

**ANALYSIS OF THE IMPACT OF FLASH FLOODS AND INFLATION ON SUSTAINABLE DEVELOPMENT GOAL 8 (SDG 8) IN LANGSA CITY****Haprila Putri Giantama<sup>1\*</sup>, Muhammad Daffa Z<sup>2</sup>, Winda Rahmadhani<sup>3</sup>, Karmila Br Tarigan<sup>4</sup>**

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**ABSTRACT**

*Flash floods and inflation may emerge as serious obstacles to achieving Sustainable Development Goal 8 (SDG 8), Decent Work and Economic Growth, since each disrupts economic activity and job opportunities while eroding household earnings and the ability to buy goods and services. This research investigates how Flash Floods and Inflation affect advancement toward SDG 8 in Langsa City. A quantitative survey approach was applied, distributing questionnaires to 100 respondents residing in Langsa City. The data were processed with SPSS 26 through descriptive statistics, validity and reliability checks, classical assumption testing, multiple linear regression, partial t-tests, an F-test, and the coefficient of determination. The results indicate that Flash Floods exert a positive and significant influence on SDG 8 (regression coefficient = 0.516;  $t = 4.109$ ; significance  $< 0.001$ ), while Inflation likewise demonstrates a positive and significant influence (regression coefficient = 0.223;  $t = 2.500$ ; significance = 0.014). Taken together, both variables significantly affect SDG 8, as shown by an F-value of 14.984 and a significance level under 0.001. An  $R^2$  of 0.266 reveals that Flash Floods and Inflation jointly account for 26.6% of the variance in SDG 8, whereas the remaining 73.4% is attributable to factors not included in the model. The study concludes that disaster-related circumstances and inflationary pressure are key factors associated with the attainment of SDG 8 in Langsa City.*

**Keywords:** *Flash floods, inflation, Sustainable Development Goal 8, decent work and economic growth, Langsa City.*

**INTRODUCTION**

In November 2025, Langsa City was hit by a flash flood that left many residents deeply traumatized. Reports describe it as the biggest and most destructive flood the area has seen in the past 30 years. Data from the Aceh Regional Disaster Management Agency (BPBA) for 2024 place Aceh Province at a high level of disaster risk, with 68 flood events and four flash flood events recorded (Juwita, 2025). Beyond the environmental damage that strained community finances, the disaster also interrupted people's day-to-day routines. A large share of the population in Aceh Province, Langsa City included, earns a living in the informal sector as traders or daily wage workers. Such groups depend strongly on consumer demand and on local economic conditions, and their irregular incomes and thin social protection leave them especially exposed to economic shocks from natural disasters (Zahro et al. 2025).





Figure 1. Types of Disasters in Aceh Province

Figure 1 shows that these circumstances bear directly on Sustainable Development Goal 8 (SDG 8), whose aim is lasting, inclusive, and sustainable economic growth together with full, productive employment and decent work for all. When flash floods damage workplaces, infrastructure, business assets, and transport links, economic activity is interrupted at once and chances to earn an income shrink, above all for informal-sector workers and their households. Inflation adds to the strain by eroding purchasing power and pushing up the price of goods and services, which makes it harder for low-income households to make ends meet. Flash floods and inflation are therefore proposed as central determinants of SDG 8: each can affect whether economic activity continues, and each shapes household income, purchasing power, job opportunities, and the ability of vulnerable groups to secure a decent, sustainable livelihood.

A number of steps were taken in 2025 to keep inflation in check (Aditya and Rangkuti, 2025). One was the Affordable Food Movement (Gerakan Pangan Murah/GPM), held at regular intervals, October 2025 among them, to keep the prices of staple foods affordable and stable for residents. The Regional Inflation Control Team (Tim Pengendalian Inflasi Daerah/TPID) also tracked the commodities driving inflation on a daily basis, so that the authorities could follow price movements and react quickly to any likely rise.

The Sustainable Development Goals (SDGs) constitute a global development framework promoted by the United Nations Development Programme (UNDP), an organization that also seeks to reinforce peace across the world and expand freedom. According to the UNDP, ending poverty in all its forms and dimensions, including extreme poverty, stands among the most pressing challenges facing the world and is a prerequisite for achieving sustainable development (United Nations Development Programme, 2025).

Indonesia is one of the countries pledged to achieve the Sustainable Development Goals (SDGs) agreed at the global level. Statistics Indonesia (BPS) reported for March 2025 that poverty remained fairly high nationwide: about 23.85 million people, or 8.47%

of the population, lived below the poverty line, which averaged IDR 609,160 per capita per month. Of Langsa City's 185,622 residents, 16,280 were categorized as poor (Badan Pusat Statistik, 2025). The SDGs are made up of 17 goals and 169 targets, all set to be accomplished by 2030. The 17 goals include No Poverty, Zero Hunger, Good Health and Well-Being, Quality Education, Gender Equality, Clean Water and Sanitation, Affordable and Clean Energy, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Reduced Inequalities, Sustainable Cities and Communities, Responsible Consumption and Production, Climate Action, Life Below Water, Life on Land, Peace, Justice and Strong Institutions, and Partnerships for the Goals.

Of the 17 goals, this study focuses on Goal 8, which promotes sustained, inclusive, and sustainable economic growth, along with full and productive employment and decent work for all people. This goal also covers productive activities, the creation of decent jobs, entrepreneurship, and the formalization and expansion of micro, small, and medium-sized enterprises (United Nations Development Programme, 2025).

Earlier research has looked at how natural disasters affect the economy and livelihoods, including their effects on employment, income-generating activity, and local economic activity, while other work has addressed inflation and its consequences for household purchasing power and economic conditions. These topics, however, tend to be studied in isolation, and little attention has gone to how disaster shocks (flash floods in particular), inflation, and SDG 8 outcomes relate to one another at the city level. The gap matters for Langsa City, where residents engaged in informal economic activity may face both the economic disruption that follows flash floods and the higher cost of living that comes with inflation. This study therefore provides a local-level analysis of flash floods and inflation considered together in relation to SDG 8 in Langsa City.

What sets this study apart is that it analyzes flash floods and inflation together, as two linked economic pressures bearing on Sustainable Development Goal 8 (SDG 8), especially decent work and economic growth, at the city level. Recent studies have found that natural disasters can reduce household welfare, consumption, income, and economic activity (Lim et al., 2022; Agarwal et al., 2024), and recent evidence from Indonesia indicates that natural disasters, floods above all, can raise inflation by disrupting economic activity and supply chains (Nuranisa & Satria, 2025). Other work has emphasized economic resilience and decent work as factors in achieving SDG 8 in Indonesia (Paksi et al., 2024). Still, these studies usually treat disaster impacts, inflationary pressure, and SDG 8-related outcomes as separate matters. This study accordingly adds a new local-level perspective by examining flash floods and inflation jointly in relation to SDG 8 in Langsa City. The integrated approach produces empirical evidence on how environmental and economic shocks are jointly related to decent work and economic growth, and gives a fuller view of local economic resilience in a disaster-prone city.

