



DRUG SURRENDERERS AND CRIME STATISTICS DURING THE IMPLEMENTATION OF PROJECT DOUBLE BARREL (PDB) IN THE PHILIPPINES



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ABSTRACT

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sorsogon.

It is a fact that criminality related to illegal drugs is, indeed, a social problem which affects the growth of the nation and every aspect of community life. This study analyzed the profile of drug surrenderers and the crime statistics in the Province of Sorsogon during the implementation of Project Double Barrel in the Philippines. It was found out that most of the drug surrenderers are from the marginalized sectors belonging to informal workers, construction workers and jobless. There was a notable decrease in the crime volume incidents during the implementation of Project Double Barrel in the province. Due to constraints in the number of police personnel, however, there is no significant difference in the crime solution efficiency (CSE) as compared to the previous year. Physical injury and theft were the highest among the recorded index crime while most of the non-index crime incidents recorded was related to vehicular traffic incidents and other violation of street laws.

Contribution/ Originality: This is one of the very few studies which have investigated the impact to crime statistics of the intensified implementation of the Anti-illegal Drug Campaign also known as Project Double Barrel (PDB) in the Philippines during the term of President Rodrigo Roa Duterte.

1. INTRODUCTION

A substantial number of laws and literature on reducing crime volume are available in every nation of the world, but it has never ceased since the biblical crime at the Garden of Eden (Genesis 4:8). Crime situation has been recognized as an indicator of a peaceful, orderly, and safe community. Moreover, a safe and secured environment is a key factor in fostering investment and economic growth in a country.

Scholars worldwide recognize that the commission of the crime and the use of illicit substances are both deviant, problematic behaviors that cause vast amounts of human suffering and societal problems. This argument can be strengthened by the investigation made by Nordstrom and Dackis (2011) who found out that active use of illegal drugs tends to increase the frequency of criminal activity. The use of prohibited drug is, indeed, a social problem which affects every aspect of community life. Villar (2015) underscores that peace and order and illegal drug activities are two non-economic problems that affect every country's economy. Without peace and order, operations of business and industries are disrupted.

White and Gorman (2000) stress some social, psychological and cultural factors that may be used to identify people who are at risk of becoming offenders and/or drug users. In the report of United Nations International Drug

Control Programme (1995) it mentions that drug problem in the global context contributes to international tensions. Hence, the origins of some of these tensions are clear; rapid changes in political alignment, reduced family and community cohesiveness, increased unemployment and underemployment, economic and social marginalization and crime volume.

The Furtos (2017) World Drug Report of the United Nations Office on Drugs and Crime estimates that about a quarter of a billion people used drugs in 2015. Of these, around 29.5 million people or 0.6 percent of the global adult population suffered from drug use disorders. The abuse of drugs has an adverse impact, not only on the individual abuser but also on the economy and society of a country as a whole. In principle, the use of drugs can cause or promote crime, and in turn, criminality may reinforce drug use.

Powell (2011) examines past and present United States drug policies that substantially impact how the “war on drugs” is waged from several perspectives; the three explanatory models that encompass the drug-crime relationship, drug use leads to crime, crime leads to drug use and the drug-crime relationship is explained by other causes. One of the significant findings showed that robbery and other property crimes are considerably higher during the heroin addiction period than pre-addiction or non-addiction period.

Like in any other countries, crimes are present in various forms, and it has been tremendously affecting the Philippines’ economic growth. Crimes and illegal drug use are related in several ways since illegal drugs may increase the likelihood of other, non-drug crimes occurring, which are closely linked to other major problems, such as the use of prohibited guns, various forms of violence, and terrorism.

The Revised Penal Code of the Philippine Act No. 3815 (1930) serves as the basic law that defines criminal offenses and provides the penalties for the commission of such. It classifies the crime as to index and non-index crimes. Index crimes, as defined by the Philippine National Police (PNP), involve crimes against persons such as murder, homicide, physical injury and rape; and the crimes on property such as robbery, theft, carjacking/carnapping, and cattle rustling. On the other hand, non-index crimes are violations in the law of streets, illegal logging and other local ordinances.

As such, Article II Section 5 of the Philippine 1987 Constitution in Nolledo (2009) asserts that the State has the responsibility to maintain peace and order, protect life, liberty, and property as well as promote general welfare which is an essential component to enjoy a democratic society. Moreover, the Philippine Republic Act 9165 (2002) (or RA 9165), otherwise known as the Comprehensive Dangerous Drug Act of 2002 reiterates that the State needs to enhance further the efficacy of the law against dangerous drugs as one of today’s more serious social ills. This law signals intensive and unrelenting campaigns against the trafficking and the use of dangerous drugs and other similar substances through an integrated system of planning, implementation, and enforcement of anti-drug policies, programs, and projects. It defines more concrete courses of action for the anti-drug campaign and imposes heavier penalties on offenders. It, likewise, reorganizes the Philippine drug law enforcement system, with the Dangerous Drugs Board as the policy-making and strategy-formulating body on drug prevention and control including the creation of Philippine Drug Enforcement Agency (PDEA) as the implementing arm of the Board.

