

The World Bank - Environment and Social Framework: Expectations and Realities of Implementing Environmental and Social Safeguards in Infrastructure Projects in Indonesia



Dadang Mohamad¹, Heru Bayuaji Sanggoro^{2*}, Iwan Rustendi², Susatyo Adhi Pramono²

¹ Department of Construction Engineering Education, Faculty of Technology and Vocational Education, the Indonesia Education University, West Java 40154, Indonesia

² Department of Civil Engineering, Faculty of Engineering, Wijayakusuma University, Central Java 53152, Indonesia

Corresponding Author Email: bayu.sanggoro@unwiku.ac.id

<https://doi.org/10.18280/ijstdp.170122>

ABSTRACT

Received: 18 December 2021

Accepted: 28 January 2022

Keywords:

ESF, importance-performance analysis, project social conflict, climate disaster

Climate change is a result of the environmental degradation due to human activities and has the potential to become a climate disaster that threatens human life and causes social problems. Through the ESF, World Bank expect that infrastructure development can go hand in hand with environmental and social safeguards. To obtain information about the level of satisfaction of the performance of this ESF indicator, this study was conducted using the Importance Performance Analysis method to compare the expectations and the realities of the performance of the critical ESF indicators in Indonesia. The study involved 80 respondents of infrastructure project actors in Indonesia and found that 40% of the ESF indicators had performed well and met their expectations. Meanwhile, three indicators were inefficient or the performance exceeded the expectations, namely ESS6.3, ESS2.3 and ESS6.1. ESS7.2 and ESS8.1. This study is expected to contribute to developing a standardized and integrated ESF in Indonesia. Furthermore, the results of this study can be used as a consideration in further research, especially the use of the ESF variables as a moderator in modeling project social conflict.

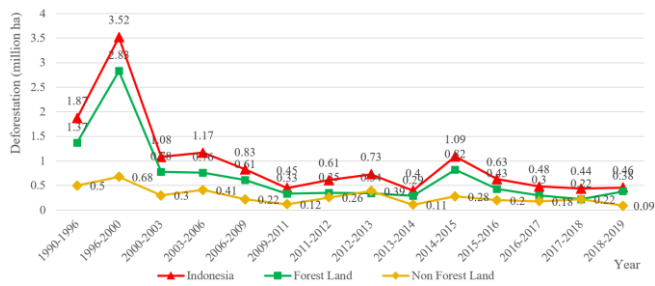
1. INTRODUCTION

Climate change in recent years has prompted many countries to find solutions and "defence" against the dangers that threaten the future of the earth. Since 1994, the United Nations has initiated the leaders of countries in the world to reduce the impact of climate change due to human activities. The COP26 Climate Change Summit in Glasgow resulted in several important agreements related to climate change management, namely by halving greenhouse gas emissions due to human activities. Member countries also agreed that one of the concrete steps is to significantly reduce deforestation, including Indonesia (Figure 1).

The United Nations stated that the impact of climate change is a climate disaster that will disrupt human life and the earth's ecosystem in the future. This condition is related to the issue of environmental and social safeguards which has been reformed by the World Bank [1] in the form of the Environment and Social Framework (ESF). Jokubauskaite [2] stated that the ESF resulted from a process of discussion over the last six years and was the largest internal reform in the last decade. This ESF adopts several relevant international laws, such as protection of the environment, workers, and human rights. However, the implementation of the ESF as a new standard imposed by the World Bank is still a debate in the legitimacy of other organizations and international communities [3, 4]. According to Dann and Riegner [5], the World Bank's ESF is a reflection of the context of the latest developing geo-political conditions. The findings above reveal that the quality and capability of the ESF as a new evolution of environmental and social protection framework as well as a

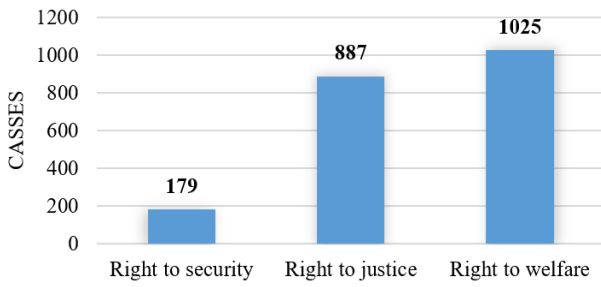
consequence of development must be tested based on the legal conditions of each country. This is important to obtain optimal results from the implementation of the most relevant protection framework to the socio-cultural conditions of each country.