When SDG targets are implemented well and monitored over time, they can give regional leaders and local government institutions positive momentum and serve as strategic assets. It is therefore important to understand what shapes progress toward SDG

8, so that economic and employment policy can be strengthened in line with local needs. Given this background and the gap identified above, the study aims to analyze the effect of flash floods and inflation on Sustainable Development Goal 8 (SDG 8) in Langsa City.

## **RESEARCH METHOD**

A total of 100 respondents were selected using purposive sampling. Sample size was determined by the rule of thumb of Hair et al. (2010), who recommend at least five respondents per indicator in quantitative multivariate analysis. With 20 indicators measuring Flash Flood (X1), Inflation (X2), and SDG 8 (Y), the minimum came to 20 indicators  $\times$  5 respondents = 100 respondents, which was adopted as the final sample. The respondents were Langsa City residents who met the inclusion criteria set beforehand and who had themselves experienced, or been exposed to, the economic effects of flash floods and inflation. This number was considered enough observations to test the effects of Flash Flood (X1) and Inflation (X2) on SDG 8 (Y).

The research proceeded in several stages. The researchers began by defining the problem, namely how flash flood disasters and inflation affect decent work and economic growth in Langsa City. Next, a conceptual framework and hypotheses were built around the relationships among Flash Flood (X1), Inflation (X2), and SDG 8 (Y). The variables were then converted into questionnaire items, and the questionnaire was distributed to respondents who fit the sampling criteria defined in advance. Finally, the returned data were coded, processed, and analyzed statistically using the Statistical Package for the Social Sciences (SPSS) version 26.

Answers were captured using a five-point Likert scale ranging from 1 to 5, where 1 stood for strongly disagree and 5 for strongly agree. Through this scale, respondents' perceptions of flash flood conditions, inflation, and the attainment of SDG 8 in Langsa City could be converted into numerical values.

## **Population and Sample**

The population consisted of lower- and middle-income communities in Langsa City, Aceh, Indonesia, with emphasis on economically vulnerable residents affected by flooding. These communities were taken as the unit of analysis since disasters and inflation bear directly on household economic conditions, job opportunities, income stability, and economic growth.

Purposive sampling was used, meaning respondents were selected against criteria matching the study's objectives. Two criteria applied: 1) Langsa City residents affected by the flash flood whose homes were built of bamboo, wood, or other comparatively cheap materials, and 2) Langsa City residents affected by the flood whose incomes were unstable or uncertain, such as casual daily workers and small-scale traders. Using these criteria, 100 respondents formed the research sample. They were regarded as appropriate because they had direct experience of the economic and social conditions associated with the flood disaster and inflation in Langsa City.

### **Data Collection Procedure**

Primary data came from a structured questionnaire developed out of each variable's operational definition and indicators, which were taken from relevant prior studies and established methodological texts. Indicators for Flash Flood (X1) reflected the socioeconomic impacts of flash floods described by Mutia and Wijayanto (2025): interrupted economic activity, damaged assets and infrastructure, disrupted livelihoods, and lost income. Indicators for Inflation (X2) covered price changes, purchasing power, and household economic conditions, following the socioeconomic indicators reported by the Central Statistics Agency (BPS, 2025). Indicators for SDG 8 (Y) were drawn from the dimensions of decent work and economic growth, namely employment opportunities, income-generating activities, productivity, and inclusive economic conditions, with the United Nations Development Programme (2025), Nialda et al. (2022), and Sari and Nugraheni (2024) as references.

Every indicator was written as a statement easy for respondents to understand and rated on a five-point Likert scale. The questionnaire was given to respondents who fulfilled the sampling criteria defined earlier. Before completing it, respondents were informed of the study's purpose and how to answer, and were asked to reply according to their real experiences and circumstances. When the questionnaires came back, the researchers checked that each had been filled in properly, and the valid responses were coded and entered into SPSS version 26 for analysis. Development and adaptation of the questionnaire also followed research-method principles from Sekaran and Bougie (2016), Kuncoro (2018), and Hair et al. (2019).

### **Research Variables and Measurement**

Three variables were examined, two independent and one dependent. Flash Flood (X1) and Inflation (X2) served as the independent variables, and Sustainable Development Goal 8 (SDG 8) (Y) as the dependent variable. Flash Flood (X1) refers to the conditions and impacts respondents went through as a result of the flash flood disaster, particularly its effects on housing and on the economic circumstances of the affected communities.

Inflation (X2) denotes the shifts in the prices of goods and services as perceived by respondents, along with their consequences for purchasing power and household economic circumstances. Sustainable Development Goal 8 (SDG 8) (Y) denotes conditions of decent work and economic growth, covering job opportunities, income, economic productivity, and the extent to which communities are able to sustain their economic activities. Every variable was assessed using questionnaire items rated on a five-point Likert scale, running from 1 (strongly disagree) to 5 (strongly agree).

### **Data Analysis**

Data analysis in SPSS version 26 followed several ordered stages. The first was descriptive statistics, which summarized respondents' characteristics and the response distribution of each variable through the minimum, maximum, mean, and standard

deviation.

The second stage tested the instrument to assess the quality of the questionnaire. For validity, each item's correlation coefficient was compared against the critical value, and an item counted as valid when its computed correlation was higher. Reliability was assessed with Cronbach's Alpha to judge the internal consistency of the questionnaire.

Third, classical assumption tests were carried out prior to estimating the regression model. Normality was inspected through a Normal P-P Plot of Regression Standardized Residual to determine whether the residuals followed an approximately normal distribution. Multicollinearity was evaluated based on Tolerance and Variance Inflation Factor (VIF) values. Heteroscedasticity was examined by plotting standardized residuals against standardized predicted values, and it was deemed absent when the points scattered randomly above and below zero without any discernible pattern.

Last, multiple linear regression was used to test how Flash Flood (X1) and Inflation (X2) affect Sustainable Development Goal 8 (SDG 8) (Y). The regression model is specified as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e$$

where:

Y = Sustainable Development Goal 8 (SDG 8)

$\alpha$  = Constant

X<sub>1</sub> = Flash Flood

X<sub>2</sub> = Inflation

$\beta_1$  = Regression coefficient of Flash Flood

$\beta_2$  = Regression coefficient of Inflation

e = Error term

Hypotheses were tested at a 5% significance level ( $\alpha = 0.05$ ). A hypothesis was treated as supported when its significance value was under 0.05 and the sign of the regression coefficient agreed with the direction stated in the hypothesis. The testing drew on the coefficient of determination ( $R^2$ ), the t-test, and the F-test.  $R^2$  indicated the share of variation in SDG 8 that Flash Flood and Inflation together could explain. The partial significance test (t-test) examined whether each independent variable individually had a significant effect on SDG 8, and the hypothesis was supported if the significance value was below 0.05. The simultaneous significance test (F-test) examined whether Flash Flood and Inflation jointly had a significant effect on SDG 8. A 5% significance level ( $\alpha = 0.05$ ) was used throughout.

