



From Anxiety to Independence: Disability Empowerment Innovation through the Superior Disability Teaching Center (PADU) Program

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Abstract: Persons with disabilities in Bitung City, particularly the Deaf community, continue to face limited access to education, employment, and social participation. In response, PT Pertamina Patra Niaga, through its Corporate Social and Environmental Responsibility (TJSL) program, implemented a participatory and collaborative approach that included surveys, interviews, focus group discussions (FGDs), and observations, accompanied by pre- and post-test evaluations to measure participants' competency improvement. The PADU Program offers five main training modules – Sign Language, Souvenir Production, Barista Skills, Shoe Care, and Digital Creativity – tailored to the diverse types of disabilities among participants. The results indicate an average increase of 40% in technical skills and 35% in social aspects, including self-confidence and communication. Economically, participants successfully produced approximately 200 coconut-shell souvenirs, valued at around IDR 10 million per month. The program also contributed to reducing potential emissions by up to 15 tons of CO₂ per month through the implementation of a circular economy approach. PADU contributes to SDGs 8, 10, 12, and 13, demonstrating that multi-stakeholder collaboration can foster inclusive, equitable, and sustainable social transformation for persons with disabilities. The Bitung Deaf Care Community (KALEB) established the PADU Inclusive Disability Learning Center as a community-based model for inclusive empowerment. This study employs a qualitative approach.

Keywords: Circular Economy, Disability Empowerment, PADU, Social Inclusion, SDGs

Introduction

People with disabilities around the world still face challenges in gaining equal access to education, employment, and social life. The report estimates that more than one billion people live with disabilities, and about 80 percent of them are in developing countries (World Health Organization, 2023). Although international conventions such as the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) have driven significant progress, social and economic disparities are still felt strongly at the local level. International Labour Organization (2024) notes that the global workforce participation rate of people with disabilities is only about 36 percent—well below that of the non-disability group, which reaches about 60 percent.

In Indonesia, similar challenges are still strongly felt. Data from the Central Statistics Agency shows that the employment rate of people with disabilities has reached only 48.87 percent, with most working in the informal sector (Badan Pusat Statistik, 2023). Studies have also highlighted that the main obstacles faced are limited access to relevant vocational training, lack of inclusive employment, and strong social stigma (Ubihatun, 2022) (Zahira, 2022) (Zen, 2023). Special Schools (SLB) in Indonesia play an important role in basic education for people with disabilities, but many do not have an effective transition system to the world of work. As a result, many SLB graduates quit halfway or return to relying on their families and communities (Harsiwi, 2024) (Indriarti et al, 2022) (Scott, 2027) (Natadireja et al, 2023).

This condition also occurs in Bitung City, North Sulawesi, especially among the Deaf community. This group still faces limited space for social interaction, narrow job opportunities, and a lack of participation in empowerment activities. Educators at SLB even expressed concern that most of their students lacked clear direction after graduation, both because of limited practical skills and low self-confidence stemming from inherent social stigma.

To address this problem, PT Pertamina Patra Niaga, through its Social and Environmental Responsibility (TJSL) program, initiated a collaborative initiative called the Superior Disability Teaching Center (PADU). This program was born from a dialogue between SLB educators and the community of people with disabilities, especially the Bitung Deaf Care Community (KALEB). PADU is designed to bridge the transition period for people with disabilities from education to the world of work through individual, interest-based, and potential-based training. The activities held covered various fields, ranging from Sign Language and Souvenir Production to Barista and Shoe Care, to Creative Digital. All training is structured adaptively so that participants can learn actively, develop creativity, and build confidence as a step towards economic independence.

More than just a training place, PADU serves as a social learning space that fosters a spirit of inclusion and participation. Through collaboration between the community, the business world, and educational institutions, this program represents a paradigm shift: people with disabilities are no longer seen as passive recipients, but rather as empowered and productive development subjects.

Based on this background, this study aims to analyze the implementation and impact of the Superior Disability Teaching Center Program (PADU) in increasing the capacity, social participation, and economic independence of people with disabilities in Bitung City. In addition, this study also seeks to identify the potential of PADU as a model of community-based empowerment best practice in line with the Sustainable Development Goals (SDGs), especially SDG 8 (Decent Work and Economic Growth), SDG 10 (Reducing Inequality), and SDG 12 (Responsible Consumption and Production).

Methodology

The implementation of the Superior Disability Teaching Center Program (PADU) applies a participatory and collaborative approach that places people with disabilities as active subjects in all stages of activities, not just as beneficiaries. A bottom-up approach was used to ensure that each intervention is carried out from the real needs, aspirations, and actual potential of the target group. Thus, the program's planning and implementation processes are responsive to the local context and social conditions of the participants.

