International Journal of Society Reviews (INJOSER) e-ISSN: 3030-802X
Vol. 2 No. 10, August 2025, pages: 1452~1471

# DETERMINANTS OF INCOME AND WELFARE OF FISHERMEN IN DESA ADAT JIMBARAN, BADUNG REGENCY

**Kadek Surya Astawa Putra[1], Made Kembar Sri Budhi[2]**
1 Faculty of Economics and Business, Udayana University;
2 e-mail : suryaastawa26@gmail.com
[2] Faculty of Economics and Business, Udayana University
* Corresponding: Author: Kadek Surya Astawa Putra

**Abstract**: The welfare of fishermen in Desa Adat Jimbaran, Badung Regency, remains relatively low due to various interrelated factors, including limited human resources, the continued use of traditional fishing methods, restricted access to capital, poor financial management habits, and the underutilization of modern fishing technology. This study aims to analyze the determinants of fishermen's income and welfare by focusing on three main variables: working capital, technology, and work experience. Using a quantitative approach with Partial Least Squares (PLS) as the analytical tool, this research was conducted among fishermen in Desa Adat Jimbaran, who face uncertainties in daily catch volumes and income. The findings reveal that working capital and work experience have a positive and significant effect on both income and welfare, while technology has a positive but statistically insignificant effect. Income is also found to be a significant mediating variable between the independent variables and fishermen's welfare. These results suggest that while capital and experience are essential in enhancing income and living standards, the application of fishing technology has not produced optimal outcomes due to limited skills and high operational costs. Therefore, there is a need for training and improved access to user-friendly technology to strengthen the economic resilience of traditional fishing communities.
Keywords: income, welfare, fishermen, working capital, technology, experience, Desa Adat Jimbaran

## INTRODUCTION

Indonesia is a maritime country, with ocean territory covering approximately two-thirds of its total area. The marine sector has the potential to serve as a cornerstone or main driver of national development, contributing significantly to the current and future welfare of the nation. Consequently, the marine and fisheries sectors should receive greater attention from the government. In Indonesia, marine fisheries are largely dominated by small-scale or traditional fishers, with only a small portion operating within the industrial sector. Traditional fisheries are characterized by limited adoption of modern information and technology, practices passed down through generations, and the use of simple fishing equipment (Ari, 2011).

Globally, coastal areas tend to be centers of economic activity and human civilization, hosting around 60 percent of the world's population (Rustiadi, 2009). Coastal regions serve as primary landing sites for marine resources, such as fish, and are hubs for economic activities like trade, particularly for fishing communities. Daily activities of

fishers include catching fish and gathering other marine resources such as crabs, seaweed, shells, oysters, and others. However, income derived from these activities is highly dependent on luck and tends to decline sharply. Side jobs often do not provide sufficient income to meet daily needs (Mulyadi, 2005).

Fisherfolk communities are highly dependent on the ocean and form an integral part of the coastal population. The utilization of marine and aquatic biological resources in Indonesian waters can make a significant contribution to the welfare of coastal communities, particularly fishers (Kusumayanti et al., 2018). Coastal communities are defined as groups living in coastal areas whose livelihoods depend on marine and coastal resources. Therefore, fishers are individuals whose survival is closely tied to the sea and its resources. Indonesia's marine and coastal resource potential is vast.

The country's coastal biodiversity includes coral reefs, seaweed, mangrove swamps, abundant fish stocks, and non-renewable resources such as oil and minerals. These natural assets indicate Indonesia’s wealth. With a coastline of 95,181 km and marine territory covering 5.8 million km², Indonesia is an archipelagic nation where two-thirds of the territory consists of ocean, including open seas, deep seas, bays, and straits. Despite this enormous maritime potential, the welfare of fishing communities remains low. A stark contrast exists between the country's abundant natural resources and the socioeconomic condition of its fishers. In reality, fishing communities are often among the most socioeconomically disadvantaged groups, particularly in terms of access to education, healthcare, and cultural development.

Fishers are generally categorized into three groups: labor fishers, owner fishers, and independent fishers. Labor fishers operate equipment owned by others; owner fishers possess the fishing gear but employ others to operate it; and independent fishers own and operate their own fishing gear (Subri, 2005).

Fishing technology is also divided into two categories: traditional and modern. Modern fishers use more advanced fishing technology compared to traditional fishers. The level of modernity is not solely determined by the use of a motorized boat but also by the size and power of the motor and the exploitation capacity of the fishing gear. The degree of technological advancement affects the operational range and efficiency of fishing activities (Nurhidayah et al., 2020).

Community welfare levels reflect the quality of life within a household, and improving welfare is a fundamental objective of development (Putri, 2016). Fishing communities have distinct lifestyles shaped by the unique risks of ocean-based livelihoods, particularly those arising from natural conditions. Therefore, specific strategies are needed to support their development (Rahim, 2018). The challenges in improving the welfare of traditional fishers include limited human resource quality, lack of working capital, limited working hours, low productivity, and inadequate access to fishing technology (Takariani, 2015). Furthermore, fishers face difficulties in diversifying their fishing businesses and suffer from a marketing system that often benefits middlemen more than the fishers themselves (Mulyadi, 2005).

Several factors influence the welfare of fishers, including working capital, technology, work experience, and income. In economics, capital refers to production outputs used to generate further production (Maulidah, 2012). Capital is a critical production factor that strongly influences productivity or output (Umar, 2015). Research by Muda (2017) found that working capital significantly affects the welfare of fishers. Capital is a vital factor affecting fisher income, as business ventures are highly dependent on available capital, particularly in terms of the costs incurred during production (Putra & Kartika, 2019).

Another key factor affecting welfare is technology. Technology is defined as the method of fulfilling human needs using tools and reasoning, enhancing or empowering the body, senses, and brain. Fishers are highly dependent on fishing technology due to the mobile nature of fish stocks and the need for tools that allow for extended time at sea. This is supported by Rowan (2023), who found that technology helps improve fisher welfare. Similarly, Mazuki (2020) concluded that the use of marine technologies has a positive impact on the well-being of fishers.

Work experience is also a crucial factor affecting welfare. It is defined as the degree of mastery of knowledge and skills that a person acquires through time and practice (Joseph, 2019). In the fishing sector, experience is essential for improving catch productivity. The more experienced the fisher, the greater the productivity. Gushendri (2022) confirmed that fishing experience plays a significant role in enhancing fisher welfare.

The income of small-scale or traditional fishers differs significantly from other occupations, such as traders or farmers. Traders can calculate monthly profits, and farmers can predict harvest yields, but fishing is marked by uncertainty, speculation, and fluctuating results (Kusnadi, 2009). Compared to farmers, fishing provides less opportunity for income diversification, as farmers often have more time for off-farm work (Riptanti, 2005). Traditional fishers are often characterized as poor, with low food quality and intake, limited savings and investment, and a generally low standard of living. According to Olaoye et al. (2012), traditional fishing includes hunting, gathering, or capturing fish from the sea.

