

Adaptive Governance at Correctional Institution Class IIB Nunukan Inmate Development Program

Puang Dirham¹, Muh. Akmal Ibrahim², Hasniati², Didik Iskandar³

¹Doctoral Student of Department of Administration Science, Faculty of Social and Political Science, Hasanuddin University, Makassar, Indonesia

²Department of Administration Science, Faculty of Social and Political Science, Hasanuddin University, Makassar, Indonesia

³Public Administration, Universitas Negeri Makassar, Indonesia

Email: puang.dirham@gmail.com

Abstract. *To improve the skill of inmates, the Nunukan Class IIB Correctional Institution makes coaching program that is expected to be way for inmates to improve their abilities. in order to make the program success, adaptation from the Correctional Institution is needed. This research tries to explore further how the Correctional Institution adjusts and is adaptive in fostering prisoners in the Nunukan class IIB prison, especially from the aspect of Adaptive Governance. Adaptive governance includes adaptive capacity, Polycentric Institutions, Public Participation/Input, Social Learning, Bridging Organizations and Multilevel Networks. The data is then compiled in qualitative research. Data collection methods include observation, interviews and documentation. Data sources consist of primary and secondary data, data analysis with interactive methods. The results of this study show that Lapas IIB Nunukan has implemented adaptive governance, but adaptive capacity has not been optimized. There is still a need to strengthen formal networks, increase human resource capacity, and cross-actor collaboration to be truly adaptive and sustainable.*

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INTRODUCTION

The rehabilitation of prisoners is an integral part of the correctional system, which aims to rehabilitate, reintegrate into society, and reduce recidivism (Ganapathy, 2018; Ngabonziza & Singh, 2012; Omoruyi & Agbontaen, 2024; Razali et al., 2021). In Indonesia, rehabilitation tasks are regulated by the Correctional Law and other implementing regulations that designate correctional institutions (prisons) as institutions for education, employment, mental and religious guidance, and skills training programs for prisoners (Correctional Law). Each region has its own problems in implementing prisoner rehabilitation (Byrne et al., 2015; Day et al., 2022). Therefore, it is necessary to adapt the relevant instruments to tailor the guidance program to existing needs.

Based on Regulation of the Minister of Law and Human Rights of the Republic of Indonesia Number 35 of 2018 article 15 paragraph 2, it is explained that the guidance of prisoners carried out by correctional institutions covers several things such as religious awareness guidance, national and civic awareness, legal awareness, intellectual capacity building, psychological counseling, and rehabilitation. In the series of rehabilitation programs carried out, correctional

institutions play an important role as the parties that directly implement the rehabilitation process for prisoners (Phelps, 2011; Cullen & Gendreau, 2000).

The process of rehabilitating prisoners in correctional institutions is essentially a systematic effort by the state to change the behavior of individuals who have previously committed crimes so that they can be accepted back into society and function normally (Parape, 2023; Fathoni, 2025). This rehabilitation is not carried out haphazardly, but is implemented through certain stages that have been designed taking into account security, psychological, social, and legal aspects. Broadly speaking, this rehabilitation process is divided into several stages.

In relation to the rehabilitation process of prisoners, the Nunukan Class IIB Correctional Institution also constantly strives to provide rehabilitation to prisoners in its area. The Nunukan Class IIB Correctional Institution is one of the correctional institutions in the North Kalimantan region. The Nunukan Class IIB Correctional Institution was established in 2005 and began operations in 2008 in Nunukan Regency. The Nunukan Class IIB Correctional Institution stands on 100,000 m² of land with a building area of 6000 m², while the rest of the land is used as assimilation and education facilities for the rehabilitation of inmates. The number of inmates in the Nunukan Class IIB Correctional Institution as of February 2025 is

Table 1. Number of Inmates

No	Type	Total
1	Prisoners	1.102 People
2	Detainees	201 People
Total		1.303 People

Source: At Correctional Institution Class IIB Nunukan, Years 2025

One of the major obstacles to their reintegration into society. This stigma often makes former prisoners feel isolated and unaccepted, which ultimately increases the likelihood of them returning to a life of crime if they do not have skills and independence. Based on the information obtained, various skills development activities are carried out at the Class IIB Correctional Institution in Nunukan Regency, including job training in handicrafts, sewing, mechanics, fishing, plantation, agriculture, animal husbandry, barista café, carpentry, batik, hairdressing, laundry, etc. Second, formal and non-formal education, which includes the Kejar Paket-B and Paket-C equivalency education programs, the Teaching and Recitation Training Program, and the Dance Arts Training Program.

Third, entrepreneurship programs, which include the sale and marketing of handicrafts made by inmates and the sale and marketing of food and beverages (café). Fourth, personality development, which includes spiritual guidance, scouting, and national defense. Fifth, legal guidance, which involves providing guidance to lawbreakers, whether they are inmates or detainees. In this case, the Nunukan Class IIB Correctional Institution has established a Legal Guidance Center in collaboration with the Nunukan Regency Regional Leadership Communication Forum (FORKOPIMDA), which includes the Indonesian National Armed Forces (TNI), the Indonesian National Police (POLRI), the Attorney General's Office, the National Narcotics Agency (BNN), and other vertical agencies. This Legal Guidance Center aims to rehabilitate and educate lawbreakers so that they can obey the law.