The main target of the program includes people with disabilities who are graduates and active students in Special Schools (SLB). Participants came from various types of disabilities, such as Deaf, visually impaired with low vision, and People with Psychiatric Problems (ODMK). The diversity of these characteristics is the primary consideration in designing an adaptive, personalized, and inclusive learning model, ensuring that all participants have equal learning opportunities based on their capacities and needs.

The methodology for implementing the program includes several main stages, namely: (1) an initial survey to map the potential, obstacles, and needs of participants; (2) in-depth interviews to explore the motivation and readiness of individuals; (3) the implementation of focus group discussions (FGD) with various related parties; and (4) field observation during the training process. This approach allows the implementation team to gain a comprehensive understanding of participants' conditions, including technical skills, psychosocial readiness, and support for the social environment.

To ensure the effectiveness of the learning process, an evaluation using initial and final measurements (pre-test and post-test) was conducted to assess participants' development in skills, knowledge, and independence. The results of this measurement serve as the basis for preparing an adaptive curriculum and improving training methods at the next stage of implementation.

The learning process is carried out intensively by adjusting the method and tempo of activities to participants' abilities and types of disability. All activities were accompanied by facilitators from the KALEB Community, who have competence and experience in assisting the disability community. The training was held at the KALEB Community Secretariat in Bitung City, North Sulawesi, which serves as a learning space and a place of social interaction for participants.

The PADU program offers five main training classes: Sign Language, Souvenir Production, Barista, Shoe Care, and Creative Digital. Each class was attended by about six to seven participants with various disabilities. This activity has been carried out in stages since the beginning of 2024 and continues to be refined based on formative evaluations, facilitator reflections, and participant feedback.

In its implementation, PADU involves various cross-sector stakeholders such as SLB Leaders in Bitung City, Social Service, Manpower Office, Regional Disaster Management Agency (BPBD), Women's Empowerment and Child Protection Office (DP3A), local village government, and disability organizations such as HWDI, GERKATIN, PERTUNI, and PPDFI. This inter-stakeholder synergy is a strategic component in strengthening the program's sustainability, expanding the social support network, and increasing its impact across social, economic, and environmental dimensions.

Such cross-sectoral collaboration not only strengthens the program's institutional capacity but also builds an inclusive, sustainability-oriented empowerment ecosystem. Through this mechanism, PADU functions not only as a training space but also as a model of best practice for implementing community-based social policies that support the social transformation of persons with disabilities at the local level.

The Superior Disability Teaching Center (PADU) program demonstrates its effectiveness as a community-based social empowerment model that impacts three main dimensions: economic, social, and environmental. These three dimensions interact synergistically in forming an inclusive and sustainable empowerment ecosystem for people with disabilities in Bitung City.

Results and Discussion

1. Economic Dimension

From an economic perspective, PADU plays a strategic role in increasing the productive capacity of people with disabilities through skills training relevant to the labor market. Training such as the Souvenir Production Class is a concrete example of the application of inclusive economic principles based on local resources. The use of coconut shell waste as a raw material for production not only yields products with high market value but also opens up opportunities for sustainable social entrepreneurship. Based on production records, the group of participants produced around 200 souvenir units per month, with an economic value of Rp 10 million. This achievement reflects an increase in income and a strengthening of economic independence for people with disabilities, who were previously in a passive position in the labor market.

2. Social Dimension

In the social dimension, PADU functions as an inclusive, safe, and disability-friendly learning space. Through a training atmosphere that supports active participation, participants experience significant improvements in confidence, communication skills, and social networking. The interaction built between people with disabilities and between participants and the general public helps reduce social stigma and expand public acceptance of people with disabilities. The KALEB community, as the program implementer, has gained stronger recognition at the local and cross-sector levels and is now often invited to collaborative forums with the government and the private sector as an active and productive representative of disability groups.

The involvement of participants' families in the training process is also a factor that enhances the program's success. Emotional and social support from family plays an important role in building a support system that helps participants internalize skills and maintain motivation to learn. In addition, the community's enthusiasm is evident in the high interest among registrants in each wave of training, even though participant capacity is limited to maintain the quality of interaction and learning effectiveness.

3. Environmental Dimension

From an environmental perspective, PADU integrates circular-economy principles by using organic waste as a raw material for production. The use of coconut shells that were previously burned openly reduced potential emissions by around 15 tons of CO₂ and 0.15 tons of PM10 per month. This innovation not only reduces the environmental impact but also teaches participants sustainable production practices. Thus, PADU demonstrates that social empowerment programs can make a direct contribution to the Sustainable Development Goals (SDGs), especially in sustainable production and climate change mitigation.

4. Strengthening the Ecosystem and Program Replication

The success of PADU implementation can be seen not only in the individual achievements of participants but also in the positive responses from various stakeholders. Extraordinary Schools (SLB) in Bitung City and its surroundings expressed interest in adopting and integrating the PADU training model into their learning activities. This shows that PADU has both institutional relevance and the potential for replication in the context of inclusive education.