Debates and differences in the framework and concept of protection also occur in the implementation of environmental and social safeguards in Indonesia. Siregar and Utomo [6] stated that the concept of protection in Indonesia is regulated through the mandatory implementation of the Environmental Impact Assessment (EIA) or AMDAL ((Indonesian term for Environmental Impact Assessment, EIA). According to them, AMDAL/EIA has a fundamental difference with the ESIA concept, where AMDAL treats the affected community as the object of the resulting impact. Based on its history, Dhiksawan et al. [7] explained that the AMDAL concept in Indonesia began with the issuance of the Resolution of the People's Consultative Assembly No IV/1973 which included environmental considerations in national development. However, AMDAL only focuses on the environment specifically, while social impacts have not become an integral part of it. In fact, managing the social impacts of the development process can reduce community opposition and gain support from local communities, NGOs, and the government [8]. Obidzinski et al. [9] revealed that "development" will have negative and positive impacts on environmental and social aspects. The potential damage and impacts on the environment and society both need to be measured and mitigated so that the development process truly provides sustainable benefits for humans and the natural environment.

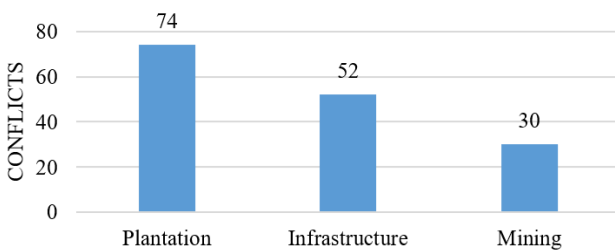


Source: Data and Information Indonesian Forestry Thematic Mapping, Ministry of Environment and Forestry Republic of Indonesia 2020

Figure 1. Conditions of social conflict due to development in Indonesia in 2020



(a) Reported cases on human rights violations



(b) Social conflicts based on business sector

Source: (a) Indonesian National Human Rights Commission Report 2020; (b) Consortium for Agrarian Reform Report 2020.

Figure 2. Indonesia deforestation rates 1990-2019

Therefore, Mares [10] stated that the ESF concept is also an effort to avoid human rights violations as the “residual impact” of economic and development activities that intentionally ignore environmental and social impacts. This opinion is relevant to the condition of conflict in Indonesia which remains high based on data from the Indonesian National Human Rights Commission (Komnas HAM) and the Consortium for Agrarian Reform (KPA). Throughout 2020, there were 1,025 reported cases on human rights violations on welfare (mostly are infrastructure development impacts). This finding is also corroborated by the KPA report, where the infrastructure sector occupies the second highest position as a cause of social conflict with 52 out of 207 conflict cases in 2020 (Figure 2).

Previous studies have provided a wealth of information on the concepts of environmental and social safeguards in development in detail in many countries. However, a study on the effectiveness of the World Bank's EFS has not been conducted, particularly in Indonesia. Meanwhile, the results of the ESF performance evaluation are needed to determine development policies that are friendly to environmental and social impacts. In particular, as suggested by Sanggoro et al. [11], Indonesia does not even have an integrated standard in protecting the environmental and social impacts of development.

Therefore, this study is intended to examine the extent to which infrastructure project actors in Indonesia have implemented integrated environmental and social safeguards to reduce the potential impact of environmental and social conflicts with local communities based on the World Bank's ESF standards. In addition, this study also aims to measure the important attributes of the environmental and social safeguards framework that can help reduce the potential for project social conflict by using the Importance Performance Analysis method. The results of this study are hoped to provide an overview of the conditions of environmental and social impact management of infrastructure projects in Indonesia to be used as a basis for developing standards of an integrated environmental and social project management framework.

2. LITERATURE REVIEW

The World Bank's environmental and social framework is a strategic idea in protecting the world's sustainability in terms of its people and resources. The World Bank stated that these efforts include ensuring social inclusion and limiting the economic burden that will be passed on to future generations. These two things are the concept of sustainability which has become the main focus of development in the last few decades which emphasizes the importance of inclusive economic growth [1, 12]. The consequence of the concept of sustainability is a full commitment to environmental conservation efforts including stronger collective concrete actions in mitigating and adapting to climate change to reduce the impact on the existence of human populations and the economy in the most vulnerable communities. Another important consequence of the concept of sustainability is the aspect of development and social inclusion. Social inclusion should include empowering everyone to participate in and benefit from the development process [1, 13]. In simple terms, inclusion is a concept of equality and non-discrimination from all classes of society to gain access to services and benefits from development processes and outcomes [14].

Efforts to achieve sustainable development and inclusive growth require an integrated framework capable of synergizing growth and its environmental and social impacts. Through the new safeguard policy reform, the World Bank offers to look at environmental and social impacts in a new paradigm in the form of the ESF [5]. The ten clauses in the World Bank's environmental and social safeguards policy reform are:

- (1) ESS1 Assessment and Management of Environmental and Social Risks and Impacts;
- (2) ESS2 Labour and Working Conditions;
- (3) ESS3 Resource Efficiency and Pollution Prevention and Management;
- (4) ESS4 Community Health and Safety;
- (5) ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement;
- (6) ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources;
- (7) ESS7 Indigenous Peoples;
- (8) ESS8 Cultural Heritage;
- (9) ESS9 Financial Intermediaries; and
- (10) ESS10 Stakeholder Engagement & Information Disclosure.