Hypothesis testing was conducted at a 5% level of significance ( $\alpha = 0.05$ ). A hypothesis was regarded as supported if its significance value fell below 0.05 and the sign of the regression coefficient matched the direction specified in the hypothesis. The testing relied on the coefficient of determination ( $R^2$ ), the t-test, and the F-test.  $R^2$  showed the proportion of variation in SDG 8 that Flash Flood and Inflation could jointly explain. The

partial significance test (t-test) assessed whether each independent variable had a significant individual effect on SDG 8, and the hypothesis was accepted when the significance value was under 0.05. The simultaneous significance test (F-test) assessed whether Flash Flood and Inflation together had a significant effect on SDG 8. Throughout the analysis, a 5% significance level ( $\alpha = 0.05$ ) was applied.

### Research Hypotheses

Based on the research framework and the variables studied, the hypotheses below were tested:

H1: Flash floods significantly and positively affect Sustainable Development Goal 8 (SDG 8) in Langsa City.

H2: Inflation significantly and positively affects Sustainable Development Goal 8 (SDG 8) in Langsa City.

H3: Flash floods and inflation together significantly and positively affect Sustainable Development Goal 8 (SDG 8) in Langsa City.

## RESULTS AND DISCUSSION

### Results

#### Descriptive Statistical Test Results

The study examined three variables: Flash Flood, Inflation, and Sustainable Development Goal 8 (SDG 8). Table 1 below presents the descriptive statistics for each of them:

Table 1. Results of the Descriptive Statistical Analysis

|                                        | Descriptive Statistics |         |         |        |                |
|----------------------------------------|------------------------|---------|---------|--------|----------------|
|                                        | N                      | Minimum | Maximum | Mean   | Std. Deviation |
| Flash Flood                            | 100                    | 3.20    | 5.00    | 4.4280 | .45485         |
| Inflation                              | 100                    | 2.83    | 5.00    | 4.3001 | .53321         |
| Sustainable Development Goal 8 (SDG 8) | 100                    | 3.00    | 5.00    | 4.4370 | .43688         |
| Valid N (listwise)                     | 100                    |         |         |        |                |

Source: Primary data processed, 2026

Table 1 summarizes the descriptive statistics of the study variables: Flash Flood, Inflation, and Sustainable Development Goal 8 (SDG 8).

#### Flash Flood

Table 1 shows that Flash Flood scores run from 3.20 (minimum) to 5.00 (maximum) with a mean of 4.4280. A mean this high suggests that respondents mostly agreed with the statements about the flash flood disaster in Langsa City. The standard deviation of 0.45485 is small, so answers were fairly uniform around the mean.

## Inflation

Inflation scores range from a minimum of 2.83 to a maximum of 5.00, with a mean of 4.3001. This indicates that respondents tended to rate the statements about inflation in Langsa City fairly highly. With a standard deviation of 0.53321, variation was low and responses were fairly consistent around the mean.

## Sustainable Development Goal 8 (SDG 8)

Scores for Sustainable Development Goal 8 (SDG 8) ranged from 3.00 to 5.00, with an average of 4.4370. This fairly high average shows that respondents generally held favorable views of decent work and economic growth conditions in Langsa City. A standard deviation of 0.43688 points to limited variability, meaning responses were grouped quite tightly around the mean.

## Validity Test Results

Validity testing establishes how precisely a research instrument captures what it is meant to measure, and it serves to categorize every questionnaire item as either valid or invalid. An item is deemed valid if it represents the construct under investigation and shows a significant correlation with the total score of its variable. In this study, validity was evaluated by contrasting the calculated r-value (corrected item-total correlation) with the critical r-value (r-table). An item is classed as valid when its calculated r-value exceeds the r-table value, and as invalid when it is equal to or below it.

Table 2 presents the validity results for the instrument items of the three variables: Flash Flood, Inflation, and Sustainable Development Goal 8 (SDG 8).

Table 2. Validity Test Results

| Question Item | Calculated r-value | Critical r-value | Description |       |
|---------------|--------------------|------------------|-------------|-------|
| X1            | X1.1               | 0.309**          | 0.1946      | Valid |
|               | X1.2               | 0.744**          | 0.1946      | Valid |
|               | X1.3               | 0.751**          | 0.1946      | Valid |
|               | X1.4               | 0.775**          | 0.1946      | Valid |
|               | X1.5               | 0.834**          | 0.1946      | Valid |
| X2            | X2.1               | 0.666**          | 0.1946      | Valid |
|               | X2.2               | 0.797**          | 0.1946      | Valid |
|               | X2.3               | 0.765**          | 0.1946      | Valid |
|               | X2.4               | 0.760**          | 0.1946      | Valid |
|               | X2.5               | 0.781**          | 0.1946      | Valid |
|               | X2.6               | 0.551**          | 0.1946      | Valid |
| Y             | Y1                 | 0.741**          | 0.1946      | Valid |
|               | Y2                 | 0.784**          | 0.1946      | Valid |
|               | Y3                 | 0.714**          | 0.1946      | Valid |
|               | Y4                 | 0.677**          | 0.1946      | Valid |
|               | Y5                 | 0.578**          | 0.1946      | Valid |
|               | Y6                 | 0.537**          | 0.1946      | Valid |
|               | Y7                 | 0.493**          | 0.1946      | Valid |

Source: Primary data processed, 2026

Table 2 indicates that every question item for Flash Flood, Inflation, and Sustainable Development Goal 8 (SDG 8) produces a calculated r-value exceeding the critical r-value of 0.1946. The calculated values fall within a range of 0.309 to 0.834, all of which surpass the critical value. It can therefore be concluded that all 18 question items used to measure Flash Flood, Inflation, and SDG 8 are valid and appropriate for use as research instruments in this study.

### Reliability Test Results

Reliability testing measures how consistent a questionnaire is as an indicator of a variable or construct. It was performed to check the consistency of respondents' answers to the questions, using the Cronbach's Alpha method with a threshold above 0.6. Table 3 below presents the results.

