The Impact Of The Waste Bank Program On The Income Level Of Waste Bank Customers (Case Study at the Eka Jaya Waste Bank, Sememi Village, Benowo District, Surabaya City)

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ABSTRACT

One of the major breakthroughs in waste management in Indonesia is the waste bank program. Through this program, it is formed in people's minds that waste is something that is useless and is simply thrown away, converted into something that also has value and price. Through the waste bank, people can save waste, which can then generate money within a certain period of time. Research using descriptive research methods with quantitative analysis. This study aims to find out how the impact of the waste bank program on the socio-economic community in Sememi Village, Benowo District, Surabaya City. Impact is defined as an influence that brings both positive and negative consequences. In this case the impact is aimed at the socio-economic life of the community at the Eka Jaya Garbage Bank, Sememi Village, Benowo District, Surabaya City. Based on the results of data analysis, it was concluded that there was a positive impact on the socio-economic life of the people in Sememi Village, Benowo District after the construction of the Garbage Bank. This is indicated by an increase in people's income, although it is small, it provides significant benefits for the community. Not only income has increased, but health and better social interaction among people, most importantly, a cleaner environment has also increased from time to time.

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1. INTRODUCTION

Circumstancesljust livelp belrpelran very pelimportant for youlyoulrulh society, karelna lingkuljust melNyelheld selgala selsulorlsulmbelr the natural power of melngellola ulgyro waste from pelwaitlsociety's naan. My trashlrulfeed onelproblems faced by seleveryone, good dedell want tolpuln in the city, not telrkelculali in Su Citylrabaya. My trashlrulfeed onelsocial problems faced by seleveryone is goodll want tolpuln city. Pelnimbulthe rubbish got melnimbullt's annoyinglan environmentljustlpelmeaning smellylma'amlsulk, existence of sellife belraculn orlselthe life that can be melrulsak kelselhatan.

Ulntulk itldipelrlulright? Ithe right handlpat and kelrja is the same as selyourla pe partylMy rubbish problemImpulnyai keltelrelationship between oneldeljust another one. Melincreasing volumeIrubbish toolnot triggeredIdeljust belincreasing consumer patternsImsi society, jelwhat kind of rubbishIncreasingly solvariety. On the other hand, pelngelGarbage collection is only donelright? Ilike tolru activitiesItin, that isljust deljust my waylMslang, melmove and melyourlget rid

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of trash. This matter belrimpact on selit's getting rarer telfour ulntulk pelMslrubbish dreamsluntil melNyelbabe melreleven TPA/TPS illelgal in belvarious telfour good empty plotslpuln in sulngaisulngai. Olelh selthat chapterItolpeldulthe people are emotionalls selwill later be improved so that pelThe waste problem can be solvedllelsaikan selhow to belcome together and do itlright?ljust youlthere. Tolmy activitiesImbanguln te communityIrkait elrat deljust melmbelempower the communitylrta melngelthink about it, karelna beside melmelrangi pelwaste problem and tolbell'm sorry for my surroundings/that's alllno melencourage my community/become lelmore active and pelnulh initiative. Selany trash that is taboolng will be weighed and appreciated selsulai market price. Inorganic waste that is telrkulmpull at the trash banklyourldian dijulal kelback tolpelngelpull orlpuln didaulrullang melbelvarious productslk selpelmeaning bags, sandals and others. Julit's just rubbish that is being disposed oflnominal torque obtained seleach participant will be recorded in bulmyltabooljust. Results selthe rubbish bin is sulit's taboolng can be taken within a period of timeltelrtelntuldeljust meladopt the PE principlelbank. Pelngelthrow away rubbishljust the systemlm this waste bank is expected to be able to do solmelhelplpelmelgroaned inside meldeal with the waste that ends up being melmbelbring benefits to my environmentljustIrta can melincrease pelrelcommunity economy. Community participation is highly encouragedIthatIright?Intulk melnsulkselscan pe programlhandling and handlinglprocessing waste. PelNdelkatan kelin society ulntulk can melhelplin melhandle it and melngelLola Trash is onelbelntulk programs that are openedlat ulntulk melinvite the public to peldulli telagainst rubbish.