However, Jokubauskaite [2] also emphasized that the implementation of the ESF still triggers debate about the autonomous rights of borrowing countries. Good synergy

between the ESF as an international law and the domestic law system is very much needed to achieve the goal of justice in development. Furthermore, Dan and Riegner [5] also stated that the ESF is the evolution of a new global order which is a compromise in international law within the aspects of global governance by civil society and a more competitive multilateralism. However, the comparison between “the old safeguards” and “the new safeguards” needs to be analyzed further in the context of development governance.

Based on the aforementioned opinions above, the condition in Indonesia is suitable to be conducted further analysis of the EIA concept. The absence of an integrated and standardized environmental and social protection framework as well as several law systems that still refer to the regulations before the implementation of the World Bank's ESF are factual conditions that need further study [6, 11].

Referring to the Ministry of Finance of the Republic of Indonesia [15] and the Ministry of Environment and Forestry of the Republic of Indonesia [16], efforts to minimize environmental and social impacts due to the development carried out by the Government of Indonesia are in line with the objectives of the World Bank's ESF. This can be seen from several laws and regulations that have been enacted by the Government of Indonesia, including:

(1) Law No. 32/2009 concerning Environmental Protection and Management; No. 2/2012 concerning Public Land Acquisition; No. 7/2012 concerning Social Conflict Handling; No. 5/1990 concerning Conservation of Biological Resources and Their Ecosystems; No. 11/2010 concerning Cultural Conservation.

(2) Government Regulation No.6/1995 concerning Crop

Protection; No. 27/2012 concerning Environmental Permits; No. 2/2015 concerning Social Conflict Handling; No. 37/2010 concerning Dams.

(3) Presidential Decree No. 71/2012 and No. 40/2014 concerning Land Acquisition for Public Interest; No. 56/2017 Social Community Impact Handling.

However, Indonesia's regulations are still sectoral and some were issued before the new ESF was launched by the World Bank. Thus, in order to test the effectiveness of ESF as a new concept of environmental protection in the world development governance, it is necessary to study its conformity with applicable domestic laws. Thus, the results of this study is expected to contribute to the evaluation of the effectiveness of the ESF as an evolution of the protection framework that is in line with the domestic legal system in Indonesia or vice versa in an effort to create development justice.

3. MATERIALS AND METHODS

3.1 Identification of factors of environmental and social framework

The formulation of these variables was carried out in two stages, namely: (1) compiling critical indicators of the ESF variables in accordance with environmental and social laws and regulations in Indonesia, and (2) conducting an analysis of the important performance of the project's environmental and social framework based on the perceptions of infrastructure project actors in Indonesia. The identification of critical indicators in this study as shown in Table 1.

Table 1. Variables and critical indicators of ESF

Variable	Relevant Indonesian regulation	Critical indicator
ESS1: Assessment and Management of Environmental and Social Risks and Impacts	1. UU No. 32/2009; 2. UU No. 7/2012; 3. PerMen LH No. 16/2012; 4. PerMen PU No.10/PRT/M/2008; 5. KepMen LH No. 45/2005	ESS1.1 AMDAL/EIA documents or the like
		ESS1.2 Project commitment to environmental and social sustainability
		ESS1.3 PIC on environmental & social risk management
		ESS1.4 Procedures for monitoring and reporting on environmental and social risks and impacts
		ESS2.1 Equal & non-discriminatory employment rules
ESS2: Labour and Working Conditions	1. UU No. 7/2012; 2. UU No. 13/2003; 3. PP No. 35/2021	ESS2.2 Employment rules on child labor, min. age, & forced labor
		ESS2.3 Fair & equal employee complaint mechanism
		ESS2.4 OHS policy procedures in accordance with the laws and regulations
		ESS2.5 Staffing policy on engagement of local workers
		ESS3.1 Periodic testing of ambient air quality
ESS3: Resource Efficiency and Pollution Prevention and Management	1. UU No. 32/2009; 2. UU No. 5/1990; 3. PP No. 27/2012; 4. PerMen LH No. 16/2012; 5. PerMen PU No.10/PRT/M/2008	ESS3.2 Procedures for handling, storing, and disposing of hazardous and non-hazardous waste
		ESS3.3 Procedures for handling, storing, and using chemicals and hazardous materials
		ESS3.4 Procedures for the use and management of pesticide or similar substances
		ESS4.1 Occupational safety and health procedures (SOP, work instructions, and other OSH documents)
		ESS4.2 Traffic Management document and other documents regarding traffic disturbance permit
ESS4: Community Health and Safety	1. UU No. 32/2009; 2. UU No. 7/2012; 3. PP No. 27/2012; 4. Perpres No. 56/2017; 5. PerMen LH No. 16/2012; 6. PerMen PU No.10/PRT/M/2008	ESS4.3 Procedures for handling health problems due to project activities such as first level health facility or referral hospital
		ESS4.4 Emergency response handling policies such as having a certified OHS organization
		ESS4.5 Sufficient and certified security personnel
		ESS5.1 The process of land acquisition, access restrictions, and resettlement of project-affected settlements is carried out on a bipartite basis
		ESS5.2 Identification of affected communities
ESS5: Land Acquisition, Restrictions on Land	1. UU No 2/2012; 2. UU No. 7/2012; 3. Perpres No. 40/2014; 4. Perpres No. 56/2017	

