Remodeling Sustainable Development Pillar Based on the Bugis Local Wisdom

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Abstract. This article discusses the shortcomings of conventional development models that prioritize economic growth but often neglect social well-being and environmental sustainability. It highlights the widening income disparities within and among nations, with developed countries controlling the majority of the world's income. The concept of "maldevelopment" is introduced, which describes development that exacerbates inequality and damage to society and the environment. The article emphasizes the need for a sustainable development approach that balances social, economic, and environmental sustainability. It argues that communities should be active participants in the development process, and local wisdom and culture should be integrated into development efforts. The research methods section outlines the qualitative research design with a phenomenological approach used in the study. Data collection methods include interviews, observations, and documentation. The preliminary results section discusses the role of Bugis local wisdom as social capital in sustainable development. It also explores the pillars of sustainable development, which include the environmental, economic, social, institutional, and spiritual dimensions. The article concludes that Bugis local wisdom-based sustainable development complements the United Nations' concept of sustainable development. It emphasizes the importance of the religious pillar as the core of sustainable development principles and the role of the organizational pillar in ensuring integrity in sustainability efforts. This article underscores the importance of a holistic and community-centered approach to sustainable development that takes into account social, economic, environmental, cultural, and spiritual dimensions.

Keywords: Bugis Local Wisdom, Remodeling, Sustainable Development Pillar.

1   Introduction

Conventional development has been successful in terms of economic growth, but it has shortcomings in social well-being and environmental aspects. Development that prioritizes or emphasizes economic aspects as a measure of societal growth often leaves social and environmental factors out of the equation for success.

Entering the 21st century, conventional development models should no longer be part of human development efforts. These models have led to widening income disparities within societies and among nations. According to Emil (2018), social inequality can reach a ratio of 20 to 80, with developed countries, comprising only 20% of the world's population, controlling 80% of the world's income. In contrast, developing countries, with 80% of the world's population, control only 20% of the world's income. Amin (2011) introduced the concept of "maldevelopment," which describes a form of development that not only fails to address social, economic, and environmental problems but also deepens inequality and damage. Furthermore, Amin highlights that the development processes in many developing countries are not effective in improving the well-being of their populations and achieving sustainable development goals. Amin argues that economic policies promoted by global institutions such as the International Monetary Fund (IMF) and the World Bank often benefit developed countries and multinational corporations while harming developing countries and exacerbating inequality.

Social inequality in South Sulawesi can be observed in education and healthcare infrastructure. According to BPS (2019), out of 3,051 villages/urban wards in South Sulawesi, 16.09% still lack preschools, 3.41% lack primary schools, 43% lack junior high schools, and 68.99% lack senior high schools. In terms of healthcare infrastructure, BPS (2019) indicates that 97.31% of villages/urban wards lack hospitals, 99.18% lack maternity clinics, 46.51% lack community health centers/sub-health centers, 94.79% lack clinics/medical centers, 86.06% lack doctor's practices, 87.45% lack midwife's practices, 48.61% lack village health posts/sub-village health posts, and 82.76% lack pharmacies. This data illustrates the existing inequalities in development that extend down to the village level, which can be a source of social conflict. Mismanaged and unjustly distributed natural resources only contribute to social disharmony.

This situation highlights the need for a development approach that can balance these aspects. Sustainable development reflects a development practice that aligns social, economic, and environmental sustainability into three interconnected pathways that continue to progress. In practice, growth that emphasizes economic aspects is hindered by the conditions of marginalized communities, leading to social instability or inequality. Economic growth also presents challenges in the environmental aspect, such as depleting and non-renewable energy sources, pollution of air, rivers, atmosphere, oceans, and lakes, all of which are community production assets.

In this era of openness, where communities are becoming increasingly critical of government development policies, the most suitable development paradigm is one that

involves communities as active participants in every development process. Communities are no longer viewed merely as "objects," and the outdated notion that communities do not understand anything about development should be discarded. Communities have their unique characteristics and adaptability to their environment, which is a significant potential or asset in future development efforts.

