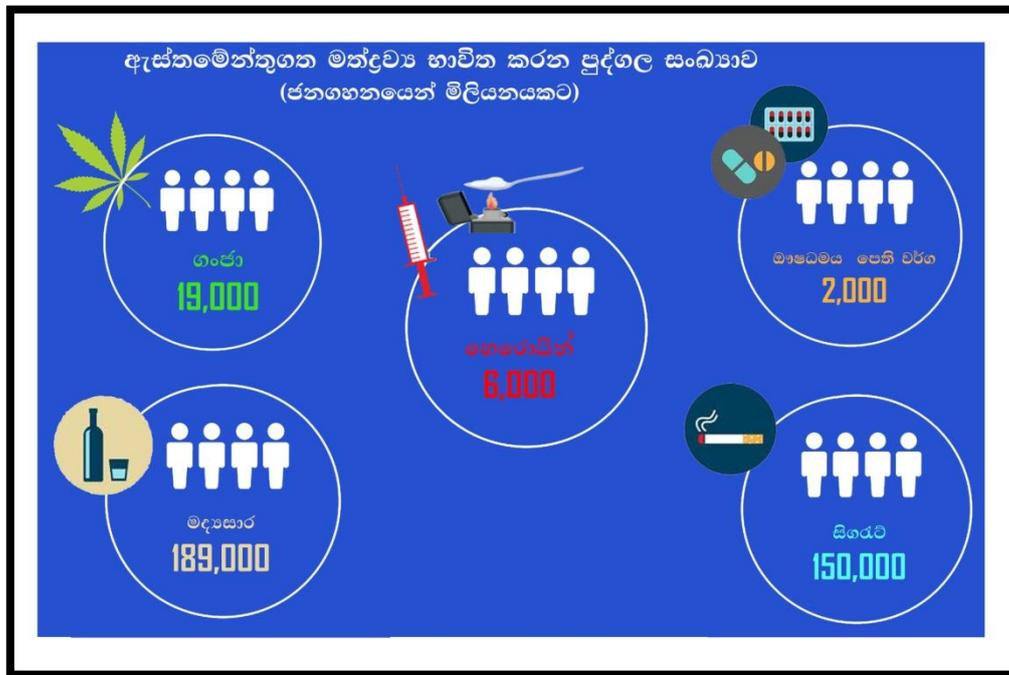
Drug type	As a percentage for total female population of above 14 years %	As a percentage for total male population of above 14 years %	As a percentage for total population of above 14 years %
Cigarette	0.3	32.32	15.80
Alcohol	0.26	40.89	19.93
Heroin	0.018	1.24	0.61
Cannabis	0.02	4.07	1.98
Pharmaceutical Tablets	0.004	0.32	0.16
Other	0.054	1.51	0.76

Among population of men who represent above 14 years, it is evident a high prevalence in the usage of Alcohol.

### 2.3 Estimated drug using population- million out of the total population (1000,000).

Relative to the total population who represents above 14 years in Sri Lanka, considering the pervence of drugs, it is able to be estimated, among million individuals, 6000 individuals utilize Heroine, 19000 individuals utilize Cannabis,2000 individuals utilize tablets.

#### Number of drug users relative to one million population



### 2.4 Estimated drug using population in Sri Lanka by sex and age level.

Drug type	Below 18 years		18 years and above		Total
	Female	Male	Female	Male	
Cigarette	282	122,432	23,284	2,260,583	2,406,581
Alcohol	906	121,170	19,680	2,893,387	3,035,143
Heroin	64	6,147	1,320	85,009	92,540
Cannabis	81	30,421	1,483	269,913	301,898
Pharmaceutical Tablets	71	4,628	219	19,293	24,211
Other	265	9,636	4,000	101,423	115,324

The above values represent the number of Poly Drug Users and in each of the age category the total number of drug users are not able to be calculated.

