



Collaborative Pentahelix Model In Overcoming Stunting Anomalous Increase In Stunting Rate In Bengkulu Province

Edriwan Mansyur ¹, Julius Habibi ², Umi Badriyah ³, Supardi ⁴, Hartian Pansori ⁵
^{1,2,3,4,5} Universitas Dehasen Bengkulu

Email: ¹⁾ edriwanmansyur@gmail.com ;²⁾ juliushabibi@unived.ac.id ;³⁾ supardisudarman@gmail.com ;⁴⁾ hartianpansor@unived.ac.id

How to Cite :

Mansyur, E., Habibi, J., Badriyah, U., Supardi, S., Pansori, H. (2024). Collaborative Pentahelix Model in Overcoming Stunting Anomalous Increase in Stunting Rate in Bengkulu Province. EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis, 12(4). doi: <https://doi.org/10.37676/ekombis.v12i4>

ARTICLE HISTORY

Received [15 Agustus 2024]

Revised [18 Oktober 2024]

Accepted [21 Oktober 2024]

KEYWORDS

Governance, Local Government, Collaboration, Pentahelix, Stunting.

This is an open access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license



INTRODUCTION

The complexity of state problems experienced by the Government of Indonesia often puts the government in a difficult position in making policy decisions. Various challenges are faced by the Government of Indonesia, especially in health issues that concern the younger generation as

ABSTRACT

Stunting is a national problem that is still a concern because it relates to the nutritional condition of toddlers as the nation's next generation. The Bengkulu Province Government launched the Pentahelix collaboration involving five elements: academia, business, communities, government, and media, to reduce stunting rates. This study aims to identify, describe, and analyze the collaboration of the pentahelix model in accelerating the reduction of stunting in Bengkulu Regency. The type of research used in this research is descriptive qualitative with data collection techniques through interviews, observation, and documentation. The data analysis technique consists of four analysis components: data collection, data condensation, data presentation, and drawing conclusions or verification. Based on the research results, the five pentahelix elements contribute according to their respective functions. The implementation of collaboration is several elements in Pentahelix still have obstacles in terms of implementing collaboration between related stakeholders. So, the advice that can be given for implementing this collaboration is that the TJS Forum as a business element is expected to immediately contribute to the stunting problem in Bengkulu Province. As part of the pentahelix, the community is expected to play a more active role in becoming cadre members to minimize delays in data collection and management. Social media should be improved for consistency in posting health content about stunting.

the nation's successor, one of which is stunting. Stunting is a national problem that is still a concern in Indonesia today.

This is because nutritional problems have an impact on the quality of human resources (HR). So following up on this, matters related to stunting in each region are delegated to the authorised local government. However, problems related to stunting are quite complex. So, local governments need other parties to be involved in solving related problems.

In policy research studies on health problems, collaboration is needed as an alternative solution in overcoming complex problems in various institutions, including in the local government environment. Collaboration is one of the flexible steps because this model allows all parties to be involved voluntarily without coercion. Collaboration will also be a sustainable pattern because each party has its own duties and will benefit according to their needs.

Nutritional status is an important point that needs to be considered in health, where the age of toddlers is a group that is vulnerable to nutritional problems, especially stunting. The risks faced by children when experiencing stunting do not only occur in the short term, but also in the long term.

Stunting is a growth and development disorder due to chronic malnutrition and recurrent infections, characterised by length or height below the standards set by the minister who organises government affairs in the health sector. (Presidential Regulation 72 of 2021 on the Acceleration of Stunting Reduction). The damage caused by stunting is irreversible, but stunting is a preventable condition. This is because the condition of toddlers with stunting not only affects their physical condition, but also affects their productivity and brain intelligence (Supariasa & Purwaningsih, 2019).

Based on the 2018 Basic Health Research (Riskesmas) data, the prevalence of stunting in Indonesia is 30.8%, which is lower than the 2013 Riskesdas results of 37.2%. The results of the Indonesian Nutrition Status Survey (SSGI) in 2023 nationally, the stunting rate decreased by 0.1% to 21.5% from the previous year 2022 of 21.6%. On the other hand, Indonesia's stunting prevalence target based on the 2020-2024 National Medium-Term Development Plan (RPJMN) is 14%. Thus, more efforts are needed to accelerate the reduction of stunting to achieve the national target rate.

The problem of stunting toddlers also occurs in Bengkulu. Based on the results of the SSGI in 2021, the prevalence of stunting in Bengkulu Province is still quite high, at 22.1%. The prevalence of stunting in Bengkulu Province in 2022 is 19.8%. Thus, it was found that from 2021-2022 the prevalence rate decreased by 2.3%. The rate increased in 2023 to 20.2%, an increase of 0.4% from the previous year and has not yet reached the national rate and the World Health Organization (WHO) stunting target of 20% (Teja, 2019).

Bengkulu Province is one of the provinces where the prevalence of stunting is still far above the national target rate. According to SKI 2023 data on the prevalence of stunted toddlers (height-for-age) by district/city in Bengkulu Province, the stunting rate in Bengkulu Province is 20.2%. Previously, in 2021 and 2022 data, the stunting rate in Bengkulu Province was 22.1% and 19.8%.