The intensified implementation of RA 9165 has been one of the vital components of the programs on peace and security of the current Philippine administration. In July 2016, as President Rodrigo Roa Duterte assumed his office, he mandated the Philippine National Police (PNP) to implement the Anti-Illegal Campaign Plan popularly known as “Project Double Barrel (PDB)” as supporting agency to PDEA pursuant to Comprehensive Dangerous Drug Act of 2002 to eradicate the problems of illegal drugs in all affected barangays across the country. The PDB intends to equally address problems in the barangays and at the same time pursue the neutralization of illegal drug personalities, as well as, the backbone of illegal drug network operating in the country.

The implementation of PDB through “Oplan Tokhang” in the Philippines was reinforced upon its launching. *Tokhang* is a Visayan word in the Philippines which means to approach and talk which was operationalized as part of the campaign to warn illegal drug traffickers and users. The Project *Tokhang* is a practical means of accelerating

the drive against illegal drugs in affected barangays through the conduct of house to house visitation to persuade suspected illegal drug personalities to stop their illegal drug activities.

The consolidated reports of [Philippine Drug Enforcement Agency \(2017\)](#) revealed that out of 42,036 barangays in the Philippines, 49.65 percent or 20,872 are considered drug-affected based on the guidelines set through Section 2 of Dangerous Drug Board Regulation series of 2007. A barangay is said to be drug-affected when there is a reported presence of drug user, pusher, manufacturer, and marijuana cultivator or other drug personality, drug den, marijuana plantation, clandestine drug laboratory and facilities related to the production of illegal drugs. Moreover, a total of 4,801 barangays were declared clear from illegal drugs in July 2016 to June 2017 through Project Double Barrel (PDB) initiated by the PNP.

The Province of Sorsogon occupying a total area of 2,119.01 square kilometers (818.15 sq mi) of the Bicol Peninsula with 14 municipalities (towns) and one city represented by the Sorsogon Police Provincial Office (SPPO) also known as *Pulis Kasanggayahan* to govern and maintain peace and order in the province. The Provincial Director, PSSupt. Ronaldo R. Cabral has initiated the drug clearing operation in accordance with the Dangerous Drug Board Regulation No. 2 series of 2007. Series of meetings and conferences with both the internal and external stakeholders were conducted during the planning and pre-operation stage of the Oplan *Tokhang* to provide an effective mechanism involving multi-agency and sectors in the community in support to the campaign against illegal drugs.

In the last quarter of 2016, Sorsogon Province has identified that 49% or 269 out of the 541 barangays in the province are drug affected. Sorsogon, as a second-class province, is also prone to the influence of illegal drugs due to its geographical location being a gateway from Luzon to Visayas area and vice versa through Matnog port in addition to Pilar and Bulan ports. With this, there is difficulty in the implementation of the campaign against illegal drugs; a big challenge for the local government units (LGUs) and PNP from the barangay to the provincial level. Community involvement will be a contributory force for the success of the drug clearing operations as reflected in the designed framework scheme of the *Pulis Kasanggayahan* in accordance to [Philippine Dangerous Drug Board Regulation Number 2 \(2007\)](#).

The *Pulis Kasanggayahan* had adopted the quad concept to fully realize the PDB where various meetings, dialogues, and activities were undertaken to gain the support of government agencies and stakeholders on the fight against illegal drugs. Vigorous implementation of PDB resulted in the neutralization (surrendered, arrested and killed during police operations) of drug personalities. With the strategies and innovative activities through PDB by the *Pulis Kasanggayahan* since the first day of Duterte's administration, an increasing trend of the Sorsoganon personalities from low profile to high profile surrendered for the first three months of its implementation. Moreover, its implementation recorded an impact on the crime statistics in the province of Sorsogon. Hence, this study documented the *Pulis Kasanggayahan's* accomplishments in the implementation of the project in the Province of Sorsogon along with the crime statistics as compared with the previous year.

2. OBJECTIVES OF THE STUDY

The study analyzed the profile of drug surrenderers and the crime statistics during the implementation of Project Double Barrel (PDB) in the Province of Sorsogon. The following are the specific objectives: (1) determine the profile of drug surrenderers per municipality, (2) describe the crime statistics in terms of crime volume, index crime, non-index crime, and crime solution efficiency and (3) test whether there is a significant change in the provincial crime statistics during the implementation of project double as compared to the previous year.