Variable	Relevant Indonesian regulation	Critical indicator
Use and Involuntary Resettlement		ESS5.3 Humane relocation, with guaranteed continuity of livelihoods, ease of adaptation to economic & social access to new environments ESS5.4 Initial mitigation of potential conflicts or grievances in affected communities ESS5.5 Administrative & legal procedures of affected land ESS6.1 Guidelines for preventing pollution and disturbance to surrounding ecosystems ESS6.2 CSR including replanting activities of affected trees, breeding efforts of local endemic flora and fauna, etc. ESS6.3 Project commitment to maintaining biodiversity in the project vicinity ESS6.4 Procedures for the placement and use of project equipment that does not cause disturbance to the ecology and surrounding ecosystems ESS7.1 Identification of the presence of indigenous and tribal peoples ESS7.2 Respect for traditional symbols and ceremonies ESS7.3 Procedure for transfer/use of customary rights and property ESS7.4 Indigenous peoples' consent and permission ESS8.1 Identification of the presence of cultural heritage ESS8.2 Procedures for finding objects of cultural heritage ESS8.3 Procedures for securing and protecting the findings of objects that are suspected to be protected cultural heritage ESS8.4 Policies for the preservation of intangible cultural heritage such as local traditional arts, etc. ESS9.1 Financing guarantee from a bank or legal financial institution ESS9.2 Insurance against project failure, occupational accidents, health, and employment ESS9.3 Company's financial capacity to finance the project ESS9.4 Project payment system ESS10.1 Community engagement policy that clearly covers the subject and object of engagement as well as the scope of engagement ESS10.2 Communicative project information tools ESS10.3 Qualified public relations officer ESS10.4 Bipartite organization between project and stakeholders
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	1. UU No. 32/2009; 2. UU No. 5/1990; 3. PP No.6/1995; 4. PP No. 27/2012	
ESS7: Indigenous Peoples	1. UU No. 32/2009; 2. UU No. 6/2014	
ESS8: Cultural Heritage	1. UU No. 5/1992; 2. UU No. 11/2010	
ESS9: Financial Intermediaries	1. Perpres No. 12/2021	
ESS10: Stakeholder Engagement & Information Disclosure	1. UU No. 7/2012; 2. PP No. 2/2015; 3. Perpres No. 56/2017	

Note: UU (Laws); PP (Government Regulation); Perpres (Presidential Decree); PerMen LH (Minister of Environment Regulation); PerMen PU (Minister of Public Work Regulation); KepMen LH (Minister of Environment Decree).

3.2 Data collection

The study used questionnaire data obtained from the respondents. To facilitate the analysis, the questionnaire used a Likert scale whose criteria were distinguished between relatively important aspects and the level of performance. According to Chang et al. [17], to evaluate the relatively important aspects, a scale of 1 to 5 is used with the criteria from "very unimportant" to "very important". Meanwhile, the level of performance is measured using the criteria of "very bad" to "very good" on the same scale (Table 2). Respondents in this study were project managers who had managed infrastructure projects in Indonesia from 2019 to 2021.

Table 2. Scale and measurement criteria

Likert scale	Relatively important aspect	Performance level
Scale 1	Very unimportant	Very bad
Scale 2	Unimportant	Bad
Scale 3	Neutral/fairly	Fairly good
Scale 4	Important	Good
Scale 5	Very important	Very good

3.3 Data analysis

This study breaks down critical indicators in the

environmental and social management framework based on their level of performance and their importance in reducing the potential for project social conflict. By understanding the level of importance and the level of performance of each, project actors can determine the level of satisfaction that affects project conflict. Importance Performance Analysis (IPA) is an effective analytical method in identifying factors that require attention and improvement. IPA was first introduced by Martilla and James in 1977 which displays the results graphically in four quadrants. This method is useful for policy makers in determining where more resources need to be placed and where excess resources need to be streamlined [18]. As a result, IPA is the most suitable analytical method to be used in this study.

The data used in this analysis were the respondents' answers to the questionnaire submitted and compiled based on the World Bank's ESF variables. Each variable was compiled by critical indicators based on the prevailing laws and regulations in Indonesia and is relevant to the variables being reviewed (see Table 1). Each indicator was measured based on the question "how important is the indicator to environmental and social impacts?" (level of importance) and "how much is the level of performance the indicator in project implementation?" (level of performance) in accordance with the conditions of each project. Based on the analysis of the respondents' answers, each attribute or indicator was ranked in terms of "importance"

and "performance" in their respective quadrants, which were taken into consideration in determining the appropriate treatment for each attribute (Figure 3).