The sustainable development approach encompasses moral and ecological values while also emphasizing economic growth. Current development efforts should be grounded in a moral responsibility towards the sustainability of future generations. A simple way to achieve this is by providing equal or even improved opportunities for future generations to continue and enjoy the current development.

Brundtland (1987) defined sustainable development as having three interconnected pillars (social, environmental, economic) that overlap and interact in the form of actions and outcomes. Sustainable development considers the principle of sustainability, which is a cyclical process of social, ecological, or planetary processes and economic profit, which simultaneously serves as the ultimate goal of development. Sustainable development is understood as a holistic concept that integrates development comprehensively.

Sustainable development manifests in three domains: social, environmental, and economic. These three domains are interrelated and integrated, representing the paradigm of sustainable development.

Sustainable development, translated into Sustainable Development Goals (SDGs), reflects the achievement of the concept of sustainable development. The attainment of SDGs is a representation of efforts towards sustainable development. According to McCollum (2018), the Sustainable Development Goals are a universal and integrated policy agenda that will be realized over 15 years, from 2016 to 2030. One of its aims is to achieve policy coherence for sustainable development, requiring interconnected individual goals. The primary focus of this article is to assess how national governments and competent ministries interpret and strive to implement policy coherence for sustainable development.

Research by Yildirim et al. (2019) found that the goals and targets of the SDGs place a strong emphasis on culture. Research by Vitanen (2020) stated that the dimension of sustainable development is closely related to the social and cultural aspects of society. These findings advocate for a critical approach to understanding sustainability within diverse social and cultural contexts. This diversity should be seen as an integral part of achieving sustainable development.

Research by Ordonez-Ponce (2023) criticizes international policies like the SDGs for often neglecting to incorporate local cultural factors that enable their achievement. Culture and sustainability have been studied in various contexts, but the role of local culture in achieving sustainability has not been fully explored. Research by Ferry (2019) indicates that local wisdom, such as customary law, has not been fully implemented or respected. It is expected that communities will preserve local wisdom in the development process, including the proper preservation of water resources.

In the context of South Sulawesi, research by Ilyas (2021) focused on the sustainability status of Bungo fish in Lake Sidenreng's waters. The research aimed to analyze the sustainability status of Bungo fish through an ecosystem approach, considering fish resources, habitat and ecosystem, socio-economic factors, and fishing technology. The results were presented in the form of indices and sustainability status. The research showed that in the fish resource domain, the status was less sustainable (37.1) with low scores in attributes such as species composition, fish size, and juvenile fish proportion. In the habitat and ecosystem domain, the status was moderate (49.67) with low scores for unique/specific habitats and the impact of climate change on water conditions. In the fishing technology domain, the status was sustainable (72.96) with low scores for catch selectivity. Finally, in the socio-economic domain, the status was less sustainable (24.74) with a low score for fishermen's income. The multidimensional sustainability index of Bungo fish falls into the moderate category (45).

In Indonesia, formal regulations governing sustainable development can be found in the Environmental Protection and Management Law No. 32 of 2009, Article 1 paragraph 2, which emphasizes planned efforts that integrate environmental, social, and economic aspects into development strategies to ensure the integrity of the environment and the well-being of present and future generations. Formal regulations regarding Sustainable Development Goals (SDGs) can be found in Presidential Regulation No. 111 of 2022 on the Implementation of Sustainable Development Goal Achievement, which amends Presidential Regulation No. 59 of 2017 on the Implementation of Sustainable Development Goal Achievement. Both of these regulations demonstrate Indonesia's commitment to preparing a development process that prioritizes an integrative.

2   Research Methods

This research employs a qualitative research design with a phenomenological approach. Moleong (2011) defines qualitative research as a study that aims to understand the phenomena experienced by research participants comprehensively by describing them in words and language in the context and natural methods such as behavior, perception, motivation, actions, and more.