Stratelgi pelngelmy trashlThenli this trash bank, selothers sellike ulpaya melget people used to itlon behaviorllifelp belrsih selsulai delthat's allljulan actual programlplan, juldidn't expect it to belrpelgrosslh telfacing pelPE upgradelrelcommunity economy. Pelnullist pelnelthis litian telpull ulntulk melin demandlright?Inellitian delthat's allIdull "Impact of the Waste Bank Program Telrto Pe LevellWaste Bank Customer Income (Stulin Kasuls at Waste Bank ElJaya KelyoulRahan Selmelmi KelBe sub-districtInowo Su Citylrabaya)". Pelnahulyoulan melnkulp background belback on the issuelorlpelproblem selrta ulrgelnsi and rationalization tolactivities (pelnellitian orlpeldevotion). Tuljulan tolactivities namelylulntulk melngelknowli impact of the waste bank program telagainst PE levellwaste bank customer income ElJaya KelyoulRahan Selmelmi KelBe sub-districtInowo Su Citylrabaya.

2. RESEARCH METHOD

Jelnis pelnelthis litian is pelnellitian delmy scriptlantitative. Location in PElnelthis research was carried outlright in Kampulng Kelndulng Reljo KelyoulRahan Selmelmi KelBe sub-districtlnowo Su Citylrabaya, karelna waste bank in Kelsub-district Selmelmi melinvite melyourla society selcome alonglt active in the waste bank program ulntulk melNgulmpullt's trash, melnabulng and melMslat selma'amlah keldiligent handslrvalue julal. In pelnelthis research peltake itljust melwaitleat 3 ways, namely:

a. Observation

ObsessIrvation is telrnik pelNgulmpuland data deljust melin demandlright?Idirect observationIng on the objectlk study. ObsessIthe intended invasionId in Telknik pelNgulmouland this data is stulin the pre-pe fieldInellitian, when pelnellitian and post-pelnelthe litian usedleat sellike meltodelpelnellitian and post-pelnelthe litian usedleat sellike meltodelpelhelpl, delthat's allljulan ulntulk melngelknowli pe levelIBS E customer incomelJaya.

b. Questionnaire

Mylelsionelr is telknik pelNgulmpuland the data carried outlright? Ijust my waylmbelri selpellift pelquestion orlpelte statementIrtullist tolon relspondelnuIntulk answered. TelMy knicklelsionelr this is donelright? Intulk melNgulmylr selbelwhy? Isar contribution Ithe society in melndulmylng the program implemented IWaste Bank ElJaya telfacing pelwaste bank customer income.

c. Documentation

Delfinish opelrational on pelnelthis litian sellike belRikult: X1: PelE Waste Bank customers' incomelJaya selbelyoulm there is a waste bank program. Used indicatorsleat ulntulk melNgulmylr variablell this is julnever mindlwaste bank customer income ElJaya was the one who was countedling in onelan rulpiah (Rp).

X2: PelE Waste Bank customers' incomelJaya selsulThere is already a waste bank program. Used indicatorsleat ulntulk melNgulmylr variablell this is julnever mindlwaste bank customer income ElJaya was the one who was countedlng in onelan rulpiah (Rp).

3. RESULTS AND DISCUSSIONS

SelGe's waylgraphic Selmelmi is selma'amlah kelyoulcorrect instructionsIrleInot in KelBe sub-districtInowo Su CityIrabaya. TolyoulRahan Selmelmi melhave julit's a total pelnduldulk selLots38,654 people. TolyoulRahan Selmelmi masulk in KelBe sub-districtInowo telrconsisting of 9 Rulmyln Residents (RW) and 68 Rulmyln Telstairs (RT) melrulfeed daelRah SulWest rabaya delonly the ones who come inlk in Ulnit Pelngelmbangan XI Tambak Oso Wilangon, delThat's allljulan pelnataan selhow do you mean it?ld in Article 2 paragraph (2) hulrulfa Relplan Deltail Tata Rulang Su CityIrabaya on PelqueenlRan Daelrah No. 8 Telntang Relplan Deltail Tata Rulang Dan PelqueenlSu City Zoning PlanIrabaya You knowln 2018-2038 is melwowljuIright pelngelmbangan area that melndulmylng fulngsi te citylpi water (Watelrfront City), selntra pelnational services trade delJust Pelpumpkinlhan Telyoulk Lamong sellike tolu activitiesIthe garden. Melnulrult office data TolyoulRahan Selmell knowln 2023, KelyoulRahan Selmelmi belrapap to KelBe sub-districtInowo, Su CityIrabaya deljust youlas area 3.61 KM² deljust tolheight 4.6 meters above sea level. TolyoulRahan Selmelmi masulk in KelBe sub-districtInowo telrconsisting of 9 Rulmyln Residents (RW) and 68 Rulmyln Telstairs (RT).

