

**GREEN
CLIMATE
FUND**

Meeting of the Board
29 June – 2 July 2026
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Provisional agenda item 11

GCF/B.45/02/Add.01

12 June 2026

Consideration of funding proposals – Addendum I

Funding proposal package for SAP070

Summary

This addendum contains the following six parts:

- a) A funding proposal titled "Building Flood Resilient Community through Adaptive Livelihood and Runoff Management in Petanglong Area of Central Java Province of Indonesia (BRAVE)";
- b) No-objection letter issued by the national designated authority(ies) or focal point(s);
- c) Secretariat's assessment;
- d) Independent Technical Advisory Panel's assessment;
- e) Response from the accredited entity to the independent Technical Advisory Panel's assessment; and
- f) Gender documentation.

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The designations and the presentation of the materials used in this document, including their respective citations, maps and references, have been included by the relevant Accredited Entity and do not imply the expression of any opinion whatsoever on the part of the Green Climate Fund concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Also, the boundaries and names shown, and the designations used in this document have been included by the relevant Accredited Entity and do not imply official endorsement or acceptance by the Green Climate Fund.

The documents are presented as submitted by the Accredited Entity.

Simplified Approval Process Funding Proposal

| | |
|---|---|
| Project/Programme title: | Building Flood Resilient Community through Adaptive Livelihood and Runoff Management in Petanglong Area of Central Java Province of Indonesia (BRAVE) |
| Country(ies): | Indonesia |
| National Designated Authority(ies): | Directorate of Multilateral Cooperation and Sustainable Finance, Ministry of Finance |
| Accredited Entity: | The Partnership for Governance Reform (Kemitraan) |
| Date of first submission: | <u>2026-01-17 (V.01)</u> |
| Date of current submission/ version number | <u>2026-04-09 (V.02)</u> |



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Contents

Section A PROJECT / PROGRAMME SUMMARY

This section highlights some of the project's or programme's information for ease of access and concise explanation of the funding proposal.

Section B PROJECT / PROGRAMME DETAILS

This section focuses on describing the context of the project/programme, providing details of the project/programme including components, outputs and activities, and implementation arrangements.

Section C FINANCING INFORMATION

This section explains the financial instrument(s) and amount of funding requested from the GCF as well as co-financing leveraged for the project/programme. It also includes justification for requesting GCF funding and exit strategy.

Section D EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

This section provides an overview of the expected alignment of the projects/programme with the GCF investment criteria: impact potential, paradigm shift, sustainable development, needs of recipients, country ownership, and efficiency and effectiveness.

Section E ANNEXES

This section provides a list of mandatory documents that should be submitted with the funding proposal as well as optional documents and references as deemed necessary to supplement the information provided in the funding proposal.

Notes to accredited entities on the use of the SAP funding proposal template

- The Simplified Approval Process Pilot Scheme (SAP) supports projects and programmes with a GCF contribution of up to USD 25 million with minimal to no environmental and social risks. Projects and programmes are eligible for SAP if they are ready for scaling up and have the potential for transformation, promoting a paradigm shift to low-emission and climate-resilient development.
- This template is for the SAP funding proposals and is different from the funding proposal template under the standard project and programme cycle. Distinctive features of the SAP funding proposal template are:
 - *Simpler documents*: key documents have been simplified, and presented in a single, up-front list;
 - *Fewer pages*: A shorter form with significantly fewer pages. The total length of funding proposals should **not exceed 20 pages**, annexes can be used to provide details as necessary;
 - *Easier form-filling*: fewer questions and clearer guidance allows more concise and succinct responses for each sub-section, avoiding duplication of information.
- Accredited entities can either directly incorporate information into this proposal, or provide summary information in the proposal with cross-reference to other funding proposal documents such as project appraisal document, pre-feasibility studies, term sheet, legal due diligence report, etc.
- Submitted SAP Pilot Scheme funding proposals will be disclosed simultaneously with submission to the Board, subject to the redaction of any information which may not be disclosed pursuant to the [GCF Information Disclosure Policy](#).
- For more information on how to develop Funding Proposals under the SAP please refer to the [Simplified Approval Process \(SAP\) Funding proposal guidelines](#).