Smith (2009) explains that the purpose of phenomenological research is to capture the phenomena experienced as closely as possible. In other words, phenomenology seeks to discover the psychological meanings inherent in phenomena through the investigation and analysis of real-life examples. In this research, a qualitative phenomenological approach is used to delve into Bugis culture in relation to the concept of sustainable development, which can be understood through the expressions of meaning derived from individuals' experiences.

The data source for this research includes community leaders and young Bugis people residing in the Ajatappareng region. Informant selection uses purpose sampling, which means selecting participants based on specific considerations. Idrus (2007) states that

purposive sampling is a sampling technique used by researchers when they have specific considerations in selecting samples.

In this study, in addition to data sources from participants, such as cultural figures and young individuals, the researcher also uses informants who can assist in the research process as data sources. These informants can be referred to as "significant others" (participants relevant to the research objectives).

Data collection in this research is conducted through methods such as interviews, observations, and documentation. In the process of data analysis and interpretation, the researcher follows the procedures outlined by Moustakas regarding several key aspects to consider in phenomenological research, including epoche, phenomenological reduction, imaginative variation, as well as the synthesis of meaning and essence (Moustakas, 1994).

3   Preliminary Results

3.1   Sustainable Development and Bugis Local Wisdom as Social Capital

Jamaluddin (2016) explained that development, both physical and non-physical, owned by a community through a combination of social, economic, and institutional processes, encompasses efforts to achieve a better life and address the needs of the community.

Blewitt (2012) described sustainable development as the idea that the future must be better, healthier, and safer than the present. This idea is a simple one that should be understood, reflected upon, replicated, and implemented. Applying a sustainable development model means striving for an improvement in the quality of life to achieve equitable development between generations in the present and the future.

Emas (2015) stated that the sustainable development model is based on three main pillars that are interconnected: first, the social pillar, which relates to the role of the community, responsibility, social interaction, community behavior, and the social conditions in a particular area. Second, the environmental pillar, which relates to the natural environment, including the physical environment and the set of human-made institutions for its utilization. Third, the economic pillar, which pertains to the economic well-being of the community and the utilization of the natural environment to meet the community's needs, includes for profit. These three pillars are interrelated, and when they are interconnected and mutually supportive within the current generation, their results can be enjoyed by future generations.

Local wisdom can be seen in the patterns of life values integrated into the community's way of life. These values can take the form of religious celebrations, cultural practices, and customary traditions. Communities undergo a process of internalization of the environment by developing a local wisdom value that is manifested through knowledge or ideas, tools or equipment, combined with cultural values, customary norms, and environmental management activities to meet the daily needs of the community. The diversity of adaptation patterns to the environment in Indonesian society is passed down between

generations. These values serve as a guide in resource utilization and are maintained to enable communities to withstand various crises.

Local wisdom, often referred to as local wisdom or local genius, can be understood as human efforts using their intellect (cognition) to act and respond to something, an object, or an event that occurs in a specific space. Additionally, local wisdom is seen as a set of life values that are passed down from one generation to the next, in the form of religion, culture, or customary practices, typically in oral form within a community's social system. The presence of local wisdom in society is the result of long-term intergenerational adaptation to a particular environment in which they reside or frequently interact.

Local wisdom is depicted as the intelligence or cleverness of a community manifested in strategies for preserving and protecting the environment as a place for survival. Local wisdom extends beyond ethics to encompass norms, actions, and behaviors, making it similar to a religion that guides human conduct and actions, both in daily life and in shaping a more advanced human civilization. A consumerist lifestyle can erode the norms of local wisdom in society. To avoid this, the established norms in a community, which are passed down from generation to generation and closely related to environmental conservation, need to be preserved.