Every year, the Nunukan Class IIB Correctional Institution always provides guidance to its inmates. The majority of the guidance programs provided are work skills development programs (Goodman & Hansen, 2005; Barker & Satcher, 2000; McCarthy, 2004). However, in implementing these guidance programs, the Nunukan Class IIB Correctional Institution often faces obstacles that hinder the implementation process. The lack of educators who play a direct role in guidance is one of the ongoing problems (Lam & Hui, 2010; Lai-Yeung, 2014). More effective guidance can be carried out if there is cooperation with external parties, such as the business world,

educational institutions, or community organizations. However, in many cases, this cooperation is not optimal and hinders efforts to provide skills that are relevant to the needs of the job market.

Based on the phenomena described above, it is clear that there are still obstacles that hinder the implementation of the inmate guidance process. In order to transform the implementation of this guidance into a more systematic process, complex reforms are needed on the part of the Nunukan Class IIB Correctional Institution. Improving the capabilities of each element and factor involved in the rehabilitation of prisoners at the Nunukan Class IIB correctional institution also needs more attention so that the synergy and capabilities of the institution in carrying out rehabilitation can be realized.

In this context, adaptive governance is important as a lens for viewing the rehabilitation of prisoners in correctional institutions because this approach is able to respond to the complexity and ever-changing dynamics of managing inmates. Correctional institutions do not only function as places of punishment, but also as means of rehabilitation and social reintegration that require flexible, participatory, and collaborative management patterns (Pamio et al., 2026; Taye, 2020; Turner, 2013). With adaptive governance, inmate rehabilitation can be tailored to individual needs, socio-cultural conditions, and institutional environmental challenges, so that programs do not run rigidly or uniformly.

Through elements such as adaptive capacity and social learning, correctional officers and inmates alike learn to adapt to change and improve the quality of their interactions. Meanwhile, polycentric institutions and multilevel networks enable synergy between various parties, such as the government, the community, social organizations, and the business world, to strengthen rehabilitation programs, whether in the form of education, skills training, or legal reintegration. Public participation is also crucial in reducing social stigma, so that former inmates have a greater chance of being accepted back into society (Bazemore & Stinchcomb, 2004; Draine et al., 2005; Jęczeń et al., 2026; Keene et al., 2018).

In addition, the presence of bridging organizations helps bridge the interests between correctional institutions and external stakeholders, so that rehabilitation can be more effective, innovative, and oriented towards long-term results (Trivedi & Ray, 2024). Thus, adaptive governance is a relevant framework for ensuring that prisoner rehabilitation is not merely an administrative routine, but truly has an impact on self-improvement, empowerment, and successful social reintegration. Adaptive governance is a concept that has developed in the realm of complex environmental, social, and institutional governance.

This idea arose from the realization that traditional governance systems, which are rigid, hierarchical, and centralized, often fail to cope with changes that are fraught with uncertainty. In situations where social and ecological changes are occurring very rapidly, inflexible governance will find it difficult to maintain sustainability. Therefore, adaptive governance has emerged as an approach that emphasizes flexibility, participation, social learning, and multilevel networks in responding to these dynamics (Folke et al., 2005; Pahl-Wostl, 2009; Foxon et al., 2009; Robinson & Berkes, 2011; Berkes, 2017).

As it has developed, the theory of adaptive governance has been enriched by various thinkers. Carl Folke and his colleagues formulated the important elements of adaptive governance that are still widely used as references today. Holling emphasized ecological fundamentals through the concepts of resilience and adaptive management. Ostrom expanded the scope with the concept of polycentric governance. Dietz, Ostrom, and Stern added principles of adaptive and participatory environmental governance. Chaffin, together with Gosnell and Cosens, provided a modern understanding of adaptive governance as a bridge between adaptive management and formal governance. Brunner and his colleagues highlight adaptive governance as a continuous process.

The following description will explain the thoughts of these experts in more depth. Folke et al. (2005), are important figures who popularized the term adaptive governance in socio-ecological studies. In their work, they define adaptive governance as a governance framework that focuses on adaptability, cross-sector collaboration, and interconnectivity between networks at various levels. According to Folke, adaptive governance consists of six key elements that form the basis for a system's success in dealing with change.

These elements are adaptive capacity, polycentric institutions, public input, social learning, bridging organizations, and multilevel networks. Adaptive capacity refers to the ability of individuals and institutions to adjust to unexpected changes (Berman et al., 2012; Gupta et al., 2010; Pelling & High, 2005). Polycentric institutions emphasize the importance of having multiple decision-making centers that work independently but are interconnected. Public input provides space for community participation in policy formulation and evaluation. Social learning enables communities to learn from shared experiences (Bos et al., 2013; Shteynberg & Apfelbaum, 2013; Berkes, 2009). Liaison organizations serve to bridge the interests of various actors.