As of 2022, Indonesia had 2,359,064 fishers across 34 provinces. Bali Province accounted for 62,302 of them, with Gianyar Regency recording the lowest number at 824 fishers and a total production of 1,697 tons. Badung Regency ranks third in Bali in terms of the number of fishers. One of its coastal villages is Jimbaran Traditional Village, located in South Kuta District.

Field observations and interviews with several fishers in Jimbaran Traditional Village reveal that coastal communities generally have low average income. Fisherfolk remain economically behind compared to individuals working in other sectors. This is due to the limited quantity and quality of fishing gear and low post-harvest processing creativity.

Jimbaran Traditional Village was originally a fishing and farming settlement. With the rise of seafood restaurants—especially the first ones in South Bali—and international

hotels along the coast, many local residents have shifted toward tourism-related employment. Although Jimbaran contributes significantly to the fisheries sector in South Kuta, its total production remains lower than that of Serangan Village in Denpasar, despite Jimbaran having a larger coastal area. The current fishing practices rely on a limited range of fish species popular in the domestic market (Khrisnandi, 1969). According to Salim (in Indara et al., 2017), factors influencing fisher income include social and economic variables such as capital, labor, fishing distance, and experience.

Research by Aswar (2017) highlights that the key indicator for evaluating environmental impacts on fishers is their level of welfare. Net income from fishing can be increased through optimal and economically efficient fisheries management (Cunningham, 1994). Income from employment does not necessarily determine one's welfare level (Lein & Djinar, 2018). Fisher income is vital for evaluating the contribution of fisheries to fisher livelihoods and comparing earnings across different fisheries sectors (Purcell et al., 2018). Income decline can reduce time allocated for consumption activities as time becomes more expensive (Becker, 1965:498), noting that all humans divide time between work and other activities.

Small-scale fisheries are characterized by low capital, low technology, and limited fishing potential due to their use of small, non-motorized boats (Muthmainnah et al., 2015).

The analysis conducted by Riana et al. (2014) indicates that central government institutions are more effective in designing programs and training schemes aimed at enhancing the skills and competencies of small-scale entrepreneurs. The income earned by fishermen from their catch is influenced by various factors such as technology, capital, working hours, and environmental weather conditions. According to Dwi Maharani and Jember (2016), capital is a crucial element in establishing a business. In the fisheries sector, the required capital may come from personal funds or loans. The catch obtained by fishermen serves as the primary source of their daily income. When fishermen have sufficient capital to support their fishing activities, they tend to use more modern equipment, thereby maximizing their catch. Proper capital management is essential to ensure adequate production levels and requires business owners to allocate sufficient resources for capital management (Diana, 2019).

Fishermen in Jimbaran Traditional Village generally have relatively low income levels. This is largely due to their reliance on traditional fishing methods and the use of simple equipment. Moreover, their limited capital results in suboptimal catch volumes. Another issue is the lack of a cooperative organization to regulate fish pricing, leading to inconsistent earnings among individual fishermen.

Capital remains a major issue for fishermen in Jimbaran Traditional Village, as the region lacks a Fishermen's Joint Business Group (Kelompok Usaha Bersama) to support those engaged in fishing. Despite efforts by the local fishermen to apply for funding assistance from village and sub-district authorities, the process has proven challenging. This has hindered their ability to acquire sufficient capital, thereby limiting their capacity to improve catch outcomes. Research by Omar et al. (2015) found that investing in capital

goods or modern boat technology significantly increases income. Likewise, Ridha (2017) and Mahendra and Kartika (2019) both confirmed that capital has a positive and significant effect on fishermen's income. In their study, capital is defined as the amount of money spent by fishermen over a one-month period for fishing activities, measured in Indonesian Rupiah.

A key issue affecting the welfare of fishermen is their difficulty in meeting daily needs due to the unpredictable nature of their catch, resulting in fluctuating daily income. In Jimbaran Traditional Village, fishermen's income is largely dependent on the amount of capital used, the level of fishing technology applied, and their experience at sea.

Several factors contribute to the low welfare levels of fishermen in Jimbaran Traditional Village. These include low human resource quality, traditional fishing techniques, suboptimal use of fishing technology, poor financial management practices, limited capital ownership, and technological constraints. Fishermen also face limited access to capital for operational costs, such as sea equipment. Additionally, there is a lack of knowledge regarding how to reinvest earnings for business development. Their access to crucial information—such as weather forecasts, sea wave conditions, and wind direction—is also limited. Fish location data is still obtained through conventional means, emergency handling is inadequate, and there is limited access to market demand information.

Another pressing issue is the continued use of basic fishing gear, with no modern aids such as GPS. This problem is compounded by the limited knowledge among Jimbaran fishermen regarding the use of modern fishing equipment. Most fishermen have acquired their skills through informal experience, leading to a lack of understanding of ocean conditions.

Work experience, or the duration a person has engaged in fishing, plays a key role in determining the success of fishing activities. The longer the experience, the greater the skills and knowledge acquired. Individuals new to fishing in Jimbaran Traditional Village struggle to achieve optimal catches, as they require time to learn about the marine environment and how to operate increasingly modern fishing tools. Brown (1989) argues that individuals with extensive work experience possess advantages in the production process, such as error detection, understanding the nature of errors, and identifying their causes. Jensen (2007) further asserts that access to technological information significantly influences the income and profit of fishermen.

Experienced fishermen are more familiar with sea conditions, giving them an advantage when catching fish. Conversely, fishermen with limited experience tend to earn less. Marimutu et al. (2015) emphasized the importance of experience and training in increasing fishermen's income, stating that experience positively influences income levels. Similarly, Primyastanto (2014) found that work experience has a significant effect on fishermen's income. Since fishing is often a generational occupation passed down through families rather than learned formally, the resulting skills tend to be rudimentary (Christianto, 2017). Ratna et al. (2018) found a positive relationship between work

experience and income, while Dahar (2017) reported a negative influence. In contrast, Anggara (2018) and Wisnu (2018) found that work experience had a positive and significant effect on income. According to Budi Eko (2019), long-term experience indicates greater knowledge and skills in maintenance management.

As previously mentioned, a core issue regarding fishermen's welfare is the difficulty of meeting daily needs due to uncertain catch results, leading to inconsistent income. In Jimbaran Traditional Village, fishermen's earnings depend largely on capital, fishing technology, and experience. Several contributing factors include low human resources, outdated fishing methods, suboptimal technology use, poor financial management, limited capital ownership, and technological constraints. Fishermen continue to face limited access to operational capital, lack knowledge of reinvestment strategies, and have restricted access to weather and oceanographic data. Fish location information is still acquired through traditional means, emergency preparedness remains low, and market demand data is lacking. The continued use of basic fishing gear and the absence of modern tools like GPS—combined with limited understanding of such technologies—underscore the traditional and experience-based nature of fishing in this region, leaving fishermen poorly equipped to adapt to changing marine conditions.

## METHOD

This study employs a quantitative approach with the objective of examining the influence of working capital, technology, and work experience on the income and welfare of fishermen in Jimbaran Traditional Village, Badung Regency. This approach was selected because it enables the objective measurement of relationships between variables using the Partial Least Squares (PLS) analytical tool. Jimbaran Traditional Village was chosen as the research location because the majority of its population works as fishermen who face challenges in increasing their income and welfare due to the uncertainty of fishing yields (Sujarweni, 2016).