Saleh (2019) explains that local wisdom, also known as local genius or local wisdom, is local knowledge created through the adaptation of a community's experiences communicated from one generation to the next. Local wisdom is the local knowledge used by the local community to survive in their environment, integrated with their belief systems, norms, cultures, and expressed in traditions and myths that persist over a long period.

Local wisdom consists of locally derived ideas that are wise, valuable, and followed by members of the community (Setiawan; 2012). In other words, local wisdom is "the outlook on life and knowledge, as well as various life strategies that take the form of activities carried out by the local community in responding to various problems in meeting their needs." Therefore, local wisdom is an effort or practice of goodness that grows and develops within a community's life. This practice of goodness is continuously passed down from one generation to the next.

Local wisdom also serves various functions, as mentioned by Aulia (2010), which include values, norms, beliefs, and specific rules. These various forms result in various functions of local wisdom.

Furthermore, Pattinama (2009) explains that local wisdom, born and developed from generation to generation, seems to persist and develop on its own. It appears to have no underlying science or technology. However, local wisdom carries the cultural heritage of the past and serves to build a longing for the ancestors' way of life, which forms the foundation of contemporary life. Local wisdom can serve as a bridge that connects the past and the present, the generations of ancestors and the present generation. Therefore, local wisdom can act as a binding and unifying force among generations. Contemporary life in Indonesia is not entirely modern. Another component that supports community assets is trust, where this value can become a resilient asset for the community (Pattinama, 2009).

Abdullah (2013) mentions several sources of social capital, including values and local wisdom that accommodate common interests, habits or traditions, educational institutions, religious teachings, customary institutions, and others. Social capital enriches social communities.

Handoko (2019) in his research associates social capital with local wisdom in Papua. Papua's local wisdom in the form of "Para-Para Adat," "Tikar Adat," "Bakar Batu," and "Bayar Kepala" contributes cultural value to the way of life and social relations. Local wisdom serves as social capital for building and promoting peace in Papua. When nurtured, developed, and implemented, social capital can act as a means of mitigating conflicts. Diversity in Papua, including ethnic groups, races, religions, cultures, and more, serves as a positive aspect in driving development to improve the well-being of all residents of Papua. However, empowering local residents in all aspects of life is crucial. Thus, a dynamic and synergistic relationship between ethnic nationalism and state nationalism is formed, leading to the development of civic nationalism.

Local wisdom should be understood as social capital manifested as community knowledge about local conditions or local wisdom. This knowledge addresses local needs that are not present elsewhere.

3.2   Pillars of Sustainable Development

Keiner (2005) states that the three pillars of sustainable development are environmental (conservation), economic (growth), and social (equity). In 1994, the World Bank (Keiner, 2005) developed the capital stock model. This capital is divided into ecological capital, economic capital, and social capital. Ecological capital includes biodiversity, landscapes, mineral resources, clean air, and safe water. Economic capital encompasses material and financial resources, while social capital consists of health insurance, social security, social cohesion, freedom, justice, equal opportunities, and peace.
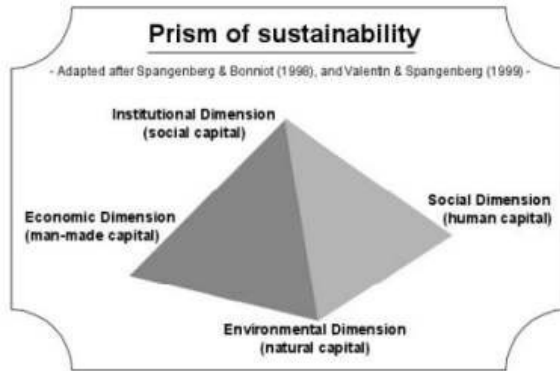
Sustainable Development Capital integrates these three forms of capital. A country cannot implement the concept of sustainable development if any one of these forms of capital is lacking support. Governments must strive to maintain the quality of these forms of capital. In the development of industrial areas, both the government and investors must consider not only economic profit but also predict the ecological damage that may occur, such as the decline in the quality of clean water and biodiversity. Similarly, in the social aspect, it must be considered that the development of such areas does not disrupt a good social order or lead to social conflicts.