Please submit the completed form through the GCF Digital Proposal Submission Platform (DPS)¹

| A. PROJECT/PROGRAMME SUMMARY | | | | | |
|--|---|---|--|---|---|
| A.1. Has this FP been submitted as a SAP CN before? | | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | | | |
| A.2. Is the Environmental and Social Safeguards Category C or I-3? | | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | | | |
| A.3. Project or programme | Indicate whether this FP refers to a combination of several projects (programme) or one project. <input checked="" type="checkbox"/> Project <input type="checkbox"/> Programme | A.4. Public or private sector | <input checked="" type="checkbox"/> Public sector <input type="checkbox"/> Private sector | A.5. RfP | Not applicable |
| A.6. Result area(s) | Check the applicable GCF result area(s) that the overall proposed project/programme targets. For each checked result area(s), indicate the estimated percentage of GCF and Co-financers' budget devoted to it. The total of the percentages when summed should be 100% for GCF and Co-financers' contribution respectively. | | | | |
| | | | | GCF Contribution | Co-financers' contribution² |
| | Mitigation total | | | Enter number % | Enter number % |
| | <input type="checkbox"/> Energy generation and access | | | Enter number % | Enter number % |
| | <input type="checkbox"/> Low emission transport | | | Enter number % | Enter number % |
| | <input type="checkbox"/> Buildings, cities and industries and appliances | | | Enter number % | Enter number % |
| | <input type="checkbox"/> Forestry and land use | | | Enter number % | Enter number % |
| | Adaptation total | | | Enter number % | Enter number % |
| | × Most vulnerable people and communities | | | 68.3 % | 88.6% |
| | <input type="checkbox"/> Health and well-being, and food and water security | | | Enter number % | Enter number % |
| | <input type="checkbox"/> Infrastructure and built environment | | | Enter number % | Enter number % |
| | × Ecosystem and ecosystem services | | | 31.7 % | 11.4 % |
| A.7.1. Expected mitigation outcome (Core indicator 1: GHG emissions reduced, avoided or removed / sequestered) | The project is focused on adaptation outcomes, so the mitigation outcome is not estimated. | A.7.2 Expected adaptation outcome (Core indicator 2: direct and indirect beneficiaries reached) | Direct beneficiaries 136,360 people, male: 81,816, female: 54,544) | Indirect beneficiaries 1,203,347 people, male: 597,596, female: 605,751 | |
| | | | The population of Indonesia is 285,721,245. The Petanglong area of Central Java, covering | Direct beneficiaries: ±6.9% of total Petanglong population or 0.05% of | |

¹ See the [DPS user guide](#) for further information on how to access and submit proposals.

² Co-financer's contribution means the financial resources required, whether Public Finance or Private Finance, in addition to the GCF contribution (i.e. GCF financial resources requested by the Accredited Entity) to implement the project or programme described in the funding proposal.

| | | | | |
|--|--|---|--|---|
| | | | Pekalongan City, Pekalongan Regency, and Batang Regency. The total population of this area is 2,202,087 ³ | Indonesia Population Indirect beneficiaries: ±54.65% of total Petanglong population or ±0.4% of total Indonesia population |
| A.8.1. Total investment (GCF + co-finance⁴) | Amount: 9,999,881 | A.8.2 Total GCF funding requested (max USD 25M) | Amount: 9,310,960 | |
| A.9. Type of financial instrument requested for the GCF funding | <i>Mark all that apply.</i> <input checked="" type="checkbox"/> Grant <input type="checkbox"/> Loan ⁵ <input type="checkbox"/> Equity <input type="checkbox"/> Guarantees <input type="checkbox"/> Others: | | | |
| A.10. Implementation period (months) | 60 months | A.11. Total project/ programme lifespan (years) | 15 years The project framework and recommendations are expected to be mainstreamed into the spatial plan policies, in which the spatial plan period of the local government is ended in 2040. The lifespan can be longer if the government further sees the need to continue the implementation of such a framework. If we consider the livelihood model perspective (the closed-loop system), the lifespan could reach around 20-25 years. | |
| A.12. Expected date of internal approval | 03 November 2025 | A.13. Has Readiness or PPF support been used to prepare this FP? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | |
| A.14. Is this FP included in the entity work programme? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | A.15. Is this FP included in the country programme? | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | |
| A.16. Executing Entity information | The executing entity is Yayasan Mercy Corps Indonesia (MCI) and Perkumpulan Kemitraan, both as a non-government organization with vast project portfolios in climate adaptation and resilience, as well as economic development across different areas in Indonesia. Kemitraan also as the project's Accredited Direct Access Entity (DAE), will have a supervisory and monitoring role in the project. MCI had undergone Kemitraan's Due Diligence assessment process and was deemed as having the capacity to execute the project. | | | |
| A.17. Scalability and potential for transformation (max. 100 words) | | | | |