3. METHODOLOGY

This descriptive method of study utilized documents and records of the Sorsogon Police Provincial Office (SPPO) also known as *Pulis Kasanggayahan* among the 14 municipalities and one city in the Province of Sorsogon,

Philippines. Documents gathered from the PNP Provincial Office include the profile of the drug surrenderers and the crime statistics per municipality. Profile of the drug surrenderers during the implementation of Project Double Barrel (PDB) includes the classification as to users or drug pushers including their sexual orientation and occupation. On the other hand, data on provincial crime statistics gathered include the crime volume, index crime, non-index crime, and crime solution efficiency (CSE) for the FY 2015 and FY 2016. Permission to conduct the study has been sought from Local Government Units (LGUs) and *Pulis Kasanggayahan* stating therein that all data gathered will be treated with utmost confidentiality ensuring anonymous subjects of the study.

Data triangulation and probing through semi-structured interview and field visits to selected Barangays in every municipality were conducted to validate and eliminate discrepancies. Furthermore, interviews were conducted to some PNP personnel, illegal drug surrenderers and residents who are willing to serve as informants through signed informant's consent form. This was made to generate useful information that would expound the results of the study.

Frequency count, ratio, percentage and mean were utilized to analyze the profile of surrenderers and the provincial crime statistics. Horizontal bar graph was used to describe the magnitude including the least and the most frequent occupation classification of drug surrenderers. Vertical bar graph was used to show both the trend and magnitude of the index crime and non-index crime incidence recorded in the province for the two succeeding FY 2015 and FY 2016. The relationship that exists between the drug affectation regarding the number of drug offenders in the municipalities and the corresponding crime statistics have been identified through Pearson product-moment correlation coefficient (r) with the use of regression analysis and scatter diagram through line fit plot. On the other hand, t-test for dependent data was used to determine whether there is a significant difference in the provincial crime statistics in FY 2016 as compared to the previous FY 2015.

4. RESULTS

4.1. *The Drug Surrenderers during the Implementation of Project Double Barrel in Sorsogon*

The proceeding paragraphs provide information on the profile of the drug surrenderers during the implementation of the Project Double Barrel (PDB) in the Province of Sorsogon. [Table 1](#) shows the classifications of drug surrenderers as to drug offense made per municipality and also categorizes them according to sex. It can be deduced from the table that out of 4,788 drug surrenderers in the province, 4,321 are drug users as compared to 467 drug pushers. This number of drug surrenderers is approximately 0.60% only when compared to the 2015 Provincial Population Census. The data also revealed that most of the drug offenders are users of illegal drugs which are roughly ten times the number of drug pushers. That is, for every drug pusher there are ten corresponding drug users in the province.

[Table 1](#) further show that the capital City has 1,509 drug surrenderers which shared 31.5% of the total, 1,264 of which are drug users and 245 drug pushers. The Municipality of Irosin ranked second as the highest number of drug surrenderers, with 649 drug users and 45 drug pushers which shared 694 or 14.5% of the total surrenderers, followed by the Municipality of Bulan having 476 drug users and 37 drug pushers which are 513 or 10.7% of the total surrenderers. The Municipality of Pilar occupying the second largest land area in the province has 443 or 9.2% share of the total drug surrenderers, 417 of which are illegal drug users and 26 are drug pushers.

Table-1. Drug Surrenderers in the Province of Sorsogon per Municipality.

Municipality	Drug Users		Drug Pushers		Total	%
	Male	Female	Male	Female		
Barcelona	89	2	9	0	100	2.1
Bulan	452	24	35	2	513	10.7
Bulusan	100	3	5	2	110	2.3
Casiguran	144	4	18	1	167	3.5
Castilla	207	6	11	2	226	4.7
Donsol	278	6	15	1	300	6.3
Gubat	194	5	11	0	210	4.4
Irosin	616	33	35	10	694	14.5
Juban	120	4	11	0	135	2.8
Magallanes	106	4	10	0	120	2.5
Matnog	93	4	9	2	108	2.3
Pilar	411	6	24	2	443	9.2
Prieto Diaz	61	4	5	1	71	1.5
Sorsogon City	1200	64	191	54	1509	31.5
Sta Magdalena	81	0	1	0	82	1.7
Provincial	4152	169	390	77	4788	100

Source: Sorsogon Police Provincial Office (2016).

On the other hand, the municipalities of Prieto Diaz with only 71 drug surrenderers, 65 of which are drug users and 6 are drug pushers; Sta. Magdalena with 82 drug surrenderers, 81 of which are drug users and one is a pusher; and the Municipality of Barcelona having 100 drug surrenderers, 91 of which are drug users and nine are drug pushers are the small municipalities located in the rural areas of the province. Table 1 also shows that most of the drug surrenderers are males comprising a total of 4,542 as compared to females having a total of 246. The data revealed that both the male and female surrenderers are mostly users of illegal drugs. However, it is notable that female drug surrenderers in the Province have higher ratio (77 out of 246) of drug pushers as compared to males counterpart (390 out of 4,542).