The population of this study consists of all fishermen in Jimbaran Traditional Village, totaling 286 individuals, comprising 164 traditional fishermen and 122 modern fishermen. A sample of 150 respondents was selected using proportionate random sampling, with proportions reflecting the number of traditional and modern fishermen. The data collected include both primary data, obtained through questionnaires and interviews, and secondary data from relevant institutions. The variables in this study include working capital (X1), technology (X2), and work experience (X3) as exogenous variables; income (Y1) as an intervening variable; and fishermen's welfare (Y2) as the endogenous variable (Sugiyono, 2020; Ghozali, 2016).

The data analysis technique utilizes two approaches: descriptive statistical analysis to describe the characteristics of respondents and research variables, and inferential analysis using the Partial Least Squares (PLS) method to test the relationships among variables. The PLS model was selected due to its capability to analyze complex structural models even with a limited sample size and non-normal data distribution. Validity tests, reliability tests, and goodness-of-fit assessments were also conducted to ensure model quality. In addition, this study examines the mediating role of income in

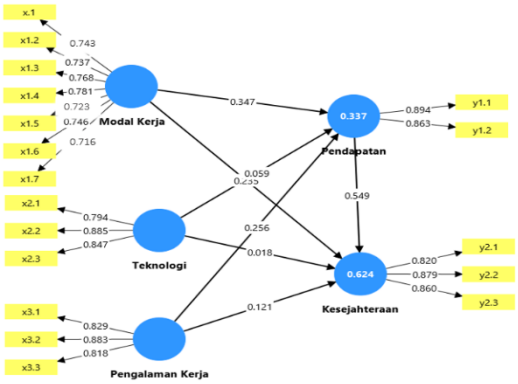
the relationship between working capital, technology, and work experience with fishermen's welfare (Ghozali, 2016; Hair et al., 2010).

## RESULTS AND DISCUSSION

### Partial Least Square Analysis

#### 1) Measurement Model Evaluation Results (Outler model)

**Figure 1. Outer Model**




Source: Data processed, 2025

a) Convergent Validity

**Table 1. Results of the Convergent Loading Factor Validity Test**

| | Welfare | Working capital | Income | Work experience | Technology |
|---|---|---|---|---|---|
| **X.1** | | 0.743 | | | |
| **X1.2** | | 0.737 | | | |
| **X1.3** | | 0.768 | | | |
| **X1.4** | | 0.781 | | | |
| **X1.5** | | 0.723 | | | |
| **X1.6** | | 0.746 | | | |
| **X1.7** | | 0.716 | | | |
| **X2.1** | | | | | 0.794 |
| **X2.2** | | | | | 0.885 |
| **X2.3** | | | | | 0.847 |
| **X3.1** | | | | 0.829 | |
| **X3.2** | | | | 0.883 | |
| **X3.3** | | | | 0.818 | |
| **Y1.1** | | | 0.894 | | |
| **Y1.2** | | | 0.863 | | |
| **Y2.1** | 0.820 | | | | |
| **Y2.2** | 0.879 | | | | |
| **Y2.3** | 0.860 | | | | |

Source: Data processed, 2025

Based on the table above, it can be seen that all loading factor values in the convergent validity test are greater than 0.7. Thus, it can be stated that the data in the study are valid.

**Table 2. Results of the AVE Convergent Validity Test**

| | Cronbach's alpha | Composite reliability (rho_a) | Composite reliability (rho_c) | Average variance extracted (AVE) |
|---|---|---|---|---|
| **Welfare** | 0.813 | 0.818 | 0.889 | 0.728 |
| **Working capital** | 0.845 | 0.854 | 0.883 | 0.519 |
| **Income** | 0.707 | 0.714 | 0.872 | 0.773 |
| **Work experience** | 0.798 | 0.805 | 0.881 | 0.712 |
| **Technology** | 0.797 | 0.816 | 0.880 | 0.710 |

Source: Data processed, 2025

Based on Table 2, above it can be seen that all AVE values of convergent validity are greater than 0.5. Thus it can be stated that the data in the study are valid.

b) Discriminant Validity

**Table 3. Results of Discriminant Validity Test**

| | Welfare | Working capital | Income | Work experience | Technology |
|---|---|---|---|---|---|
| **X1.1** | 0.401 | **0.743** | 0.323 | 0.366 | 0.558 |
| **X1.2** | 0.382 | **0.737** | 0.355 | 0.461 | 0.470 |
| **X1.3** | 0.389 | **0.768** | 0.344 | 0.456 | 0.553 |
| **X1.4** | 0.499 | **0.781** | 0.444 | 0.402 | 0.515 |
| **X1.5** | 0.375 | **0.781** | 0.288 | 0.357 | 0.299 |
| **X1.6** | 0.550 | **0.746** | 0.474 | 0.504 | 0.356 |
| **X1.7** | 0.424 | **0.716** | 0.406 | 0.388 | 0.361 |
| **X2.1** | 0.339 | 0.493 | 0.273 | 0.468 | **0.794** |
| **X2.2** | 0.421 | 0.544 | 0.428 | 0.537 | **0.885** |
| **X2.3** | 0.420 | 0.512 | 0.361 | 0.527 | **0.847** |
| **X3.1** | 0.420 | 0.443 | 0.416 | **0.829** | 0.439 |
| **X3.2** | 0.502 | 0.584 | 0.456 | **0.883** | 0.558 |
| **X3.3** | 0.445 | 0.445 | 0.378 | **0.818** | 0.537 |
| **Y1.1** | 0.691 | 0.470 | **0.894** | 0.491 | 0.388 |
| **Y1.2** | 0.609 | 0.469 | **0.863** | 0.373 | 0.363 |
| **Y2.1** | **0.820** | 0.534 | 0.604 | 0.346 | 0.335 |
| **Y2.2** | **0.879** | 0.535 | 0.688 | 0.525 | 0.405 |
| **Y2.3** | **0.860** | 0.492 | 0.601 | 0.507 | 0.463 |

Source: Data processed, 2025

Discriminant validity is related to the principle that different construct measurements (manifest variables) should not be highly correlated. The way to test discriminant validity with reflective indicators is to see the cross loading value for each variable must have the greatest correlation with its construct. Based on the table above, it can be seen that all cross loading values for each indicator on each variable are greater than 0.7. Thus, it can be stated that the data in the study are valid.

c) Cronbach's alpha and Composite reliability

**Table 4. Results of Cronbach's alpha and Composite Reliability Tests**

| Variables | Cronbach's Alpha | Composite Reliability |
|---|---|---|
| Welfare | 0.813 | 0.818 |
| Working capital | 0.845 | 0.854 |
| Income | 0.707 | 0.714 |
| Work experience | 0.798 | 0.805 |
| Technology | 0.797 | 0.816 |

Source: Data processed, 2025

Based on Table 4, it can be seen that all Cronbach's alpha and Composite reliability values on each variable are greater than 0.70. Thus, it can be stated that the data in the study are reliable.