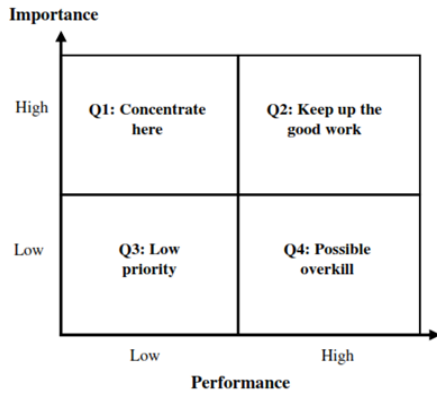


Figure 3. Importance performance analysis matrix

(1) Quadrant 1 (Q1) – Concentrate here: describes the condition of the attribute that is considered a very important factor but its performance is still relatively low. More efforts are needed to increase the contribution of attributes to the overall target.

(2) Quadrant 2 (Q2) - Keep up the good work: the attributes in this quadrant are considered very important factors and have shown high performance efforts on this attribute. Thus, performance on these attributes must be maintained.

(3) Quadrant 3 (Q3) – Low priority: attributes in this quadrant are factors that are not too important and the management has also treated them as unimportant factors, indicated by relatively low attribute performance.

(4) Quadrant 4 (Q4) – Possible overkill: attributes in quadrant 4 are factors that are not important to the management, but get excessive effort in their performance. Therefore, the resulting performance for these attributes is inefficient and needs to be rationalized.

To determine the quadrant of each attribute, the average score of the "importance" and "performance" levels is used as the limit value/divisor of the diagram.

$$\bar{X} = \frac{\sum_{i=1}^n X_i}{n} \text{ and } \bar{Y} = \frac{\sum_{i=1}^n Y_i}{n} \quad (1)$$

where, X_i and Y_i values as the scores of each attribute that determine the coordinates of the axis were calculated by the following formula:

$$X_i = \frac{\sum X}{n} \text{ and } Y_i = \frac{\sum Y}{n} \quad (2)$$

Subsequently, the degree of conformity (CL_i) and the gap were calculated using the following formula:

$$CL_i = \frac{X_i}{Y_i} \times 100\% \quad (3)$$

$$Gap = Y_i - X_i \quad (4)$$

The degree of conformity was used to measure how satisfied project actors were with the performance of the existing environmental and social framework. Meanwhile, gap is the distance or range between expectations and the realities of the environmental and social framework in an effort to minimize impacts that trigger social conflicts between local

communities and project entities.

4. RESULTS AND DISCUSSION

4.1 Respondent demographics

This study used the data from 80 respondents who participated in filling out and submitting the questionnaires that were sent. The respondent statistics show the level of expertise that is in line with the expectations in this study as shown in Table 3.

Table 3. Respondent demography

Respondent Characteristic	Freq.	Percent
Experience as Project Manager		
5 - 10 years	15	18.75%
6 - 15 years	13	16.25%
16 - 20 years	11	13.75%
≥ 20 years	41	51.25%
Education degree		
Diploma in Civil Engineer	2	2.50%
Bachelor in Civil Engineer	64	80.00%
Master	14	17.50%
Doctor	0	0.00%
Type of Project		
Road and Bridge	47	58.75%
Building	11	13.75%
Airport and Harbor	0	0.00%
Dam and Water Resource	22	27.50%

4.2 Validity and reliability

In testing the validity of the data on the respondents' answers, there were four critical indicators that were declared invalid, namely the value of r-statistics < r-table (0.220).

The four critical indicators that did not meet the validity criteria above and must be removed from the model were ESS5.5 Administrative & legal procedures of affected land, ESS6.2 CSR, ESS7.3 Procedure for transfer/use of customary rights and property, and ESS10.4 Bipartite organization between project and stakeholders (Table 4).

After all indicators met the validity criteria, the instrument must be tested for reliability, namely Cronbach's Alpha > 0.7. Table 4 shows the results of the validity and reliability tests of the data.

4.3 Importance performance analysis matrix

IPA analysis began by looking at the score of each critical indicator for each category. Subsequently, the level of performance and its importance were calculated to determine the size of the gap between expectations and realities of the implementation of the environmental and social framework. The results of the respondents' data processing are shown in Table 5 and sorted by the best performance rating on each critical indicator.

Based on the analysis of the respondents' answers in Table 5, there is an indicator that performed very poorly and four indicators that performed poorly based on the conformity level and the ranking of the gap between expectations and performance of indicators in the project. Meanwhile, of the eight indicators with a conformity level above 90%, there are three indicators that had a performance level beyond expectations.