Moreover, Figure 1 shows the occupation of the surrenderers in the Province of Sorsogon. The data revealed that most of the drug surrenderers are informal workers (1,108 out of 4,788) with no fixed income. A significant number of construction workers/laborers (923), jobless (788), drivers/transportation workers (467), and private employees (409) indicate that they were influenced to get involved in illegal drug activities because of their desire to uplift their socio-economic status. Informants from the drug surrenderers affirmed during the interview that the status of living is one of the reasons why people get involved in illegal drugs, with an income below the minimum wage which cannot support the needs of their families.

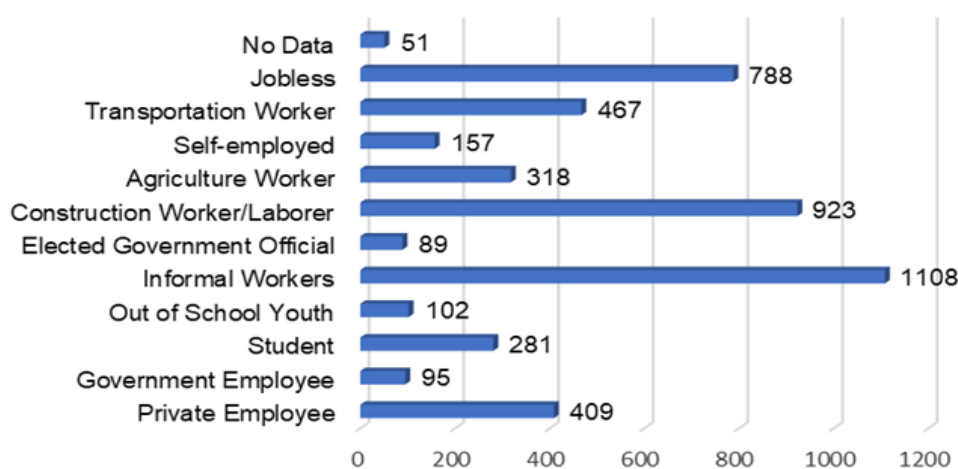


Figure-1. Occupation of the Drug Surrenderers in the Province of Sorsogon.

The figure also reveals that students (281 or 5.9%) and out of school youth (102 or 2.1%) who are mostly from low-income families also engaged in illegal drug activities. Moreover, data discloses that government employees (95 or 2%) including the peace and order keeping workers such as security guards, AFP members, CAFGU/BFP personnel as well as elected government officials (89 or 1.9%) have been involved in illegal drug activities in the Province. These facts emphasize that anybody can take part in any illegal drug activities regardless of the profile and status in life which may make the community situations alarming. Lindesmith (1941) articulated in his works published in the Journal of Criminal Law and Criminology in 1941 that drug addiction, like liquor, is not a police problem; it has never been, and never can be solved by policemen but by scientific and competently trained medical experts whose sole objective is the eradication of the appetite for illegal drugs.

4.2. A Comparative Crime Statistics in the Province of Sorsogon, FY 2015 vs. FY 2016

A comparative crime statistic in the Province of Sorsogon for the Fiscal Year 2015 and Fiscal Year 2016 per municipality is presented in this section. Table 2 presents the crime volume, index crime, and non-index crime per municipality. The data revealed that the total crime volume recorded among the 14 municipalities and one city in the Province of Sorsogon from the year 2015 was 1,024 which is approximately 0.13% only when compared to the Provincial Population (Philippine Statistics Authority, 2015). This recorded crime volume dropped to 646 in FY 2016 with 159 index crimes and 487 non-index crimes recorded from 307 and 717 in FY 2015, respectively. It can be noted that there was a higher number of non-index crimes recorded than index crimes for two consecutive years.

Table-2. Provincial Crime Statistics, FY 2015 vs. FY 2016.

Municipality	Population (2015 Census)	Crime Volume		Index Crime		Non-index Crime	
		2015	2016	2015	2016	2015	2016
Barcelona	20,990	16	11	7	4	9	7
Bulan	100,076	78	45	19	12	59	33
Bulusan	22,884	21	18	7	8	14	10
Casiguran	32,842	55	31	20	8	35	23
Castilla	57,827	72	69	20	14	52	55
Donsol	49,711	45	41	15	15	30	26
Gubat	59,534	47	28	12	14	35	14
Irosin	56,662	83	35	24	7	59	28
Juban	32,320	44	40	15	7	29	33
Magallanes	37,038	52	27	8	9	44	18
Matnog	41,101	37	16	14	3	23	13
Pilar	74,564	76	64	18	14	58	50
Prieto Diaz	22,442	10	17	3	0	7	17
Sorsogon City	168,110	377	197	120	39	257	158
Sta. Magdalena	16,848	11	7	5	5	6	2
Provincial	792,949	1,024	646	307	159	717	487

Source: SPPO (2016).