**2) Structural Model Evaluation (inner model)**

**Table 5. R-square Test Results**

| Variables | R Square | R Square Adjusted |
|---|---|---|
| Welfare | 0.624 | 0.614 |
| Income | 0.337 | 0.324 |

Source: Data processed, 2025

Based on Table 5, the R-squares value for the income variable (Y1) is 0.337, which indicates that it has a moderate influence, because it is greater than 0.33. The R-square value for the welfare variable (Y2) is 0.624, which indicates that it has a moderate influence, because it is less than 0.67 and above 0.33.

b) Testing of Research Hypotheses

**Table 6. Hypothesis Test Results**

| | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (\|O/STDEV\|) | P Values |
|---|---|---|---|---|---|
| Working capital →Income | 0.347 | 0.355 | 0.085 | 4.078 | 0.000 |
| Technology →Income | 0.059 | 0.059 | 0.094 | 0.633 | 0.263 |
| Experience →Income | 0.256 | 0.253 | 0.101 | 2,545 | 0.005 |
| Working capital →Welfare | 0.235 | 0.238 | 0.084 | 2,804 | 0.003 |
| Technology →Welfare | 0.018 | 0.021 | 0.073 | 0.252 | 0.400 |
| Experience →Welfare | 0.121 | 0.119 | 0.066 | 1,831 | 0.004 |
| Income →Welfare | 0.549 | 0.544 | 0.072 | 7,571 | 0.000 |

Source: Data processed, 2025

Based on Table 6, the p-value and t-statistics for each variable are obtained, which are explained as follows.

1) The beta value is 0.347 and the t statistics value is 4.078 with a p value of 0.000 < 0.05, so it can be concluded that working capital (X1) has a positive and significant effect on income (Y1).
2) The beta value is 0.235 and the t statistics value is 2.804 q with valuep valueof 0.003 < 0.05, it can be concluded that working capital (X1) has a positive and significant effect on welfare (Y2).
3) The beta value is 0.059 and the t statistics value is 0.633 with a p value of 0.263 > 0.05, so it can be concluded that technology (X2) has a positive and insignificant effect on income (Y1).
4) The beta value is 0.018 and the t statistics value is 0.252 with a p value of 0.400 > 0.05, so it can be concluded that technology (X2) has a positive and insignificant effect on welfare (Y2).
5) The beta value is 0.256 and the t statistics value is 2.545 with a p value of 0.005 < 0.05, so it can be concluded that work experience (X3) has a positive and significant effect on income (Y1).
6) The beta value is 0.121 and the t statistics value is 1.831 with a p value of 0.004 < 0.05, so it can be concluded that work experience (X3) has a positive and significant effect on welfare (Y2).
7) The beta value is 0.549 and the t statistics value is 7.571 with a p value of 0.000 < 0.05, so it can be concluded that income (Y1) has a positive and significant effect on welfare (Y2).

c) Testing of Mediating Variables.

**Table 7. Specific Indirect Effects**

| | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (\|O/STDEV\|) | P Values |
|---|---|---|---|---|---|
| Working Capital -> Income -> Welfare | 0.190 | 0.193 | 0.053 | 3,597 | 0.000 |
| Technology -> Income -> Welfare | 0.133 | 0.130 | 0.050 | 1.210 | 0.017 |
| Experience -> Income -> Welfare | 0.141 | 0.138 | 0.059 | 2.386 | 0.005 |

Source: Data processed, 2025

Based on Table 7, the role of income as a mediating variable is as follows.

1) The influence of working capital on fishermen's welfare mediated by income is significant with a t-statistic value of 3.597 > 1.97, this means that income plays a role aspartial mediation, which means that in the relationship between variables there are direct and indirect relationships (Garson, 2016).
2) The influence of technology on fishermen's welfare mediated by income isnot significant with a t-statistic value of 1.210 < 1.97, this means that income acts as a partial mediation, which means that in the relationship between variables there is a direct and indirect relationship (Garson, 2016).

3) The influence of work experience on fishermen's welfare mediated by income is significant with a t-statistic value of 2.386 > 1.97, this means that income plays a role aspartial mediation, which means that in the relationship between variables there are direct and indirect relationships (Garson, 2016).

Based on the results of the analysis, a summary of the hypotheses can be made, presented in Table 8.

**Table 8. Summary of Analysis Results**

| No | Analysis | T-statistic | P-Value | Conclusion |
|---|---|---|---|---|
| 1 | Working capital→Income | 4.078 | 0.000 | Proven |
| 2 | Technology →Income | 0.633 | 0.263 | Not Proven |
| 3 | Experience →Income | 2,545 | 0.005 | Proven |
| 4 | Working capital→Welfare | 2,804 | 0.003 | Proven |
| 5 | Technology →Welfare | 0.252 | 0.400 | Not Proven |
| 6 | Experience →Welfare | 1,831 | 0.004 | Proven |
| 7 | Income→Welfare | 7,571 | 0.000 | Proven |
| 8 | Working capital→ Income→Welfare | 3,597 | 0.000 | Proven |
| 9 | Technology→Income→Welfare | 1.210 | 0.017 | Not Proven |
| 10 | Experience→ Income→Welfare | 2.386 | 0.005 | Proven |

Source: attachment 4

**Discussion**

**The Influence of Working Capital, Technology and Work Experience on Fishermen's Income in Jimbaran Traditional Village, RegencyBadung**

**1) The Influence of Working Capital onFishermen's Income in Jimbaran Traditional Village, Badung Regency**

Based on the results of the study, it shows that working capital (X1) has a positive and significant effect on income (Y1). This condition means that the better the working capital, the higher the income of fishermen in Jimbaran Traditional Village, Badung Regency. This is because working capital indicators such as ship capacity (X1.1), completeness of fishing gear (X1.2), engine power (X1.3), adequacy of cooling equipment (X1.4), adequacy of fuel (X1.5), adequacy of ice cubes (X1.6) and adequacy of food (X1.7) are in good condition when fishermen use them to go to sea. However, there are still a small number of fishermen in Jimbaran Traditional Village, Badung Regency who state that their working capital for going to sea is in poor condition. This is evident from the statement that working capital is in poor condition, as many as 1 person strongly disagreed and 6 people disagreed on the ship capacity indicator (X1.1) because the condition of the ship already requires capital for maintenance costs and is often damaged so that it cannot go to sea optimally, 1 person strongly disagreed and 6 people answered disagreed on the fishing gear adequacy indicator (X1.2) because the equipment is still traditional, such as boats that do not have engines and the use of fish detectors provided by the Badung Marine and Fisheries Service is not optimally used due to lack of knowledge of use, 5 people on the engine strength indicator (X1.3) because it is damaged and needs to be repaired, 10 people on the cooling equipment adequacy indicator (X1.4) because they do not have a cooler to store fish, 10 people on

the fuel adequacy indicator (X1.5) because it is difficult to find fuel, 7 people on the ice cube adequacy indicator (X1.6) because they still use boxes filled with 4 ice cubes to preserve fish and 1 person strongly disagreed and 4 people disagreed on the adequacy indicator food ingredients (X1.7) because it is difficult to meet food needs when there is no fish.