Meanwhile, multilevel networks emphasize the interconnectedness of local, regional, and global actors. Thus, for Folke, adaptive governance is not merely an institutional structure, but rather a dynamic social interaction process that is open to change. One of the theoretical foundations of adaptive governance comes from the thinking of C.S. Holling. In 1973, Holling introduced the concept of resilience in ecology, which is the ability of a system to absorb disturbances and maintain its function. In its development, he added the concept of adaptive management, which emphasizes the importance of management based on experimentation, learning, and flexibility (Holling, 2001).

According to Holling, social and ecological systems are adaptive complexes that cannot be predicted with certainty. Therefore, rigid and linear governance approaches often fail to cope with surprises or sudden changes. Within the framework of adaptive management, policy is viewed as an experiment that needs to be tested, evaluated, and then adjusted to real conditions. Holling's thinking provides the epistemological basis for adaptive governance, namely that governance must be understood as a continuous collective learning process, not as a set of static rules (Hurlbert, 2017; Voß & Bornemann, 2011; Ison et al., 2015; Cleaver & Whaley, 2018).

Elinor Ostrom, winner of the 2009 Nobel Prize in Economics, also made a major contribution to the understanding of adaptive governance. In her work, Ostrom (2010) introduced the concept of polycentric governance, which emphasizes the existence of multiple decision-making centers as an effective strategy for managing shared resources. For her, centralized management often fails because it is unable to adapt to diverse local contexts. Polycentric governance allows for flexibility and innovation that emerge from local actors. By giving authority to various levels of government and communities, governance can be adapted to the specific conditions of each region.

This is in line with the principle of adaptive governance, where successful adaptation depends on participation, diversity, and multi-actor collaboration. Ostrom's contribution enriches adaptive governance by emphasizing a more complex institutional dimension, in which the central government is not the only dominant actor but collaborates with local actors and civil society (Rahman & Islam, 2024; Radtke, 2025). In an influential article published in *Science*, Dietz et al. (2003) assert that environmental governance requires an adaptive, participatory, and multilevel approach. They argue that resource management cannot rely solely on formal rules but must also integrate scientific knowledge with local practices.

Some of the principles they put forward are the importance of effective monitoring, rapid conflict resolution mechanisms, flexible rules to suit local conditions, and multilevel collaboration between local, national, and international actors. By emphasizing these principles, Dietz and his colleagues show that adaptive governance is a combination of various complementary

mechanisms. Their framework shows that adaptive governance requires synergy between formal structures and local knowledge that develops within communities.

Another contribution comes from Chaffin et al. (2014), who provide a modern definition of adaptive governance. They view adaptive governance as a governance system that emerges to regulate human-nature interactions under conditions of uncertainty by emphasizing institutional flexibility, multi-actor collaboration, and adaptive capacity building. For them, adaptive governance is a bridge between adaptive management, which focuses on experimental technical strategies, and formal governance, which emphasizes regulation and institutions.

Thus, adaptive governance is not only about how to manage resources adaptively, but also how to build institutional structures that support the adaptation process. This definition provides a more comprehensive understanding, as adaptive governance is seen as the result of the integration of technical, social, and institutional dimensions. Brunner et al. (2005) emphasize the process dimension in adaptive governance. They argue that adaptive governance is better understood as a process-oriented approach rather than one focused solely on institutional design. Within this framework, adaptive governance is seen as a mechanism that emphasizes social learning, community participation, and policy experimentation.

The success of adaptive governance, according to Brunner et al., is determined by the ability of social actors to interact, learn together, and adapt to changes that occur. This view confirms that adaptive governance is dynamic and evolving, not something that can be determined once and for all. Therefore, adaptive governance requires the continuous involvement of various parties in collectively building adaptive capacity. Folke explains that adaptive governance consists of several key elements, namely adaptive capacity, polycentric institutions, public input, social learning, bridging organizations, and multilevel networks.

When related to prisoner rehabilitation, the concept of adaptive capacity can be understood as the ability of correctional institutions to adjust rehabilitation programs to actual conditions, in terms of the number of prisoners, human resource capacity, and budget availability. For example, rehabilitation programs implemented in one correctional institution cannot always be applied in the same way in other correctional institutions, because each institution has different characteristics and challenges. The element of polycentric institutions shows the importance of cross-institutional cooperation, both internally between units within the Ministry of Law and Human Rights and externally with other agencies such as local governments, community organizations, universities, and the private sector.

The first stage is known as the maximum-security stage or initial stage. At this stage, prisoners are placed under strict supervision from the moment they become prisoners until they have served one-third (1/3) of their sentence imposed by the court. This stage emphasizes control and restriction of activities, as prisoners have just entered their sentence and are considered to still need to adapt to the correctional institution environment. In addition, this stage aims to instill discipline and initial awareness of the legal consequences of their actions. The second stage is called medium security or the first advanced stage.

At this stage, inmate guidance is carried out from the end of the initial stage until half (1/2) of the sentence has been served. Supervision at this stage is gradually reduced and inmates are given the opportunity to participate in various forms of guidance, both personality and independence-oriented. This stage is also an important means of measuring the level of change in attitude, compliance, and readiness of inmates to accept new values instilled through the guidance program.