The Philippine National Police (PNP) described index crimes as those crimes against person and property which is serious in nature such as murder, homicide, physical injury, carnapping, cattle rustling, robbery, theft, and rape while non-index crimes involve violations of special laws such as illegal logging, violation of the laws in the street and other local ordinances. Table 2 shows that about one index crime is being committed each day in FY 2015 and about one index crime for every two days in FY 2016 in the province. On the other hand, about two non-index crimes were committed each day for FY 2015 and about two non-index crimes for every three days in FY 2016.

Table 2 also reveals that Sorsogon City has the highest crimes in the two succeeding years with 377 crime incidents in FY 2015 and 197 crime incidents in FY 2016 followed by the municipalities of Irosin with 83 crime incidents in FY 2015 and 35 incidents in FY 2016, and Bulan with 78 crimes recorded in FY 2015 and 45 in FY

2016. The table further shows that the municipalities of Prieto Diaz, Sta. Magdalena, Barcelona, and Bulusan have recorded a less number of crime volumes for the two succeeding Fiscal Years along with the index and non-index crimes.

Table-3. The Relationship between the Volume of Drug Surrenderers and Crime Statistics.

Crime Statistics	Fiscal Year	r - value	r ²	p-value	Remarks
Crime Volume	2015	0.949	0.901	0.000	Significant
	2016	0.908	0.825	0.000	Significant
Index Crime	2015	0.934	0.873	0.000	Significant
	2016	0.865	0.749	0.000	Significant
Non-index Crime	2015	0.952	0.906	0.000	Significant
	2016	0.903	0.816	0.000	Significant

The strength of the relationship between the number of drug surrenderers and the crime statistics in the drug affected areas is found in Table 3. The table further shows whether there is a significant relationship between drug affectation in terms of the combined number of illegal drug users and pushers and the crime statistics regarding crime volume, index crime and non-index crime in the Province of Sorsogon. Table 3 reveals that all the computed r -values have a corresponding p-value of less than 0.05 and 0.01 for the FY 2015 and FY 2016 lead to rejection of null hypothesis (H₀) of no significant relationship. Thus, there is a significant relationship between drug affectation and crime statistics in the province which means that municipalities with higher number of drug users and pushers have tendencies to have a higher number of crime incidence.

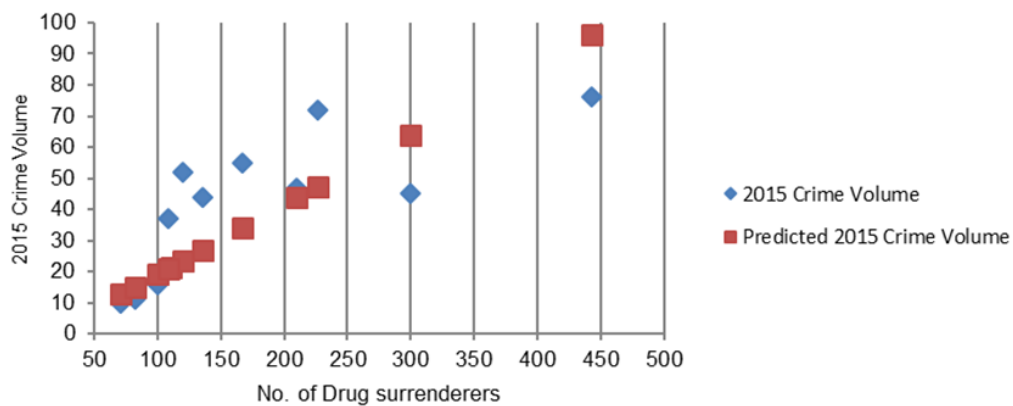


Figure-2. Line Fit Plot of the Relationship of Drug Affectations and 2015 Crime Volume.

The findings could be further explained by Figure 2 showing a direct positive relationship between the drug affectation regarding the number of illegal drug offenders and the crime volume in the Province for FY 2015. A similar illustration was deduced in FY 2016 which shows a direct positive relationship between the drug affectation and the crime statistics in terms of crime volume, index crime, and non-index crimes.

These findings were strengthened by the online report of Chanco (2016) in the Philippine Star on the assumption of President Rodrigo Duterte that drug problem is the root cause of people’s alienation from a government. The report emphasizes that the worsening of the crime situation can be attributed to the rampant illegal drug activities in the country.