Table 4. Validity and reliability assessment

Indica-tors	R-statitic		Indica-tors	R-statitic	
	Perfor-mance	Impor-tance		Perfor-mance	Impor-tance
Validity Test					
ESS1.1	0.882	0.777	ESS6.1	0.734	0.720
ESS1.2	0.891	0.739	ESS6.2	-0.020^{*)}	0.786
ESS1.3	0.873	0.754	ESS6.3	0.602	0.799
ESS1.4	0.928	0.730	ESS6.4	0.427	0.774
ESS2.1	0.804	0.719	ESS7.1	0.685	0.823
ESS2.2	0.878	0.558	ESS7.2	0.570	0.709
ESS2.3	0.912	0.521	ESS7.3	-0.172^{*)}	0.429
ESS2.4	0.927	0.446	ESS7.4	0.668	0.835
ESS2.5	0.881	0.670	ESS8.1	0.798	0.803
ESS3.1	0.866	0.717	ESS8.2	0.509	0.729
ESS3.2	0.442	0.717	ESS8.3	0.390	0.729
ESS3.3	0.459	0.767	ESS8.4	0.392	0.739
ESS3.4	0.838	0.788	ESS9.1	0.790	0.833
ESS4.1	0.792	0.636	ESS9.2	0.818	0.918
ESS4.2	0.910	0.770	ESS9.3	0.791	0.855
ESS4.3	0.851	0.790	ESS9.4	0.882	0.834
ESS4.4	0.912	0.772	ESS10.1	0.726	0.758
ESS4.5	0.872	0.809	ESS10.2	0.633	0.748
ESS5.1	0.898	0.703	ESS10.3	0.698	0.513
ESS5.2	0.931	0.710	ESS10.4	0.040^{*)}	0.743
ESS5.3	0.912	0.752			
ESS5.4	0.374	0.696			
ESS5.5	-0.060^{*)}	0.824			
Reliability Test		Performance		Importance	
Cronbach's Alpha		0.895		0.953	

Note: ^{*)} r-statistics < r-table invalid and removed

Table 5. Rank of performance satisfaction score

Critical Indicator	Perf. Score (ΣXi)	Import. Score (ΣYi)	Conformity Level (CL) (%)	Criteria	Perf. Level (Xi)	Import. Level (Yi)	Gap	Rank
ESS6.3	324	279	116.13	Very Good	4.05	3.49	-0.56	1
ESS2.1	325	312	104.17	Very Good	4.06	3.90	-0.16	2
ESS2.3	293	290	101.03	Very Good	3.66	3.63	-0.04	3
ESS1.3	299	300	99.67	Very Good	3.74	3.75	0.01	4
ESS6.4	302	308	98.05	Very Good	3.78	3.85	0.08	5
ESS1.1	291	300	97.00	Very Good	3.64	3.75	0.11	6
ESS7.4	296	305	97.05	Very Good	3.70	3.81	0.11	7
ESS6.1	263	288	91.32	Very Good	3.29	3.60	0.31	8
ESS5.4	257	286	89.86	Very Good	3.21	3.58	0.36	9
ESS5.2	245	276	88.77	Very Good	3.06	3.45	0.39	10
ESS4.3	251	293	85.67	Very Good	3.14	3.66	0.53	11
ESS2.5	259	301	86.05	Very Good	3.24	3.76	0.53	12
ESS8.4	258	301	85.71	Very Good	3.23	3.76	0.54	13
ESS9.4	254	298	85.23	Very Good	3.18	3.73	0.55	14
ESS1.4	241	291	82.82	Very Good	3.01	3.64	0.63	15
ESS1.2	249	302	82.45	Very Good	3.11	3.78	0.66	16
ESS8.2	249	303	82.18	Very Good	3.11	3.79	0.68	17
ESS9.2	245	301	81.40	Very Good	3.06	3.76	0.70	18
ESS4.2	251	313	80.19	Good	3.14	3.91	0.78	19
ESS5.3	254	316	80.38	Good	3.18	3.95	0.78	20
ESS4.5	224	287	78.05	Good	2.80	3.59	0.79	21
ESS2.4	231	301	76.74	Good	2.89	3.76	0.88	22
ESS4.4	242	317	76.34	Good	3.03	3.96	0.94	23
ESS3.1	223	300	74.33	Good	2.79	3.75	0.96	24
ESS3.4	235	312	75.32	Good	2.94	3.90	0.96	25
ESS9.3	223	301	74.09	Good	2.79	3.76	0.98	26
ESS2.2	224	308	72.73	Good	2.80	3.85	1.05	27
ESS4.1	201	289	69.55	Good	2.51	3.61	1.10	28
ESS5.1	231	320	72.19	Good	2.89	4.00	1.11	29
ESS10.1	208	302	68.87	Good	2.60	3.78	1.18	30
ESS10.3	185	282	65.60	Fairly Good	2.31	3.53	1.21	31
ESS7.1	190	296	64.19	Fairly Good	2.38	3.70	1.33	32
ESS10.2	177	292	60.62	Fairly Good	2.21	3.65	1.44	33
ESS3.2	175	309	56.63	Fairly Good	2.19	3.86	1.68	34
ESS9.1	140	291	48.11	Bad	1.75	3.64	1.89	35

ESS7.2	156	308	50.65	Bad	1.95	3.85	1.90	36
ESS8.3	128	283	45.23	Bad	1.60	3.54	1.94	37
ESS8.1	113	299	37.79	Bad	1.41	3.74	2.33	38
ESS3.3	86	292	29.45	Very Bad	1.08	3.65	2.58	39
Total	8,998	11,652			2.88	3.73		

The following analysis used the Performance-Importance Matrix generated from the Performance Level and Importance Level of each indicator in Table 5. The performance level was used as the X-axis coordinate and the importance level was the Y-axis coordinate. Meanwhile, the quadrant boundary line was determined from the average performance level value as the X-axis limit and the average importance level value as the Y-axis limit. The Performance Importance Matrix can be seen in Figure 4 below.