The increase in the stunting rate by approximately 0.4% according to the 2023 SKI data is something that needs serious attention. The prevalence rate of 20.2% is still above the national stunting rate. So that efforts are still needed to reduce the prevalence of stunting.

In addition to using survey data such as SSGI, RISKESDAS and SKI, stunting data also comes from the Electronic Community-Based Nutrition Reporting System (E-PPGBM) managed by the Bengkulu Provincial Health Office. Based on the available data, the prevalence of stunting in Bengkulu Province from 2021 to 2023 experienced fluctuating conditions where there were decreases and increases during the three years, if referring to this data, nationally Bengkulu Province is classified below the minimum percentage of stunting which is 14%.

However, there is a considerable difference in prevalence rates between SSGI and E-PPGBM data. This is because the survey data uses a predetermined sample based on statistical

calculations, while the E-PPGBM data is obtained through examinations conducted on all infants and toddlers in Bengkulu Province. However, the Bengkulu Provincial Government continues to pay attention to these two data despite the differences. For more details on the differences in the data, see the following table.

Table 1 Comparison Of Stunting Data Based On Survey Results And E-Ppgbm Bengkulu Province

No	Year	Data SSGI/SKI	Data E-PPGBM
1	2021	22,1	6,0
2	2022	19,8	4,9
3	2023	20,2	5,1

Regarding the implementation of community-based programmes, collaboration between several parties is something that needs to be done. Collaborative governance according to (duan et al., 2020) cited in (hertati & arif, 2022) is a process where stakeholders place the interests of each agency to be involved and bound in order to achieve common goals. The collaborative approach describes that the collaboration system will introduce various types of concepts that bridge a process, especially between the government sector and the private sector. The interests and needs of the issues discussed will be resolved through dialogue and collaboration (kurniasih, 2017).

The provincial government of Bengkulu together with public institutions, private institutions, and the community continue to pursue programmes that can support the reduction of stunting in Bengkulu province. One of the efforts made by the Bengkulu provincial government in order to reduce the stunting rate is by implementing collaboration through the pentahelix commitment in accelerating the reduction of stunting in Bengkulu province. The implementation of the pentahelix stunting commitment is carried out by forming the stunting reduction acceleration team (tpps) which consists of 5 (five) elements that work together in providing health services. The five elements include elements of the local government (related opd), elements of the media, elements of civil society (community), elements of education, and elements of professional/business organisations.

According to soemaryani (2016) cited in (aribowo et al., 2018), the pentahelix model is a reference used in synergy development efforts by several related agencies in order to achieve goals. The pentahelix approach is an extension of the triple helix model in which both community elements and non-profit institutions are involved with the aim of realising an innovation.

According to (awaluddin et al., 2016), pentahelix has an important role in the digital creative industry in Indonesia as a synergised cooperation involving five parties. The five synergised pentahelix components have their own interrelated contributions, namely academics, business, community, government, and media. Strong commitment and synergy hold the key to the success of this collaborative innovation. Based on the background description above, what underlies this research is to know, describe and analyse the pentahelix model collaboration in accelerating stunting reduction in Bengkulu province.

This research aims to know, describe and analyse the collaboration of the pentahelix model in accelerating stunting reduction in Bengkulu Province. The research object is Bengkulu Province. In this study, the research focus will look at the implementation of pentahelix collaboration, collaborative relationships, and stakeholder participation.

LITERATURE REVIEW

Collaborative Governance

Collaborative governance is an emerging approach in government administration where diverse policy players convene in a forum to establish a shared agreement (Yunas, 2021). The theoretical foundation of collaborative governance is derived from various scientific studies, encompassing organization theory, public administration theory, leadership theory, strategic management theory, policy studies, planning, environmental management studies, network theory, conflict management theory, and communication theory. The theoretical foundation of collaborative governance shapes the perspective and focus of its primary elements. Collaborative governance is a type of government regulation where public agencies actively engage non-government stakeholders in a formal, consensus-driven, and deliberative decision-making process. The goal is to develop and implement public policies or regulate public programs or assets (Maria, et.al 2024).

Penta Helix Stakeholder Concept

The penta-helix concept emerged from two earlier models—the triple helix theory and the quadra helix theory—that involved key actors: such as government, entrepreneurs, academics, and civil society. Subsequently, stakeholders in the penta-helix concept were streamlined to five, with a specific emphasis on the mass media (Kania, dkk, 2024). As the conversation progressed, the penta helix model became recognized as the framework, including Academics, Business, Community, Government, and Media. The penta-helix model is a useful approach for addressing complex issues involving multiple parties, each representing different interests, inside a single place [25].

We can optimize the utilization of the pentahelix cooperation concept as a foundation for collaborative efforts aimed at fostering social transformation in society. In order to achieve a grand vision, it is imperative to engage multiple parties and distribute responsibilities among them. Any goal can be achieved by starting with academics or other jobs. Whatever function is performed, the goal is always to be present as a means of collaboratively addressing community needs and creating long-lasting social change (Kurniawan, Zarkasyi, & Setyanta, 2023).