Next is the third stage, known as minimum security or the second advanced stage. At this stage, prisoners are introduced to the outside world through an assimilation program, which is a form of guidance that allows prisoners to leave the correctional facility without supervision. This stage begins at the end of the first advanced stage and lasts until two-thirds (2/3) of the actual

prison term has been served. The main focus at this stage is to build a sense of responsibility, independence, and social skills in inmates so that they are truly ready to return to society. The fourth stage is the integration stage, also known as the final stage of rehabilitation.

At this stage, rehabilitation is provided from the end of the second advanced stage until the end of the sentence. Prisoners who have successfully completed this stage may be recommended for parole, provided they have served at least nine months of their sentence and demonstrated good behavior. The purpose of this final stage is to facilitate the reintegration of prisoners into society while maintaining proportional supervision.

In addition to guidance oriented towards character or personality, another very important form of guidance is independence guidance. Independence guidance is a strategic program aimed at training prisoners' skills, knowledge, and abilities in various productive fields. This is in line with the mandate of Law Number 22 of 2022 concerning Corrections, specifically in Article 38 letter b, which emphasizes that independence training can be upgraded to activities that produce goods and services that have economic benefits and added value. With this program, prisoners are not only prepared to serve their sentences with meaningful activities, but are also projected to be able to start a new life independently after being released from prison.

This independence training covers various skills, including carpentry, mechanics, culinary arts, handicrafts, agriculture, animal husbandry, and services such as barbering, laundry, and café businesses. These programs are not only intended to provide practical skills, but also aim to instill an entrepreneurial spirit so that inmates are equipped to compete in the workforce after returning to society. The existence of this program is also expected to reduce unemployment among former inmates while minimizing the risk of recidivism.

In the context of inmate rehabilitation, this inter-agency cooperation can take the form of providing skills training, legal counseling, formal and non-formal education programs, and social reintegration support after inmates are released. Furthermore, the element of public input in adaptive governance emphasizes the need for community participation in supporting inmate rehabilitation. This is in line with the fact that the success of rehabilitation does not only depend on the efforts of correctional institutions, but also on the readiness of the community to accept ex-convicts back into society. This participation can be realized through involvement in training programs, cooperation in marketing products made by inmates, and providing employment opportunities after release.

Social learning is also an important aspect, where prisoners are encouraged to learn not only from correctional officers, but also from fellow prisoners and external parties involved in rehabilitation. This learning process allows prisoners to internalize positive values through social interaction, thereby accelerating changes in attitude and behavior. In addition, bridging organizations such as regional leadership communication forums, religious organizations, and other social institutions serve as bridges connecting correctional institutions with the community. The presence of these organizations facilitates communication, coordination, and cross-sector collaboration in supporting the success of rehabilitation programs.

Finally, multilevel networks emphasize the importance of a connected network from the local to the national, and even international, levels. In the context of correctional services, this means coordination between regional correctional institutions and the central government, as well as opening up opportunities for cooperation with international institutions working in the fields of human rights, rehabilitation, and social reintegration. The application of adaptive governance principles in the rehabilitation of prisoners can also be seen in the practices at the Nunukan Class IIB Correctional Institution. This prison not only carries out routine rehabilitation, but also strives to adapt to the conditions and needs of prisoners in the border region of North Kalimantan.

Since its establishment in 2005 and commencement of operations in 2008, the Nunukan Class IIB Correctional Institution has utilized an area of 100,000 m², most of which is used as a means of assimilation and education for the rehabilitation of inmates. Various rehabilitation programs implemented at the Nunukan Prison include: job training (handicrafts, sewing, mechanics, fishing, plantation, agriculture, animal husbandry, barista café, carpentry, batik, barbering, laundry, etc.), formal and non-formal education (Kejar Paket B and C equivalency programs, Quran recitation training, dance), entrepreneurship programs (sales and marketing of handicrafts and food and beverage products), personality education (spiritual guidance, scouting, national defense), and legal guidance through a legal center in collaboration with the Nunukan Regional Leadership Coordination Forum (FORKOPIMDA) and vertical agencies such as the Indonesian National Armed Forces (TNI), the Indonesian National Police (POLRI), the Attorney General's Office, and the National Narcotics Agency (BNN).

These programs not only focus on changing individual behavior, but are also aimed at developing practical skills so that prisoners have the tools they need to live independently after their release. Thus, the success of the guidance program at the Nunukan Prison reflects the application of the principles of adaptive governance, particularly in terms of collaboration, program innovation, and the involvement of various actors across sectors. The forms of inmate rehabilitation in this field can include various things such as technical skills, carpentry, mechanics, culinary arts, handicrafts, and other work-related skills. Basically, these programs are designed based on the interests and conditions of each correctional institution while maintaining efficiency and the needs of the inmates.

The independence guidance programs implemented by one correctional institution may differ from those implemented by another. These differences are based not only on needs but also on factors such as the number of inmates, the number of guidance personnel, the amount of funding received, and the cooperation between agencies. Based on the above description, this paper will discuss in depth the theory of adaptive governance according to Folke (2005), analyze the stages of inmate rehabilitation in Indonesia, and map out how the principles of adaptive governance can be integrated into the rehabilitation program at the Nunukan Class IIB Correctional Institution.