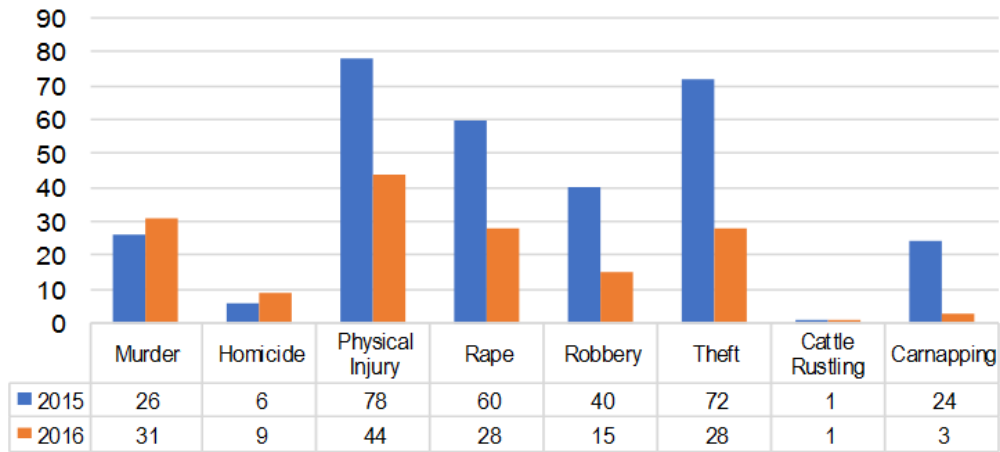


Figure-3. Index Crimes Committed in the Province of Sorsogon.

Figure 3 presents the different forms of index crimes committed in the province which were classified as murder, homicide, physical injury, rape, robbery, theft, cattle rustling, and carnapping. The data revealed that physical injury has consistently the highest index crime incidence recorded in the province for FY 2015 with 78 and FY 2016 with 44 records. Only one castle rustling was recorded and consistently has the lowest index crime incident for both FY 2015 and FY 2016. It is also noted in Figure 3 that the crime incidences of physical injury, rape, robbery, theft, and carnapping in the province have decreased from FY 2015 to FY 2016. On the other hand, the crime incidences of murder and homicide have increased from 26 in FY 2015 to 31 in FY 2016 and 6 in FY 2015 to 9 in FY 2016, respectively.

Figure 4 presents the classification of the non-index crimes along traffic incidents, special laws and other similar crimes committed in the province from FY 2015 to FY 2016. Crimes under traffic incidents involve vehicular traffic incidents which are attributed to human errors. On the other hand, crimes related to special laws include laws under the revised penal code such as illegal logging, illegal fishing, illegal gambling among others while other non-index crimes are those committed related to ordinances of the barangay and municipal levels. It is reflected in Figure 4 that crimes related to traffic incidents and other violation in the law of the streets were the highest non-index crimes committed for FY 2015 with 329 and FY 2016 with 263 incidences. It was followed by the violations of special laws and other non-index crimes for the two succeeding years.



Figure-4. Non-Index Crimes Committed in the Province of Sorsogon.

It can be gleaned from Table 2 that non-index crimes recorded a high number of incidents as compared to index crimes where mostly are crimes committed in violation of traffic rules as shown in Figure 4. This finding can be supported by the *Pulis Kasanggayahan* personnel report through the face to face interview which revealed that crimes related to vehicular accidents in the province can be associated by either influence of liquor or illegal drugs.

Villar (2015) reinforces that illegal drugs do not only contribute to the growing number of crimes but also makes crimes more brutal.

Table 4 shows the Crime Solution Efficiency (CSE) in the Province of Sorsogon from FY 2015 to FY 2016. Crime Solution Efficiency (CSE) as defined by the PNP is the percentage of solved cases out of the total number of crime incidents handled by law enforcement agencies for a given period of time. The table emphasizes the police to population ratio and the number of solved crime cases in the Province. It can be seen from the table that the ideal police to population ratio of 1:500 was not attained in all municipalities. It was reported by the Philippine Senate Economic Planning Office (2013) that the PNP has targeted a 1:700 police-to-population ratio in 2010; 1:600 in 2020; and 1:500 in 2030 which are not visible in the Province of Sorsogon. The municipalities of Juban and Donsol were among the rural areas with the police-to-population ratio of higher than 1:1,100 which is more than double the target ratio of 1:500 by 2030.

Table-4. Provincial Crime Solution Efficiency, FY 2015 vs FY 2016.

Municipality	A	Ratio A:B	Solved Cases		Crime Solution Efficiency	
			2015	2016	2015	2016
Barcelona	25	1: 840	4	4	25.00%	36.40%
Bulan	49	1: 2,042	30	22	38.50%	48.90%
Bulusan	24	1 : 954	6	12	28.60%	66.70%
Casiguran	26	1: 1,263	18	13	32.70%	41.90%
Castilla	28	1: 2,065	24	33	33.30%	47.80%
Donsol	36	1: 1,381	24	16	53.30%	39.00%
Gubat	35	1: 1,701	12	16	25.50%	57.10%
Irosin	39	1: 1,452	33	19	39.80%	54.30%
Juban	29	1: 1,114	36	22	81.80%	55.00%
Magallanes	24	1: 1,543	26	19	50.00%	70.40%
Matnog	22	1: 1,868	21	10	56.80%	62.50%
Pilar	33	1: 2,260	37	39	48.70%	60.90%
Prieto Diaz	24	1 : 935	2	1	20.00%	5.90%
Sorsogon City	133	1: 1,264	203	131	53.80%	66.50%
Sta Magdalena	24	1 : 702	2	1	18.20%	14.30%
Provincial	551	1: 1,439	478	358	46.70%	55.40%

Legend: A – No. of PNP Personnel, B – No. of Population.