When analyzed on the number of individuals who utilize drugs/Alcohol by age level, it is able to be identified a tendency regarding the usage of individuals utilizing Cigarette and Alcohol who represent below 18 years of age and furthermore among Narcotic and Psychotropic drug category, it is able to be identified a propensity in the usage of Cannabis and Tablets.

**2.5 Estimated drug using population by pattern of the usage.**

Drug type	Drug use pattern		Total
	Daily	Occasionally	
Cigarette	1,613,777	792,804	2,406,581
Alcohol	1,063,383	1,971,760	3,035,143
Heroin	70,862	21,678	92,540
Cannabis	178,643	123,255	301,898
Pharmaceutical Tablets	12,932	11,279	24,211

**In the above values, number of Poly Drug Users are represented.**

When analyzed on the number of drug users by pattern of the usage, it is evident an increase in the number of individuals who utilize all types of drugs except for Alcohol. Among the individuals who utilize alcohol, it can be noted a high percentage in the usage of alcohol occasionally.

## 2.6 Estimated population of drug users by provinces.

Province	Alcohol		Cigarette		Cannabis		Heroin		Pharmaceutical Tablets		Other	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Western Province	7435	916,852	6964	705,968	944	99,984	977	62,619	192	14,288	1743	30,760
Eastern Province	1827	375,573	2882	299,283	121	38,611	101	8144	28	1292	325	8154
North Western Province	2211	292,506	2764	192,115	118	33,442	92	6192	19	3115	596	9697
Central Province	2500	442,529	2964	373,251	76	23,541	75	4165	23	1210	173	13,058
Sabaragamuwa Province	2052	322,223	2253	223,694	74	32,189	53	4676	11	1366	338	11,780
Northern Province	1335	126,267	1212	106,169	74	7534	12	475	2	72	190	12362
eastern Province	1181	123,730	1677	124,946	57	11,836	29	683	4	205	344	7685
Uva Province	943	206,937	1428	174,247	54	19,395	15	687	4	163	521	12,843
North Central province	1102	207,940	1422	183,342	46	33,802	30	3515	7	2210	35	4720

When analyzed on the prevalence of the usage of drugs by Provinces, it can be noted a high prevalence in the western Province.