METHODS

This study uses qualitative research methods. Data collection methods include observation, in-depth interviews, and documentation. The data sources consist of primary and secondary data, using Carl Folke's (2005) Adaptive Governance approach. Several elements are included in Adaptive Governance, namely adaptive capacity, which is the ability of institutions to respond to change and adjust strategies; polycentric institutions, which are the existence of multiple decision-making centers that coordinate with each other; public input, which is the active involvement of the community in every stage of policy making; social learning, which is collective learning through interaction and sharing of experiences; bridging organizations, which are liaison institutions that facilitate collaboration between stakeholders; and multilevel networks, which are cooperation networks that connect across levels from local to international. Meanwhile, data analysis was carried out using interactive methods. The informants in this study were individuals involved in the rehabilitation of prisoners at the Nunukan Class IIB Correctional Institution, namely the Head of the Correctional Institution (Kalapas) Class 12, the Head of Education and Training (Kasibinadik) and the Head of Activities (Giatja) Class 9, the Head of the Work Activities Subdivision Class 8 and the Head of the Registration and Bimkemas Subdivision Class 8 of the Nunukan District Class IIB Correctional Institution, external stakeholders ranging from the Manpower Office, the Education Office, the Food Security and Agriculture Office, the Ministry of Religious Affairs, the Indonesian Ulema Council (MUI), the Religious Affairs Office (KUA), and the community under the guidance of the Correctional Institution.

RESULTS AND DISCUSSION

Adaptive Governance is a governance theory introduced by Carl Folke (2005) to address complex challenges in managing social and environmental resources amid uncertainty. This theory emphasizes the need for adaptive capacity, social learning, public participation, cross-agency coordination, bridging organizations, and multilevel networks in creating a resilient governance system. Although initially used in the context of ecology and the environment, the concept of Adaptive Governance is also highly relevant for application in other sectors, including the rehabilitation of prisoners in correctional institutions. Prisoner rehabilitation is an important aspect of the criminal justice system, which aims not only to punish but also to rehabilitate prisoners so that they can return to society as better individuals. In this context, Adaptive Governance can be an appropriate analytical framework because prisoner rehabilitation involves many actors, cross-sectors, limited resources, and requires the ability to adapt to social changes and structural challenges.

Adaptive capacity in Folke's (2005) framework is the ability of an institution to adapt to change, take advantage of opportunities, and respond to challenges in a flexible manner. In the context of the Nunukan Class IIB Prison, adaptive capacity is reflected in their ability to continue running rehabilitation programs despite budget, facility, and human resource constraints. Research shows that independence rehabilitation programs, such as agricultural and plantation training, are often hampered by limited equipment such as tractors, hoes, and other agricultural tools. As a result, the rehabilitation process is slow and cannot be maximized. However, the prison continues to strive to hold various programs by collaborating with external parties such as private organizations and local governments, even if they are only short training courses (e.g., barista, screen printing, or bakery training). On the other hand, adaptive capacity is also evident in the utilization of 10 hectares of land for agriculture, animal husbandry, and agrotourism through the Assimilation and Education Facilities (SAE Lanuka) program.

This innovation demonstrates flexibility in utilizing available assets for rehabilitation purposes as well as social integration with the community. However, the main obstacle remains the sustainability of the program, because after their release, prisoners do not have the capital or access to continue the skills they have acquired. Thus, the adaptive capacity of the Nunukan Prison is still partial and tends to be reactive. To be more in line with the concept of Adaptive Governance, this adaptive capacity must be strengthened through the provision of adequate facilities, skills certification, and a clearer path to social reintegration. Polycentric institutions refer to the existence of multiple decision-making centers that work in a coordinated manner, rather than being centralized under a single authority. In the case of Nunukan Prison, there are various parties involved in guidance, both internal and external.

For example, personality guidance is carried out in collaboration with the Ministry of Religious Affairs, the Indonesian Ulema Council (MUI), and the Office of Religious Affairs (KUA); educational guidance is carried out in collaboration with the Education Office through PKBM; and independence guidance is carried out in collaboration with the Agriculture Office, Nunukan Polytechnic, and private parties such as Jaya Kopi. However, this polycentric nature is not yet fully optimal because inter-agency coordination is still weak, especially in terms of post-release employment. The lack of strong cooperation with the Manpower Office makes it difficult for graduates of the rehabilitation program to find work after their release. This shows that although there are many actors involved, their roles are still fragmented and have not been consolidated into an adaptive governance system. Thus, the elements of polycentric institutions in Nunukan Prison are still limited to formal cooperation, without strong integration in the post-rehabilitation phase.

Public participation is the active involvement of the community or affected parties in the decision-making process. In the context of prisoner rehabilitation, the public here can refer to the prisoners themselves or the wider community. Research shows that prisoner participation is still

very minimal. Decisions on rehabilitation programs are generally top-down, based on internal prison policies and national regulations. Although initial assessments are conducted to identify the interests and talents of prisoners, implementation is often not optimal because prisoners are reluctant to show their potential or feel that there is no need to participate. This results in low motivation and a low sense of belonging among prisoners towards rehabilitation programs. Adaptive Governance emphasizes that without the active involvement of affected parties, governance will not function adaptively. Therefore, inmate participation in designing, implementing, and evaluating programs needs to be strengthened so that rehabilitation is more relevant to their real needs.