Stunting

In the syndrome known as stunting, failure to grow linearly serves as a marker for some pathological conditions that are linked to higher rates of morbidity and mortality, diminished potential for physical growth, impaired neurodevelopmental and cognitive function, and an increased risk of developing chronic illnesses as an adult (Kania, dkk, 2024).

Additionally, children with severely stunted development are more likely to experience sepsis, meningitis, tuberculosis, hepatitis, and increased morbidity and mortality from infections, particularly pneumonia, diarrhea, and other diseases. In summary, stunting raises the risk of infection because it impairs the function of the epithelial barrier and modifies immunological responses (Maria, et.al 2024).

METHODS

In this study, the authors used a qualitative research method with a descriptive approach. According to (siyoto & sodik, 2015), qualitative research aims to gain an understanding of social phenomena from the perspective of participants. This research will be analysed using the pentahelix theory by (awaluddin et al., 2016) which consists of academics, business, community, government, and media.

Then, data collection is done through interviews, documentation, and observation. The data analysis technique aims to get answers related to the focus of the problem in the research

topic. This research uses the interactive model data analysis technique expressed by (miles & huberman, 2014).

This data analysis technique has four components of analysis, namely data collection, data condensation, data presentation, and conclusion drawing or verification. This research method is used to answer the objectives of the research conducted, namely knowing, describing, and analysing the pentahelix model collaboration in accelerating stunting reduction in bengkulu province.

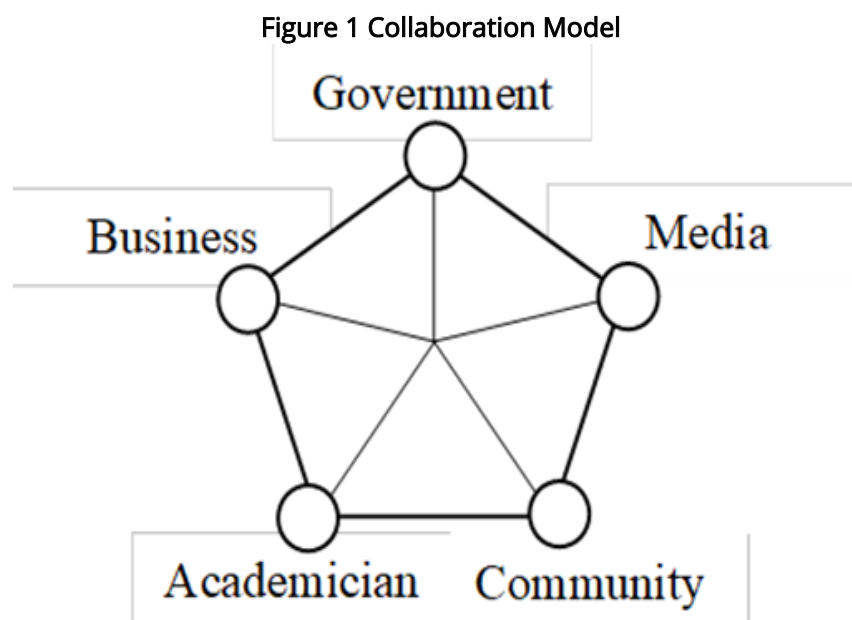
RESULTS AND DISCUSSION

The pentahelix model is a collaboration model consisting of five elements of stakeholders, namely academia, community, business (economy), government, and media. The pentahelix model is known as the ABCGM concept (Academician, Business, Community, Government, and Media) (Slamet et al., 2017). Strong commitment and synergy hold the key to the success of this collaborative innovation.

Through synergistic cooperation, it is expected to realise innovations supported by resources that synergise optimally. Pentahelix collaboration has an important role in supporting the goals of joint innovation and advancing the regional socio-economy. According to (Soemaryani, 2016) cited in (Khusniyah, 2020), the pentahelix model is a reference for developing synergies between agencies in an effort to achieve a common goal that has been set.

The pentahelix element stems from the triple helix with its components, namely Academician, Business Sector, and Government. The triple helix concept focuses on the relationship between universities, the business sector, and the government. Furthermore, one element was added, namely community/civil society, resulting in the development of the concept of the triple helix into a quadruple helix.

Then, one more element was added, namely the media, which eventually developed into pentahelix. Pentahelix has an important role in the digital creative industry in Indonesia as a synergised cooperation involving five parties.



The five synergised pentahelix components have their own interrelated contributions, namely:

1. Academician, acts as a conceptor. Academics in this case become a source of knowledge with relevant theoretical concepts;
2. Business, acting as an enabler. The business component in this case carries out business processes that have relevance to the programme that will run in maintaining sustainable growth and creating added value;
3. Community (Community/Civil Society), acts as an accelerator. The community in this case is people who have an interest and are relevant to the programme. This component acts as an intermediary or liaison between stakeholders;
4. Government, acting as a regulator. The government in this case acts as a regulator who has regulations and controllers who are responsible for implementing the programme;
5. Media (Media), acts as an expender. The media in this case has a role as a supporter of the publication of the programme to be carried out.

One of the efforts made by the Bengkulu Provincial Government is to implement a pentahelix collaboration called the pentahelix commitment. The pentahelix commitment is an integrated step taken by the local government. This collaboration involves various parties such as academics, companies/businesses, communities, OPD, and the media in an effort to accelerate stunting reduction in Bengkulu Province. The cooperation between these five elements is based on the Decree of the TPPS (Stunting Reduction Acceleration Team) which includes the membership composition along with its task objectives.