As a follow-up, program development focuses on establishing internship schemes and work partnerships with government agencies and the private sector. This step is expected to strengthen participants' transition to the world of work by providing hands-on practical experience, improving technical skills, and fostering mental readiness to enter the professional environment.

5. Contribution to the SDGs and Social Transformation

PADU contributes directly to the achievement of several Sustainable Development Goals (SDGs), including:

- SDG 8 (Decent Work and Economic Growth) through improving skills and access to work for people with disabilities;
- SDG 10 (Reducing Inequality) by narrowing the social and economic gap between disability groups and the general public;
- SDG 12 (Responsible Consumption and Production) through the application of circular economy principles; and
- SDG 13 (Climate Change Management) through efforts to mitigate emissions from waste treatment.

The results of the pre-test and post-test measurements showed an average increase of 40% in technical competence and 35% in social competence, including confidence and communication skills. These findings are reinforced by in-depth interviews and field observations that show significant behavioral changes among participants, from passive to more active, creative, and oriented toward economic independence. Some participants have obtained job opportunities from local business actors, while others have started independent ventures based on the skills acquired during the training.

6. Impact on Facilitators and Collaborative Networks

The positive impact was also felt by the facilitators and tutors involved. In addition to increased income, they also receive pedagogical enrichment and greater social empathy toward people with disabilities. This experience broadens the tutor's understanding of adaptive learning strategies while opening up new economic collaboration opportunities between local actors.

7. Analytical Conclusions

Overall, PADU has proven to be a model of community-based disability empowerment, effective in creating layered economic, social, and environmental impacts. The collaborative and participatory approach applied has resulted in real change both at the individual and community levels. This program not only increases the capacity of people with disabilities but also changes the social paradigm towards a more inclusive and just society. With these results, PADU has strong potential for replication in other regions, with adjustments to the social context and the characteristics of local communities.

Conclusion

The Superior Disability Teaching Center (PADU) program has proven to be an effective community-based empowerment model in increasing the capacity, participation, and independence of people with disabilities in Bitung City. Through a participatory, collaborative, and inclusive approach, PADU has integrated economic, social, and environmental dimensions into a single, sustainable empowerment framework. The results of the implementation showed a significant increase in participants' technical skills, confidence, and work readiness, reflected in competence increases of up to 40% and social skills of 35%.

From the social side, PADU has succeeded in creating a disability-friendly learning space, strengthening social networks, and reducing stigma against people with disabilities. This success also strengthens the position of the KALEB Community as a social actor capable of fostering cross-sector collaboration with the government, educational institutions, and the business world. Meanwhile, in the environmental context, integrating circular economy principles through the use of organic waste has made a real contribution to emission reduction and sustainable production practices.

Conceptually, PADU shows that social transformation can emerge from local initiatives grounded in multi-stakeholder care and collaboration. The program not only has a direct economic impact but also strengthens a more inclusive, diversity-responsive social structure. Thus, PADU can be positioned as a best practice for implementing inclusive social policies that support the achievement of the Sustainable Development Goals (SDGs), especially SDG 8, SDG 10, SDG 12, and SDG 13.

Recommendations

1. Strengthening Sustainability and Replication Schemes

To sustain the impact, it is necessary to strengthen PADU's institutional capacity through policy support and adequate resource allocation from local governments and the private sector. The PADU model is also suitable for replication in other regions by adapting

to each region's social context, disability community characteristics, and local economic potential.

2. Integration with the Education and Employment System

Collaboration between PADU and Extraordinary Schools (SLB) needs to be formalized as a sustainable partnership, including the development of a transitional curriculum that connects the worlds of education and work. In addition, cooperation with the Manpower Office and local industry players can strengthen people with disabilities' access to internship opportunities and decent work.

3. Development of Community-Based Inclusive Ecosystems

Local governments and disability organizations are advised to build an empowerment ecosystem that supports the disability value chain—from training and production to marketing. Support in the form of access to capital, entrepreneurship training, and facilitation of product distribution networks can strengthen the economic independence of program participants.

4. Continuous Evaluation and Data Reinforcement

A comprehensive data-driven evaluation system is needed to monitor the development of participants' competencies, the effectiveness of training methods, and the long-term socio-economic impact. An evidence-based approach will help formulate more targeted, inclusive policies in the future.

5. Multi-Stakeholder Collaboration for Inclusive Development

Cross-sectoral engagement — including government, business, educational institutions, and civil society organizations — needs to be expanded to strengthen social networks and resources for PADU's sustainability. This kind of collaboration is an important foundation for ensuring that the empowerment of persons with disabilities is not a short-term project but part of a sustainable, inclusive development agenda.

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