Social learning is a collective learning process through interaction and knowledge exchange between actors. In inmate rehabilitation, social learning is evident in the involvement of external parties who bring new knowledge, such as barista training from the private sector or construction training from polytechnics. However, problems arise when internal staff at the Nunukan Correctional Facility have to fill roles that are not their area of expertise, resulting in role mismatches. For example, staff who have no scouting experience are forced to become mentors and learn on their own through YouTube. Another case occurred when staff incorrectly applied fertilizer because they did not understand agricultural techniques. This situation highlights the weakness of internal social learning, as knowledge does not flow well from external actors to internal actors, nor between staff members. By strengthening social learning mechanisms, prisons can create a cycle of continuous learning between staff, inmates, and external actors, thereby improving the quality and effectiveness of rehabilitation.

Bridging organizations are actors or institutions that serve to connect different parties to facilitate collaboration. In this case, SAE Lanuka acts as a form of bridging organization because it connects inmates with the community through agrotourism and the marketing of rehabilitation products. However, this bridging role is still limited to the prison phase. After their release, former inmates continue to experience difficulties in reintegration because there are no institutions that bridge them with the world of work or community groups, mainly due to negative stigma. This shows that bridging organizations in Nunukan Prison have not fully functioned as socio-economic bridges for post-release inmates.

Multilevel networks are cooperation networks that span local, regional, national, and international levels. Nunukan Prison does have networks with local agencies (regional offices), national agencies (Ministry of Religious Affairs, Ministry of Law and Human Rights), and private actors. However, these networks are not yet functioning optimally at the post-release implementation level. For example, although there is cooperation with the education office for packages A, B, and C, or with the agriculture office for skills training, these networks do not extend to the world of work. The absence of formal networks with the Manpower Office and the business world means that the skills acquired by prisoners in prison cannot be implemented in the real world of work. Adaptive Governance requires a comprehensive and sustainable cross-level network. Therefore, Nunukan Prison needs to expand its network to the employment, entrepreneurship, and microfinance sectors to support the social reintegration of former prisoners.

From the above classification, it can be seen that Nunukan Prison already has several elements of Adaptive Governance, but they are still partial and incomplete. Adaptive capacity exists but is limited; polycentric institutions are present but not integrated; public participation is minimal; social learning is hampered by staff limitations; bridging organizations are not yet functioning optimally; and multilevel networks have not yet reached the post-release phase. When viewed as a whole, the governance of correctional facilities in Nunukan Prison still tends to be reactive, sectoral, and top-down. To be truly adaptive, a transformation towards collaborative, participatory governance based on the needs of prisoners and the challenges of their social reintegration is needed.

CONCLUSION

The rehabilitation process for prisoners at Nunukan Class IIB Prison is still in a transitional stage toward adaptive governance. Although several adaptive elements have emerged, such as multi-actor involvement, inter-agency cooperation, and innovative programs like agricultural training and the Assimilation and Education Facility (SAE Lanuka), the overall governance structure remains largely hierarchical, sectoral, and limited in flexibility. Key challenges include insufficient cross-sector coordination, limited resources, weak institutional support for post-release reintegration, and minimal participation of inmates in decision-making processes. While customary collaboration and external partnerships exist, the absence of strong coordination mechanisms, particularly with employment institutions, restricts the long-term impact of rehabilitation programs. Additionally, limited staff capacity and the lack of continuous social learning hinder the sustainability and quality of training initiatives. As a result, many rehabilitation outcomes fail to translate into meaningful economic or social reintegration after inmates are released. Therefore, strengthening adaptive governance requires a shift toward a more collaborative, participatory, and integrated correctional system that emphasizes cross-sector partnerships, institutional coordination, and the active involvement of inmates to ensure sustainable rehabilitation and successful reintegration into society.

REFERENCES

- Bailey, A. (2014). Once the capacity development initiative is over: Using communities of practice theory to transform individual into social learning. *The Journal of Agricultural Education and Extension*, 20(4), 429-448. <https://doi.org/10.1080/1389224X.2013.846871>
- Barker, J., & Satcher, J. (2000). School counselors' perceptions of required workplace skills and career development competencies. *Professional School Counseling*, 4(2), 134.
- Bazemore, G., & Stinchcomb, J. (2004). A civic engagement model of reentry: Involving community through service and restorative justice. *Fed. Probation*, 68, 14.
- Berkes, F. (2009). Evolution of co-management: Role of knowledge generation, bridging organizations and social learning. *Journal of environmental management*, 90(5), 1692-1702. <https://doi.org/10.1016/j.jenvman.2008.12.001>
- Berkes, F. (2017). Environmental governance for the anthropocene? Social-ecological systems, resilience, and collaborative learning. *Sustainability*, 9(7), 1232. <https://doi.org/10.3390/su9071232>
- Berman, R., Quinn, C., & Paavola, J. (2012). The role of institutions in the transformation of coping capacity to sustainable adaptive capacity. *Environmental Development*, 2, 86-100. <https://doi.org/10.1016/j.envdev.2012.03.017>
- Bos, J. J., Brown, R. R., & Farrelly, M. A. (2013). A design framework for creating social learning situations. *Global Environmental Change*, 23(2), 398-412. <https://doi.org/10.1016/j.gloenvcha.2012.12.003>
- Brunner, R., Steelman, T. A., Coe-Juell, L., Cromley, C. M., Edwards, C. M., & Tucker, D. W. (2005). *Adaptive governance: integrating science, policy, and decision making*. Columbia University Press.
- Byrne, J. M., Pattavina, A., & Taxman, F. S. (2015). International trends in prison upsizing and downsizing: In search of evidence of a global rehabilitation revolution. *Victims & Offenders*, 10(4), 420-451. <https://doi.org/10.1080/15564886.2015.1078186>
- Chaffin, B. C., Gosnell, H., & Cosens, B. A. (2014). A decade of adaptive governance scholarship: Synthesis and future directions. *Ecology and Society*, 19(3), 56. <https://doi.org/10.5751/ES-06824-190356>