³ According to Official mid-year Census of Indonesia (2024) [Provinsi Jawa Tengah Dalam Angka 2024 - Badan Pusat Statistik Provinsi Jawa Tengah](#)

The BRAVE project builds on ongoing initiatives by the MCIs/Zurich Flood Resilience Alliance (now Zurich Climate Resilience Alliance/ZCRA⁶) and Kemitraan's Adaptation Fund (AF) project⁷, addressing their limitations while amplifying successful approaches. ZFRA's resilient livelihood models in 8 villages of Pekalongan have demonstrated the economic and environmental benefits of climate-smart agriculture and adaptive aquaculture. However, the pilot was geographically limited and lacked enabling policy and financial systems, necessary for replication and scale. BRAVE builds on these achievements by expanding resilient livelihood practices to new communities across the Kupang and Sengkarang watersheds, embedding proven business models into resilient value chains, and institutionalizing Integrated Water Resource Management (IWRM) across jurisdictions to address upstream, midstream, and downstream drivers of flood risk. At the same time, BRAVE strategically leverages lessons from the AF project which focuses on downstream interventions by applying a holistic landscape perspective, integrating upstream and midstream interventions that reduce pressures on downstream areas. The project also explores potential linkages with ZFRA and AF livelihood interventions, ensuring economic sustainability, while capitalizing on MCI/ZFRA and Kemitraan's established partnerships with local, provincial, and national governments to mainstream climate-resilient and IWRM frameworks.

The project achieves a paradigm shift through three mechanisms:

- **Community empowerment:** translating climate data into actionable knowledge, establishing impact-based forecasting, and embedding Climate-Resilient Livelihood Transformation Plans into Village Development Plans transforming communities from passive recipients into proactive climate risk managers.
- **Systemic governance change.** By institutionalizing Integrated Water Resource Management (IWRM) across jurisdictions and mainstreaming landscape resilience into at least five local and provincial policies, BRAVE shifts governance from fragmented, reactive responses to integrated, preventive climate action.
- **Market and finance transformation:** closed-loop agriculture models, bundled service schemes, and private sector partnerships de-risk investment, incentivize MSMEs, and opens climate finance pathways, ensuring sustainability beyond grant support.

Through this multi-level integration of knowledge, governance, and market systems, BRAVE catalyzes long-term, self-sustaining resilience pathways aligned with low-emission, climate-resilient development.

A.18. Project/Programme rationale, objectives and approach (max. 300 words)

Climate rationale of the project/programme.

The Petanglong area of Central Java, covering Pekalongan City, Pekalongan Regency, and Batang Regency, faces severe and worsening flood risks due to a combination of climate change, sea level rise, land subsidence, and watershed degradation. Current flood events already cause extensive infrastructure damage, land loss, and livelihood disruption, with annual economic losses in Kupang watershed area in 2020 estimated at USD 110.7 million (over 40% of the combined local budgets). Based on climate impact assessments, there is a high likelihood of more frequent extreme rainfall, increased consecutive wet days, sea level rise of 5 mm/year, and land subsidence with a medium rate of up to 16.5cm/year, leading to a near-tripling of inundated areas from 1,800 ha (2020) to 5,700 ha (2035). It has been estimated that flood hazards will extend inland up to 9.4 km, submerging 90% of mangroves and large areas of settlements, aquaculture, and agriculture. Compounding these risks, dry season rainfall is expected to decline, further threatening water supply, agriculture, and community resilience in the upland areas. BRAVE aims to strengthen climate resilience across the Kupang and Sengkarang watersheds through a holistic, source-to-sea landscape approach. Its purpose is to reduce climate-induced flood and water risks while enhancing resilient livelihoods.