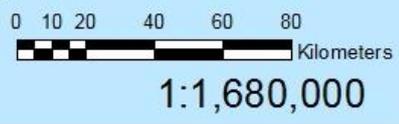
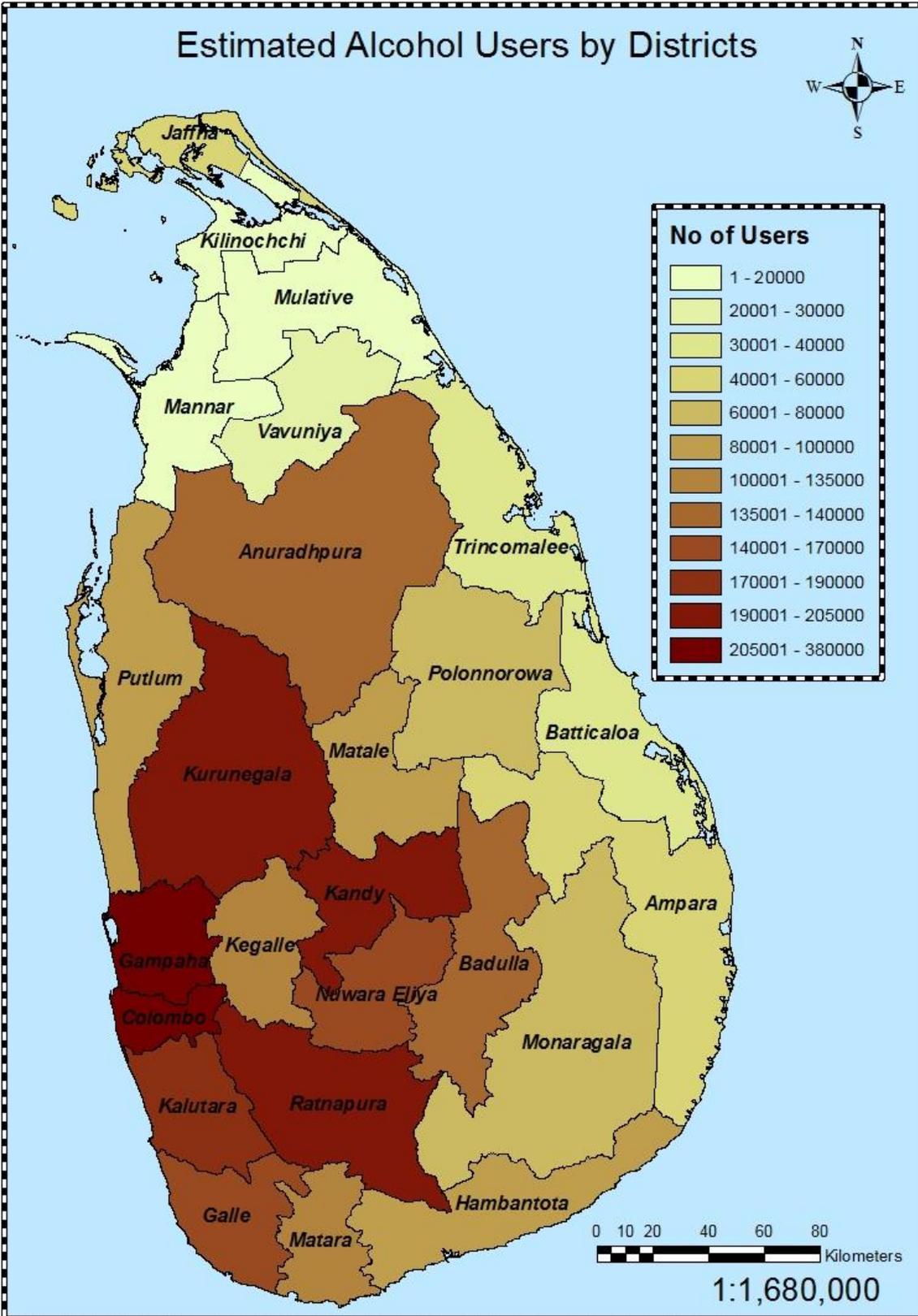
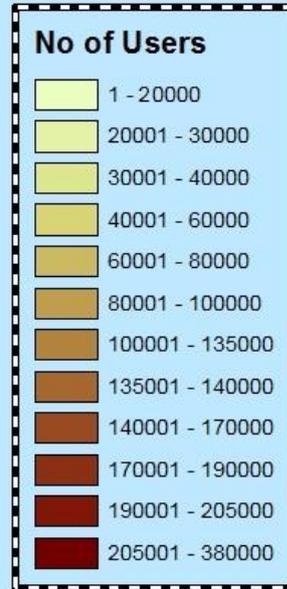
## 2.7 Estimated population who utilize drugs by districts.

