

Analysis of Sustainability of Bamboo Handicrafts: Investigation of Welfare and Its Supporting Variables

M. Rudi Irwansyah^{1,*}, *Ni Komang Ayu Rustini*², *Putu Riska Wulandari*³, *I Nyoman Mahaendra Yasa*², and *Ida Ayu Nyoman Saskara*²

¹Faculty of Economics, Universitas Pendidikan Ganesha, Singaraja, Indonesia

²Faculty of Economics and Business, Udayana University, Denpasar, Indonesia

³Faculty of Dharma Duta, I Gusti Bagus Sugriwa State Hindu University, Denpasar, Indonesia

Abstract. Bamboo is a natural material with numerous applications, one of which is the creation of handicrafts. As a form of creative economic development that contributes to the welfare of people, bamboo handicrafts are a form of ancestry. This condition is supported by the trend of the global community to “back to nature”, which includes the use of in-demand natural products, thereby increasing the popularity of bamboo handicrafts. However, the challenge of bamboo handicrafts' sustainability must be considered in harmony between of economic, social, and environmental harmony. This research was conducted to examine the current state of bamboo handicrafts and the factors that contribute to their sustainability. The Lipsor-developed Micmac application served as the foundation for the prospective methodology of this study. This investigation takes place in Sidetapa Village, Bali, Indonesia. The study's primary data sources were collected via surveys and Focus Group Discussion (FGD) with research informants. According to the findings of the study, sixty percent of the community is comprised of bamboo handicrafts. Nutritional health, employment, accommodation, and community environment is in the good category. However, the condition of community education falls within the category of sufficiency. Conservation, environmental protection, culture, wealth, and innovation all have an impact on the sustainability of bamboo crafts in Sidetapa Village. Producing sustainably also requires taking into account marketing, supplies, and production. Conservation, environmental protection, culture, wealth, and innovation all have an impact on the sustainability of bamboo crafts in Sidetapa Village. In order to achieve sustainability, additional factors such as production, marketing, and materials must be taken into account. The research data can explain the condition of the variables that contribute to the durability of bamboo handicrafts. It must be supported by government programs, the extant culture, the capacity of human resources, and government or private capital investment. This research contributes the human resource capacity and government and private investment are the most important determinants to the regional economic development plans that promote the betterment of human welfare.

* Corresponding author: rudi.irwansyah@undiksha.ac.id

1 Introduction

Economic development, which is marked by improved distribution of different essential items as well as economic and social living standards, is one of the efforts made to address community issues in order to improve life [1]. Economically, changes in the development sectors fueled by industrial expansion are a clear sign of sound and expanding finances. This increases people's income and spending power by indirectly creating jobs [2]–[4].

Development seeks to increase welfare to a certain degree. In order to be in a state of welfare, one must be able to meet all of one's needs, both physical and spiritual [5]–[8]. A person is said to be successful if they have the chance to meet all of their basic wants because doing so will increase satisfaction and make them feel better overall [9]–[11]. Real incomes that are both high and low define welfare. The economic welfare of the community will increase if the real income of the community rises [12]. One of the most effective ways to boost the economy of a community, particularly the indigenous population there, is through industrial growth [13]. In truth, a lot of projects have pushed out local communities since the local government didn't do enough to prepare human resources that could compete and follow the development process itself. The federal and regional governments must recognise the value of assessing community readiness and look for a solution so that the community may be included in the development process.

The issue of enhancing welfare in rural communities has received attention from the government [14]–[17]. This may be seen in the way that the goals for financial development have changed over time, moving from original emphasis on large-scale finance's sustainable growth to current emphasis on development priorities. In line with Presidential Instruction No. 6 of 2009, which supports the growth of the creative sector, this is done. With this support, the creative economy sector has more chances to grow and contribute significantly to Indonesia's economic recovery [5], [8], [18]. At every level of its development, the idea of a sustainable creative economy must be taken into account. To mitigate the potential negative effects of increasing the creative economy, sustainable development is used, taking into account economic, social, and environmental factors [19]. The three characteristics that are jointly developed and mutually supportive are given priority in this principle. All UN member states have equity as their top priority and agenda, and sustainable development is consistent with this [20]–[22].

The creation of handicrafts using materials found in the local environment, such as weaving bamboo, is an example of creative economic growth. In Indonesia, bamboo-woven handicrafts constitute a staple of the country's handicraft industry [23]. Currently, bamboo woven products are being designed and built with more creativity. Businesspeople, notably SMEs in the areas, will continue to develop innovative innovations. The creative economy has now spread to these communities and is now an alternative industry that offers locals job opportunities. Because it integrates concepts, aspects of art, and technology, woven bamboo as a handicraft can expand quickly [23], [24].

According to [25], [26] the Province of Bali has the potential for natural advantages due to its human creativity in arts and crafts, which improve community welfare and the growth of various economic sectors. These activities are also supported by regional development programmes through its industrial activities. The production of woven bamboo crafts is one of Bali's well-known industries. Indonesia is home to a variety of plants, including bamboo. Bamboo plants develop quickly because it takes 80 to 100 days to harvest the bamboo [27]. Due to their characteristics, visitors from both domestic and foreign countries place a high value on the products made from bamboo. Bamboo handicrafts are becoming more and more well-liked because of the global trend of returning to nature and the high demand for products made from natural resources. The public is interested in a variety of items made of woven bamboo, including bags, musical instruments, kitchenware, and other items [24].