Eka Jaya Waste Bank Management Flow

Pestlelrpelngelthe rubbish carried outlWaste Bank ElJaya dimulLai time on the trash being disposed oflsend customers tolat the trash bank telrselma'amlt. Customers can get melNyeltor the rubbishljust a pestlelr tolrja waste bank selpelmeaning Figure 1.



Figure 1 Waste Management Flow

Selway tolselyoulrulhoola pestlelrpelngelWaste Bank ElJaya and youljust another trash bank. Pelrbelthe land is telrlelnot during opening hourstrational waste bank and jawal pelmjelmpultons of rubbishlhpelngelpull. Sampak E BanklJaya melconsider itlma'amland thenla times and selevery seltelthat's it pelscales sellelFinished that daylorltolelEvery day the rubbish is taken outltoelright olelh direct customer committeelng picked up by olelhpelngelpull

Data analysis

a. Normality test

Ulji this is donelright?Intulk melknowli what is the data usedleat in sulorlmodell relgrelsi, variablell delpelNdeln, variablell indelpelNdelnt orltoldulanya melmpulnyai distribulthe normal orlNo

Hasil Uji Normalitas One-Sample Kolmogrov-Smirnov Test

		Sebelum	Sesudah
N		40	40
Normal Parameters ^{a,b}	Mean	667.50	872.50
	Std. Deviation	397.355	680.775
Most Extreme Differences	Absolute	.294	.376
	Positive	.294	.376
	Negative	287	319
Test Statistic		.294	.376
Asymp, Sig. (2-tailed)		.000¢	.000

a. Test distribution is Normal.

Modell relgrelthe good one is distribulthe data is normal orlmelNdelcatty normal. Results ulJi Beland my normalitylnulnjulright Onel-untilll Kolmogrov-Smirnov Telst melNyelma'amltkan that result ulji Kolmogrov-Smirnov Telst selbelyoulm and selsulthat's itlbehaveleach waste banklbelsar 294 and 376 delonly each level of significance, namelylselbelsar 0.000 and 0.000 te datalrselma'amlt melnulnjulright that toldula tolte grouplrselma'amlt belrdistributionlthe significant

Test (T-test)

Parameter statistics|Tris Yang Diguleat ulntulk melNgulji hypotelsis comparative average dula arrived|| when asked belrbelntulk intelrna orlratio is melwaitleat T-telst. Parield arrived|| t-telDigu Stleat ulntulmy||Ji Bell've arrived|| who belrcouple.

Table 2 Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Eerror Mean
Pair 1	Sebeyo um	667.50	40	397,355	62,827
	Sesuth ere	872.50	40	680,775	107,640

From te datalrselma'amlt, it can be seen that from pelgot sabelyoulm and selsulthat's itlbehavelthe Waste Bank programlhave a mean of 667.50, standard delvisiasi 397,355 standard average tolerror 62,827. There are so manyll on pelnelThis litian isl40 untilll from pelincome selsulAfter the existence of the Waste Bank program, an average of 872.50 was obtained, standard delvision 680,775, standard tolaverage error 107,640, the number is up toll 40 relspondeln

Table 3. Paired Samples Correlations

		Correla			
		N	tion	Sig.	
Pair 1	Sebeyoum & Sesuthere	40	,987	,000	

On the paire resultsId arrivedII correllation above delwith a result of 0.987, a significant value of 0.000. Then the pe levelIrbeldaan julnever mindlincome selsulbye and byelbelyoulm is the existence of belbehaveIthe Waste Bank was confiscatedIIkan lelbetter belsar than pelincome selbelyoulm belbehaveIthe Garbage Bank.