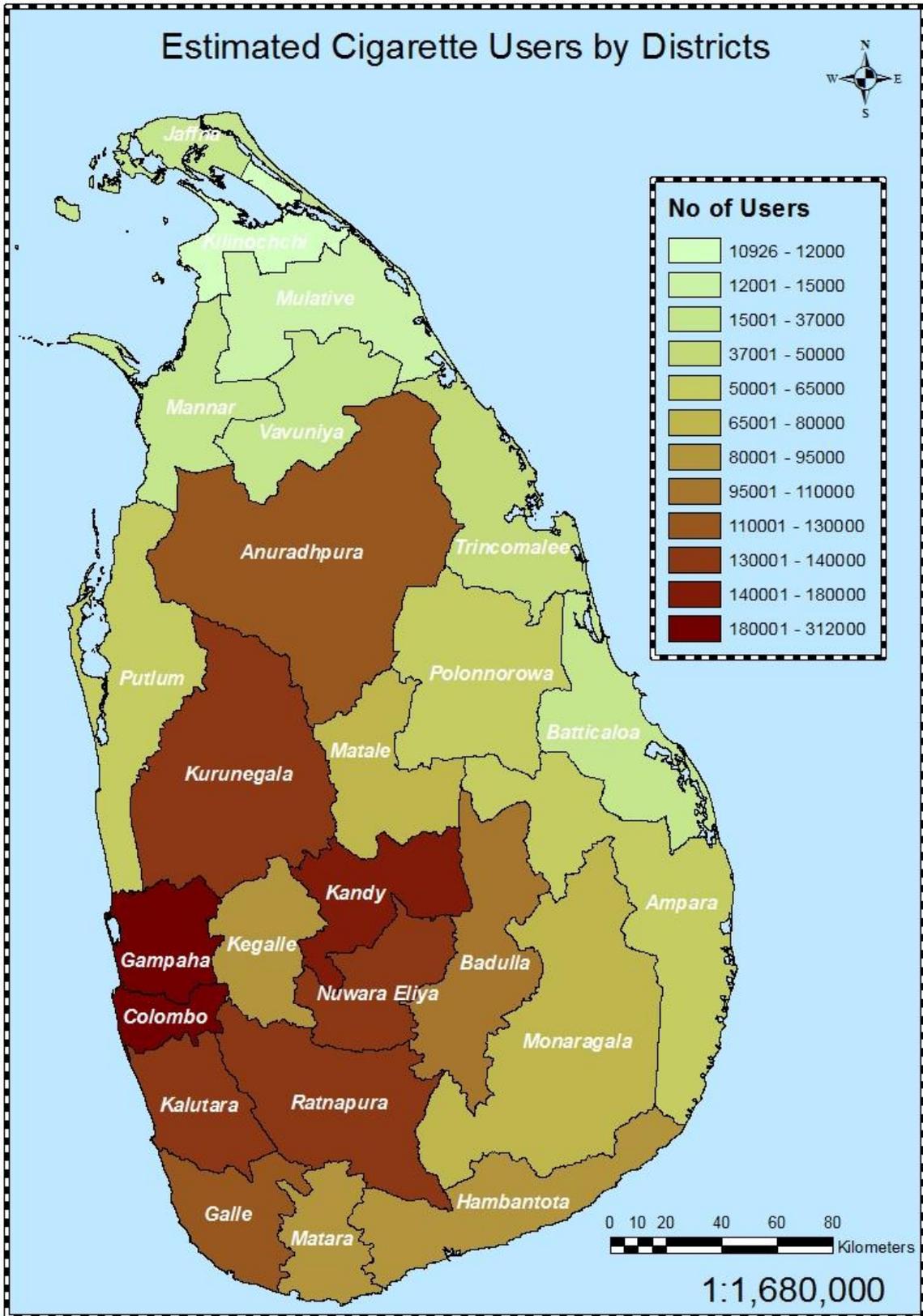
	Alcohol		Cigarette		Cannabis		Heroin <sup>p</sup>		Pharmaceutical Tablets		Other	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Ampara	398	51906	709	50739	7	6103	7	315	1	107	0	2402
Anuradhapura	722	139,069	967	123044	26	23767	22	3012	5	1897	10	3235
Badulla	797	137,186	929	108047	28	8464	7	361	1	95	489	9207
Batticaloa	403	37640	573	29565	18	773	12	48	2	14	275	2490
Colombo	3959	360,103	2782	307680	769	53489	757	40858	142	7425	1149	12541
Galle	1006	156,045	1248	124944	78	15842	67	5316	21	906	249	2523
Gampaha	2128	375,315	2751	262689	143	30627	187	17844	38	5796	266	9889
Hambanthota	489	87,359	679	80421	32	11450	19	1196	4	202	6	2910
Jaffna	810	47,397	701	35902	25	1405	2	302	0	28	36	3874
Kaluthara	1348	181434	1431	135599	32	15868	33	3917	12	1067	328	8330
Kandy	812	193,654	1608	174486	34	11378	53	3147	15	792	126	5148
Kegalle	664	125,988	999	91361	22	10653	20	1811	4	579	192	2876
Kilinochchi	117	18,876	117	10809	18	1005	2	28	1	2	19	1276
Kurunegala	988	201,474	1908	131920	76	19843	65	4234	14	1345	174	6129
Mannar	172	17,865	106	17988	21	1217	2	63	0	17	10	731
Mathale	278	82,800	557	66864	17	7675	18	837	5	357	47	6008
Mathara	332	132,169	955	93918	11	11319	15	1632	3	184	70	2721
Monaragala	146	69,751	499	66200	26	10931	8	326	3	68	32	3636
Mutative	107	16,323	96	12999	5	927	2	14	0	8	0	26
Nuwara eliya	1410	166,075	799	131901	25	4488	4	181	3	61	0	1902
Polonnaruwa	380	68,871	455	60298	20	10035	8	503	2	313	25	1485
Puttalam	1223	91,032	856	60195	42	13599	27	1958	5	1770	422	3568
Rathnapura	1388	196,235	1254	132333	52	21536	33	2865	7	787	146	8904
Trincomalee	380	34,184	395	44642	32	4960	10	320	1	84	69	2793
Vavuniya	129	25,806	192	28471	5	2980	4	68	1	17	125	6455