In its development, Keiner (2005), adopting the model from Spangenberg and Bonniot 1998, Valentin and Spangenberg 1999, introduced four dimensions of Sustainable Development:

a.   Economic dimension (man-made capital)
b.   Environmental dimension (natural capital)
c.   Social dimension (human capital)

d.   Institutional dimension (social capital)

These four dimensions are represented in the form of a prism, as shown in the figure.

Picture 1. Prism of Sustainable Development

The development of the concept of sustainable development lies in the institutional dimension. This notion indicates that the socio-cultural dimension is divided into human resource capital and institutions. A system or organization responsible for development activities must be capable of managing human resources effectively. This can only be achieved through the presence of institutions.

A clear concept of sustainable development is articulated by Kates (2005), which divides sustainable development into two parts: what needs to be preserved and what needs to be built. The part that needs to be preserved includes: 1) Nature, which encompasses the Earth, biodiversity, and ecosystems. 2) Life support, which includes ecosystem services, resources, and the environment. 3) Community, which involves culture, groups, and places. The part that needs to be built includes: 1) Humanity, focusing on children's lives, life expectancy, education, equality, and equal opportunities. 2) Economy, directed towards well-being, productivity, and consumption. 3) Society, targeting institutions, social capital, local and regional areas. This definition aligns with the following diagram.

What is to be sustained	For how long? 25 years "Now and in the future" forever	What is to developed
Nature Earth Biodiversity Ecosystems		**People** Chil survival Life expectancy Education

|		Equity Equal opportunity
Life Support Ecosystem Services Resources Envirement	**Linked By** Only Mistly But And Or	**Economy** Wealth Productive Sectors Consumption
Community Culture Groups Places		**Society** Institutions Social capital States Regions

Picture 2. Definition of Sustainable Development (Kates, 2005)

Different paradigms are based on Abdulrachman's (2011) perspective, which goes beyond beliefs by proposing a model of Islamic sustainable development. Abdulrachman incorporates spiritual development along with existing socio-cultural development, economic development, political development, and environmental protection. This model is illustrated in Figure 3.
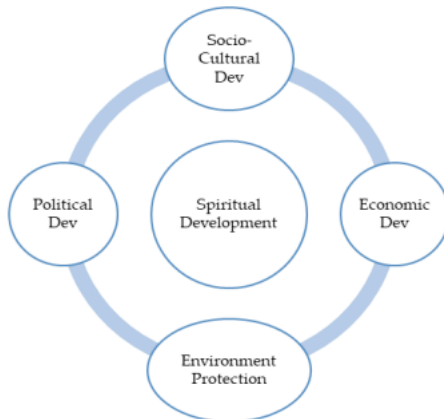
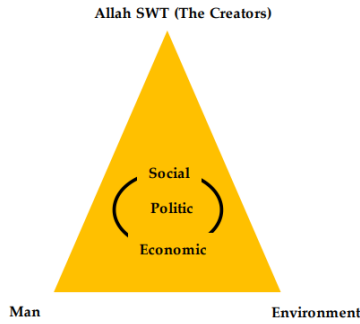**Picture 3.** Sustainable Development Model by Abdulrachman

Another perspective comes from Al-Jayyousi (2016), introducing another framework for Islamic sustainability. The proposed development framework consists of four elements: justice (adl), excellence (ihsan), social capital (arham), and the limit of harm (fasad), as shown in the Figure.
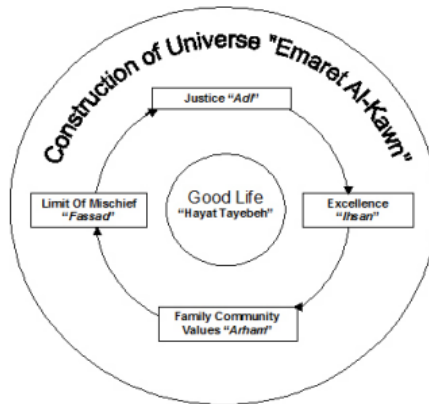
Picture 4. Sustainable Development Model by Al-Jayyousi