The pentahelix commitment in accelerating stunting reduction in Bengkulu Province implements 8 Convergence Actions for Stunting Reduction consisting of

1. identification of stunting distribution;
2. preparation of activity plans;
3. holding stunting meetings;
4. providing legal certainty for villages to carry out their role in integrated nutrition interventions;
5. ensuring the availability of Village Government auxiliary cadres;
6. improving the stunting data management system;
7. measuring child development; and
8. conducting performance reviews of programme implementation.

Academia

Academics in this collaboration are universities. In this case, those who are members of the pentahelix collaboration in accelerating stunting reduction in Bengkulu Province are all universities in Bengkulu Province who are members of the Provincial TPPS in the fields of Data, Monitoring and Evaluation and Knowledge Management. According to (Awaluddin et al., 2016), academics play a role as conceptors, where academics have a role as a source of knowledge with relevant theoretical concepts. Furthermore, according to (Halibas et al., 2017) academics play a role in improving and encouraging the delivery of ideas and implementing innovations.

The implementation of higher education activities as stated by (Fitriana et al., 2021) is based on the tri dharma of higher education. The implementation of the tri dharma of higher education includes education, research, and community service (Lian, 2019). In this pentahelix collaboration, universities in Bengkulu carry out their duties on the basis of the tri dharma of higher education, which includes analysing the situation, identifying factors related to stunting, and carrying out community service activities.

In line with research conducted by (Andayani et al., 2022), the academic element in the implementation of efforts to reduce stunting rates is carried out by involving lecturers and students. Another study conducted by (Hertati et al., 2023) showed that the involvement of academics in the implemented programme was by conducting research based on concepts.

Elements of higher education in Bengkulu Province have participated in many efforts to accelerate the reduction of stunting in Bengkulu. Among other things, formal discussion forums are often held in studies on stunting policy briefs and various efforts are made directly to the community in the context of stunting prevention education through student activities or in the form of research.

One of the universities, Poltekkes Kemenkes, has even made an innovation by making high-protein ready-to-eat food samples that utilise local resources, namely catfish. Regular discussions are also always held at the Bengkulu Province TPPS Secretariat at the BKKBN Representative to discuss the steps that need to be taken together.

In the implementation of the Convergence Action, several universities also joined the Stunting Case Audit team in the regencies/cities. The stunting case audit itself is carried out to examine the root causes of the stunting problem from various analyses of the health sector, the environment and from an academic perspective. Other universities in Bengkulu have also played an active role in socialising efforts to accelerate stunting reduction in Bengkulu, including by supporting the implementation of various activities carried out by the Bengkulu Provincial Government, especially in stunting prevention efforts.

Dehasen University Bengkulu has been collaborating with the Bengkulu Provincial Government in the health sector since 2018 before the issue of stunting emerged. Then in 2021, Dehasen University Bengkulu joined the pentahelix commitment by signing an MoU related to efforts to reduce stunting in Bengkulu Province. As a conceptor with a source of knowledge, Dehasen University Bengkulu has a source of energy, namely lecturers and students. Besides the many collaborative activities carried out, the continuity experienced by Dehasen University Bengkulu tends to be stable.

In the situation analysis indicator, discussions were held with other pentahelix elements to determine the villages that would become the locus of stunting, which resulted in the findings of the villages that became the locus of stunting. Then related to the identification of factors is done by looking at the conditions of families that have the potential for stunting which then results in the findings of the causes of stunting toddlers in the stunting locus village.

Furthermore, for community service activities, it is carried out by sending KKN students to the stunting locus village. Thus, from these three indicators, it is found that as an academic element that acts as a conceptor, Dehasen University Bengkulu channelled its role by carrying out three study objectives, namely situation analysis, identification of factors that cause stunting, and community service activities.

The three study objectives that are the tasks of Dehasen University Bengkulu have been carried out optimally with stable continuity. Furthermore, there is no specific cooperation carried out by academics with BKKBN as the leading sector. The cooperation carried out with BKKBN is in the implementation of discussions held during coordination meetings.

Business

The business/corporate component of this pentahelix collaboration is the TJSI (Social and Environmental Responsibility) Forum. According to (Awaluddin et al., 2016), business organisations have a role to carry out business processes that have relevance to related programs. Business contributions can be made in the form of goods, fund assistance, and services in accordance with the scope of each business (Andayani et al., 2022).

As an enabler, the TJSI Forum is a forum in which several companies unite to carry out social activities with the aim of covering a wider range. Based on the Regulation of the Minister of Social Affairs of the Republic of Indonesia Number 9 of 2020, Environmental Social Responsibility is the commitment of a business entity to participate in sustainable social development in order to improve the quality of life and the environment that is beneficial, both for the business entity itself, the local community, and society in general.