From a financial perspective, bamboo handicrafts are valuable commodities that hold great potential as a source of revenue. It is envisaged that the selling price of the bamboo handcraft items will boost the bamboo craftsmen's revenue.

The majority of the residents in Sidetapa Village, one of the bamboo craftsman's communities, are also bamboo artisans. According to information the researchers gleaned from Sidetapa Village's village government in 2023, there are 2,120 people who work as bamboo craftsmen, including 618 males and 1,502 women out of a total of 5,968. For the purpose of improving their aesthetic appeal, people who work as artisans and create bamboo handicrafts are given decorative motifs. Banjar District, Buleleng Regency is where Sidetapa Village is situated. The everyday task of weaving bamboo has been passed down by their ancestors in Sidetapa Village from generation to generation so that it can support the community's finances. The bamboo crafts made in the village of Sidetapa are unique from those made elsewhere. The Sidetapa village's bamboo handicrafts are unique from other bamboo in Bali in that they have natural potential in the form of unusual bamboo trees [28].

One of the best types of woven bamboo to reach the global market is that from Sidetapa Village in Buleleng Regency, North Bali. Residents of Sidetapa Village perform each step in the production process themselves, customarily by hand [29]. In the village of Sidetapa, bamboo crafts are made in a variety of ways, using objects like shells, wood, and other materials. *Besek*, *sokasi*, steamers, *gedeg*, chicken cages, and many forms of plaits are among the woven bamboo items manufactured in Sidetapa Village [28]. One aspect of the creative economy that helps the local community, especially in Sidetapa village, prosper financially is bamboo crafts.

Researchers in Sidetapa Village have noted that it is a by product of Buleleng Regency's creative economy. Although woven bamboo crafts have a significant positive social impact, overall welfare is still uneven. Communities that specialise in making bamboo products vary in their degrees of welfare. The need to address this discrepancy must be addressed if artisans are to increase their welfare through increased productivity. A suggestion for those involved in fostering a creative economy for woven bamboo crafts can be the creation of a welfare model for bamboo artisans. This study will look at sustainability-related factors that have an impact on bamboo craftsmen's wellbeing.

2 Method

A mixed-methods research design was used to create this study, using quantitative and qualitative methods to address research questions. The mixed technique utilised in this study takes an explanatory approach, first gathering quantitative data to explain the field data's description and then qualitative data to describe the phenomena the quantitative data revealed [30], [31]. While qualitative data was used to investigate factors that affect the creative economic sustainability of woven bamboo crafts, quantitative data was collected to ascertain the welfare of bamboo craftspeople in Sidetapa Village.

The community of bamboo craftsmen in Sidetapa Village served as the study's population, consisting of 337 samples out of a total population of 2120. The Slovin formula, with a 5% error rate, was used to determine the total number of research samples. An instrument to measure the perception of the welfare of those who work in the creative economic sector was used in the data gathering process. Focus group discussions (FGDs), which included representatives from the community of woven bamboo craftsmen, the Sidetapa village government, trade, industry, cooperatives, and SMEs of Buleleng Regency, as well as sales agents of woven bamboo handicraft products, were conducted in the meantime to confirm research findings. The variables that have a significant and predominating impact on the sustainability of woven bamboo crafts in Sidetapa Village are

identified by this study's MICMAC analysis. In order to find a methodical resolution to an issue, the MICMAC methodology focuses on analytical thinking [32]. With the help of the MICMAC analysis approach, it is possible to see the pattern of relationships between variables, whether they arise directly between two variables or because of an intermediary variable that links them. According to their degree of reliance and effect, the variables that have been investigated are then divided into four quadrants using the MICMAC approach. The essential variables are displayed in quadrant I, relay variables in quadrant II, dependent variables in quadrant III, and omitted variables in quadrant IV. The outcomes of the MICMAC analysis can be utilised as a standard when figuring out what aspects of Sidatapa Village's woven bamboo handicrafts affect their sustainability. The variables can be determined based on the FGD results and are shown in the following table:

Table 1. Variables of Sustainability of Bamboo Handicraft

No	Dimension	Variable	Code	Description
1	Economy	Production	Prod	actions taken to create an item
		Material	Material	materials utilized as raw materials during production
		Market	Market	Promotional actions for a product
		Price	Price	The price that is assessed for a good
		Human Resource	HR	Anyone who is capable of producing items at work
		Capital	Capital	a group of products or cash used to operate a business
		Technology	Tech	a process for enhancing the value of products
2	Social	Partnership	Partner	partnering with outside parties to grow the business
		Culture	Culture	The regional traditions
		Creativity	Creative	the capacity to develop fresh ideas
3	Ecology	Environmental	Environmental	Environmental protection and damage prevention measures
		Conservation	Conservation	judicious preservation and protection initiatives

3 Result and Discussion

3.1 Welfare of Sidatapa Village Bamboo Woven Craftsmen

The bamboo craftsmen in Sidatapa Village are native people, and most of them inherited their businesses from their parents. Becoming a bamboo craftsman is a choice made by the craftsmen in Sidatapa Village. Based on the choice of bamboo craftsmen, they hope that their business can become a source of income for their welfare. Based on the results of the research, welfare conditions are measured by perceptions of health, nutrition, education, employment, consumption levels and patterns, housing and the environment, poverty, and other social indicators.