Within this context, several village clusters across the Kupang and Sengkarang watershed area of Petanglong have been identified as potential intervention areas, reflecting different physical characteristics and climate risk profiles.

The coastal clusters that comprise of West Coastal (Api-api, Pecakaran), Central Coastal (Jeruksari, Bandengan), and East Coastal (Krapyak, Degayu, Klego) are lowland aquaculture areas highly exposed to sea level rise, coastal flooding, land subsidence, and permanent inundation, with high to very high exposure and vulnerability. These hazards result in asset losses, declining income, and reduced land productivity, with estimated economic losses reaching USD 121.87 million in Central Coastal, USD 9.42 million in West Coastal, and USD 3.43 million in East Coastal. Interventions focus

⁴ Refer to the Policy on Co-financing of the GCF.

⁵ Senior loans and subordinated loans.

⁶ [Indonesia - Zurich Climate Resilience Alliance](#) and [Zurich Climate Resilience Alliance \(ZCRA\) | Mercy Corps Indonesia](#)

⁷ [Adaptation Fund Project – Pekalongan - KEMITRAAN](#)

on adaptive aquaculture practices, climate information systems, climate-smart field schools, value-added aquaculture models, women-led adaptation initiatives, and closed-loop aquaculture systems to strengthen livelihood resilience.

The Urban Settlement cluster (Tirto, Buaran Kradenan) and SME Center cluster (Kuripan Yosorejo, Kuripan Kertoharjo, Jenggot, Sokoduwet) face flash flooding and land subsidence, with estimated economic losses of USD 25.93 million and USD 12.09 million, respectively. Interventions prioritize community resilience action plans and community-based climate information systems to improve flood preparedness and anticipatory action.

Further inland, the agricultural, water catchment, and upstream clusters including areas such as Karanganyar, Warungasem, Wonotunggal, Blado, and Petungkriyono, are characterized by hilly to mountainous landscapes exposed to flash floods, drought, extreme rainfall, landslides, and erosion, which threaten agricultural productivity and ecosystem stability. Interventions emphasize blue-green space development, climate-smart agriculture, agroforestry and land conservation, climate information systems, and anticipatory action planning to reduce watershed risks and strengthen climate-resilient livelihoods. The detailed climate rationales for each specific location is provided in Annex 17

Climate results of the project/programme

- **Reduced vulnerability to floods and droughts:** Blue-green spaces, flood contingency plans, and climate-smart land and water management will directly protect and provide adaptation benefits to 135,196 people from flood risks and water scarcity.
- **Strengthened ecosystems:** Restoration and improved management of 3,700 hectares of productive upstream land, floodplains, and vegetative buffers will enhance water regulation, reduce runoff, and maintain biodiversity. Approximately 14,160 people will receive adaptation benefits from soil and water conservation, upstream land management, and participatory conservation plans.
- **Resilient livelihoods:** Climate-smart agriculture and aquaculture practices will improve productivity and income for 1165 people. Linking farmers and MSMEs to markets and finance will further scale such practices and improve adoption.
- **Gender-responsive adaptation:** Around 40% of direct beneficiaries for activities related to training will be women, with deliberate inclusion of vulnerable groups in decision-making and specific livelihood activities for women's groups.
- **Long-term scalability:** Institutionalized climate-informed planning, policy adoption, and market systems will enable replication beyond the project area, indirectly benefiting approximately 1,203,347 people across Pekalongan City, Pekalongan Regency, and Batang Regency.