The TJSJL Forum in Bengkulu Province has been running for 2 years with the assistance of BKKBN as a facilitator. The government as a facilitator in this case is to bridge the interests of the parties in optimising regional development (Firdaus, 2020). The TJSJL Forum was formed with the aim that business entities can reach a wider target in running a programme. Based on the results of interviews conducted by the author and on existing supporting data, it is known that the TJSJL Forum has not yet contributed to the pentahelix collaboration in accelerating stunting reduction in Bengkulu Province. Previously, several companies had contributed to the stunting problem in Bengkulu Province. However, this was done partially by individuals from one company only, not in groups on behalf of the TJSJL Forum.

Various companies have also participated in this stunting prevention effort, including The OOLONG company in Kepahiang by providing assistance in the form of milk and eggs given to children with nutritional problems to prevent stunting. Bank Indonesia and several NGOs have also contributed by providing direct assistance to the community through their CSR funds.

This is taken into consideration because adolescent girls are the early upstream of the possibility of stunting in children. Activities are carried out by socialising and distributing blood supplement tablets. Through this programme, it is expected to prevent stunting conditions through adolescent girls. Adolescents need to be equipped with an understanding of stunting, which includes the causes, impacts, and efforts made to prevent it (Wandini & Angesti, 2023).

Although the TJSJL Forum has not yet contributed as a forum in the pentahelix commitment, it still fully supports the implementation of the pentahelix commitment. The inclusion of the TJSJL Forum in this collaboration is expected to help a wider range of stunting locus areas, namely in several sub-districts within the district. Without the TJSJL Forum, one company can only provide assistance in the area where the company is located. So far, the TJSJL Forum has only provided assistance in the house renovation programme, not yet reaching stunting.

Thus, it can be interpreted that the business element as an enabler that plays a role in carrying out business processes related to relevant programmes has been partially carried out well. The contribution to Penahelix has so far only been carried out partially from one company to one region, still not covering Bengkulu Province at large. The cooperation between BKKBN and the business element is coordination between the TJSJL Forum and facilitators from BKKBN Bengkulu Province.

Community Of Communities

The community acts as an accelerator. According to (Awaluddin et al., 2016), the community in this case is people who have an interest and are relevant to the programme to be run and play a role as an intermediary or liaison between stakeholders. The community plays a role in facilitating the adoption of economic processes (Dani Rahu & Suprayitno, 2021). In this element of the community, professional organisations and community cadres are incorporated. Professional organisations that are incorporated are professional organisations in the health sector and carry out tasks in accordance with their respective functions. In efforts to reduce stunting in Bengkulu Province, the community is tasked with increasing public awareness related to the problem of stunting in children under five.

In this case, one of the professional organisations incorporated is PERSAGI (Persatuan Ahli Gizi Indonesia) Bengkulu Province. PERSAGI Bengkulu Province has been involved in the Bengkulu Province TPPS since 2021. The focus of PERSAGI Bengkulu Province is on specific interventions, namely the first 1000 days of life. This activity is carried out by conducting audits in several villages that are the locus of stunting. PERSAGI Bengkulu Province as a professional organisation has its own work program and follows the work plan carried out by other pentahelix elements.

The organisation's own work program is carried out on every National Nutrition Day every year, which activities are carrying out monthly weighing and providing education related to

stunting problems in the form of socialisation or workshops. This activity is carried out in one of the stunting locus villages. Basically, all elements of organisations in Bengkulu have been involved in efforts to reduce stunting, such as IAKMI, IDI, IDAI and others.

Furthermore, in the community, there is also a cadre / companion called KPM (Kader Pembangunan Manusia) Stunting. KPM Stunting consists of selected community members who have concerns and are willing to dedicate themselves to play a role in human development in the village, especially in monitoring the handling of stunting. The activities carried out by cadres are collecting community data at posyandu activities and conducting small campaigns related to stunting prevention to the community present at posyandu activities. Cadres also visit homes to provide assistance to pregnant women.

Then, to support the smooth running of the activities carried out, efforts were made to develop cadres by organising training. As cadres, it is important to get the right understanding (Andayani et al., 2022). However, people who are members of KPM Stunting are not only members of one cadre, but also join several other cadres. Thus, it was found that the data collection carried out by KPM Stunting was delayed several times.

Regarding community participation, it was found that the participation of the community was considered quite good. This is because when the community has been given education about the dangers of stunting, it will increase the community's vigilance, which in turn will make the community more aware of the dangers of stunting in toddlers and how to prevent it. The community actively attends socialisation or workshops related to stunting that are held.

Thus, it is found that the community element that acts as an accelerator, which includes communities that have interests and functions that are relevant to the activities carried out, has been carried out well. The existence of professional organisations and community cadres can assist the government in collecting data on the community. However, there is no role of the community as a liaison between elements.

This is because pentahelix collaboration activities are under the control of the government, especially BKKBN as the leading sector. In addition, there is no specific cooperation between BKKBN and the community, where the cooperation between BKKBN and the community is through coordination meetings or stunting meetings.

Government

The government acts as a regulator. According to (Awaluddin et al., 2016), the government acts as a regulator who has regulations and is responsible for implementing the programme. According to (Rohman & Hardianto, 2019) cited in (Sabilla & Kriswibowo, 2021) over time, in fulfilling the services desired by the community, the government needs to involve other parties. This also applies to the pentahelix collaboration efforts in reducing stunting in Bengkulu Province.