Table 3. Reliability Test Results

| Variabel                               | Cronbach's Alpha | Ketentuan Nilai Alpha | Keterangan |
|----------------------------------------|------------------|-----------------------|------------|
| Flash Flood                            | 0,716            | 0,6                   | Reliabel   |
| Inflation                              | 0,809            | 0,6                   | Reliabel   |
| Sustainable Development Goal 8 (SDG 8) | 0,764            | 0,6                   | Reliabel   |

Source: Primary data processed, 2026

In Table 3, Cronbach's Alpha is 0.716 for Flash Flood, 0.809 for Inflation, and 0.764 for Sustainable Development Goal 8 (SDG 8). All three exceed the 0.6 threshold, so the questionnaire items for the three variables are reliable. The instrument therefore has adequate internal consistency, as its items produce reasonably consistent responses, and it can proceed to further analysis.

### Classical Assumption Test Results

#### Normality Test Results

Normality testing examines whether the errors (residuals) of a regression model are normally distributed. This study employed a Normal P-P Plot of Regression Standardized Residual, and its result is presented in the figure below.

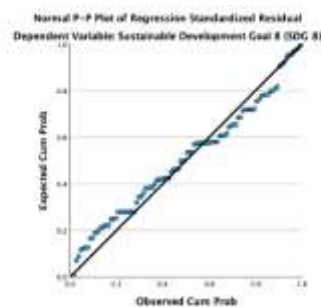


Figure 2. Normality Test Results

Source: Primary data processed, 2026

In Figure 2, the data points are situated near the diagonal line and move along the same direction, indicating that the regression model satisfies the normality assumption and is appropriate for use.

### Multicollinearity Test Results

The multicollinearity test checks whether the independent variables in a multiple linear regression model are highly correlated with one another, because such correlation may distort the relationship between the independent variables and the dependent variable. Detection relies on tolerance and Variance Inflation Factor (VIF) values: a model is considered free of multicollinearity if VIF does not exceed 10 and tolerance is not below 0.1 (Sunjoyo et al., 2013). The results are presented in Table 4 below.

Table 4. Multicollinearity Test Results

| Coefficients <sup>a</sup> |             |                         |       |
|---------------------------|-------------|-------------------------|-------|
| Model                     |             | Collinearity Statistics |       |
|                           |             | Tolerance               | VIF   |
| 1                         | (Constant)  |                         |       |
|                           | Flash Flood | .869                    | 1.151 |
|                           | Inflation   | .869                    | 1.151 |

a. Dependent Variable: Sustainable Development Goal 8 (SDG 8)

Source: Primary data processed, 2026

Table 4 shows that both independent variables, Flash Flood (X1) and Inflation (X2), have a Tolerance of 0.869, above 0.10, and a VIF of 1.151, below 10. The regression model thus shows no multicollinearity among its independent variables and satisfies this assumption, meaning Flash Flood and Inflation are not linearly correlated to a problematic degree. The data are therefore suitable for regression analysis of their effects on Sustainable Development Goal 8 (SDG 8) in Langsa City.

### Heteroscedasticity Test Results

Heteroscedasticity testing examines whether the variance of the residuals differs across observations. Using the scatterplot method, heteroscedasticity is considered absent when the points are scattered randomly without forming any pattern and appear both above and below zero on the Y-axis. The results are presented in the figure below.

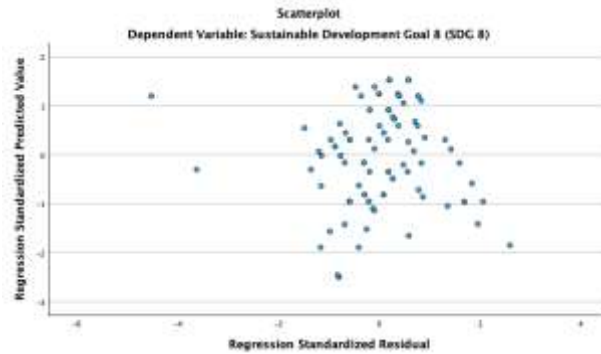


Figure 2. Heteroscedasticity Test Results

Source: Data processed, 2026

In Figure 2, the scatterplot points are dispersed randomly around the Y-axis with no clear pattern, appearing both above and below zero. The regression model is therefore free from heteroscedasticity and meets the homoscedasticity assumption, making it suitable for further analysis of the effect of Flash Flood (X1) and Inflation (X2) on Sustainable Development Goal 8 (SDG 8) (Y) in Langsa City.

## Hypothesis Testing Results

### Multiple Linear Regression Analysis

Once the classical assumption tests confirmed that the regression model fulfilled the necessary assumptions as a whole, the multiple linear regression model was estimated and interpreted. The findings are presented in the table below:

Table 5. Regression Equation Model

|       |             | Coefficients <sup>a</sup>   |            |                           | t     | Sig.  |
|-------|-------------|-----------------------------|------------|---------------------------|-------|-------|
| Model |             | Unstandardized Coefficients |            | Standardized Coefficients |       |       |
|       |             | B                           | Std. Error | Beta                      |       |       |
|       | (Constant)  | 13.891                      | 2.907      |                           | 4.778 | <.001 |
| 1     | Flash Flood | .516                        | .125       | .383                      | 4.109 | <.001 |
|       | Inflation   | .223                        | .089       | .233                      | 2.500 | .014  |

a. Dependent Variable: Sustainable Development Goal 8 (SDG 8)

Source: Primary data processed, 2026

From Table 5, the multiple linear regression yields this equation:

$$Y = 13,891 + 0.516X1 + 0.223X2$$

The regression model can be interpreted as follows:

### Constant

The constant of 13.891 indicates that if Flash Flood (X1) and Inflation (X2) were both zero, the predicted value of Sustainable Development Goal 8 (SDG 8) would be

13.891 units.

### Flash Flood (X1)

Flash Flood (X1) has a positive regression coefficient of 0.516. Holding Inflation (X2) constant, each one-unit increase in Flash Flood goes with a 0.516-unit increase in the SDG 8 score. The standardized coefficient (Beta) of 0.383 also indicates a positive relationship between Flash Flood and SDG 8. Given a t-value of 4.109 and a significance value of  $<0.001$ , the effect of Flash Flood on SDG 8 is statistically significant, so the hypothesis that Flash Flood significantly affects SDG 8 in Langsa City is accepted.

### Inflation (X2)

Inflation (X2) likewise has a positive coefficient, 0.223. Holding Flash Flood (X1) constant, each one-unit increase in Inflation goes with a 0.223-unit increase in the SDG 8 score. A Beta of 0.233 points to a positive relationship between Inflation and SDG 8. With a t-value of 2.500 and a significance value of 0.014, below 0.05, Inflation has a statistically significant effect on SDG 8, and the hypothesis that Inflation significantly affects SDG 8 in Langsa City is therefore accepted.