Sustainability in Islamic studies, as introduced by Ilmu Umrān (Dariah, 2019), is implemented in the form of a "triangle," starting with faith in the angels of Allah, the Holy Scriptures (Torah, Gospel, Psalms, and the Noble Qur'an), the Prophets, and the Day of Judgment. Humans have an advantage over other creatures because Allah Subḥānahu wa Taālā has made humans stewards of the Earth. It is the duty of humans to inhabit the Earth so that they can live in peace and prosperity and worship one God (Allah) who has created all creatures on Earth, in the heavens, and in the space between them.

The presence of humans as stewards of God on Earth is synonymous with the effort to enrich the Earth through the utilization and distribution of all resources in accordance with Allah's provisions. The utilization and distribution of all resources are at the core of economic activities, and when done at the right time according to the will of Allah, the approach and pattern of utilization and distribution are certainly based on Islamic teachings. Therefore, there will be specific behavioral rules related to this, and their adjustment to the needs of the organization in its implementation. This is where the importance of politics lies in framing the rules of the game and human relationships in enriching the Earth. The following four sub-sections explain how the Umranic Framework works.

Picture 5. Sustainable Development Model Umranic Framework

3.1. Bugis Local Wisdom-Based Sustainable Development Model

The model of sustainable development integration is a solution to contemporary social development issues. Sustainable development can examine social aspects that are interconnected with the environment and the economy. The following is a visual representation of the integration model.
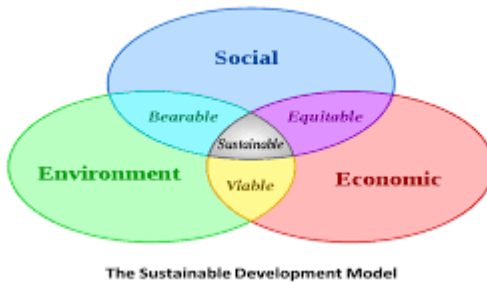
Picture 6. Sustainable Development Model

The research conducted by Vitanen (2020) suggests that although the concepts defined at the intersection of economic, social, and environmental pillars, the dimensions of life are closely related to the socio-cultural aspects of society. The findings of this research call for a critical approach to understanding how sustainable living is embedded within the local context and in social structures with different or diverse contexts. This diversity should be understood as part of the effort to achieve Sustainable Development.

The process of analyzing the sustainable development model based on Bugis local wisdom was conducted through a study of "pappaseng" in the book "pangajak tomatoa".

(Hakim, 1992) "Pappaseng" is a virtue that exists in Bugis society and is believed in and applied in daily life (Gani: 1990; Abbas: 2013) . Bugis represented by Ajattapareng region. Ajatappareng region comprises the Sidenreng Rappang Regency, Parepare City, and Pinrang Regency. In its history, Ajatappareng was a combination of five kingdoms: the Suppa Kingdom, Sawitto Kingdom, Sidenreng Kingdom, Rappang Kingdom, and Alitta Kingdom, located in the central part of the southern Sulawesi peninsula, west of three lakes: Lake Sidenreng, Lake Tempe, and Lake Buaya (Amir, 2015). In its development, these five kingdoms formed a union or cooperation agreement later known as the Alliance of Lima Ajatappareng (Druce, 2009). In the Bugis language, Lima Ajatappareng consists of several words: lima (five), aja (west), and tappareng (lake). So, the meaning of Lima Ajatappareng is the alliance of five kingdoms located to the west of the lakes (Amir, 2013).