The results of this study are in accordance with the theory expressed by Firdaus (2012) that capital is all forms of wealth that can be used directly or indirectly in the production process to increase output. Capital is also a production input needed by fishermen in carrying out the production process, but in addition to physical and human capital, social capital as something that summarizes all forms of fishermen's cooperation is also a determinant for increasing farmer income (Aressi, 2017). Capital is one of the production factors used to carry out a production process. This statement is supported by the results of research by Bintang (2022), showing that there is a positive effect of capital on labor income. Research conducted by Mahayasa (2018) shows that capital has a positive and significant effect on income.

**2) The Influence of Technology on Fishermen's Income in Jimbaran Traditional Village, RegencyBadung**

Based on the results of the study, it shows that technology has a positive but insignificant effect on income. This means that the better the technology used to catch fish, the less significant the increase in income of fishermen in Jimbaran Traditional Village, Badung Regency. This condition is caused by fishermen not utilizing technological advances to catch fish due to not being proficient in using fish finder technology and the lack of regular monitoring of the use of tools provided by the government. This is evident from the statement that fishing technology is in poor condition as many as 3 people on the technological progress indicator (X2.1), 5 people on the progress indicator in production methods (X2.2) and 3 people on the indicator of production capability (X2.3).

The results of this study are in accordance with the statement from (Autio et al, 2004) that technology refers to someone who is active in developing new technological knowledge in research institutions. The use of technology is associated with labor income. The more effective the use of technology is assumed to increase the capacity or amount of production, so that labor income increases because the capital factor used is raw materials. This statement is supported by the results of research by Nurfiat (2018), showing that technology has a positive effect on labor income. Research from Rahmawati (2018), shows that technology has a positive and significant effect on income. Research from Wijaya (2018), that technology has a significant effect on labor income. Research conducted by Mahayasa (2018), that technology has a positive and significant effect on income.

**3) The Influence of Work Experience on Fishermen's Income in Jimbaran Traditional Village, RegencyBadung**

Based on the results of the study, it shows that work experience has a positive and significant effect on income. This means that the greater the work experience, the greater the income of fishermen in Jimbaran Traditional Village, Badung Regency. This is because indicators of work experience such as length of time or period of work (X3.1), level of knowledge and skills possessed (X3.2) and mastery of work and equipment (X3.3) are in good condition, so that they can increase fishermen's income in fishing. However, there are still a small number of fishermen in Jimbaran Traditional

Village, Badung Regency who do not have good enough experience. This is evident from the fishermen who received a score of disagree (TS) as many as 6 people on other indicators of length of time or period of work (X3.1) due to age and health factors so that they only go to sea for a short time, 7 people on the indicator of level of knowledge and skills possessed (X3.2) because the use of modern tools is not optimal because they are just learning and 6 people on the indicator of mastery of work and equipment (X3.3) because they are new as fishermen replacing their parents so that mastery of fishermen's work and equipment is still grouped with other fishermen.

The results of this study are in accordance with the statement that workers who get more working hours will get more wages so that they can meet their living needs by consuming nutritious food, the body becomes healthy, thus they can allocate their working time more calmly so that work income can be increased. This statement is supported by research by Kurniawan (2022) that work experience affects income.

**The Influence of Working Capital, Technology, Work Experience and Income on Fishermen's Welfare in Jimbaran Traditional Village, RegencyBadung**

**1) The Influence of Working Capital on Fishermen's Welfare in Jimbaran Traditional Village, RegencyBadung**

Based on the results of the study, it shows that working capital has a positive and significant effect on welfare. This means that the better the working capital, the better the welfare of fishermen in Jimbaran Traditional Village, Badung Regency. This is because working capital indicators such as ship capacity (X1.1), completeness of fishing gear (X1.2), ship engine power (X1.3), adequacy of cooling equipment (X1.4), adequacy of fuel (X1.5), adequacy of ice cubes (X1.6) and adequacy of food (X1.7) are in good condition when fishermen use them to go to sea and have an impact on increasing the catch so that welfare also increases. However, there are still a small number of fishermen in Jimbaran Traditional Village, Badung Regency who state that their working capital for going to sea is in poor condition. This is evident from the statement that working capital is in poor condition, as many as 1 person strongly disagreed and 6 people disagreed on the ship capacity indicator (X1.1) because the condition of the ship already requires capital for maintenance costs and is often damaged so that it cannot go to sea optimally, 1 person strongly disagreed and 6 people answered disagreed on the fishing gear completeness indicator (X1.2) because the equipment is still traditional, such as boats that do not have engines and the use of fish detectors provided by the Badung Marine and Fisheries Service is not optimally used due to lack of knowledge of use, 5 people on the ship's engine strength indicator (X1.3) because it is damaged and needs to be repaired, 10 people on the indicator of the adequacy of cooling equipment (X1.4) because they do not have a cooler to store fish, 7 people on the indicator of fuel adequacy (X1.5) because it is difficult to find fuel, 4 people on the indicator of ice cube adequacy (X1.6) because they still use boxes filled with ice cubes to preserve fish and 1 person strongly disagreed and 4 people on the indicator of food adequacy (X1.7) because it is difficult to meet food needs when there are no fish.

The results of this study are in accordance with the statement from Fajrin (2015), the more business capital, the more business income is obtained and welfare is better. According to Sukirno (2012), capital can be interpreted as a company's expenditure to purchase goods and production equipment to increase the ability to produce goods

and services available in the economy. The amount of capital used in a business can certainly affect the income obtained. If the capital is large, it will be possible that the amount of inventory of goods produced will increase so that it can affect the level of income obtained, therefore the company always tries to achieve maximum profit so that it can automatically increase welfare. This question is supported by the results of research by Munardi (2018), showing that capital has a positive effect on welfare. Research from Kusumayanti (2018), shows that social capital has a positive effect on the welfare of fishermen in Badung Regency, International research by Prawiti (2021) shows that working capital has a positive effect on the welfare of fishermen.

2) **The Influence of Technology on the Welfare of Fishermen in Jimbaran Traditional Village, RegencyBadung**

Based on the results of the study, it shows that technology has a positive but insignificant effect on welfare. This means that the better the technology used by fishermen, the welfare of fishermen in Jimbaran Traditional Village, Badung Regency does not increase significantly. This is because some fishermen do not utilize advances in technology to catch fish, advances in production methods optimally, so that the catch is not optimal and ultimately the welfare increase is not significant. In addition, the use of technology in catching fish for small fishermen is quite burdensome because it requires high production costs, so it is not effective in increasing fish catches. Conditions like this will not increase fish catch production. This means that the use of technology does not have a significant effect on the welfare of the fishermen themselves.

The results of this study do not correspond to the statement from Sastrawidjaya (2012), that the more sophisticated the technology and fishing equipment used by fishermen, the more income will increase, thereby increasing production, and the community will achieve a higher level of welfare.The results of this study are also inconsistent with the results of Hartati's (2017) study, which shows that technology has an effect on welfare. The results of Mahayasa's (2019) study show that technology has a positive effect on welfare.