Table 2. Welfare Perceptions of Woven Bamboo Craftsmen in Sidetapa Village

No	Indicators	Mean	Percent
1	Nutrition Health	4.56	91.3
2	Education	4.61	92.2
3	employment	2.55	51
4	Consumption Level and Pattern	4.35	87
5	Housing and Environment	3.80	76.1
6	Poverty	4.38	87.6
7	Social Indicators	4.18	83.6

The analysis of bamboo craftsmen's health indicators yielded high welfare criteria, or 91.3%; the mean value was 4.56, and bamboo artisans were thought to be in good health. The respondent places a high priority on health, as evidenced by the description of diet and health. The majority of bamboo craftsmen's families receive an average score of 4.61 based on the indicators for access to education, which is considered to be in the upper range. The majority of artisans claim that their kids have access to higher level education. Although the educational backgrounds of the bamboo craftsmen in Sidetapa Village vary, their capacity to provide financial support for their offspring so they can continue their studies until graduation falls into the good group.

With an average value of 2.55, the employment indicator for artisans working with bamboo is categorised as having moderate wellbeing. The degree of employment is divided in this study depending on whether participants worked more than 35 hours per week, between 15 and 35 hours per week, or for 15 hours per week. With an average weekly work schedule of 35 hours, this industry is the principal source of income for the majority of bamboo artisans in Sidetapa Village. Bamboo artisans work only in this industry, and they can support themselves with the money they earn there. In other words, making bamboo crafts is the primary career and a means of financial success.

The income of the residents of Sidetapa Village, a comparison of consumption expenditure with non-consumption needs, and consumption expenditure over a one-month period can all be used to determine the outcomes of the analysis for indicators of the level and pattern of consumption. The average salary of bamboo artists is 4.35, which places it in the high category. Due to the lucrative wages and the fact that the artisans in Sidetapa Village have been handed down from generation to generation, the residents of Sidetapa Village are motivated to seek careers as bamboo craftsmen.

The living conditions and surroundings of each high category home can be used to gauge the welfare of the bamboo craftsmen in Sidetapa Village. A mean value of 3.80 indicates this conclusion. The results of data collection from all respondents indicate that, on average, the environmental conditions where they reside are clean and orderly and are classified as habitable. The bamboo craftspeople of Sidetapa Village fall into the good income group with an average of 4.38, despite the fact that some of the workers lack basic necessities.

The ability to find entertainment, obtain information, and communicate, which each have average scores of 3.89, 4.3, and 4.36, respectively, from the results of quantitative data analysis of other social variables, lead to the conclusion that they are classed as good. There

are craftspeople who have high and low social welfare, despite the fact that the majority are rated as good. Because all of the welfare indicators or components are met, the degree of welfare of the bamboo artisans in Sidetapa Village is high. It is not comparable to the high level of fulfilment of bamboo handicraft artisans' welfare, even though artisans with a moderate to low level of welfare can still meet welfare indicators.

3.2 The Sustainability of Woven Bamboo Crafts in Sidetapa Village

Using Lipsor's Micmac application, the Micmac technique is used to analyse the factors influencing the sustainability of bamboo handicrafts in Sidetapa village. A mapping of all the variables provided in the study was done based on the data from the focus group discussions to come up with the mapping shown in Figure 1.