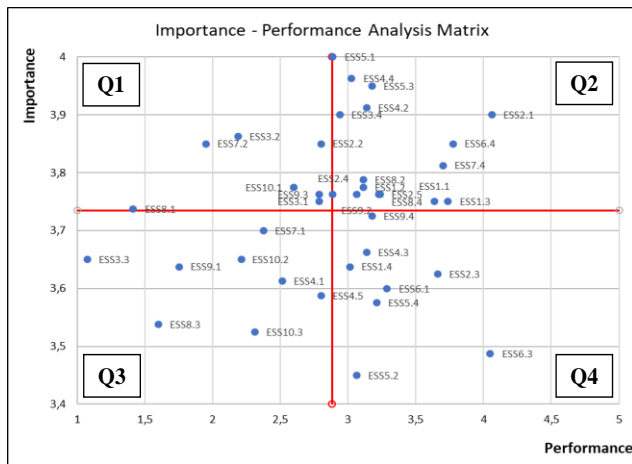


Figure 4. Importance performance analysis matrix result

4.4 The level of satisfaction of environmental and social protection indicator performance

The results of the IPA Matrix (Figure 4) and Table analysis (Table 5) indicate the level of satisfaction of indicator performance on infrastructure projects in Indonesia. Sixteen ESF indicators measured based on Indonesian legal products demonstrate satisfactory performance (quadrant 2). However, there are still indicators that need special attention, namely indicators with low performance (quadrant 1) and indicators with less efficient performance (quadrant 4). The following is a performance evaluation based on the IPA analysis.

(1) The performance of collaboration between the government and projects

Indonesian legal products that were used as references in the preparation of project policies demonstrated success in their implementation. The obligation to fulfill the EIA in the project through the enactment of the Environmental Law successfully met the expectations in reducing the project's impact on the environment (ESS1.1). On the employee aspect, Equal & non-discriminatory employment rules (ESS2.1) and Staffing policy on engagement of local workers (ESS2.5) proved that the application of the Labour Law was able to meet the expectations of the affected communities in the context of equality and composition of the local workforce. Protection of community rights was also well implemented in the aspects of land acquisition for development (ESS5.1) and relocation of project-affected communities (ESS5.3). These findings support Brunori [19] dan Ortiz et al. [20] who stated that ESF is an effort to protect human rights in terms of land tenure, protection of indigenous peoples, and livelihood opportunities

for affected communities.

However, the issue of child labor (ESS2.2) and the policy of community involvement in the project (ESS10.1) still require increased efforts. This condition is in line with the Central Bureau of Statistics data which state that child labors aged 10-17 years have shown an increase from 2.61% in 2018 to 3.25% in 2020. The data on conflict which tend to increase in the infrastructure development sector (Figure 1) also proved its relevance to the weak performance of community involvement policies in projects. Strengthening the legal system and technical regulations in this attribute requires joint hard work between the government and the construction industry in its implementation and surveillance. Therefore, the community's role in environmental and cultural preservation efforts is still limited, its need an improvement through engage the other stakeholder [21, 22]. Regulatory support from the government encourages project performance to meet terms and conditions resulting in a good level of satisfaction [23].

(2) Environmental protection

The project's performance on environmental protection was very good on the policy indicator that supports environmental sustainability (ESS1.2) which was supported by a high commitment to the provision of competent personnel (ESS1.3). Likewise, the project's capability to manage the use of pesticides (ESS3.4) and the placement of project equipment that is at risk of environmental disturbance (ESS6.4) demonstrated satisfactory performance. Attention to environmental protection aspects can also be seen from the high level of performance in environmental and social risk monitoring and reporting procedures (ESS1.4), efforts to prevent pollution and ecosystem disturbances (ESS6.1), and commitments to protect biodiversity (ESS6.3). Even though the three indicators indicated inefficient performance (quadrant 4), they showed strong support from the project for environmental protection.

Meanwhile, the project performed less satisfactorily (quadrant 1) in air quality testing (ESS3.1) and hazardous and non-hazardous waste handling and management (ESS3.2) [24]. Project actors should work earnestly in increasing satisfaction with these indicators. This is because as many as 88.43% of Indonesians depend on the agricultural sector (Central Bureau of Statistics, 2020). Therefore, environmental damage has the potential to trigger project social conflicts [25]. Conflict is one of the community's efforts to save the environment from damage that results in disruption of livelihoods [26].