3) **The Influence of Work Experience on Welfare in Jimbaran Traditional Village, Regency**Badung

Based on the results of the study, it shows that work experience has a positive and significant effect on welfare. This means that the greater the work experience, the greater the welfare of fishermen in Jimbaran Traditional Village, Badung Regency. This is because fishermen use work experience indicators such as length of time or period of work (X3.1), level of knowledge and skills possessed (X3.2) and mastery of work and equipment (X3.3) properly, so that it can improve the welfare of fishermen in fishing. However, there are still a small number of fishermen in Jimbaran Traditional Village, Badung Regency who do not have good enough experience. This is evident from the fishermen who received a score of disagree (TS) as many as 6 people on other indicators of length of time or period of work (X3.1) due to age and health factors so that they only go to sea for a short time, 7 people on the indicator of level of knowledge and skills possessed (X3.2) because the use of fish-finding technology tools is not optimal because they are just learning and 6 people on the indicator of mastery of work and equipment (X3.3) because they are new as fishermen replacing their parents so that the mastery of fishermen's work and equipment is still grouped with other fishermen.

The results of this study are in accordance with the statement (Rofi 2012) that work experience is a person's main capital to enter a certain field where the higher the intensity of a fisherman's work experience, the more productive a fisherman will be. This question is supported by the results of research by Norlinda (2021) stating that work experience has a positive effect on the welfare of fishermen. Research from Putra (2019) shows that work experience has a positive effect on the welfare of fishermen. Research by Widiana (2019) shows that work experience has a positive effect on workers' income. Research from Muliani (2022) shows that work experience has a positive effect on the welfare of fishermen.

**4) The Influence of Income on Welfare in Jimbaran Traditional Village, RegencyBadung**

Based on the results of the study, it shows that income has a positive and significant effect on welfare. This means that the higher the income, the higher the welfare of fishermen in Jimbaran Traditional Village, Badung Regency. This is because fishermen utilize income indicators such as the amount of money earned (Y1.1), the number of dependents (Y1.2). Fishermen in Jimbaran Traditional Village, Badung Regency use these income indicators optimally, in order to work effectively and productively so that the results can improve the welfare of fishermen and their families.

The results of this study are in line with the research conducted by Ni Luh Ayu Utaminingsih (2022) on the influence of income and family welfare in Karangasem Village partially. The regression equation of income variables on family welfare has a positive coefficient direction indicating that income and family welfare are directly proportional. If income increases, family welfare will increase. Theoretically, increasing welfare is influenced by community income (Sukirno, 2006). Income is all wages received by a person from things done during a certain period of time which are allocated to support the survival of themselves and their families (Tiara, 2019). Income is the total income earned by a household or family during a certain period which is allocated to meet the needs of life.

**The Influence of Working Capital, Technology and Work Experience on Fishermen's Welfare Through Income in Jimbaran Traditional Village, RegencyBadung**

**1) The Influence of Working Capital on Fishermen's Welfare inJimbaran Traditional Village, Badung Regency Through Income**

Based on the results of the study, it shows that working hours on welfare (Y2) through Income (Y1) are significant. This means that Income acts as a partial mediation of the influence of working capital (X1) on the welfare of fishermen (Y2). This means that indirectly working hours have a significant effect on the welfare of fishermen through Income. This condition means that the better the use of working capital, the fishermen's Income in fishing will increase, and with the increase in fishermen's Income fishing will indirectly increase the welfare of the fishermen themselves. The results of this study are in accordance with the statement (Wijaya, 2016) stating that capital is also several factors that affect Income if the greater the capital used in the production process, it will increase the amount of output issued, conversely the lower the capital used, the lower the output produced which is related to the management of production factors in such a way that the output produced is in accordance with consumer demand, both in quality and price.

Working capital is one of the factors that can affect fishermen's income because the working capital can be used to produce an idea, then the idea can produce goods

in the form of fish catches, from the fish catches then sold and get money, the money obtained can be used to buy goods for working capital which can then be converted to increase income and then the more productive the fishermen are, indirectly it will increase the welfare of the fishermen themselves.

2) **The Influence of Technology on Fishermen's Welfare inJimbaran Traditional Village, Badung Regency Through Income**

Based on the research results, it shows that technology has an impact on welfare ($Y_2$) through Income (Y1) is not significant. This means that Income acts as a partial mediation of the influence of technology (X2) on the welfare of fishermen (Y2). This means that indirectly technology does not have a significant effect on the welfare of fishermen through Income. This condition means that technological progress cannot guarantee an increase in income, so that indirectly it does not guarantee welfare. This is because some fishermen do not utilize advances in technology to catch fish, advances in production methods optimally, so that their catch is not optimal, thus affecting income and finally the welfare increase is not significant. In addition, the use of technology in catching fish for small fishermen is quite burdensome because it requires high production costs, so it is not effective in increasing their fish catch, their income is lacking.

This matternot in accordance with the theory According to Imron (2013) fishing gear technology affects their operational cruising capabilities. Acheson (2001) stated that fishermen have a high dependence on fishing gear technology, the more modern the technology, the more productive and the greater the catch so that it meets the welfare of the fishing community itself.

3) **The Influence of Work Experience on Fishermen's Welfare inJimbaran Traditional Village, Badung Regency Through Income**

Based on the research results, it shows that work experience has an impact on well-being (Y).$_2$) through Income (Y1) is significant. This means that Income plays a role as a partial mediation of the influence of work experience (X3) on fishermen's welfare (Y2). This means that indirectly work experience has a significant effect on fishermen's welfare through Income. This condition means that the more experienced fishermen are at sea, the fishermen's Income in catching fish will increase, and with the increase in fishermen's Income in catching fish, it will indirectly increase the fishermen's welfare itself.

The results of this study are in accordance with the statement from (Arifin 2013) stating that work experience is the level of mastery of knowledge and skills of a person in his work. The more or longer the work experience a person has, the more productive he will be in completing the work that is his responsibility, and by being more productive in working, his welfare will increase.

## CONCLUSION

Based on the discussion that has been carried out, the following conclusions can be drawn.

1) Working capital, technology and work experience have a positive and significant influence on fishermen's income in Jimbaran Traditional Village, RegencyBadung. While technology has a positive but insignificant effect on fishermen's income. This is because fishermen do not utilize technological advances to catch fish due to not

being proficient in using fish-finding technology and the lack of regular monitoring of the use of equipment provided by the government.

2) Working capital, technology and work experience have a positive and significant influence, while technology has a positive but not significant influence on fishermen's welfare.Income has a positive and significant effect on welfare. This means that the better the working capital, work experience and income of fishermen, the better the welfare of fishermen, while the better the application of technology does not have a significant effect on the welfare of fishermen in Jimbaran Traditional Village, Badung Regency.
3) Working capital, technology and work experience indirectly have a significant effect on the welfare of fishermen through Income in Jimbaran Traditional Village, while technology has a positive but insignificant effect on the welfare of fishermen through income. This shows that the use of technology in fishing for small fishermen is quite burdensome because it requires high production costs, so it is not effective in increasing fish catches so that their income is lacking so that it does not have a significant effect on welfare.

**REFERENCES**


Adi Fahrudin, Pengantar Kesejahteraan Sosial (Bandung: Refika Aditama, 2012) Ahmad, K. 2015. Dasar-Dasar Manajemen Modal Kerja. Jakarta :RinekaCipta (Anggota IKAPI).