- Cleaver, F., & Whaley, L. (2018). Understanding process, power, and meaning in adaptive governance. *Ecology and Society*, 23(2).
- Cullen, F. T., & Gendreau, P. (2000). Assessing correctional rehabilitation: Policy, practice, and prospects. *Criminal Justice*, 3(109-175).
- Day, A., Daffern, M., Woldgabreal, Y., & Currie-Powell, N. (2022). Rehabilitative progress in prison: Some challenges and possibilities. *Aggression and violent behavior*, 67, 101783. <https://doi.org/10.1016/j.avb.2022.101783>
- Dietz, T., Ostrom, E., & Stern, P. C. (2003). The struggle to govern the commons. *Science*, 302(5652), 1907–1912. <https://doi.org/10.1126/science.1091015>
- Draine, J., Wolff, N., Jacoby, J. E., Hartwell, S., & Duclos, C. (2005). Understanding community re-entry of former prisoners with mental illness: a conceptual model to guide new research. *Behavioral sciences & the law*, 23(5), 689-707. <https://doi.org/10.1002/bsl.642>
- Fathoni, A. R. (2025). Efektivitas Program Rehabilitasi Narapidana dalam Kebijakan Masyarakat di Indonesia. *Journal of Correctional Management*, 2(1), 10-22. <https://doi.org/10.52472/jcm.v2i1.530>
- Folke, C., Hahn, T., Olsson, P., & Norberg, J. (2005). Adaptive governance of social-ecological systems. *Annual Review of Environment and Resources*, 30(1), 441–473. <https://doi.org/10.1146/annurev.energy.30.050504.144511>
- Foxon, T. J., Reed, M. S., & Stringer, L. C. (2009). Governing long-term social–ecological change: what can the adaptive management and transition management approaches learn from each other?. *Environmental Policy and Governance*, 19(1), 3-20. <https://doi.org/10.1002/eet.496>
- Ganapathy, N. (2018). Rehabilitation, reintegration and recidivism: A theoretical and methodological reflection. *Asia Pacific Journal of Social Work and Development*, 28(3), 154-167. <https://doi.org/10.1080/02185385.2018.1501416>
- Goodman, J., & Hansen, S. (2005). Career development and guidance programs across cultures: The gap between policies and practices. *The Career Development Quarterly*, 54(1), 57-65. <https://doi.org/10.1002/j.2161-0045.2005.tb00141.x>
- Gupta, J., Termeer, C., Klostermann, J., Meijerink, S., Van den Brink, M., Jong, P., ... & Bergsma, E. (2010). The adaptive capacity wheel: a method to assess the inherent characteristics of institutions to enable the adaptive capacity of society. *Environmental science & policy*, 13(6), 459-471. <https://doi.org/10.1016/j.envsci.2010.05.006>
- Holling, C. S. (1973). Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics*, 4(1), 1–23. <https://doi.org/10.1146/annurev.es.04.110173.000245>
- Holling, C. S. (2001). Understanding the complexity of economic, ecological, and social systems. *Ecosystems*, 4(5), 390–405. <https://doi.org/10.1007/s10021-001-0101-5>
- Hurlbert, M. A. (2017). Adaptive governance (management, Co-management and anticipatory). In *Adaptive Governance of Disaster: Drought and Flood in Rural Areas* (pp. 21-48). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-57801-9_2
- Ison, R. L., Collins, K. B., & Wallis, P. J. (2015). Institutionalising social learning: Towards systemic and adaptive governance. *Environmental Science & Policy*, 53, 105-117. <https://doi.org/10.1016/j.envsci.2014.11.002>
- Jęczeń, J., Zaborowska, A., & Gagacka, M. (2026). Benefits and Barriers to Employing Former Prisoners as Street Outreach Workers: The Perspectives of Social Welfare and Prison