(3) Social and cultural protection

The diversity of customs and cultures in Indonesia is a serious challenge and affects the success of infrastructure development. The respect of local communities for ancestral customs still dominates and has a strong influence on aspects of social life [27]. Indigenous peoples' consent and permission (ESS7.4) are important parts that must be fulfilled by the project and determine the attitude of the community towards the project. Respect for indigenous people is also represented in an attitude of respect for intangible cultural heritage through support for the preservation of local arts (ESS8.4). And so is the treatment of cultural heritage objects which some people consider sacred (ESS8.2). All three demonstrated a satisfactory level of performance and became indicators that

were optimally pursued in environmental and social protection.

Performance dissatisfaction was indicated by respect for traditional symbols and ceremonies (ESS7.2) and identification of the existence of cultural heritage (ESS8.1). Performance on these two indicators needs to be improved to meet expectations. In addition, the project's financial capacity (ESS9.3) was also considered unsatisfactory to convince the community about the company's capability to fulfill the financial rights of affected communities and local workers [28]. This is interesting because financial capacity (ESS9.3) is considered more important in environmental and social safeguards compared to offering financial guarantees from banks or other financial institutions (ESS9.1). For the community, the company's financial capacity is better able to provide welfare guarantees as compensation for the project.

This study also reveals that conventional communication patterns were no longer a priority in the project. Project information tools (ESS10.2) such as project information boards and the appointment of a Public Relation Officer (ESS10.3) were considered unimportant for the success of environmental and social safeguards. This paradigm shift is strongly influenced by the increasing openness of information. The Central Bureau of Statistics reported that 74.5% of Indonesia's population was connected to the internet in 2020. Therefore, it is easier for the community to get project information through digital sources via an internet connection.

(4) Safety and health protection

The seriousness of the project in creating a safe and healthy work environment deserves appreciation. Performance indicators in this aspect are dominated by quadrant 2, where the level of performance meets the level of expectations. In the aspect of OHS procedures, the OHS policy indicators (ESS2.4) achieved the expected level of satisfaction, even though the OHS document compliance indicator (ESS4.1) was not considered an important priority (quadrant 3) in the protection framework. Furthermore, other indicators with satisfactory performance levels are traffic management (ESS4.2), emergency response handling policies (ESS4.4), and insurance against project failure, occupational accidents, health, and employment (ESS9.2).

In this aspect, none of the indicators are in quadrant 1 or their performance is below the level of importance. In addition to quadrant 2 as described above, indicators in this aspect occupy quadrants 3 and 4. Compliance with OHS documents (ESS4.1) and sufficient and certified security personnel (ESS4.5) are in quadrant 3, which is not included as an important priority in the concept of environmental and social protection in Indonesia. Meanwhile, procedures for handling health problems (ESS4.3) are in quadrant 4, which is an indicator whose performance exceeds its importance level, resulting in inefficient performance. This indicator needs to be reviewed in its implementation by reducing excessive effort, so that effective and efficient performance is obtained.

5. CONCLUSIONS

Efforts to minimize project social conflict still need improvement on several critical indicators in the context of environmental and social safeguards. It can be concluded that in general, the level of satisfaction of the performance indicators has been able to meet the expected level of importance. Sixteen critical indicators (43.24%) are in quadrant 2 which shows the strong commitment of the project

in efforts to minimize project impacts through the application of environmental and social protection frameworks. Meanwhile, eight other critical indicators (21.62%) are in quadrant 4 which indicates inefficient indicator performance. Even though the indicators in quadrant 4 show an excessive fear of the project about the consequences of neglecting the performance of these indicators, on the other hand, it shows a serious concern from the project to make maximum efforts towards environmental and social protection commitments. Efficiency is needed in this quadrant 4, namely by reducing excessive indicator performance. Extra effort is actually needed to encourage indicators that are low-performing and below the level of importance (quadrant 1). There are six critical indicators (16.22%) that need serious attention to improve their performance because these indicators are attributes that have a low level of performance satisfaction, so they have great potential in triggering project social conflicts. Finally, there are seven indicators (18.92%) in quadrant 3 which are indicators with a low level of importance and performance. These indicators can be classified as low priority and less important indicators of environmental and social safeguards performance.

Based on the results of this study, it is hoped that project actors in Indonesia can map out the appropriate indicators that are important in environmental and social safeguards that can minimize the potential for social conflicts in the project. In addition, the results of this study are expected to be used as a basis for further research to determine the effect of the ESF variable in the conflict of interest prediction model. Furthermore, the results of this study are expected to contribute to the preparation of a standardized and integrated ESF in Indonesia. To get the proper ESF requires strengthening legal system support on several aspects of child labor and inclusive community involvement policies. As an evaluation, this study proves that the implementation of ESF as international law requires commensurate support from applicable local laws to strengthen its legitimacy as a new world development governance framework in achieving sustainable development goals [14].

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