In the TPPS membership composition, the leading sector position is held by BKKBN Bengkulu Province. The government element has the task of supervising, socialising policies, proclaiming commitment among stakeholders, improving coordination, and ensuring that budget funds are channeled. As revealed by (Andayani et al., 2022) in their research, the local government through BKKBN has prioritised stunting budgeting in accordance with the direction of the Vice President of the Republic of Indonesia.

Based on the results of interviews conducted by the author and on the supporting data obtained, the regulations used as a reference in the implementation of this collaboration are contained in Bengkulu Governor Regulation Number 4 of 2022 concerning Acceleration of Integrated Stunting Reduction in Bengkulu Province. Furthermore, the membership composition refers to the Decree of the Bengkulu Governor Regulation concerning the Bengkulu Province Integrated Stunting Reduction Acceleration Team. This is in line with research conducted by (Hertati et al., 2023) which states that the government acts as a controller who has regulations.

Supervision by government elements is carried out by continuing to monitor the progress made by each element by holding and attending coordination meetings. Policy socialisation is conveyed through coordination meetings with elements of the village government which will then be conveyed by the village government to its citizens. The coordination meetings held are the government's efforts to improve coordination between elements despite the busy schedules experienced by each related element.

As previously stated, there are two data that serve as a reference for reducing stunting rates, namely SSGI data and EPPGBM data. Although these two data state different figures related to stunting rates, the government still initiates these two data to become a reference, where the 2023 SSGI data has increased to 20.2% and the 2023 EPPGBM data has decreased to 5.1%. Following up on this decline in stunting rates, the government appreciates the elements of the pentahelix that have contributed to efforts to accelerate stunting reduction in Bengkulu Province.

Thus, it is found that the government element, which acts as a regulator that formulates policies and is responsible for the implementation of activities, has been carried out well. Policy formulation is realised through the creation of Governor Regulation No. 4 of 2022 concerning the Acceleration of Integrated Stunting Reduction in Bengkulu Province. Furthermore, as the person in charge of implementing activities, it is realised through the holding of coordination meetings that discuss the progress of each element's activities and to strengthen the commitment of the pentahelix elements.

In alleviating stunting, it requires the support of various OPD elements in the Bengkulu Provincial Government, with the leading sector being in BKKBN based on Presidential Regulation 72 of 2021, which makes it a little difficult to implement coordination, especially in matters related to budgeting and delegation of duties and authorities.

Media

The media acts as an expander. According to (Awaluddin et al., 2016), the media has a supporting role in terms of publication on the programme being run. Information dissemination can be done either through print media or online media. Information presented by utilising existing media, especially online media, will allow readers to enjoy information effectively and efficiently (Ready & Romyeni, 2016).

In the pentahelix collaboration in accelerating stunting reduction in Bengkulu Province, publications related to stunting are carried out through print media, online media, and radio. As with research conducted by (Andayani et al., 2022) which shows that the dissemination of information related to stunting is done through online media, namely websites and Instagram.

In this collaboration, RRI Bengkulu is a LPPL Radio station (Local Public Broadcasting Institution) under the auspices of Kominfo Bengkulu Province. As a media element. Based on the results of interviews conducted by the author and on the supporting data obtained, radio media has good continuity in reporting related to stunting. The stunting news is carried out by creating fixed content that is scheduled to be broadcast. This is in the form of education by presenting speakers or short adverts. Content creation activities are also a collaboration with OPD. In addition, the radio also broadcasts information if there is a stunting programme being implemented.

RRI Bengkulu has a programme that supports efforts to accelerate stunting reduction in Bengkulu Province. The first programme is ILM (Public Service Advertisement), which is the delivery of short-duration stunting-related material. The second programme is adlibs in the form of an interlude of the announcer's communication invitation to listeners. The third programme is an interactive talk show entitled *Pojok Kesehatan* and *Sapa Genre*. *Health Corner* and *Sapa Genre* (*Sahabat Anak dan Perempuan Generasi Berencana*) are weekly contents that discuss health. In the *Health Corner* programme, *Suara Jombang* collaborates with the Health Office, while the *Sapa Genre* programme collaborates with the PPKB-PPPA Office.

Then, the news about stunting is also carried out through the radio's social media, namely Instagram. Instagram was chosen because of its wide reach with a target audience with an age range of 40 years and under. Radio broadcasts can also be re-watched through the radio's YouTube channel.

Social media accounts are used as a source of information and notifications related to the latest broadcasts that will be carried out by the radio. However, based on observations made by the author, there are not many publications related to stunting and health content related to stunting on the radio's Instagram account. This is unfortunate because Instagram is a social media that can be categorised as an easily accessible social network with complete features and easy to use (Abidin et al., 2021).

Thus, it is found that the media element that acts as an expander, namely making publications related to the stunting programme and disseminating information, has been carried out well. The main media used is radio broadcasts which are then innovated by creating YouTube channels and Instagram social media accounts.

Radio broadcasts in the form of stunting content are carried out regularly every week, although Instagram accounts are not very active in disseminating information related to stunting. In addition, there was no special cooperation between the radio and BKKBN as the leading sector. Cooperation that occurs is carried out only through coordination meetings whose presence is represented by the Office of Communication and Information.