Albert, Hannel. 2007. Kesejahteraan Diklasifikasikan Menjadi 3 Macam Masyarakat. Penerbit Andi; Yogyakarta.

Amelia, Lia, 2007. Ekonomi Pembangunan. Yogyakarta: Graha Ilmu. Arliman, Muhammad., 2013. Pengaruh Modal, Jam Kerja, Pengalaman

Kerja dan Teknologi Terhadap Pendapatan Nelayan Tangkap di

Desa Tamasaju Kecamatan Galesong Utara Kabupaten Takalar, E- Jurnal, Universitas Hasanuddin. Vol. 8 No. 1 : 108-115.

Badrudin, R. (2012). Pengaruh Desentralisasi Fiskal Terhadap Belanja Modal, Pertumbuhan Ekonomi, Dan Kesejahteraan Masyarakat Kabupaten/Kota Di Provinsi Jawa Tengah (Doctoral dissertation, UNIVERSITAS AIRLANGGA).

Bagong Suyanto, Anatomi Kemiskinan dan Strategi Penanganannya, (Malang: Intrans Publishing, 2013), hlm. 53.

Basir Barthos, 2001. Manajemen Sumber Daya Manusia Suatu Pendekatan Makro.

Jakarta: Penerbit Bumi Aksara.

Ebert, R. J. 2014. Bisnis. Jakarta: Erlangga.

Faruk, Muhammad. 2019. Analisis Pendapatan Nelayan Di Desa Lumpur Kabupaten Gresik, Jurnal Ilmu Ekonomi (JIE). Vol. 3, No. 1 : 9- 19.

Firdaus, R. A. 2012. Pengaruh Modal awal, Lama Usaha dan Jam Kerja Terhadap Pendapatan Pedagang Kios di Pasar Bintoro Demak. Jurnal Ekonomi dan Bisnis, Vol. 23.

Fitroh, M. A. . (2019). Pengaruh Pendapatan, Harga dan Selera Masyarakat terhadap Permintaan Kartu BRIZZI PT.Bank Rakyat Indonesia(Studi pada Masyarakat di Kabupaten Tulungagung). Institutional Repository.

Ghozali, I. 2016. Aplikasi Multivariate Dengan Program SPSS. Semarang:Badan Penerbit Universitas Diponegoro.

https://diskan.badungkab.go.id/berita

Imron, 2003, Pengembangan Ekonomi Nelayan dan Sistem Sosial Budaya Penerbit PT Gramedia Jakarta.

Imron, Ali. 2012. Strategi dan Usaha Peningkatan Kesejahteraan Hidup Nelayan Tanggulsari Mangunharjo Tugu Semarang Dalam Menghadapi Perubahan Iklim. Jurnal Riptek Vol. 6, No. 11 : 35-49

Jaya, I G N M. & Sumertajaya, I M. 2008. Pemodelan Persamaan Struktural dengan Partial Least Square. Jurnal Semnas Matematika dan Pendidikan Matematika.

Joseph, Chricela Natalia Pengaruh Keterampilan Dan Pengalaman Kerja Terhadap Kinerja Pengrajin Gerabah Di Negeri Ouw Kecamatan Saparua Kabupaten Maluku Tengah. Jurnal SOSOQ, Vol. 7, No.2: 2019

Khasmir, 2010. Pengantar Manajemen Keuangan. Kencana. Jakarta. Kusnadi. 2015. Keberadaan Nelayan dan Dinamika Ekonomi Pesirir. Yogyakarta: Ar-Ruzz Media.

Kusumayanti, N. M. D., Setiawina, I. N. D., & Utama, I. M. S. (2018). Analisis Faktor-Faktor Yang Mempengaruhi Kesejahteraan Nelayan Di Kabupaten Jembrana. E-Jurnal Ekonomi Dan Bisnis Universitas Udayana, 2437.

Lamia, Karof, A. 2013. Faktor-faktor yang Mempengaruhi Pendapatan Nelayan Kecamatan Tumpaan, Kabupaten Minahasa Selatan. Universitas Sam Ratulangi. Jurnal EMBA. Vol 1 No.4 Desember 2013.1748-1759.

Mankiw, N. Gregory. 2007. Teori Makro Ekonomi Terjemahan. PT. Gramedia Pustaka Utama, Jakarta.

Masyhuri, Machfudz, 2014. Metodologi Penelitian Ekonomi. Malang: Genius Media.

Maulidah, Silvana. 2012. Pengantar Manajemen Agribisnis. Malang: UB Press Mazuki, Raidah. 2020. Systematic Literature Review: Benefits of Fisheries Technology on Small Scale Fishermen.

International Journal of Academic Research in Business and Social Sciences Vol.
10 , No. 16 : 307-316.

Muda, Iskandar. 2017. The Role of Working Capital, Productivity, Applied Technology and Selling Market Prices on Fisherman's Revenues. International Journal of Economic Research. Vol. 14, No. 20 : 1- 13.

Muflikhati I, Hartoyo, Sumarwan U, Fahrudin A, Pupitawati H. 2010. Kondisi sosial ekonomi dan tingkat kesejahteraan keluarga: kasusdi wilayah Pesisir Jawa Barat

Mulyadi. 2005. Ekonomi Kelautan. Rajawali Pers. Jakarta.

Norlinda. (2022) Pengaruh Modal Kerja, Tenaga Kerja, Pengalaman, Dan Teknologi Terhadappendapatan Nelayan Di Desa Ambahai Kecamatan Paminggir Kabupaten Hulu Sungai Utara.KINDAI, 18(1), 150–164.

Nurhidayah, M., Studi, P., Syariah, E., Ekonomi, F., & Bisnis, D. A. N. (2020). Nelayan di Pallameang Kabupaten Pinrang (Analisis Ekonomi Islam). Makassar.

Olaoye, O. J., A. A. Idowu, G. A. K. Omoyinmi, I. A. Akintayo, O. C. Odebiyi and Fasina. 2012. SocioEconomic Analysis of Artisanal Fisher Folks in Ogun Water-Side Local Government Areas 88 J. Sosek KP Vol. 11 No. 1 Juni 2016: 75-88 of Ogun State, Nigeria, Global Journal of Science Frontier Research Agriculture and Biology.USA. Volume 12 Issue 4 Version 1.0 April 2012.

Prakoso, Jati. 2013. Peranan Tenaga Kerja, Modal, Dan Teknologi Terhadap Peningkatan Pendapatan Masyarakat Nelayan Di Desa Asemdoyong Kecamatan Taman Kabupaten Pemalang. Pascasarjana Ekonomi Pembangunan Fakultas Ekonomi Universitas Negeri Semarang.

Pratama D.S, Iwang G, dan Ine M. 2012. Analisis Pendapatan Nelayan Tradisional Pancing Ulur di Kecamatan Manggar. Kabupaten Belitung Timur. Fakultas Perikanan dan Ilmu Kelautan Unpad, Volume 3 Nomor 3, September 2012, hal : 107-116

Putra, P. M. S., & Kartika, N. (2019). Analisis pengaruh modal, umur, jam kerja, pengalaman kerja, dan pendidikan terhadap pendapatan nelayan di Kedonganan. Jurnal Ekonomi Pembangunan Universitas Udayana, 2(2), 1- 20.

