



**DEMOGRAPHIC FACTORS INFLUENCE ON POPULATION ADDED IN
SUMBERSARI JEMBER DISTRICT
EAST JAVA**

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ABSTRACT

Population growth is the increasing population changes at any time which is calculated in the number of individuals. This study aimed to determine the effect of demographic factors on the growth of population in the district of Jember in East Java Sumbersari. Selection of research areas using purposive sampling technique which is in District Sumbersari Jember. The number of samples is equal to the number of population is the whole population in Jember in 2012 - 2016. The results of this study show the influence of demographic factors include fertility, mortality, and migration on population growth is the $F > M$ and positive migration rises (N) in the District Sumbersari Jember, East Java.

Keywords: population growth, demographics, migration

INTRODUCTION

Population growth or population dynamics is a phenomenon of population change in either increasing or decreasing the number of people in a region from time to time. A change in the number of people affected by demographic factors such as births (fertility or birthrate), death (mortality), and migration (migration); as well as nondemographic factors such as level of education and health. It is said to increase when there is birth and residents who come to the region, the opposite can be said to be reduced if there is death and there are people who leave the region. The population growth rate is the rate of population in a region / country in a certain period (%).

Required the calculation of population growth aims to predict the population of a region in the future. The population of the knowable through surveys, registration and population census at a certain period and the schedule has been adjusted in the region. Population growth is a factor related to social conditions - the economy of a region.

Table 1. Population in Jember Year 2012-2016.

No	District	Total Population					average Population Added 2012- 2016 Year
		2012	2013	2014	2015	2016	
1	Kencong	66129	66471	66838	67251	67583	364
2	Gumuk Mas	80628	80970	81337	81750	82154	382
3	Puger	117035	117377	117744	118157	118740	426
4	Wuluhan	117229	117571	117938	118351	118936	427
5	Ambulu	107331	107673	108040	108453	108990	415
6	Tempurejo	71793	72135	72502	72915	73276	371
7	Silo	106040	106382	106749	107162	107690	413
8	Mayang	48783	49125	49492	49905	50151	342
9	Mumbulsari	63205	63547	63914	64327	64645	360
10	Jenggawah	82789	83131	83498	83911	84325	384
11	Ajung	75666	76008	76375	76788	77168	376
12	Rambipuji	80329	80671	81038	81451	81853	381
13	Balung	78339	78681	79048	79461	79853	379
14	Umbulsari	70634	70976	71343	71756	72111	369
15	Semboro	43739	44081	44448	44861	45083	336
16	Jombang	50476	50818	51185	51598	51852	344
17	Sumberbaru	101465	101807	102174	102587	103093	407
18	Embankment	84277	84619	84986	85399	85821	386
19	Bangsalsari	116416	116758	117125	117538	118118	426
20	Panti	60172	60514	60881	61294	61596	356
21	Sukorambi	38038	38380	38747	39160	39354	329
22	Arjasa	38147	38489	38856	39269	39463	329
23	Pakusari	41922	42264	42631	43044	43256	334
24	Kalisat	76231	76573	76940	77353	77735	376
25	Ledokombo	63400	63742	64109	64522	64841	360
26	Sumberjambe	60922	61264	61631	62044	62350	357
27	Sukowono	59486	59828	60195	60608	60906	355
28	Jelbuk	31859	32201	32568	32981	33144	321
29	Kaliwates	114307	114649	115016	115429	115999	423
30	Sumbersari	129184	129526	129893	130306	130949	441
31	Patrang	96362	96704	97071	97484	97965	401
Total		2372333	2382935	2394312	2407115	2419000	

Source: BPS Jember, 2017.

Based on these data, the total population of the year 2012 to 2016 is known that the subdistrictSumbersari experiencing population growth and very m, enarik to be investigated. This study was limited to demographic factors namely, births, deaths, and migration.

Table 2. Number of births, Deaths and Migration in Sub Sumbersari Year 2012-2016

No	Year	Total population	Number of births	Number of deaths	Number of Migration Income	Number of Migration Outcome
1	2012	129184	342	149	178	27
2	2013	129526	367	495	224	89
3	2014	129893	413	580	433	101
4	2015	130306	643	567	339	137
5	2016	130949	935	437	774	519
Total		649858	2700	2228	1948	873

Source: BPS Jember 2017.