Rationale for the use of GCF funding. Despite strong government recognition of climate risks, financing remains insufficient and heavily focused on structural flood defenses, leaving preventive, ecosystem-based, and livelihood-centered interventions underfunded. Budget cuts following the 2025 Presidential Instruction have further constrained provincial and local resources, with local governments also lacking the technical and institutional capacity to translate climate science into actionable plans, and private investors remain hesitant to support innovative livelihood models. GCF funding is critical to de-risk and demonstrate ecosystem and livelihood-based approaches, fill data and capacity gaps for evidence-based planning and unlock co-financing by validating climate-resilient business models.

B. PROJECT/PROGRAMME DETAILS

B.1. Context and baseline (max. 500 words)

B.1.1 The baseline scenario: current and future climate projections

Located in Central Java Province, Indonesia, the Petanglong area, covering Pekalongan City, Pekalongan Regency, and Batang Regency, with a population of over 2 million⁸, faces persistent and worsening flood risks. Flooding results from a combination of intense rainfall, land-use and river morphology changes, and tidal influences⁹. The coastal zone is particularly exposed: Pekalongan has experienced sea level rise of 5 mm per year, above the Java Sea average of

⁸ Central Java Province Bureau of Statistics, 2021. *Central Java Province in Number Year 2021*. Central Java Province

⁹ Pasarihu, M, Kumar Hazarika M, Nashrullah S, Hazarika MK, Samarakoon L. 2013. Study on Flood Inundation in Pekalongan, Central Java. *Int. J. Remote Sens. Earth Sci.* 10(2):76–83. Available on: <https://www.researchgate.net/publication/270435267>

3.9 mm, alongside rapid land subsidence of 10–17 cm annually between 2012 and 2018¹⁰. These compounded processes make the area exceptionally vulnerable to inundation¹¹. Recurrent floods have caused severe infrastructure damage, permanent land loss, and disruption of livelihoods, while also straining municipal budgets. The interaction of coastal change with upstream and midstream watershed developments has further increased the scale and complexity of flood events. Climate change is expected to intensify these dynamics, amplifying both physical impacts and socio-economic costs. To better understand the impacts of climate change, the drivers of flooding, their interactions, and the area's capacity to respond, the MCI's Zurich Flood Resilience Alliance (ZFRA) program conducted a Landscape Climate Risk and Impact Assessment (CRIA) of the Kupang watershed (covering Pekalongan City and Regency). The CRIA provides the scientific foundation for assessing climate risks and guiding adaptation planning. It includes decadal and long-term climate projections, hazard and flood modelling, vulnerability and risk assessments, and analysis of both economic and non-economic losses. These findings form the evidence base for identifying appropriate response measures for the BRAVE project and underpin the rationale for GCF support. For a summary of the findings of the Climate Risk and Impact Assessment (see Annex 15).

The CRIA results show that the upstream areas of the Kupang watershed are projected to experience more frequent and intense extreme rainfall, while the midstream and downstream zones will face more frequent but less intense events. Rainfall anomaly analysis confirms a long-term trend toward Above Normal conditions, increasing the likelihood of flash floods cascading downstream if no preventive measures are taken. Projections under the RCP4.5 scenario suggest that Pekalongan will become significantly wetter, with higher rainfall intensity in both upstream and coastal areas. This underscores a rising probability of extreme rainfall in coastal zones, compounding existing flood risks. Under the RCP8.5 high-emission scenario, the number of Consecutive Wet Days is expected to rise by 40%, while Consecutive Dry Days remain relatively stable. Climate variability combined with sea level rise is projected to significantly amplify flood risks across the Kupang watershed and the wider Petanglong area.