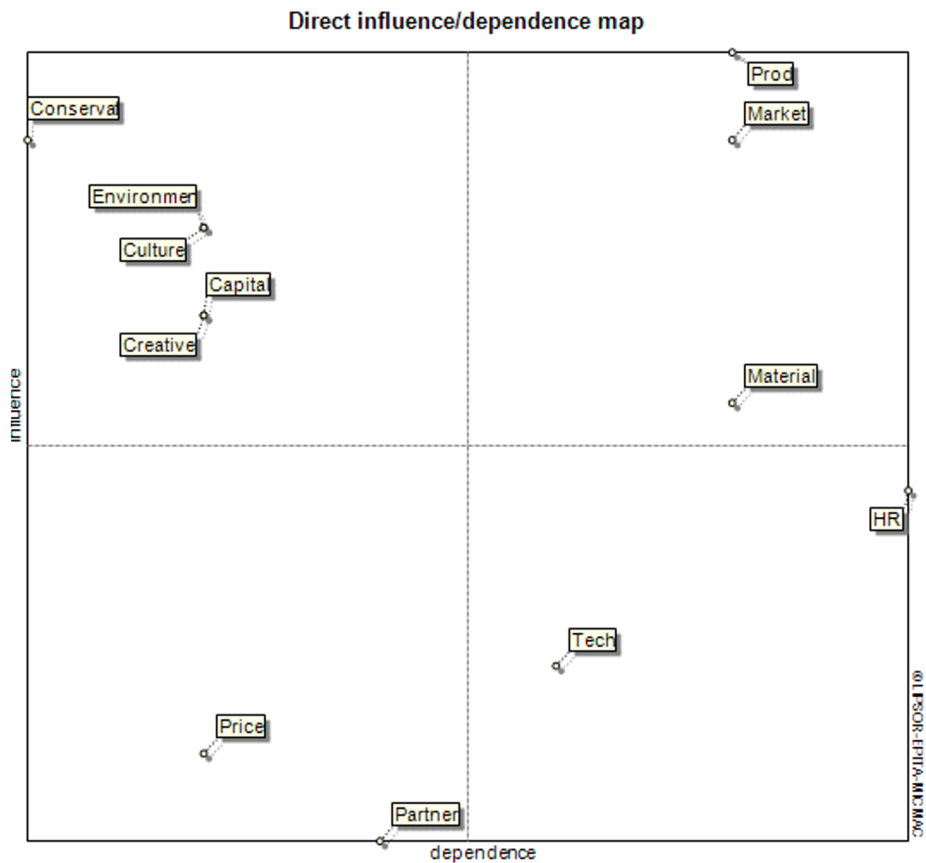


Fig. 1. Mapping of Sidetapa Village Bamboo Crafts Sustainability Variables

According to the analysis's findings, which are shown in Figure 1, each variable's position is clear. Conservation, environment, culture, capital, and innovation are the four main factors that determine the sustainability of bamboo crafts (quadrant I). Production, marketing, and materials (quadrant II) These aspects all have an impact on the sustainability of bamboo crafts. The analysis's findings also indicate that there are two dependent variables in quadrant III, namely technology and human resources, which are

influential but also highly dependent. Price and partnership are factors that are not considered since they have very little impact on the sustainability of bamboo handicrafts in Sidatapa Village (Kudran IV), although. The linkages between variables that affect the sustainability of research bamboo handicrafts can be seen in Figure 2.