### Coefficient of Determination Test ( $R^2$ )

The coefficient of determination test reveals the extent to which the independent variables are able to account for the dependent variable. The findings are provided in the table below:

Table 6. Coefficient of Determination Test Results

| Model Summary |                   |          |                   |                            |
|---------------|-------------------|----------|-------------------|----------------------------|
| Model         | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1             | .516 <sup>a</sup> | .266     | .251              | 2.64614                    |

a. Predictors: (Constant), Inflation, Flash Flood

Source: Primary data processed, 2026

In Table 6, an R value of 0.516 indicates a moderate positive relationship between Sustainable Development Goal 8 (SDG 8) and the independent variables Flash Flood (X1) and Inflation (X2). The R Square of 0.266 (26.6%) means the two variables together explain 26.6% of the variation in SDG 8, and the other 73.4% is due to factors outside this model. After adjusting for the number of independent variables, the Adjusted R Square of 0.251 (25.1%) shows that they explain about 25.1% of the variation in SDG 8. This implies that factors beyond those examined here may also play a substantial role in how SDG 8 is achieved in Langsa City.

### Partial Test Results (t-Test)

The partial test evaluates the effect of each independent variable on the dependent variable using the t-test. Decisions rest on the significance value: an independent variable

is considered to have a significant effect when the value is below 0.05. The partial test results follow.

Table 7. Partial Test Results (t-Test)

|       |             | Coefficients <sup>a</sup>   |            |                           |       |       |
|-------|-------------|-----------------------------|------------|---------------------------|-------|-------|
| Model |             | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig.  |
|       |             | B                           | Std. Error | Beta                      |       |       |
| 1     | (Constant)  | 13.891                      | 2.907      |                           | 4.778 | <.001 |
|       | Flash Flood | .516                        | .125       | .383                      | 4.109 | <.001 |
|       | Inflation   | .223                        | .089       | .233                      | 2.500 | .014  |

a. Dependent Variable: Sustainable Development Goal 8 (SDG 8)

Source: Data processed, 2026

Based on the t-test results, the partial effects of Flash Flood and Inflation on SDG 8 are explained as follows.

### Hypothesis Testing 1 (H1)

In Table 7, Flash Flood (X1) has a significance value of <0.001, far below 0.05. Its regression coefficient of 0.516 shows a positive influence on SDG 8, and the t-value of 4.109 confirms the effect is statistically significant. H1 is accepted: Flash Flood has a significant positive effect on Sustainable Development Goal 8 (SDG 8) in Langsa City.

### Hypothesis Testing 2 (H2)

Table 7 gives Inflation (X2) a significance value of 0.014, under 0.05. The coefficient of 0.223 indicates a positive influence on SDG 8, and the t-value of 2.500 shows the effect is statistically significant. H2 is therefore accepted, so Inflation has a significant positive effect on Sustainable Development Goal 8 (SDG 8) in Langsa City.

### Simultaneous Test Results (F-Test)

The simultaneous test, or F-test, determines whether the independent variables Flash Flood (X1) and Inflation (X2) have a joint significant effect on the dependent variable, Sustainable Development Goal 8 (SDG 8). The decision depends on the significance value; below 0.05, the independent variables are considered to have a statistically significant simultaneous effect on the dependent variable.

Table 8. Test Results (F-Test)

|       |            | ANOVA <sup>a</sup> |    |             |        |                    |
|-------|------------|--------------------|----|-------------|--------|--------------------|
| Model |            | Sum of Squares     | df | Mean Square | F      | Sig.               |
| 1     | Regression | 218.472            | 2  | 109.236     | 14.984 | <.001 <sup>b</sup> |
|       | Residual   | 707.168            | 97 | 7.290       |        |                    |
|       | Total      | 925.640            | 99 |             |        |                    |

a. Dependent Variable: Sustainable Development Goal 8 (SDG 8)

b. Predictors: (Constant), Inflation, Flash Flood

Source: Data processed, 2026

Table 8 gives an F-value of 14.984 and a significance value of  $<0.001$ , below 0.05. Flash Flood (X1) and Inflation (X2) therefore have a statistically significant joint effect on Sustainable Development Goal 8 (SDG 8) in Langsa City, and the hypothesis that the two together significantly affect SDG 8 in Langsa City is accepted. The results suggest that disaster conditions combined with inflationary pressure are significantly associated with decent work and economic growth as captured by SDG 8.

## **Discussion**

### **The Effect of Flash Floods on Sustainable Development Goal 8 (SDG 8)**

The analysis shows that Flash Flood (X1) exerts a positive and significant influence on Sustainable Development Goal 8 (SDG 8) in Langsa City, as supported by a regression coefficient of 0.516, a  $t$ -value of 4.109, and a significance value of  $<0.001$ , well under the 0.05 level. H1 is therefore accepted. Because the coefficient is positive, a rise in the Flash Flood variable is statistically associated with a rise in the SDG 8 variable.

This significant result points to a close connection between flash flood conditions and the attainment of SDG 8, decent work and economic growth in particular, among the affected communities of Langsa City. Flash floods can bear directly on how people earn a living, on their employment situation and income, and on their capacity to sustain their livelihoods. Groups living in flood-prone housing with irregular incomes, for example daily workers and small-scale traders, are likely to suffer more when disaster strikes.

Such evidence gives empirical grounding for reading the significant link between flash flood conditions and SDG 8 in Langsa City. The finding should nevertheless be understood within this study's measurement framework. A significant statistical association between the Flash Flood variable and SDG 8 does not mean that flash floods improve decent work or economic growth. What it shows is that differences in how respondents rated flash flood conditions go together with differences in the SDG 8 scores captured by the questionnaire. Accordingly, the sign of the coefficient has to be read in light of the particular indicators and coding used to measure Flash Flood.

How the positive direction should be read depends on how Flash Flood was measured here. With a positive coefficient, respondents who scored higher on the Flash Flood measure also tended to score higher on SDG 8. This need not imply that a more severe disaster improves decent work and economic growth; it reflects a positive statistical association between respondents' assessments of flash flood conditions and the SDG 8 indicators in the questionnaire.

Viewed through sustainable development, the result shows that disaster conditions are a key factor in explaining local economic and employment conditions. Flash floods can prompt changes in livelihood strategies, employment patterns, economic activity, and community adaptation. Pursuing SDG 8 in disaster-prone areas should therefore go hand in hand with disaster preparedness, protection for vulnerable communities, revival of local economic activity, and support for affected workers and small traders.

For Langsa City, building economic resilience after a flash flood matters so that affected communities can carry on with productive activities. Government measures

might include reopening access to economic activities, backing affected workers and small businesses, improving disaster preparedness, and offering aid that helps communities regain their income sources. Such efforts fit the purpose of SDG 8, which stresses productive employment, decent work, and sustainable economic growth.