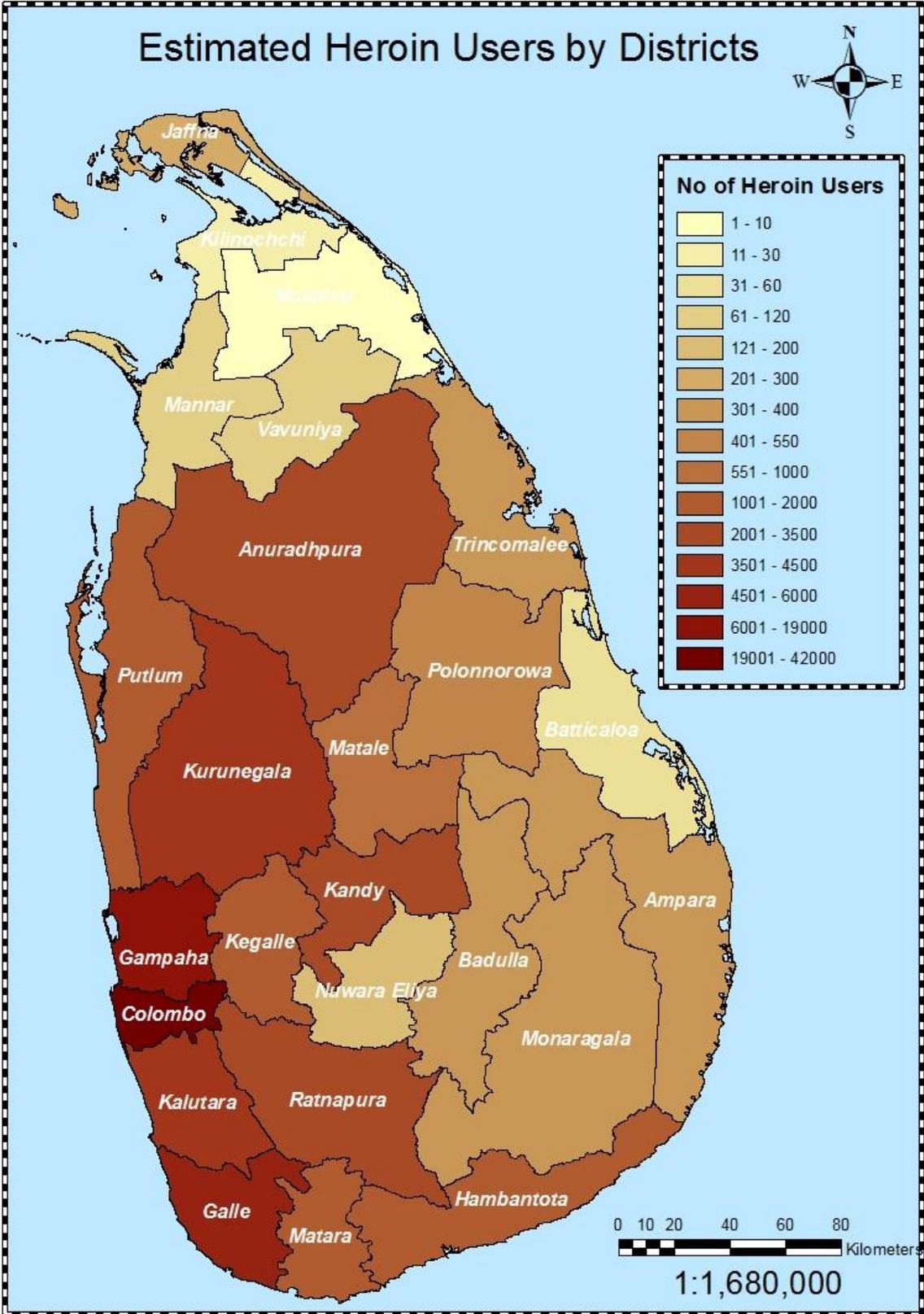
When considering the prevalence of the drug users by district level, it is able to be identified highest prevalence related to both illegal and legal drug categories in the Colombo district.