In the results and discussion described above, it is stated that the collaboration of the pentahelix model in accelerating stunting reduction in Bengkulu Province, which consists of academics, business, community, government and media, has been well implemented. The pentahelix collaboration implemented is said to be good and in accordance with the goal, which is to reduce the stunting rate in Bengkulu Province.

In the implementation of pentahelix collaboration in accelerating stunting reduction in Bengkulu Province, although several obstacles were found, this did not mean that the collaboration did not run well. Based on the results of the research, it was found that during the implementation of collaboration, the stunting rate in Bengkulu Province decreased consistently from year to year, where in 2023 the stunting rate reached 8.43% below the national rate of 14%.

CONCLUSION

Thus, the Pentahelix Model Collaboration in Accelerating Stunting Reduction in Bengkulu Province has been well implemented. Collaboration is carried out by five pentahelix elements, namely academics, business, community, government, and media. BKKBN as the leading sector coordinates the pentahelix elements well through coordination meetings that are held regularly, both large-scale coordination meetings that invite all pentahelix elements and small meetings that only involve interested pentahelix elements.

The results showed that the continuity experienced by the five elements tended to be stable because each element carried out activities in accordance with their respective main tasks and functions.

When it came time to identify possibilities and hurdles, the government and communities (NGOs) agreed on several difficulties that needed to be addressed, including those about the National Health Insurance Healthy Indonesia Card or JKN/KIS card ownership, awareness of the significance of poor parenting styles, people's comprehension and knowledge, children's inadequate nutritional intake in 1000 HKP, and sanitation issues (clean water and latrines).

In the Debate Strategy stage, the government tackles various possibilities and challenges to accelerate stunting reduction, influencing actions by the government, NGOs, and the media. Each group develops plans during the joint action planning stage (academics, government, society, media, business). Nonetheless, the objective remains the same: the community must be

able to comprehend and apply innovative policies and programs. Since collaborative efforts to combat stunting are still ineffective, stunting rates will still rise.

SUGGESTION

The implementation of collaboration is considered not yet running optimally, this is evidenced by the stunting rate in Bengkulu Province in the 2023 data, Bengkulu Province's stunting rate has increased to 0.4% which is still far from the national target of 14% in 2024. According to the researcher's view, several elements in the pentahelix still have obstacles, in terms of implementing collaboration between relevant stakeholders.

So, the suggestions that can be given for the implementation of this collaboration are the TJSJL Forum as a business element is expected to immediately contribute to the problem of stunting in Bengkulu Province as part of the pentahelix, the community is expected to play a more active role in becoming cadre members to minimise delays in data collection, and the management of social media owned by RRI Bengkulu FM should be further improved for its consistency in posting health content about stunting.

REFERENCES

- Abidin, K. Z., Soegiarto, A., Masyarakat, H., & Jakarta, U. N. (2021). Pemanfaatan Instagram Sebagai Media Publikasi Media online yang dapat digunakan oleh pengguna nya dengan berbagai aktivitas seperti joining, sharing , dan atau isi dari media sosial mereka pada dianggap sebagai media online yang dapat mengubah komunikasi. *Jurnal Riset Komunikasi*, 12(2).
- Andayani, Q., Ariadi, S., Koesbardiati, T., Fauziah, N., & Praharsena, B. (2022). Penta Helix "Desa Emas " Dalam Komitmen Percepatan Penurunan Stunting Di Kabupaten Sumenep Provinsi. *Media Gizi Indonesia (National Nutrition Journal)*, 1, 64–75.
- Aribowo, H., Wirapraja, A., & Putra, Y. D. (2018). Implementasi Kolaborasi Model Pentahelix Dalam Rangka Mengembangkan Potensi Pariwisata Di Bengkulu Serta Meningkatkan Perekonomian Domestik. *Jurnal Mebis (Manajemen Dan Bisnis)*, 3(1), 31–38. <https://doi.org/10.33005/mebis.v3i1.21>
- Awaluddin, M., Sule, E., & Kaltum, U. (2016). The Influence Of Competitive Forces And Value Creation On Company Reputation And Competitive Strategy: A Case Of Digital Creative Industry In Indonesia With The Implication On Sustainable Business Performance. *International Journal of Economics, Commerce and Management*, 4(2), 201–234.
- Dani Rahu, P., & Suprayitno. (2021). Kolaborasi Model Pentahelix Dalam Pengembangan Desa Wisata Sei Gohong Kecamatan Bukit Batu Kota Palangka Raya. *Journal Ilmu Sosial, Politik Dan Pemerintahan*, 10(1), 13–24. <https://doi.org/10.37304/jispar.v10i1.2286>
- Dewanti, C., Ratnasari, V., & Rumiati, A. T. (2020). Pemodelan Faktor-Faktor yang Memengaruhi Status Balita Stunting di Provinsi Bengkulu Menggunakan Regresi Probit Biner. *Jurnal Sains Dan Seni ITS*, 8(2). <https://doi.org/10.12962/j23373520.v8i2.48519>
- Firdaus, R. (2020). Peran Pemerintah Daerah Sebagai Regulator, Dinamisator, Fasilitator, Dan Katalisator Dalam Pemberdayaan Petani Kakao Di Kabupaten Luwu Utara. *Jurnal I La Galigo | Public Administration Journal*, 3(1), 32–40.
- Fitriana, A. D., Mutmainnah, I., & Halifah, S. (2021). Penyelenggaraan Tridharma Perguruan Tinggi Sesuai Bidang Keilmuan Sebagai Upaya Personal Branding Dosen. *KOMUNIDA: Media*