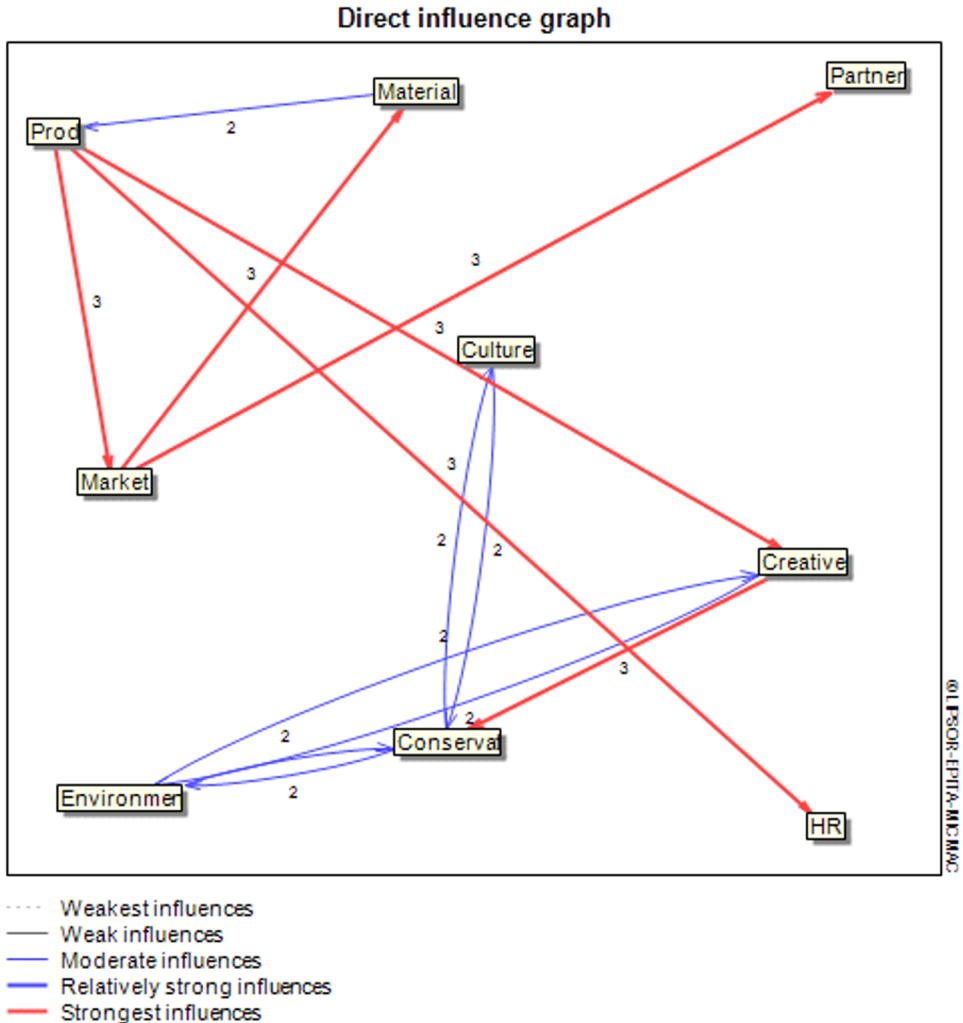


Fig. 2. Flow of Direct Influence Between Bamboo Craft Sustainability Variables

As shown in Figure 2, the variable of production has a significant impact on the variables of marketing, human resources, and innovation. On the other side, marketing has a significant impact on relationships and materials. Conservation is impacted by the creative variable, which is influenced by output. It is clear from the interrelationships between the variables that the variables of environment, culture, conservation, and creativity are mutually dependent and interrelated. The environment and creativity are related to conservation, whereas culture and conservation are also related. Additionally, there is a connection between production and material factors. The flow model shown in Figure 2 demonstrates the inter-dimensional interconnectedness in bamboo handicraft sustainability. The sustainability of bamboo handicrafts in Sidatapa Village depends on the

interaction of the three dimensions of economic, social, and environmental factors. As demonstrated in Figure 3, in addition to its direct impact, the variable sustainability of bamboo handicrafts also influences other variables indirectly.

Figure 3 demonstrates the relationship between manufacturing and its indirect effects on labour, resources, technology, and marketing. Materials, production, marketing, and labour are all indirectly impacted by relative conservation variables. Marketing and labour are indirectly affected by relative cultural characteristics. Additionally, further analysis was done utilising iterations using MDII to see changes in the ranking of each variable based on influence and reliance, even though marketing variables have a somewhat indirect impact on labour, production, and materials. Figure 4 displays the investigation's findings.