Demography is the study of the components of population such as birth, death, marriage, and the migration is calculated and mathematical statistics. This is consistent with the statement Mantra (2008) which states that the demography is the study of the structure and process of residents in an area covering the number, distribution, and composition of the population.

1. Birth (birthrate or fertility)

Birth is a natural factor related to the reproducibility of the population. This is similar to Adietmo and Samosir (2010) that produces a rich offspring Fertility is the ability associated with female fertility or fecundity also called. Birth is a growing population in a region characterized by the presence of live births. Factors supporting the (pro birthrate), their marriage at a young age as in remote villages that requires a daughter to be married when the teenager is also the notion that married late could get embarrassing.

In addition, there is another assumption that many children a lot of luck, the child will be proud parents, family successor is a boy so that people will have children continue to acquire boys thus increasing birth. The family planning program were not implemented causing the increased birth rate. Inhibiting factor (anti birthrate) the birth of such a delay marriage, child tunjang restrictions, the assumption that the child would be a burden for the family, the family planning program to limit the number of children.

2. Death (Mortality)

Deaths were factors in natural population density. Death is the loss of human life signs permanently or decrease in population in the region. Supporting factors that lead to mortality such as war, natural disaster, disease, traffic accidents and industrial, suicide and murder, are

not living a healthy lifestyle, eating irregularly, does not maintain health, as well as health facilities are still lacking in a region (puskesmas clinics, pharmacies, hospitals).

Inhibiting factor is certainly contrary to the supporting factors such as healthy lifestyle, regular diet and eat nutritious food, health advice adequate number of poor people is low, the level of education of the population is high, and their belief that religious teachings are prohibited from committing suicide and killing people ,

3. Population Coming and Going

population comes from outside the region who move to other areas with the aim to settle, looking for security and safety, learning, working. While locals go / moved from one area to another with the intention to live, work, or study, can in large quantities (TKI).

The purpose of this study was to determine the influence of demographic factors on the growth of population in the district of Jember Regency Sumbersari Year 2012-2016.

RESULTS AND DISCUSSION

1. Results
 - a. area and the region's population

Jember Regency has 31 districts is one of them is the District Sumbersari. Sumbersari sub-district has a total area of 35.32 km² and is a district that is close to the city center. Subdistrict Sumbersari have 7 (seven) and 33 Environmental village, 152 Rukun Warga (RW) and 519 Neighborhood (RT).

The boundaries of the District of Sumbersari namely:

- | | |
|-------|-------------------------|
| North | :District of Patrang; |
| East | :District of Pakusari; |
| South | :District of Ajung; |
| West | :District of Kaliwates; |

While the 7 village in the District of Sumbersari are as follows:

1. Sumbersari;
2. Kebonsari;
3. Karangrejo;
4. Kranjingan;

- 5. Wirolegi;
- 6. Tegalgede;
- 7. Antirogo;

Distance subdistrictSumbersari with the central government Jember district only approximately 5 km, so the condition of the area is still in the urban area, it allows the Human Resources who has a pretty good potential in order to support the acceleration of the implementation of development programs, particularly in the District of Sumbersari , Moreover, in the District of Sumbersari a center of educational facilities ranging from early childhood, elementary, junior, senior and universities. There are some universities who are located in the district of JemberUniversitySumbersari among other things, the Muhammadiyah University, University Moch. Sroedji, PGRI Teachers' Training College, STIE Mandala Jember Polytechnic and Academy-College or other academy. With many universities in the District of Sumbersari this will have an impact on the level of civilization and mindset of the people so that it will be a huge potential in order to spur the progress of the District of Sumbersari.Dengan number of universities and the Academy-the Academy else, this will impact on the economic development of society. As the influx of students from outside the region Sumbersari who was educated in Sumbersari, one in UNEJ, it will cause the effect of rapid economic, such as the emergence of shops, food stalls, hangout places, rental-leasing, and other etc., which ultimately spur to the movement of the economy, which it all is the impact of their places of education in the District of Sumbersari.

b. Population growth

The population growth for their four components, namely births, deaths, and migration. The difference between birth and death is called reproductive changes. While the difference between in-migration and out-migration is called net migration. This can be seen in the following table.