Source: SPPO (2016).

Table 4 shows that with about 1:1,114 police-to-population ratio, the Municipality of Juban has accomplished the highest crime solution efficiency (CSE) of 81.8% in FY 2015 as compared to the other municipalities. However, this has dropped to 55.0% in FY 2016. Moreover, the Municipality of Irosin as one among the municipalities with the highest number of recorded crime incidence has 33 or 39.4% solved cases in FY 2015 which also went higher in FY 2016 with 54.8% or 19 solved cases of crime incidents. Sorsogon City which has the highest number of crime incidence in the Province has 203 solved cases or 53.8% CSE in FY 2015 and has 131 or 66.5% CSE in FY 2016. The data presented in Table 4 shows that 11 out of the 15 municipalities, including the City of Sorsogon, have a CSE increase in FY 2016. On the other hand, there were four municipalities in the province such as Donsol, Juban, Prieto Diaz and Sta. Magdalena which had a decrease in a crime solution efficiency (CSE) from FY 2015 to FY 2016.

Generally, the province of Sorsogon with a 1:1,439 police-to-population ratio was able to increase the number of solved cases in the province from FY 2015 with 478 or 46.7% CSE to 358 or 55.4% CSE in FY 2016. This data indicates that despite the lack of police personnel in the province, they are able to provide the services that they can for the benefit of the people because of *Pulis Kasanggayahan's* dedication, perseverance, and determination with the corresponding cooperation and active support from the community that they serve.

Additionally, Table 5 shows the t-test result to determine whether the difference in the crime statistics in Sorsogon Province regarding crime volume, index crime, non-index crime, and CSE is significant during the implementation of Project Double Barrel as compared to the previous year. It can be gleaned from Table 5 that the t-value computed of 2.161, and 2.278 on crime volume and non-index crime, respectively, were greater than t-critical value of 2.145 with a corresponding p-value of less than 0.05 leading to the rejection of null hypothesis (Ho) of no significant difference. This indicates that there is a significant decrease in the recorded crime incidents including the non-index crime in the Province of Sorsogon during the implementation of Project double Barrel. It connotes that through the implementation of Project Double Barrel (PDB) with higher number of drug surrenderers, the crime incidents in the province decreased significantly with a corresponding Cohen's index (d) value of 0.4 and 0.3 which has a medium effect for the crime volume and non-index crime incidents, respectively.

Table-5. Test of Difference of Crime Statistics in Sorsogon Province FY 2015 vs FY 2016.

Crime Statistics	Mean		t-value *	p-value	Remarks
	2015	2016			
Crime Volume	68.27	43.07	2.161	0.048	Significant
Index Crime	20.47	10.60	1.870	0.082	Not significant
Non-Index Crime	47.80	32.47	2.278	0.039	Significant
Crime Solution Efficiency	40.40%	48.51%	-1.834	0.088	Not significant

Legend: *t-crit. value = 2.145, df = 14, $\alpha=0.05$.

However, the computed t-value for the index crime and crime solution efficiency (CSE) of 1.870 and -1.834, respectively, are both less than the critical t-value of 2.145 with p-value greater than 0.05 which lead to rejection of the null hypothesis (Ho) of no significance. This means that there is no significant change in the index crime and CSE from FY 2015 to FY 2016. Though, there was a decrease in the index crime incidence in the province as shown by the mean value among the municipalities, the decrease is not that significant since there were six municipalities in the Province which were not able to decrease its index crime incidences for the two succeeding years. Moreover, the mean increase in the CSE from 40.40% to 48.51% in the province was not significant since there were four municipalities which have decreased the CSE for the two succeeding years.

5. DISCUSSION

The geographical features of the Province of Sorsogon, serve as gateway to Visayas and Mindanao and vice versa which attract the growing number of business establishments and are easily penetrated by drug syndicates. The gathered data revealed that illegal drug activities in the Province are mostly from the city and big municipalities where a number of big business establishments are growing. Municipalities that serve as center of commercialization in the Province are prone to illegal drug activities and can attract several forms of crime from both internal and external individuals and groups. It entails that small municipalities belonging to fifth class in the province are among the least affected by illegal drugs. People living on these municipalities are busy with their family activities and devotion and prefer to work as farmers or fisherman for the needs of their conservative family.