The result agrees with recent empirical studies indicating that floods can seriously damage the economy and livelihoods of affected households. Collalti (2024) reported a delayed, short-term negative effect of flash floods on local economic activity, especially in countries at low to medium levels of human development, which supports the view that flash floods can disrupt local economic activity and hence conditions relevant to economic growth. Zayed et al. (2025) likewise documented heavy losses of household income and assets after floods in Bangladesh, with daily wage workers and households relying on agriculture and other livelihoods most exposed to these losses.

Wagner (2025) offers further support, finding that flash floods caused bigger income losses for lower-income groups and that informal employment was an important channel of this vulnerability. That is highly pertinent here, since daily workers and small-scale traders often have little financial protection and rely directly on uninterrupted daily economic activity. Recent evidence on recurrent floods also shows that they can deepen household poverty and widen economic disparities, implying that repeated flooding may have effects reaching beyond immediate physical damage.

### **The Effect of Inflation on Sustainable Development Goal 8 (SDG 8)**

Inflation (X2) is found to have a positive and significant effect on Sustainable Development Goal 8 (SDG 8) in Langsa City, based on a regression coefficient of 0.223, a *t*-value of 2.500, and a significance value of 0.014, which is under 0.05. H2 is thus accepted. The positive coefficient means that movements in the Inflation variable are statistically associated with movements in the SDG 8 variable.

Inflation is tightly bound up with household purchasing power, production costs, income, and how well people can cover daily needs. Price changes for goods and services influence the economic choices of both households and businesses, and for lower- and middle-income communities with uncertain incomes, inflationary pressure can be a major determinant of economic conditions and livelihood activities. Recent empirical work backs this up. Hartawan and Gonzalez (2026) found that inflation cuts real income, shifts household consumption patterns, and heightens economic vulnerability among low-income urban households, and recent Indonesian evidence shows that inflation can weaken purchasing power and worsen conditions for vulnerable groups by limiting their ability to afford basic needs. These results bear on the present study because purchasing power and household economic stability are closely tied to the wider aims of SDG 8, notably productive economic participation and decent livelihoods.

The flash flood result is also in agreement with recent studies on the socioeconomic effects of flooding. Work published in 2024 indicates that repeated floods can raise household poverty and widen economic gaps, especially for households directly exposed. A separate study found that floods can alter household welfare via changes in

consumption and in the coping strategies households adopt, and newer evidence on the 2024 Bangladesh flash flood documented serious disruption of livelihoods in affected communities. Taken together, these studies support reading flash floods as a source of interference with economic activity, income generation, and livelihood security, all of which matter for SDG 8.

This study thus adds to earlier research by analyzing flash floods and inflation together against SDG 8 at the local level. Past work has mostly addressed how floods affect household welfare, livelihoods, or inequality, and separately how inflation affects purchasing power and economic vulnerability. Here the two pressures are combined in one SDG 8 framework, with evidence from Langsa City. When comparing results across studies, differences in location, population, research design, and measurement indicators should still be kept in view.

The inflation and flash flood results therefore extend earlier work by showing that disaster-related disruption and economic pressure are both statistically associated with SDG 8 in Langsa City. Earlier research has concentrated mainly on the socioeconomic effects of disasters or on wider economic challenges, whereas this study places the two factors together in an SDG 8 framework. Any comparison should nonetheless allow for differences in study location, population, research design, and measurement indicators.

As with Flash Flood, the positive sign of this coefficient has to be read according to how the questionnaire measured the variable. It does not automatically mean that higher inflation benefits decent work and economic growth; it indicates that respondents' measured perceptions of inflation are positively associated with the measured SDG 8 indicators in the regression model.

The result underlines the need for policies that keep prices stable while shielding vulnerable groups. In Langsa City, inflation control could be reinforced by watching the prices and supply of essential commodities, safeguarding food stocks, supporting affordable food programs, and coordinating the institutions involved so that price rises can be anticipated. These steps can help sustain purchasing power and keep community economic activity going, contributing to SDG 8 more broadly.

Household purchasing power, production costs, income, and the ability of communities to meet everyday needs are all closely linked to inflation. Shifts in the prices of goods and services shape the economic decisions of households and businesses, and for lower- and middle-income communities with uncertain incomes, inflationary pressure can become a significant influence on economic conditions and livelihood activities. This matches the wider debate on inclusive economic development under SDG 8, which emphasizes productive employment, decent livelihoods, and inclusive economic opportunities (Sari & Nugraheni, 2024). Luthfi (2025) also points to economic conditions and productivity as important for achieving SDG 8, which suggests that economic pressures on household and community welfare are relevant to the wider goals of decent work and economic growth.

Earlier research on the socioeconomic consequences of flood disasters also agrees with the flash flood result. Mutia and Wijayanto (2025), for instance, found that flash

floods can change the socioeconomic conditions of affected communities, mainly by disrupting livelihoods and economic activity, and Zahro et al. (2025) examined the difficulties traders face in keeping their livelihoods going amid environmental and economic uncertainty. Both support this study's observation that disaster conditions matter for community economic activity and SDG 8. This study goes a step further by examining flash floods and inflation together in relation to SDG 8, instead of handling disaster impacts and economic pressures separately.

### **The Simultaneous Effect of Flash Floods and Inflation on Sustainable Development Goal 8 (SDG 8)**

The simultaneous test indicates that Flash Flood (X1) and Inflation (X2) together have a significant effect on Sustainable Development Goal 8 (SDG 8) in Langsa City, with an  $F$ -value of 14.984 and a significance value of  $<0.001$ , below 0.05. H3 is therefore accepted.

The result suggests that flash flood conditions and inflationary pressure jointly help explain variation in SDG 8. Decent work and economic growth cannot be attributed to one factor alone, because local economic conditions are shaped by several interlinked influences: a disaster may disrupt economic activity and livelihoods while, at the same time, inflation affects purchasing power, prices, and the cost of keeping economic activity running.

Vulnerable communities in Langsa City are especially affected by the two factors in combination. Those hit by flash floods can see their homes, workplaces, income sources, and economic activities disrupted, while inflation simultaneously drives up the cost of basic necessities and other goods and services. Together these conditions may put extra pressure on households trying to sustain their livelihoods and economic activities.

Because both variables are significant together, an integrated approach to SDG 8 at the local level is needed. Disaster management policy should look beyond emergency response and physical recovery to the continuity of employment, income generation, purchasing power, and local economic activity, and inflation-control policy should in turn take account of the economic situation of disaster-affected communities.

In sum, flash flood conditions and inflation emerge as statistically significant factors associated with SDG 8 in Langsa City. This supports building disaster resilience, economic stability, employment protection, and community economic recovery into local development policy, an integrated approach that should help vulnerable communities keep up productive activities and advance SDG 8: Decent Work and Economic Growth.