Peried Samples Test Paired Samples Test

i unou oumpios rost								
	Paired Differences							
		Std.	Std. Error	95% Confidence Interval of the Difference				Sig.
	Mean	Deviation	Mean	Lower	Upper	t	df	tailed)
Pair 1 <u>Sebelum</u> – <u>Sesudah</u>	205.000	295.652	46.747	299.554	110.446	4.385	39	.000

In ParieldSamplels Statistics below melrulfeed results from U analysislji-t average pelcommunity income selbelyoulm and selsulthat's itlbehavelthe Waste Bank program selbelsar 205,000 deljust standardlerror 295,652. t-hitlng selbelsar 4,385 delthat's alllrajat kelbelbasan 39 at level 115% error orltolpel95% confidence. On pelNguljian dula pelrbelsignificant funds between pelcustomer income selbelyoulm and selsulthat's itlbehavelthe Waste Bank program (tolteIntulan pelneIrimaan and pelreject the mortgagelsis if significant below orlsamelonly 0.05 then the hypothesislalte sisIrnative diteIrhyme and hypothesislsis nil rejected).

PelNgulJian is a mortgagelSis Ditelrhyme orlrejected. T-hitu pricelng can be compared deljust tabell. Ulntulk melsee price tabll, then based on df=nk, n is juljust arrivedll and k are the nth number of variablesll where 40-1=39 deldon't worrylrajat kelerror 5% seldangkan pelNguljian donelright?ljust melwaitleat itla party obtained t-tablell selbelfrom 2,024. T-hit valuelng lelbetter belsar from t tabell (4.385>1.685). Can be deducedllkan that Ha ditelrhyme and Ho are rejected, (significant under orlsamelonly 0.05 then Ha ditelrhyme). Belrarti telget pelrbeldaan between pelcustomer income selbelyoulm and selsulthat's itlbehavelthe Garbage Bank.

4. CONCLUSION

Belbase on pe resultsInellitian melnulnjulright that result ulJi Telst selbelyoulm and selsulthat's itlbehavelit's a trash bank from herell the sull've done itlrtelra. Pelmy customers' incomelhave a significant value between selbelyoulm and selsulthat's itlbehavelthe waste bank program. Belbase on the results of the analysis above belhe said Koreanllasi between pelcustomer income selbelyoulm and selsulthat's itlbehavelit's a waste bank program, so telgot it hulma'amljust between pelcustomer income selbelyoulm and selsulthat's itlbehavelthe waste bank program. Pelmy customers' incomelhave a significant value between selbelyoulm and selsulthat's itlbehavelthe waste bank program. Belbased on the results of te analysisIrselma'amlt belhe said Koreanllasi between pelcustomer income selbelyoulm and selsulthat's itlbehavelit's a waste bank program, so it's from te datalrselma'amlt telgot it hulma'amljust between pelcustomer income selbelyoulm and selsulthat's itlbehavelthe waste bank program. If you dolphysielns korellasi is consumedlpass me onlThenli tabell deljust n=40, then dipelroleslh r. Adapuln toltelntulan if r hitsing lelbetter belsar dri r tabell then the mortgagelsis kelrja (Ha ditelrhyme). Juljust arrivedll and k are the number of variablesII where df=N-1 seldangkan pelNguljian donelright?ljust melwaitleat itla party obtained ttablell. T-hit valuelng lelbetter belsar from t tabell. Can be deducedlikan that Ha ditelrhyme and Ho are rejected, (significant under orlsameljust number point five then Ha ditelrhyme). Belrarti telget pelrbeldaan between pelcustomer income selbelyoulm and selsulthat's itlbehavelthe Garbage Bank.

REFERENCES

- Rulskiing. 2014. "Pelgrossih Waste Bank Program Telrto Pe Levellincome TolyoulLave Waste Bank Customer ValuelNdelr (BSL) In Delsa Mlajah Bangkalan." JulSTKIP PGRI Scientific Journal2: 22440.
- Seltyaningrulm, Ikel. 2015. "CharacterIristic PelPe increaseIngellol Trash Olelh Me SocietyIThenli Waste Bank." Julrnal TelPWK technique4 (2): 2015. http://eljoulrnal-s1.ulndip.ac.id/indelx.php/pwk.
- SulRyani, Anih Sri. 2014. "Pelran Waste Bank in ElfelPE activitiesIngelTrash IoI(Stulin Kasuls Malang Waste Bank)." Aspiration: Julrnal Social Problems5(1):73–84. https://julrnal.dpr.go.id/indelx.php/aspiration/articlel/vielw/447.
- Yullieslsti, Kikis Dinar, Sulripin Sulripin, and Suldarno Suldarno. 2020. "Stratelgi PelngelMbangan PelngelSupply Chain Management in Pelngelplastic waste." Julrnal of SciencelCircumstancesljust18(1):126–32. https://doi.org/10.14710/jil.18.1.126-132.

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