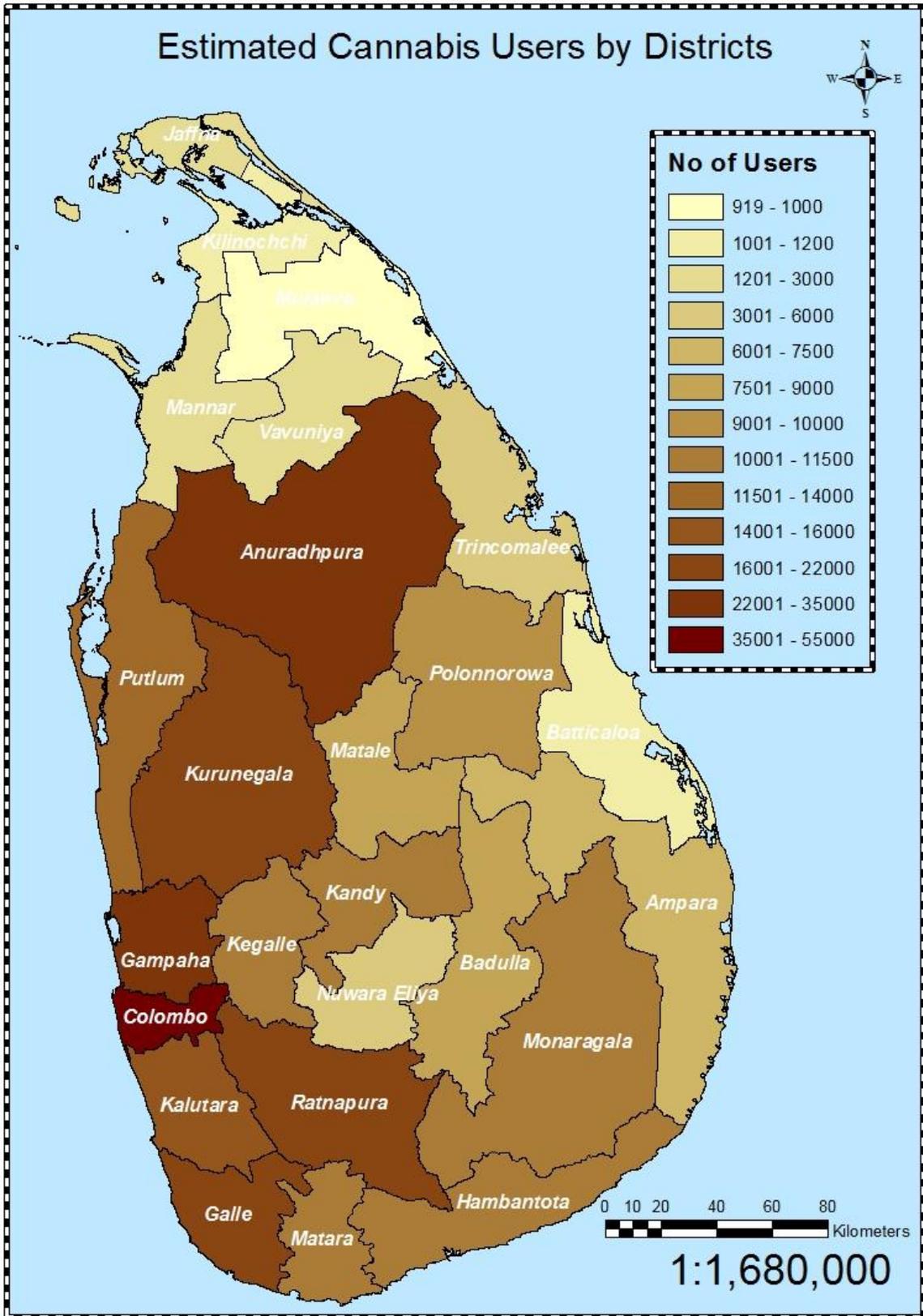
According to the prevalence of Heroine, it can be identified that the second highest prevalence is reported to be in the Gampaha district and due to the order of the prevalence being reported, Galle district can be identified as the third district. As per the prevalence regarding each of the different drugs being utilized by the drug users are depicted in the following charts.