   In this book, there are 312 "pappaseng." This number was examined and reinforced with interview data and observations. An analysis of the relationship between these "pappaseng" and the pillars of sustainable development can be explained as follows:

   a. Social Pillar: There are 74 "pappaseng" related to social aspects. Social aspects include those that regulate aspects of poverty and hunger, as indicated by achievements in food and nutrition security, sustainable agriculture, healthy living, well-being of all people of all ages, inclusive and equitable quality education, lifelong learning opportunities for all, gender equality, and empowerment of women.

   b. Environmental Pillar: There are 44 "pappaseng" related to environmental aspects. Environmental aspects include ensuring availability and sustainable management of clean water and sanitation, inclusive, safe, and resilient cities and human settlements, sustainable patterns of production and consumption, urgent action to combat climate change and its impacts, conservation and sustainable use of marine resources, protecting and restoring land ecosystems, and sustainable forest management.

   c. Economic Pillar: There are 62 "pappaseng" related to economic aspects. Economic aspects include ensuring access to affordable, reliable, sustainable, and modern energy, inclusive and sustainable economic growth, productive and decent employment opportunities through robust infrastructure, inclusive industrialization, and fostering innovation, reducing inequality within and among countries by strengthening the means of implementation and revitalizing the global partnership.

   d. Institutional Pillar: There are 61 "pappaseng" related to institutional aspects. Institutional aspects include building inclusive and peaceful societies for sustainable development, ensuring access to justice for all, and effective, accountable, and inclusive institutions at all levels.

   e. Spiritual Pillar: There are 71 "pappaseng" related to spiritual aspects. Spiritual aspects include belief in the ruler of the earth, worship rituals, and belief in the afterlife.

Based on further findings, the interconnectedness between the pillars of sustainable development based on Bugis local wisdom can be elaborated as follows:
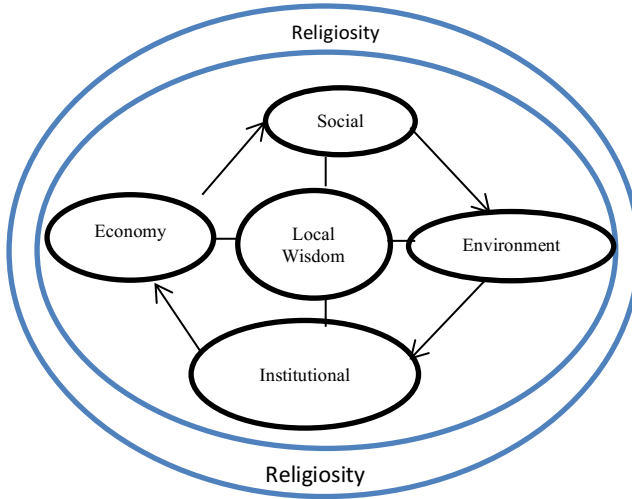
Picture 7. Sustainable Development Model Based on Bugis Local Wisdom

Based on the above diagram, it can be explained that the sustainable development model based on Bugis local wisdom adds an additional development pillar, which is the dimension of institutional pillar or structure. The sustainable development model based on Bugis local wisdom emphasizes spiritual considerations. This finding can be understood as the social structure needing to be a development pillar that also requires consideration, while spirituality or religiosity serves as the foundation in designing development.

4   Conclusions

The pillars of sustainable development based on Bugis local wisdom complement the concept of sustainable development introduced by the United Nations and theories related to sustainable development. The research findings reveal that the pillars of sustainable development consist of the social pillar, environmental pillar, economic pillar, organizational pillar, and religious pillar. Two unique findings in Bugis local wisdom are the organizational pillar and the religious pillar. The organizational pillar complements the integrity of sustainability principles. The religious pillar serves as the epicenter or core of sustainable development principles. This means that without the religious pillar, development is limited to worldly pursuits that focus solely on growth.

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