<https://doi.org/10.35905/komunida.v7i2.http>

- Halibas, A., Ocier Sibayan, R., & Lyn Maata, R. (2017). The Penta Helix Model of Innovation in Oman: An HEI Perspective. *Interdisciplinary Journal of Information, Knowledge, and Management*, 12(May), 159–174. <https://doi.org/10.28945/3735>
- Hertati, D., & Arif, L. (2022). *Stakeholders Collaboration Model in Integrated Waste Management in Gresik District, East Java*. 2022, 126–131. <https://doi.org/10.11594/nstp.2022.2422>
- Hertati, D., Nurhadi, & Tukiman. (2023). Penta Helix Collaboration Model in Handling Problems of Waste Management. *7st International Seminar of Research Month 2022. NST Proceedings.*, 371–377.
- Kania, Ikeu and Ardiyanti, Handrini and Tarigan, Herlina and karmila, Mila and Rismayanti, Ema and R. Nenometa, Melkianus and Supriyanti, Ni Wayan, (2024). A Strategic Model to Reduce Stunting Rate Through Parenting Improvement in Indonesia. Available at SSRN: <https://ssrn.com/abstract=4867028> or <http://dx.doi.org/10.2139/ssrn.4867028>
- Khusniyah. (2020). Implementasi Model Pentahelix Sebagai Landasan Pengembangan Potensi Pariwisata Di Kabupaten Kediri (Studi Literatur). *Prosiding Seminar Nasional Kahuripan*, 1–5. <https://conference.kahuripan.ac.id/index.php/SNapan/article/view/42>
- Kurniasih, D.-. (2017). Model Penguatan Kelembagaan Pada Program Sanitasi Lingkungan Berbasis Masyarakat (Slbm) Di Kabupaten Banyumas (Suatu Pendekatan Collaborative Governance). *Sosiohumaniora*, 19(1), 1–7. <https://doi.org/10.24198/sosiohumaniora.v19i1.7888>
- Kurniawan, D. A., Zarkasyi, M. R., & Setyanta, B. (2023). Economic recovery strategy for the SMEs post covid-19 pandemic in ponorogo: the role of the penta helix model. *Sentralisasi*, 12(1), 75-86.
- Lian, B. (2019). Tanggung Jawab Tridharma Perguruan Tinggi Menjawab Kebutuhan Masyarakat. *Prosiding Seminar Nasional Pendidikan Program Pascasarjana Universitas Pgrri Palembang*, 100–106.
- Maria Magdalena Lino, David B. W. Pandie, Dominikus Fernandez, Hendrik Toda, Yani Seran (2024). Penta Helix Collaboration in Accelerating the Reduction of Stunting Rates in East Nusa Tenggara, Indonesia. *Universal Journal of Public Health*, 12(5), 918 - 927. DOI: 10.13189/ujph.2024.120514.
- Miles, M. B., & Huberman, M. A. (2014). *Qualitative Data Analysis A Methods Sourcebook* (3rd ed.). SAGE Publications, Inc.
- Ready, A., & Rummyeni. (2016). Penggunaan Media Online Sebagai Sumber Informasi. *Ilmu Komunikasi Fakultas Ilmu Sosial Dan Ilmu Politik Universitas Riau.*, 3(1). <https://jom.unri.ac.id/index.php/JOMFSIP/article/view/8438>
- Sabilla, A. A., & Kriswibowo, A. (2021). Implementation of the Principles of Good Governance in Combating Stunting in the Jabon District, Sidoarjo Regency. *DiA: Jurnal Administrasi Publik*, 19(1), 53–67. <https://doi.org/10.30996/dia.v19i1.4822>
- Siyoto, S., & Sodik, M. A. (2015). *Dasar Metodologi Penelitian* (1st ed.). Literasi Media Publishing.
- Slamet, R., Nainggolan, B., Roessobiyatno, R., Ramdani, H., Hendriyanto, A., & Ilma, L. L. (2017). Strategi Pengembangan Ukm Digital Dalam Menghadapi Era Pasar Bebas. *Jurnal Manajemen Indonesia*, 16(2), 136. <https://doi.org/10.25124/jmi.v16i2.319>

- Supariasa, I. D. N., & Purwaningsih, H. (2019). Faktor-Faktor Yang Mempengaruhi Kejadian Stunting pada Balita di Kabupaten Malang. *Karta Rahardja, Jurnal Pembangunan Dan Inovasi*, 1(2), 55-64. <http://ejurnal.malangkab.go.id/index.php/kr>
- Yunas, N. S. (2021). Implementation of pentahelix collaboration in handling Covid-19 pandemic through Kampung Tangguh program in Malang. *International Journal of Research in Business and Social Science (2147-4478)*, 10(5), 207-215.