This study's contribution is to analyze flash floods and inflation simultaneously in relation to SDG 8 at the local level, whereas earlier studies have generally treated the socioeconomic impacts of natural disasters and of economic pressures separately. Placing flash flood conditions and inflation in one analytical framework gives an integrated picture of how environmental and economic pressures are statistically associated with decent work and economic growth. This is particularly useful for understanding communities whose livelihoods are sensitive both to disaster-related disruption and to

shifts in economic conditions.

Although the data come from Langsa City, the practical implications could also hold for other disaster-prone regions with similar problems. Their local governments might use the results as a reference for integrated policies combining disaster preparedness and resilience, livelihood and employment protection, price and economic stability, and post-disaster economic recovery, which can help vulnerable communities keep productive economic activity going during and after disasters. Transferring these implications elsewhere, however, requires attention to differences in local socioeconomic conditions, disaster characteristics, employment structures, and institutional capacity.

The results have practical value for strengthening local economic resilience and advancing SDG 8 in disaster-prone communities. The joint relationship between flash floods and inflation implies that local development policy should pair disaster risk reduction with measures protecting employment, household purchasing power, livelihoods, and the continuity of local economic activity. Recent studies stress that natural disasters can have major economic and welfare consequences for households, and that price and income shocks can further affect consumption and economic recovery (Lim et al., 2022; Agarwal et al., 2024). Within SDG 8, strengthening economic resilience, productive employment, and inclusive economic opportunities is likewise important for sustainable development in Indonesia (Paksi et al., 2024). The findings can thus serve as empirical input for local policymakers designing integrated disaster-response and economic-recovery programs that include livelihood protection, employment support, price stabilization, and help for vulnerable communities. For communities and local economic actors, they underline the value of building economic resilience and keeping productive activity going through disaster and economic pressure. Although the evidence is specific to Langsa City, the approach could serve as a reference for regions similarly exposed to natural disasters and economic instability, provided implementation stays responsive to local socioeconomic and institutional conditions.

## **Discussion**

### **The Effect of Flash Floods on Sustainable Development Goal 8 (SDG 8)**

Flash Flood (X1) is shown to significantly and positively influence Sustainable Development Goal 8 (SDG 8) in Langsa City: the regression coefficient is 0.516, the t-value 4.109, and the significance value  $<0.001$ , far below the 0.05 threshold. This leads to acceptance of H1. A positive coefficient means that respondents scoring higher on Flash Flood also scored higher on SDG 8, in statistical terms.

The significance of this effect implies that flash flood conditions are closely tied to SDG 8 attainment, especially decent work and economic growth, for the affected communities of Langsa City. Flash floods may directly alter people's economic activities, employment, income, and ability to sustain livelihoods, and households in flood-prone homes with unpredictable incomes, such as daily workers and small-scale traders, may be disrupted more severely when disaster comes.

Empirical evidence of this kind helps interpret the significant link between flash flood conditions and SDG 8 in Langsa City. The result must still be read within the measurement framework of this study. That the Flash Flood variable is significantly related to SDG 8 statistically does not imply that flash floods improve decent work or economic growth; it means that variation in how respondents assessed flash flood conditions corresponds to variation in the SDG 8 scores obtained from the questionnaire. The coefficient's direction should therefore be considered together with the indicators and coding behind the Flash Flood variable.

The measurement of Flash Flood likewise determines how the positive direction should be understood. A positive coefficient means that higher Flash Flood scores accompany higher SDG 8 scores, but a more severe disaster is not necessarily good for decent work and economic growth. The relationship is a positive statistical one between how respondents judged flash flood conditions and the SDG 8 indicators in the questionnaire.

In terms of sustainable development, disaster conditions turn out to be a significant element in understanding economic and employment conditions locally. Flash floods can bring about changes in livelihood strategies, employment patterns, economic activity, and how communities adapt. In disaster-prone areas, work toward SDG 8 therefore needs to be paired with preparedness, protection of vulnerable groups, restoration of local economic activity, and assistance for affected workers and small traders.

After a flash flood, Langsa City needs stronger economic resilience so that affected communities are able to return to productive activity. The government could restore access to economic activities, help affected workers and small businesses, improve preparedness, and provide aid that lets communities rebuild their income sources. These actions are in line with SDG 8's emphasis on productive employment, decent work, and sustainable economic growth.

Recent empirical studies point the same way, showing that floods can have major economic and livelihood impacts on affected households. Collalti (2024) found a delayed short-run negative effect of flash floods on local economic activity, particularly where human development is low to medium, supporting the idea that flash floods disrupt local economic activity and so influence conditions relevant to economic growth. In Bangladesh, Zayed et al. (2025) recorded large household income and asset losses after floods, and the households hit hardest were daily wage workers and those depending on agriculture and other livelihoods.

Wagner (2025) is a further source of support, reporting that flash floods produced greater income losses for lower-income groups, with informal employment as a central mechanism of that vulnerability. This is especially relevant because daily workers and small-scale traders tend to have limited financial protection and depend directly on daily economic activity continuing without interruption. Evidence from repeated flood events adds that floods can increase household poverty and widen economic disparities, so recurring exposure may carry consequences beyond the immediate physical damage.

### **The Effect of Inflation on Sustainable Development Goal 8 (SDG 8)**

Inflation (X2) significantly and positively affects Sustainable Development Goal 8 (SDG 8) in Langsa City, as shown by a regression coefficient of 0.223, a t-value of 2.500, and a significance value of 0.014, under 0.05. H2 is accepted. With a positive coefficient, changes in Inflation are statistically associated with changes in SDG 8.

Inflation has strong links with household purchasing power, production costs, income, and people's capacity to meet their daily needs. When prices of goods and services change, the economic decisions of households and businesses are affected, and inflationary pressure may substantially shape the economic conditions and livelihoods of lower- and middle-income communities, especially those with uncertain incomes. Recent evidence supports this. Hartawan and Gonzalez (2026) reported that inflation lowers real income, changes household consumption patterns, and increases economic vulnerability among low-income urban households, and recent Indonesian evidence likewise indicates that inflation can erode purchasing power and worsen the position of vulnerable groups by restricting their ability to buy basic necessities. This is relevant to the present study because purchasing power and household economic stability are closely connected to SDG 8's broader goals, particularly productive economic participation and decent livelihoods.

Recent work on the socioeconomic effects of flooding is consistent with the flash flood result as well. A 2024 publication shows that recurring floods may increase household poverty and widen economic disparities, above all among households directly exposed to them; another study found that floods affect household welfare through consumption changes and the coping strategies households adopt; and newer evidence on the 2024 Bangladesh flash flood recorded severe livelihood disruption in the affected communities. These studies jointly support the interpretation that flash floods can interfere with economic activity, income generation, and livelihood security, each of which bears on SDG 8.