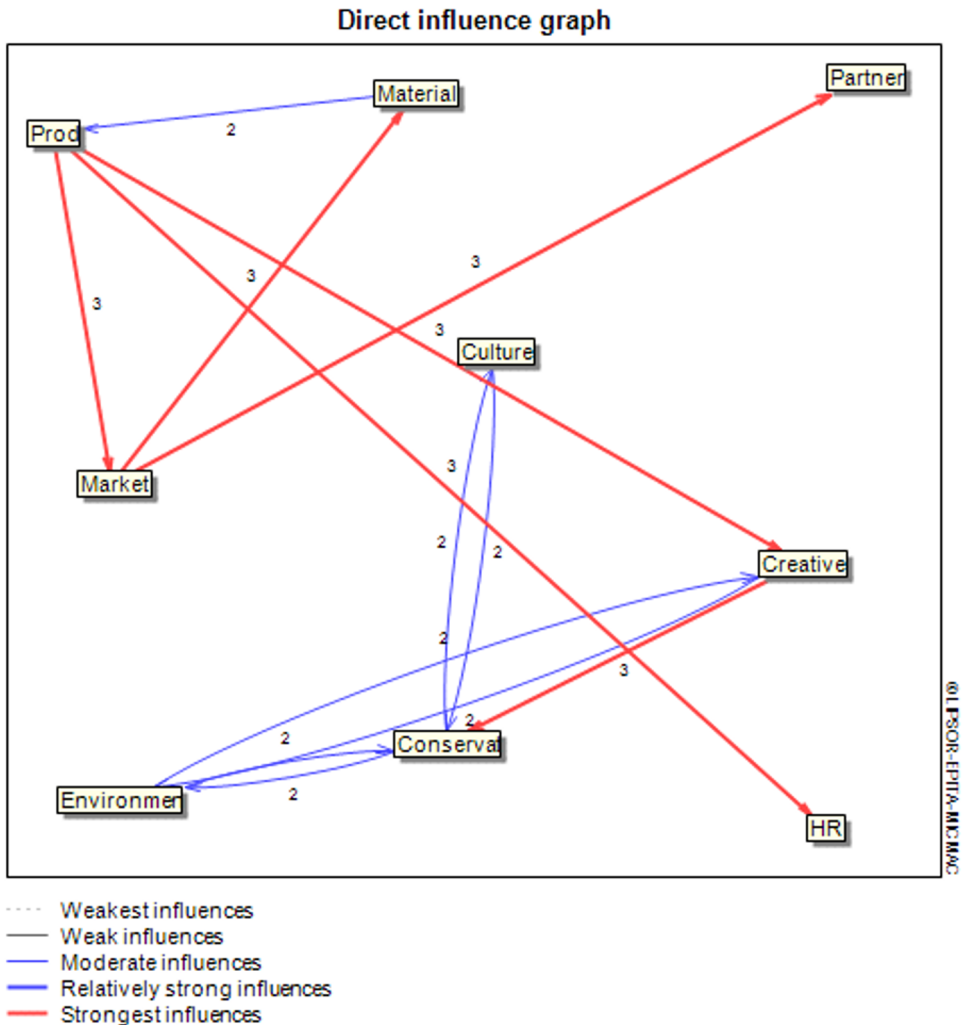


Fig. 3. Flow of Indirect Influence Between Bamboo Craft Sustainability Variables

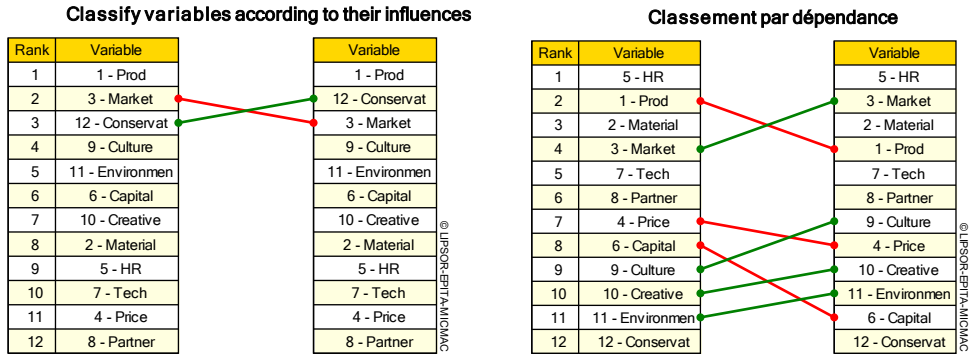


Fig. 4. Bamboo Craft Sustainability Variable Rating in Sidatapa Village

Two variables suffer a change in the order of the influential variables, according to the findings of iterative analysis using MDII. Figure 4 depicts how the third marketing variable, which has an impact on the sustainability of bamboo handicrafts in Sidatapa Village, has moved up in the list of factors. The conservation variable, which moved up to be the second factor affecting the sustainability of bamboo handicrafts in Sidatapa Village, also saw a change. Production, marketing, pricing, capital, culture, creativity, and environmental variables are among the seven variables that experience a change in order following analysis with MDII when considered in terms of variable dependence. This change demonstrates the sensitivity of each sustainability dimension's variables. The impact created by the influence of other factors shifts as a result of the indirect effect of a variable. As seen in Figure 5, variable shifts are also visible on the displacement map.

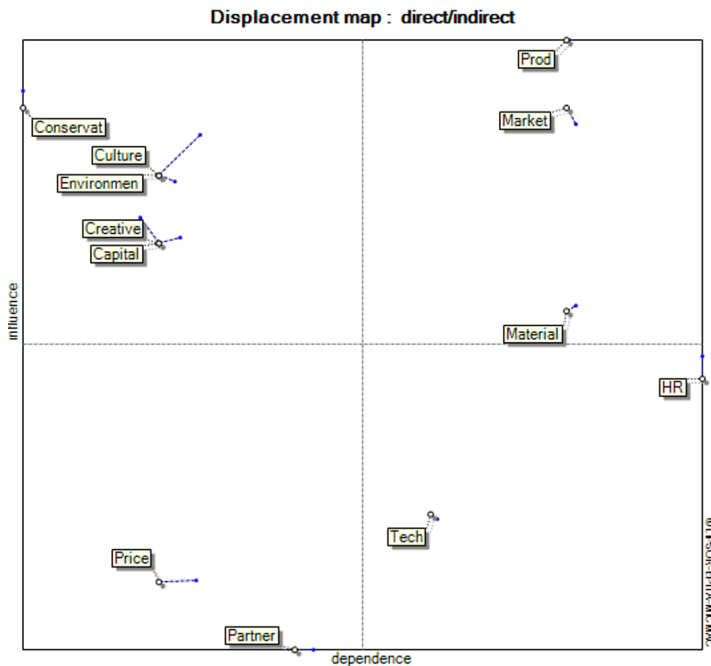


Fig. 5. Displacement Map

By taking into account both the direct and indirect impacts on other variables, Figure 5 depicts the change in the positions of the variables in the quadrants. The analysis's findings revealed that the variables' final positions had not changed significantly; the only thing that had altered was how much effect each had. The final analysis's findings demonstrate that capital, culture, environment, innovation, and conservation are the five main factors that influence the sustainability of bamboo handicrafts in Sidatapa Village. The relay variable has an impact but is heavily reliant on other factors, including as production, markets, and materials. Labour and technology are examples of dependent variables, which are factors that have little effect yet are highly dependent. Price and partnership are two more variables that have a high degree of reliance but limited influence.

3.3 Bamboo Crafts Sustainability Variables in Sidatapa Village

The Sidatapa Village's bamboo handicrafts' sustainability is affected by the variable key driver. The sustainability of bamboo handicrafts is determined by four factors, each of which reflects an aspect of sustainability from an economic to a social to an environmental perspective. To ensure that the bamboo crafts produced in Sidatapa Village are sustainable, these four factors must be taken into consideration.

In terms of the economic dimension, Sidatapa Village's bamboo handicrafts' viability is determined by capital. The fundamentals of running a firm are determined by capital in economic activity [33]–[36]. Additionally, the amount of capital a company has a major impact on its ability to survive [37]. This component may include monetary factors and the accessibility of production raw materials as a commercial enterprise that is anticipated to provide cash for the offenders. The amount of capital that is available will have a significant impact on the manufacturing capacity that is used. Large capital investments allow for both high production and the potential for high income. The sensitivity of the capital variable in the production process has been demonstrated in numerous research.