Putri, A. I. 2016. Peran dan Strategi Istri Nelayan dalam Membangun Ekononomi Keluarga dan Komunitasnya di TPI Asemdoyong dan Tanjungsari, Kabupaten Pamalang Indonesia. Tesis. Universitas Diponegoro. Semarang.

Putri, K. P. S., & Budhi, M. K. S. (2019). Analisis Determinan Pendapatan Nelayan Di Kecamatan Tejakula Kabupaten Buleleng. E-Jurnal Ekonomi Pembangunan Universitas Udayana, 10(3), 1246-1271.

Rahim, Abd., 2018. Model Ekonomterika Perikanan Tangkap. Makassar: Badan Penerbit Universitas Negeri Makassar.

Retnowati, E. (2011). Nelayan indonesia dalam pusaran kemiskinan struktural (perspektif sosial, ekonomi dan hukum). Perspektif, 16(3), 149-159.

Riptanti, E. W. 2005. Karakteristik dan Persoalan Ekonomi Masyarakat Petani dan Nelayan pada Kawasan Pantai di Torosiaje Kabupaten Pohuwatu, Caraka Tani (Jurnal Ilmu-ilmu Pertanian), Volume 22 Nomor 2 Oktober 2005, Universitas Sebelas Maret, Surakarta: 52-64

Rofi, 2012. Pengaruh Disiplin Kerja Dan Pengalaman Kerja Terhadap Prestasi Kerja Karyawan Pada Departemen Produksi PT. Leo Agung Raya Semarang.Sekolah tinggi ilmu ekonomi totalwin Semarang. Jurnal Ilmu Manajemen dan Akuntansi Terapan, 3(1):1-21.

Rosni, 2017. Analisis Tingkat Kesejahteraan Masyarakat Nelayan di Desa Dahari Selebar Kecamatan Talawi Kabupaten Batubara, Jurnal Geografi, 9. (1) : 57-69

Rosyidi, S. 2009. PengantarTeori-Teori Ekonomi: Pendekatan Kepada Teori Makro dan Mikro. Jakarta: PT. Rajawali Grafindo Persada

Rowan, Neil J. 2023. The role of digital technologies in supporting and improving fishery and aquaculture across the supply chain – Quo Vadis. Aquaculture and Fisheries : Vol. 8, No. 4 : 365-374

Rustiadi. Ernan, dkk. 2009. Perencanaan dan Pengembangan Wilayah. Yayasan Pustaka Obor Indonesia : Jakarta.

Salim, Ernawati. 2019. Bunga Rampai Info Komoditi Rumput Laut. Badan Pengkajian dan Pengembangan Kebijakan Perdagangan Kementerian Perdagangan Republik Indonesia dan Al Mawardi Prima.

Sastrawidjaya. 2002, Nelayan dan Kemiskinan, Penerbit Pradnya Paramita Jakarta. Soetomo. 2014. Kesejahteraan dan Upaya Mewujudkannya dalam Perspektif Masyarakat Lokal. Penerbit Pustaka Pelajar. Hal 48

Suartawan dan Purbadharmaja, Pengaruh Modal Dan Bahan Baku Terhadap Pendapatan Melalui Produksi Pengrajin Patung Kayu Di Kecamatan Sukawati Kabupaten Gianyar. E-Jurnal Ekonomi Pembangunan Universitas Udayana, Vol. 6 No 9 : 1628-1657

Subri, M. 2005. Ekonomi Kelautan. Jakarta: PT.Rajagrafindo.

Sugiyono, 2016, Metode Penelitian Kuantitatif, Kualitatif dan R&D, Cetakan Ke- 23, Penerbit CV. Alfabeta, Bandung.

Suharto, E. 2017. Membangun Masyarakat Memberdayakan Rakyat. Bandung: PT Refika Aditama

Sujarweni, V. Wiratna. 2016. Pengantar Akuntansi. Yogyakarta: Pustaka Baru Press.
Sukirno, S. (2006). Ekonomi Pembangunan: Proses, Masalah, dan Dasar Kebijakan.
Jakarta: Kencana.
Sukirno, Sadono. 2015. Makroekonomi Teori Pengantar. Jakarta: PT RajaGrafindo Persada.
Sunarti E. 2012. Tekanan Ekonomi dan Kesejahteraan Objektif Keluarga di Pedesaan dan Perkotaan. Prosiding Seminar Hasil-Hasil Penelitian IPB. Bogor [ID]: LPPM.
Susanto, Bagong dan Emi Susanti Hendarso. 1996. Wanita : Dari Subordinasi dan Marginalisasi Pemberdayaan. Surabaya: Airlangga University press.
Takariani, C.S.D. 2015. Opini Nelayan Tentang Akses Informasi Publik. Jurnal Penelitian dan Komunikasi Vol. 18 No. 2 Desember 2015, Hal : 101-114
Teguh, Muhammad. 2014. Metode Kuantitatif untuk Analisis Ekonomi dan Bisnis Ed. 1, Cet. 1.Jakarta: Rajawali Pers.
Todaro, M. P., & S. C. Smith. (2006). Economic development Eleventh Edition.
United States: Addison Wesley.
Triana, A., Haryono, D., & Hasanuddin, T. (2020). Analisis Pendapatan dan Tingkat Kesejahteraan Rumah Tangga Petani (Kasus Petani Pada Organik dan Anorganik di Kecamatan Pringsewu dan Kecamatan Pardasuka, Kabupaten Pringsewu). JIIA, 8(4), 555–562.
Umar, Husein. 2015. Strategic Management InAction. Jakarta: PT Gramedia Pustaka Utama
Utaminingsih, N. L. A., & Suwendra, I. W. (2022). Pengaruh pendapatan dan
jumlah anggota keluarga terhadap kesejahteraan keluarga di Kelurahan Karangasem. Ekuitas: Jurnal Pendidikan Ekonomi, 10(2), 256-263.
Wagito. 1994. "Dampak Motorisasi Perahu Nelayan dan Penyempurnaan Alat Tangkap Terhadap Kesejahteraan Nelayan dan Ketersediaan Sumber Daya Ikan di Muncar, Banyuwangi, "Dalam Lingkungan dan Pembangunan No. 1(14), 1994.
Wahbi, A. A., Sahrudi, & Ariwibowo, P. (2020). Pengaruh Pendapatan Terhadap Kesejahteraan Keluarga Pada Industri Konveksi di Kampung Bulak Timur Depok Jawa Barat. Jurnal Ilmu Manajemen Dan Akuntansi, Vol. 8(No.1), 52–60.
Wijayantia, L. P. D. A., Arthanaa, I. W., & Indrawana, G. S. Tingkat Kesejahteraan Nelayan Tradisional di Pantai Bias Lantang Desa Seraya Timur, Kabupaten Karangasem, Bali.
Yatim, Usman. 2002. Zakat dan Pajak. Penerbit:PT Bina Rena Parieara, Jakarta