The surrenderers from both sexes are mostly drug users and for every drug pusher there is a corresponding 10 drug users in the Province of Sorsogon. It is also notable that female illegal drug offenders have a higher tendency as drug pusher than male offenders. This can be supported by the reports where most of the drug pushers would like to raise income for their family especially for the needs of their children. Furthermore, a number of female surrenderers and out of school youth (OSY) reveal that they wanted to help raise income for their family with the influence of peers as their top reason why they engaged in illegal activities. This can be supported by the results of the study of Hasam and Mushahid (2017) who found out that frustration and peer group influence lead to drug addiction.

The data also revealed that regardless of the profile and status in life, anybody can engage and be affected by the influence of illegal drugs whether one is an ordinary individual, government employee, elected government official, PNP/AFP member, or security guard which makes the situation alarming. Villar (2015) emphasizes that illegal drug problem becomes worse when law-enforcement officials are involved which makes the community become reluctant to seek for help from the authorities. This indicates that the local government units and concerned agencies through the support of stakeholders in the community may initiate projects according to the needs and profile of the drug surrenderers such as job opportunities, clinical rehabilitation, social and physical activities, as well as, moral and spiritual recovery program as their diversion activities that can make them more productive and responsive members of the society. Information drive campaigns and dissemination on the effect of illegal drugs to health, family and society may be initiated with the strong support and cooperation of every sector to raise awareness among the members of community.

Provincial crime statistics can be associated with illegal drugs in the sense that areas which are highly affected by illegal drugs have also higher cases of crime commission. This situation can be associated with the number of population, industrial developments and land area covered by each municipality where crime commission especially those drug related crimes are more attracted to the big and populated municipalities than those which are smaller and less populated. The study find support from the study of Barrera *et al.* (2013) who found out that Motor Vehicle Theft (MVT) as a form of index crime in the Philippines are disproportionately distributed in urban areas in Negros Oriental. This connotes that the penetration of illegal drugs is a contributing factor in crime volume constituting the index and non-index crimes. These findings support the assumption that the worsening of crime situation can be attributed to the rampant illegal drug activities in the country (Rafaiee *et al.*, 2013; Villar, 2015; Chanco, 2016).

The decrease in the Provincial crime volume from FY 2015 to FY 2016 implies that the initiative and effort of *Pulis Kasangayahan* personnel in the implementation of Project Double Barrel (PDB) helped minimize the criminality situation. With this, the PNP may continue to strengthen its campaign against illegal drugs through a thorough, proper and intensive implementation of the PDB in the Country. The Barangay assembly, *Oplan Tokhang*, and information dissemination of PNP project helped a lot from pre-operation to post operation stages of the campaign against illegal drugs where useful information has been provided to PNP by the community itself and have resulted to the decrease of crime incidences.

Despite the incomparable police-to-population ratio of 1:1,439 in the Province as compared to its ASEAN neighbors, there was an increase of solved cases from 46.7% in FY 2015 to 55.4% in FY through the support of stakeholders with an organized system of volunteerism particularly the designation of Barangay *Tanod*, a local term for Barangay Police. This indicates that the measures of the Philippine government with the initiative and cooperation of the different stakeholders in the community is an effective mechanism in neutralizing the crime situations and illegal drug activities, if not totally eliminated, in the community. The PNP programs if actively supported by the vigilant stakeholders would guarantee a peaceful and safe environment where anybody could live, work and do business. This was also recommended in the study of Rodriguez (2010) as an approach in the fight against specific transnational organized crimes through the application of mixed-public private response.

6. CONCLUSIONS

The drug surrenderers whether drug users or drug pushers mostly came from the populated urban areas and big municipalities in the Province of Sorsogon. Most of the illegal drug pushers and users (ratio 1:10) are from the low-income families belonging to informal workers, constructions workers and jobless. Those identified municipalities with higher number of drug surrenderers have also higher number of crime incidence recorded. The strict implementation of the Project Double Barrel (PDB) helped to significantly decrease the crime volume in the Province. However, due to constraints in terms of number of police personnel, there is no significant change of increase in the crime solution efficiency. Physical injury and theft were the highest among the recorded index

crimes while most of the non-index crime incidents recorded were related to vehicular traffic incidents and other violations of laws in the street.

The Local Government of Sorsogon in collaboration with the concerned national government line agencies may provide livelihood program, as well as moral and social rehabilitation programs, for the drug surrenderers in the Province. The Sorsogon Police Provincial Office (also known as *Pulis Kasanggayahan*) should continue to monitor and evaluate the implementation of the Project Double Barrel as one of the strategies to control the criminalities and maintain peace and order in the Province. The Police visibility along the roads and highways in the urban areas and big municipalities should be strengthened to lessen the vehicular and traffic incidents. The provision of additional personnel to *Pulis Kasanggayahan* may strengthen and further improve efficiency in the implementation of its program and services along peace, order, and security. In addition, Information and Education Campaign (IEC) and enforcement mechanisms should be strengthened for the awareness on the law and ordinances from the Barangay to national levels which may reinforce the safety and security of the community as a whole.

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