The two other production inputs in theory are labour and land. Employment is a changeable component of capital, but land, including all mineral resources, is a fixed and quantifiable amount. The population that is employed or has the potential to be employed is included in the means of production labour [38]. Capital has a significant impact on gaining productivity or output as a factor of production. From a macro viewpoint, capital is a key motivator for increased investment in the production process itself as well as in the supporting infrastructure, which helps to increase output and productivity. The type of business being operated determines the quantity of capital needed; generally speaking, people are familiar with the categories of micro, small, medium, and large enterprises, and each type of business needs cash within specific bounds.

On the social level, the sustainability of woven bamboo handicrafts in Sidatapa Village is influenced by creativity and culture. Entrepreneurs can achieve sustainability by using their creativity to develop novel and ground-breaking ideas that can drive trends, change the game, and offer value for customers [39]–[41]. Craftsmen with creativity are able to develop fresh concepts and discover fresh perspectives on a challenge or opportunity [42]. Weaved bamboo crafts are intimately tied to innovation as a creative economy because of their shape, utility, and product longevity. As a result, the ideas discovered can both address social issues that are currently plaguing society and open up new commercial prospects. The development of besek products through ornamentation and use demonstrates the inventiveness of the woven bamboo craftspeople in Sidatapa Village. Innovating artisans try to make their handicrafts into something fresher in the hopes that customers will be more interested. The realisation of the sustainability of woven bamboo handicrafts in Sidatapa Village will be aided through creativity.

The social dimension discovered cultural influences on the sustainability of woven bamboo crafts in Sidatapa Village in addition to inventiveness. One of the old settlements, known as Baliaga, that is still in existence today is Sidatapa village. Sidatapa village is not only home to a variety of fascinating customs, such as dances and religious rituals, that set it apart from other Bali villages, but it also has numerous benefits in a number of other areas, one of which is the development of creative industry hubs for bamboo crafts. The residents of Sidatapa Village have learned and practised bamboo weaving for many generations as a tradition. The fact that so many people—35.5%—become artists demonstrates how closely linked woven bamboo has become to the village's identity. Inherent cultural qualities are a distinguishing feature of woven bamboo goods in Sidatapa Village. The primary characteristic is the use of bamboo, which is a high-quality and long-lasting material that grows primarily in the vicinity of Sidatapa Village. Additionally, the primary attribute of weaved bamboo is that it is a locally produced item. Almost all of Sidatapa village's traditional bamboo handicrafts are made by weaving them in the yards of individual homes. The method of weaving also begins with the purchase of furniture or the search for bamboo at bamboo collectors, after which the professionals trim the bamboo to the required size. After being divided into smaller pieces, the bamboo is repeatedly sliced until it is smooth, creating elegant bamboo sheets. As a result, culture plays a crucial role in achieving sustainability [43]–[45], particularly in achieving the sustainability of bamboo handicrafts in Sidatapa village.

Environmental factors like conservation and the surrounding area have an impact on how long Sidatapa Village's bamboo handicrafts will last. As a product that draws its raw ingredients from nature, it is crucial to consider the ecosystem's overall balance. Bamboo plants have thick roots that help to preserve aquatic environments and store a lot of water for the area around them. Because of the power of its fibrous roots, bamboo acts as a natural bulwark against erosion. Plant sustainability and their role in the environment will be diminished if bamboo is used as a raw material for handcraft items. As a result, considerations for the environment and wildlife conservation must be made when using bamboo. According to [46], [47], the environment is an essential component of human life and supports sustainability in all spheres of existence.

3.4 Relay Variable in the Sustainability of Bamboo Crafts in Sidatapa Village

Production, materials, and marketing are significant factors but are largely reliant on the major variables, according to the analysis's findings. The community engages in production as an economic activity to generate income for daily expenses. Only skilled craftsmen with financial resources and imagination can carry out this task. Woven bamboo must be created in order for the craftspeople who make it to benefit financially. Green production that is considerate of the economic, social, and ecological components of the environment serves as a benchmark for realising sustainability [48], [49].

For woven bamboo crafts to be sustainable, material considerations must also be made. Materials that were previously available and sufficient to meet current production needs must be imported from outside the town. A prerequisite for material coming from outside Sidatapa hamlet is the calibre of bamboo the hamlet possesses. A different source of raw materials for crafts can be found in the nearby villages that have bamboo plants. When using raw bamboo resources from outside the village, a screening method must be used to maintain quality. According to [41], [47], [48], the environmental impact of the use of materials in the production process must be considered.

The secret to a successful business is marketing bamboo handicrafts. Crafts made of bamboo at Sidatapa Village The artisans in Sidatapa Village are categorised as "existing" economically and commercially, despite the fact that they continue to be heavily reliant on

powerful businesspeople in Gianyar and Denpasar in southern Bali in terms of marketing. As a result, the government must find a fresh approach, including widespread public introduction and promotion, to ensure that the typical crafts of Sidatapa Village become a craft icon in North Bali. Therefore, it is hoped that the craftsmen's economy will improve and develop. The revenue of the craftsman can be increased with effective and efficient marketing, and an increase in income will ensure the sustainability of the woven bamboo handicraft industry in Sidatapa Village. In order to earn operational profits, a company must increase sales, which can be accomplished through successful marketing [50], [51].