By studying flash floods and inflation jointly in relation to SDG 8 at the local level, this research complements earlier studies. Many of those concentrated on flood effects on household welfare, livelihoods, or economic inequality, and others on inflation's effects on purchasing power and economic vulnerability. The current study combines the two pressures in a single SDG 8 framework and supplies evidence from Langsa City, although differences in location, population, research design, and measurement indicators must be borne in mind when results are compared across studies.

These inflation and flash flood findings build on prior work by demonstrating a statistical association between SDG 8 and both disaster-related disruption and economic pressure in Langsa City. Earlier studies mostly dealt with the socioeconomic effects of disasters or with wider economic challenges, while this one handles both factors at once under an SDG 8 framework. Location, population, research design, and measurement indicators still differ between studies, and comparisons should reflect that.

The same caution applies here as for Flash Flood: the direction of the inflation coefficient depends on how the questionnaire measured it. A positive value does not mean

that rising inflation is good for decent work and economic growth; it shows that respondents' perceptions of inflation, as measured, are positively associated with the SDG 8 indicators as measured in the regression model.

Policies that preserve price stability and protect vulnerable groups become important in light of this result. Langsa City could strengthen inflation control by tracking the prices and availability of essential commodities, securing food supplies, providing affordable food programs, and coordinating the relevant institutions to prepare for price increases. Such measures help protect purchasing power and community economic activity and thus contribute to SDG 8 as a whole.

Purchasing power, production costs, income, and the affordability of daily needs are all closely related to inflation. Price changes influence how households and businesses make economic decisions, and lower- and middle-income communities with uncertain incomes may find inflationary pressure a decisive factor in their economic conditions and livelihoods. The point accords with the broader discussion of inclusive economic development under SDG 8, which highlights productive employment, decent livelihoods, and inclusive economic opportunities (Sari & Nugraheni, 2024). Luthfi (2025) similarly emphasizes economic conditions and productivity as supports for SDG 8, indicating that economic pressures on household and community welfare are pertinent to the wider aims of decent work and economic growth.

Prior studies of flood disasters' socioeconomic consequences agree with the flash flood finding too. Mutia and Wijayanto (2025) showed that flash floods can influence the socioeconomic conditions of affected communities, chiefly by disrupting livelihoods and economic activities, and Zahro et al. (2025) described the difficulty traders have in sustaining their livelihoods under environmental and economic uncertainty. Both sources reinforce the point that disaster conditions matter for community economic activity and SDG 8. What this study adds is the joint examination of flash floods and inflation in relation to SDG 8, rather than separate treatment of disaster impacts and economic pressures.

### **The Simultaneous Effect of Flash Floods and Inflation on Sustainable Development Goal 8 (SDG 8)**

According to the simultaneous test, Flash Flood (X1) and Inflation (X2) have a joint significant effect on Sustainable Development Goal 8 (SDG 8) in Langsa City (F-value = 14.984; significance value <0.001, under 0.05), and H3 is accepted.

Together, flash flood conditions and inflationary pressure help account for variation in SDG 8. No single factor explains decent work and economic growth, since many interconnected influences shape economic conditions locally; a disaster can disturb economic activity and livelihoods even as inflation acts on purchasing power, prices, and the cost of sustaining economic activity.

For vulnerable communities in Langsa City, these two factors matter most in combination. A flash flood may damage homes, workplaces, income sources, and economic activities, and inflation raises what basic necessities and other goods and

services cost. Their interplay can make it still harder for households to sustain their livelihoods and economic activity.

That both variables are jointly significant highlights the need for an integrated local approach to SDG 8. Beyond emergency response and physical recovery, disaster management policies ought to consider whether employment, income generation, purchasing power, and local economic activity can continue, and inflation-control policies ought to reflect the economic situation of communities affected by disasters.

All in all, flash flood conditions and inflation are statistically significant factors associated with SDG 8 in Langsa City. The findings favor embedding disaster resilience, economic stability, employment protection, and community economic recovery in local development policy; an approach of this kind is expected to help vulnerable communities sustain productive activity and support SDG 8: Decent Work and Economic Growth.

Analyzing flash floods and inflation together in relation to SDG 8 at the local level is where this study contributes. Previous research has typically looked separately at the socioeconomic effects of natural disasters and of economic pressures. Combining flash flood conditions and inflation into one analytical framework offers an integrated view of how environmental and economic pressures are statistically associated with decent work and economic growth, which is especially relevant to communities whose livelihoods react to both disaster disruption and changes in economic conditions.

The findings originate in Langsa City, yet their practical implications may extend to other disaster-prone regions with comparable challenges. Local governments there could refer to them when designing integrated policies covering disaster preparedness and resilience, livelihood and employment protection, price and economic stability, and post-disaster recovery, thereby helping vulnerable communities keep economic activity productive during and after disasters. Any such transfer should, however, take into account local socioeconomic conditions, the nature of the disasters, employment structures, and institutional capacity.

Practically, the findings can help strengthen local economic resilience and support SDG 8 in disaster-prone communities. As flash floods and inflation are jointly related to SDG 8, local development policy should combine disaster risk reduction with measures that protect employment, household purchasing power, livelihoods, and the continuity of local economic activity. Recent studies stress the major economic and welfare consequences natural disasters can have for households, and the further influence that price and income shocks can have on consumption and economic recovery (Lim et al., 2022; Agarwal et al., 2024). Under SDG 8, strengthening economic resilience, productive employment, and inclusive economic opportunities is also important to Indonesia's sustainable development (Paksi et al., 2024). Local policymakers can therefore use the results as empirical input when designing integrated disaster-response and economic-recovery programs, including livelihood protection, employment support, price stabilization, and assistance to vulnerable communities. For communities and local economic actors, the findings stress the importance of building economic resilience and maintaining productive activity during disasters and economic pressure. The evidence is

specific to Langsa City, but the approach may be a useful reference for regions with similar exposure to natural disasters and economic instability, so long as implementation remains responsive to local socioeconomic and institutional conditions.

## CONCLUSION

The study concludes that flash floods and inflation are significantly related to progress on Sustainable Development Goal 8 (SDG 8), particularly decent work and economic growth, in Langsa City. Disaster-related conditions and inflationary pressure both appear to matter for local economic conditions, employment, and community livelihoods. Since the two are jointly related to SDG 8, environmental and economic pressures should be considered together in efforts to build local economic resilience. Achieving SDG 8 in Langsa City thus calls for an integrated approach that combines disaster risk management, economic recovery, employment protection, and efforts to stabilize the economy and preserve community purchasing power.

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