Spatial modelling indicates that the inundated area will expand nearly threefold, from 1,800 ha in 2020 to 5,700 ha by 2035. The proportion of villages/kelurahans with a very high hazard index is expected to rise from 10% in 2020 to almost 40% by 2035. Ecosystems and land use will be severely affected: over 90% of mangroves, bushland, and parkland are projected to be permanently submerged, alongside more than half of settlements, fishponds, open land, and industrial zones. The inland extent of flooding will increase sharply, from 4.2 km in 2020 to as far as 8.5 km (decadal prediction) and 9.4 km (RCP4.5 projection) by 2035. The CRIA's decadal predictions show that the number of high-risk villages in the watershed will grow from 36 in 2020 to 58 by 2035, while those at very high risk will more than double, from 17 to 35. The situation will be especially severe in Pekalongan City, where by 2035 every kelurahan will face high or very high flood risk, compared to around 65% in 2020. These findings highlight not only the accelerating scale of physical inundation but also the escalating social, ecological, and economic risks, underscoring the urgent need for transformative adaptation measures that go beyond incremental responses. Without adaptation measures, flood risks and related economic losses in Pekalongan will escalate sharply. The evidence provides a strong scientific justification for GCF support to finance enabling market system development, ecosystem restoration, and community-based adaptation, interventions that local governments alone lack the fiscal capacity to implement.

Decadal projections indicate a significant decline in rainfall during the dry season, which will directly affect the quantity and continuity of water supply. Reduced rainfall will not only constrain domestic water availability but also undermine agriculture and agroforestry productivity. To adapt, water infrastructure must be technically designed to accommodate variability in supply, while farmers need timely climate information and the capacity to translate it into appropriate agricultural practices. The impacts are already visible. In 2020, the state-owned water utility company was only able to serve 40% of Pekalongan City's population and 11% of Pekalongan Regency's population¹². Service reliability remains a major concern, with minimal and intermittent supply during the dry season. This demonstrates the vulnerability of the watershed's current water management system to climate variability.

The Kupang and Sengkarang watersheds, two of Petanglong's major catchments, are under mounting pressure from land use change and unsustainable livelihoods. These pressures, combined with projected climatic shifts, are expected to exacerbate flood risks and water stress. Forest plantations and surrounding settlements have expanded steadily, driving deforestation, land degradation, reduced catchment capacity, river pollution, and

¹⁰ Kismawardhani, Ratu & Wirasatriya, Anindya & Berlianty, Dessy. 2018. Sea Level Rise in The Java Sea Based on Altimetry Satellites Data Over 1993-2015. IOP Conference Series: Earth and Environmental Science. 165. 012006. 10.1088/1755-1315/165/1/012006

¹¹ Tempo.2019. Penurunan Tanah Terparah Peneliti ITB Save Pekalongan. <<https://tekno.tempo.co/read/1284106/penurunan-tanah-terparah-peneliti-itb-save-pekalongan>> [accessed 1 July 2021].

¹² Pekalongan City Bureau of Statistics, 2020. Pekalongan City in Number Year 2020. Pekalongan City
Pekalongan Regency Bureau of Statistics, 2020. Pekalongan Regency in Number Year 2020. Pekalongan Regency

sedimentation. Satellite imagery analysis, as part of the CRIA, shows that between 2000 and 2021, about 23% (5,080 hectares) of forested land, mainly production forest, was lost, with major conversion occurring in 2000–2012 and 2015–2020, largely due to logging followed by horticulture. The Pemali Jratun Watershed and Protected Forest Management Agency reports that around 21% of the Kupang and Sengkarang watersheds, critical sources of raw water supply for the state-owned utility, are now in an ecologically critical state. Reduced land cover has diminished the ecosystem's capacity to retain and regulate water, altering infiltration and runoff rates. These changes underscore the urgent need for improved land management and effective runoff control infrastructure in the upstream and midstream zones to stabilize water flows and safeguard supply. They also highlight the critical need for a watershed wide approach.

A detailed climate rationale study will be examined during the implementation of the BRAVE project, as part of the detailed study and climate modelling activities. Considering that Kupang and Sengkarang watersheds directly border each other, there will be no significant variability in the climate characteristics of the two watersheds. The BRAVE project will create a climate model that covers both areas. In addition, existing productivity gain data from target value chains that resulted out of the ZFRA programme will be replicated by the BRAVE project.