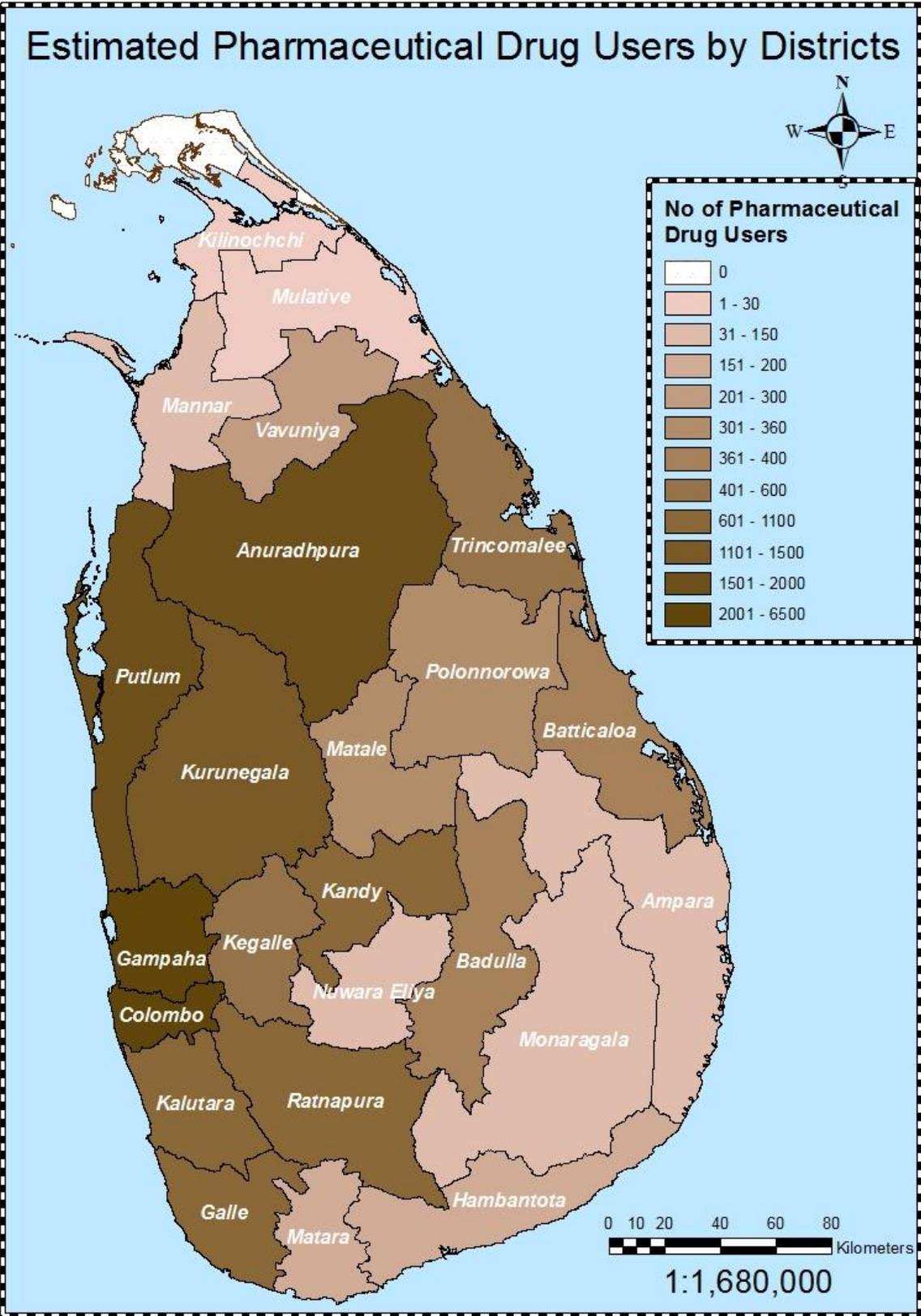
# Estimated Alcohol Users by Districts











## **2.8 propensity of engaging in treatments.**

Among the drug using population, individuals who have admitted for treatment and rehabilitation services annually has been reported to be 7%. In Sri Lanka. Furthermore, Among the individuals who utilize Heroin, individuals who are willing to take necessary treatments are able to be estimated as 77%.

## **2.9 Propensity of imprisonment.**

Among the population who are imprisoned for the usage of Heroin, is reported to be 8%, and for the usage of Cannabis, 2 % of individuals reported to be imprisoned. Moreover, Among the individuals who are imprisoned for the usage of drugs, 7205 are reported to be using Heroin, 5575 are reported to be using Cannabis.

## **03. Conclusions.**

- Usage of Cigarette and Alcohol are reported to be below and above 18 years and moreover there is a high prevalence in the usage of respective drugs among men and women.
- Among the usage of illicit drugs, Usage of Cannabis is reported to have the highest prevalence and the second highest prevalence is reported be of Heroin.
- It is identified that there is a propensity of misusing tablets and moreover it is seemed to be systematically progressing. Furthermore, individuals tend to utilize one or more types of drugs occasionally. Thus, the majority of the drug users were represented by Poly drug users.
- Districts such as Colombo, Gampaha, Galle and Kurunegala are reported to have a high prevalence concerning the misuse of Heroin and districts such as Colombo, Gampaha, Anuradhapura and Rathnapura are reported to have a high prevalence regarding the misuse of Cannabis.
- Among the total population who misuse drugs, it is reported 7 % of them admitted for the treatments and moreover relative to the number of individuals who need to obtain treatments, it is able to be considered a very low rate.

## **04. Suggestions.**

- 1) Implementing drug control programmes productively and in the policy formulation process, it is imperative to consider modern trends and the prevalence of the usage of drugs revealed by the National surveys.
- 2) In order to minimize the usage of drugs, it is ought to be increased the services related to treatments and rehabilitations. It is also vital to consider on the following priorities.

- Initiating treatment centers on the basis of psychological treatment modal at the community level.
- Increasing the capacity of currently existing private and non-governmental treatment centers.
- Graining the assistance of private and non-governmental sector for treatment programmes.
- Individuals who are imprisoned for the misuse of drugs, ought to be included for the residential treatment programmes.

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