- System Professionals (The Polish Case). *Social Sciences*, 15(3), 158. <https://doi.org/10.3390/socsci15030158>
- Keene, D. E., Smoyer, A. B., & Blankenship, K. M. (2018). Stigma, housing and identity after prison. *The Sociological Review*, 66(4), 799-815. <https://doi.org/10.1177/0038026118777447>
- Lai-Yeung, S. W. C. (2014). The need for guidance and counselling training for teachers. *Procedia-Social and Behavioral Sciences*, 113, 36-43. <https://doi.org/10.1016/j.sbspro.2014.01.008>
- Lam, S. K., & Hui, E. K. (2010). Factors affecting the involvement of teachers in guidance and counselling as a whole-school approach. *British Journal of Guidance & Counselling*, 38(2), 219-234. <https://doi.org/10.1080/03069881003674962>
- McCarthy, J. (2004). The skills, training and qualifications of guidance workers. *International Journal for Educational and Vocational Guidance*, 4(2), 159-178. <https://doi.org/10.1007/s10775-005-1024-z>
- Ngabonziza, O., & Singh, S. (2012). Offender reintegration programme and its role in reducing recidivism: Exploring perceptions of the effectiveness of tough enough programme. *Acta Criminologica: African Journal of Criminology & Victimology*, 2012(sed-2), 87-102.
- Omoruyi, O. L., & Agbontaen, E. S. I. (2024). Nature and Effectiveness of Rehabilitation Programmes in Preventing Inmates' Recidivism in Nigeria Correctional Service. *NIU Journal of social sciences*, 10(2), 217-227. <https://doi.org/10.58709/niujs.v10i2.1885>
- Ostrom, E. (2010). Polycentric systems for coping with collective action and global environmental change. *Global Environmental Change*, 20(4), 550-557. <https://doi.org/10.1016/j.gloenvcha.2010.07.004>
- Pahl-Wostl, C. (2009). A conceptual framework for analysing adaptive capacity and multi-level learning processes in resource governance regimes. *Global environmental change*, 19(3), 354-365. <https://doi.org/10.1016/j.gloenvcha.2009.06.001>
- Pamio, F., Buzzao, G., Erculiani, V., Achard, P. O., Rullani, F., & Mongelli, L. (2026). Work integration in prisons: A taxonomy of social cooperatives. In *Global Cooperative Economics and Movements* (pp. 537-554). London: Routledge. <https://doi.org/10.4324/9781003534006>
- Parape, M. F. (2023). *Pelaksanaan Rehabilitasi Terhadap Warga Binaan Masyarakat Narkotika di Lembaga Masyarakat Narkotika Kelas IIA Sungguminasa* (Doctoral dissertation, Universitas Hasanuddin).
- Pelling, M., & High, C. (2005). Understanding adaptation: what can social capital offer assessments of adaptive capacity?. *Global environmental change*, 15(4), 308-319. <https://doi.org/10.1016/j.gloenvcha.2005.02.001>
- Phelps, M. S. (2011). Rehabilitation in the punitive era: The gap between rhetoric and reality in US prison programs. *Law & society review*, 45(1), 33-68. <https://doi.org/10.1111/j.1540-5893.2011.00427.x>
- Radtke, J. (2025). Understanding the complexity of governing energy transitions: introducing an integrated approach of policy and transition perspectives. *Environmental Policy and Governance*, 35(4), 595-614. <https://doi.org/10.1002/eet.2158>
- Rahman, M. M., & Islam, M. S. (2024). Institutional dynamics and climate adaptation: unveiling the challenges and opportunities in coastal Bangladesh. *SN Social Sciences*, 4(8), 150. <https://doi.org/10.1007/s43545-024-00951-4>

- Razali, A., Mustaffa, J., & Kamsani, S. R. (2021). Reducing recidivism among former offenders: Strategies to increase success in social reintegration. *Turkish Online Journal of Qualitative Inquiry*, 12(3).
- Robinson, L. W., & Berkes, F. (2011). Multi-level participation for building adaptive capacity: Formal agency-community interactions in northern Kenya. *Global environmental change*, 21(4), 1185-1194. <https://doi.org/10.1016/j.gloenvcha.2011.07.012>
- Shteynberg, G., & Apfelbaum, E. P. (2013). The power of shared experience: Simultaneous observation with similar others facilitates social learning. *Social Psychological and Personality Science*, 4(6), 738-744. <https://doi.org/10.1177/1948550613479807>
- Taye, C. E. (2020). The Role of Prison Service in Reducing Re-Offence: Challenges Of (Re)-Integration in Illu Abba Bor and Bunno Bedelle Zones Prisons, Ethiopia. *Annals of the University of Craiova for Journalism, Communication and Management*, 6(1), 105-149.
- Trivedi, C., & Ray, S. M. (2024). Equity, empowerment, and social justice: Social entrepreneurship for formerly incarcerated individuals. *New Horizons in Adult Education and Human Resource Development*, 36(1), 48-64. <https://doi.org/10.1177/19394225231223388>
- Turner, J. (2013). Disciplinary engagements with prisons, prisoners and the penal system. *Geography Compass*, 7(1), 35-45. <https://doi.org/10.1111/gec3.12014>
- Voß, J. P., & Bornemann, B. (2011). The politics of reflexive governance: challenges for designing adaptive management and transition management. *Ecology and society*, 16(2).