3.5 Depending Variables in the Sustainability of Bamboo Crafts in Sidatapa Village

Native people who were born and reared in Sidatapa Village make woven bamboo items. This weaving pastime has become a routine because it has been a childhood habit. The labour factor has little impact on the sustainability of woven bamboo crafts because there are so many artisans and they provide the majority of the villagers' income. Due to their existing talents, villagers decide to become craftsmen and have little interest in seeking out new knowledge or alternate sources of income. To put it another way, people will decide to become woven bamboo craftsmen because of their skills and because they want to contribute to the endeavour to preserve cultural traditions. According to study [52], [53] the social conditions of the community will affect the choice of labour. This condition is consistent with that finding. Since each worker technically makes their own weaving by hand and separately, the use of technology in bamboo crafts has no impact on how sustainable they are. He has not updated the technology he uses in the course of his business, from the cutting process through weaving. At the stage of product completion, the technology is used to the colouring procedure and the anti-herb coating. To preserve the original natural colour of woven bamboo items, this technology is used in a restricted capacity, keeping in mind that the product's key selling point is that it does not utilise colouring. Although there are many ways that the technology that is currently being developed benefits humans, some tasks cannot be substituted by technology [54].

3.6 Excluded Variables in the Sustainability of Bamboo Crafts in Sidatapa Village

According to the analysis's findings, neither pricing nor collaboration have a significant impact on the longevity of bamboo handicrafts in Sidatapa Village. The only factors typically taken into account when deciding the selling price are labour and material costs. The artisans do not pay much care to calculating the selling price; rather, they are primarily motivated by the desire to preserve culture. Of course, this requirement is the opposite if it is related to economic theory. But this is the distinctiveness of handcraft goods, which are ancestor heritage and have evolved into a way of life for people. The partnership variable demonstrates the same phenomenon.

As a tourist destination with exceptional natural and cultural potential, Sidatapa Village has established its own market for goods made of bamboo. The Bali Aga settlement, which is a portion of Tigawasa settlement, is situated in Banjar District, 24 km to the west of Singaraja City. Tigawasa Village has a cool village ambiance as a result of its highland location. Tigawasa Village has a lot of promise as a tourist destination in addition to being well known for its primary bamboo craft. Tigawasa Village's natural beauty and rich culture, which are the ancestors' legacy of the Bali Aga group, contribute to some of its tourism potential. Visitors to Tigawasa Village in Bali Aga can enjoy the beauty of the village's tourism potential. The Tigawasa tourism village has the following potentials,

among others: Four stunning waterfalls can be found in Tigawasa Village. The first is Sasan Tegeh, the tallest waterfall in this bamboo craft's centre settlement. Because Second Tibu Remeng is a particularly lovely waterfall, visitors frequently visit it. The distance that tourists must travel to see this waterfall will reward them with stunning natural beauty and lush foliage. The Singsing 1 and Singsing 2 waterfalls, which are the third and fourth waterfalls, are both near to the boundary between Tigawasa Village and Temukus Village. Traditional residence in Tigawasa Village Every Bali Aga village, including Tigawasa Village, still has traditional dwellings that are in good condition. The essential components of the exquisite architecture of the traditional Tigawasa Village home are wood and dirt. There are three different kinds of traditional homes in Tigawasa village, including sekaroras, sekanem, and sekatpat homes. The tumpul or pole, depending on the name of the traditional house, is what makes each of them unique. The Tigawasa Village's traditional home has a unique character that sets it apart from other traditional homes. Traditional village homes can be divided into three categories. Along with natural and cultural attractions, Tigawasa Village also offers artificial tourism that rivals those of other Buleleng villages in terms of attractiveness. The Natural Fort and the Kejapa House are the man-made tours. One of the popular man-made tours for tourists visiting Tigawasa Village is the two that are run by one of the residents of the village. Additionally, the community's distinctive activities have an impact on the draw that tourists have to Tigawasa Village. Every day, the residents of Tigawasa Village—beginning with the young, the old, and everyone in between—engage in weaving activities. This settlement, which is a part of Bali Aga village, is most famous for this. Every resident's home is lined up with woven bamboo materials, and there are weavers on every street.

4 Conclusion

According to the findings, 35.5% of the residents in Sidatapa Village were bamboo weavers. It has been able to provide cash for the community and improve their welfare as an ancestral tradition that has merged with daily communal activities. According to the analysis of sustainability, the vital factors of preservation, environment, wealth, culture, and artisanal creativity have a significant impact on the sustainability of woven bamboo crafts. Production methods, materials, and marketing all have an impact but are reliant on the primary variables. Price and partnerships, two significant factors in the production of other sectors, have no impact on bamboo handicrafts. The distinctive quality of the bamboo handicrafts from Sidatapa village necessitates a different strategy in order to realise their sustainability. The majority of the performers think they will keep weaving as a part of their daily lives and preserve their ancestry. The findings of this study indicate that the village, sub-district, and district administrations need to pay close attention to and give systematic help for the critical factors in the sustainability of woven bamboo crafts. The ideals of sustainability must be upheld and put into practise because this is a natural craft. With efforts to protect and safeguard the utilisation of natural potentials for human wellbeing, the spirit of harmony can be started in the realisation of the harmony of human life.

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