Table 3. Model Added Population

Model		Migration		
		Positive	Negative	Zero
1	$M < F$	N, T, S	T	T
2	$M < F$	N	N, T, S	N
3	$M = F$	N	T	S

Description:
M = mortality (death)

F = fertility (births)
 N = Up
 F = down
 S =Stable

Based on table 3, it can be seen clearly influence the demographics of the population growth (Yasin, 1981, 6). Crude birth rate per year can be seen in the following table.

Table 4. Crude birth rate Summersari District of the Year 2012-2016

No	Year	Population (People)	Number of Birth (People)	Crude birth rate (People)
1	2012	129184	342	2,65
2	2013	129526	367	2,83
3	2014	129893	413	3,18
4	2015	130306	643	4,93
5	2016	130949	935	7,14

Based on table 4 are the crude birth rate highest occurred in 2016 is 7.14,which means that in 2016 there were 1,000 inhabitantsin from 7.14 childbirth, whereas the amount of the crude birth rate of the lowest occurred in 2012, namely 2.65 means that only the of 2.65 soulbirths in 1000 inhabitants.

Table 5. Crude Death Rate District of Summersari Year 2012-2016

No	Year	Population (People)	Number of Death (People)	Crude Death Rate (People)
1	2012	129184	149	1,15
2	2013	129526	495	3,82
3	2014	129893	580	4,47
4	2015	130306	567	4,35
5	2016	130949	437	3,34

Based on the 5 table then the crude death rate highest occurred in 2014 is 4.47,which means that in 2014 there were 1,000 residents in 4.47 deaths, while the amount of the crude death rate the lowest occurred in 2012 is 1.15, meaning that only 1.15 soul of death in 1,000 of the population.

Table 6. Total Net Migration District of Summersari Year 2012-2016

No	Year	Population (People)	Total Migration In (People)	Total Migrating Out (People)	Total Net Migration
1	2012	129184	178	27	1,17
2	2013	129526	224	89	1,04
3	2014	129893	433	101	2,56
4	2015	130306	339	137	1,55
5	2016	130949	774	519	1,95

Based on table 6 that the amount of the highest net migration occurred in 2014 is 2.56,which means that by 2014 in1,000 residents are 2,56 migratory, while the number of the lowest net migration occurred in 2013 is 1.04, meaning that only 1.04 inhabitants who migrated in 1000 inhabitants.

2. Discussion

If you look at the model of population growth (Table 3), it can be seen clearly on the effect of demographics on the growth of population. For the average number of births 540 people, the average amount of the death of 446 people, the average number of 390 souls in-migration, the average number of outmigration 175 inhabitants. Average number of births is greater than the average number of deaths or $F > M$. And the average amount of inward migration is larger than the out-migration or $IM > OM$. Models of population in this study is the $M < F$ and positive migration, Naik (N).

CONCLUSION

Given birth rate was 540 inhabitants, the average mortality is 446 people, average in-migration was 390 people, and the average outmigration is 175 people. Based on this it can be seen that the average number of births is more than the average number of deaths or $F > M$ and the average number of in-migration is larger than the out-migration or $IM > OM$. Thus obtained models of population in this study is the $M < F$ and positive migration, Naik (N).

REFERENCES

- Adietmo, Sri, Moetiningih & Samosir, Omas, Bulan. 2010. *Dasar-dasar Demografi*. Depok: Salemba Empat.
- Badan Pusat Statistik. 2013. Kabupaten Jember dalam Angka Tahun 2013. Jember.
- Badan Pusat Statistik. 2014. Kabupaten Jember dalam Angka Tahun 2014. Jember.
- Badan Pusat Statistik. 2015. Kabupaten Jember dalam Angka Tahun 2015. Jember.
- Badan Pusat Statistik. 2016. Kabupaten Jember dalam Angka Tahun 2016. Jember.
- Badan Pusat Statistik. 2017. Kabupaten Jember dalam Angka Tahun 2017. Jember.
- Mantra, Ida Bagoes. 2008. *Demografi Umum*. Yogyakarta: Pustaka Pelajar.