B.1.2 Climate change impacts and adaptation needs

The scale of impact on downstream communities is substantial and escalating over time. Downstream communities have regularly had to deal with losses and damage to their assets and productive land, from flooding and permanent inundation. Damage to infrastructure has driven up basic need's expenses, with house repairs and increasing the floor height becoming regular expenses for high-risk communities. Impact analysis conducted as part of CRIA on 42 villages identified as having the highest risk revealed that the total annual economic loss from the impact of flooding was around USD110.7 million in 2020, which is more than 40% of the combined total annual budget of Pekalongan City and Regency. For the local government, increasing road height and other flood-related costs have become a regular occurrence. The disbursed budget has been insufficient to comprehensively address the issue. Combined with flood impacts on income reduction and the loss of productive land, which was estimated to be around USD 24 million¹³, has left the flood-affected population in an increasingly precarious position. Factoring in the projected flood risks, the losses are predicted to significantly increase to USD2.2 billion per year by 2035 in Kupang watershed only (more than twelve-fold the baseline state in 2020)¹⁴¹⁵¹⁶, this substantial increase in losses will extremely affect their development activities.

The CRIA also identified the upstream areas of Petanglong as highly vulnerable due to greater exposure to climate hazards, topographic changes, and expanding settlements. In the absence of climate literacy, farmers have adapted through agricultural expansion, heavy chemical fertilizer use, and a shift from food crops to horticulture. These unsustainable practices have degraded ecosystems, caused pollution, and driven land use change, with cascading impacts on midstream and downstream flood risks. Reducing vulnerability will require better land management, controlling agricultural and settlement expansion, promoting resilient agricultural practices, and strengthening forest rehabilitation and protection. Importantly, adaptation must address not only flood risks from extreme rainfall, but also droughts that threaten water supply across Pekalongan City and Regency. The interdependence between upstream, midstream, and downstream zones underscores the need for a holistic, landscape-based approach to policy and flood risk management. Current watershed mismanagement amplifies climate risks, requiring interventions tailored to the characteristics and vulnerabilities of each segment. This includes managing land conversion pressures, strengthening adaptive capacity, and reducing sensitivity and exposure, particularly in areas with high and very high vulnerability. Alongside risk reduction infrastructure, ecological functions must be restored and protected, especially coastal mangrove ecosystems, which provide vital physical, biological, and economic services for resilience. Vulnerability is further shaped by social dynamics: around half of the Kupang and Sengkarang watershed population are women, while 31% are children and elderly with limited adaptive capacity. Experience from resilient livelihood activities in ZCRA shows persistent gender gaps in agriculture and aquaculture, where men dominate decision-making and resource access, particularly in downstream areas. Addressing these inequities through inclusive capacity building and livelihood diversification will be essential to strengthen community-wide resilience.

B.1.3. National and provincial policies that support the BRAVE Project

¹³ Mercy Corps Indonesia, 2020. Climate Risk and Impact Assessment of Kupang Watershed and Coastal Area of Pekalongan City and Regency

¹⁴ Mercy Corps Indonesia, 2020. Climate Risk and Impact Assessment of Kupang Watershed and Coastal Area of Pekalongan City and Regency

¹⁵ Mercy Corps Indonesia, 2023. Regional Climate Budget Tagging for Pekalongan City

¹⁶ Mercy Corps Indonesia, 2023. Regional Climate Budget Tagging for Pekalongan Regency

The proposed project will align with the current policies of the Government of Indonesia and also fill the gaps in integrated water resource management (IWRM) and livelihood adaptation. The project will take a source-to-sea landscape framing and a multi-sector approach, which is aligned with Indonesia's 2nd Nationally Determined Contribution that sees comprehensive land-based climate change adaptation efforts as critical consideration to achieve climate resilience in food, water, and energy. It emphasizes adaptation through three resilience pillars: economic resilience, social and livelihood resilience, and ecosystem and landscape resilience. The BRAVE Project also has high relevance to National Adaptation Policies (NAPs). Under NAPs, our project falls under climate resilience policies, specifically sectoral adaptation (highly relevant to Water Security and Ecosystem Security, with moderate relevance to Food Security). Meanwhile, its relevance to the Cross-Sectoral Adaptation Portfolio encompasses economic resilience, social and livelihood resilience, and ecosystem and landscape resilience. For in-country policy framework, the National Policy on Climate Resilient Development (PBI), one of the implementing instruments of the RPJMN 2020-2024¹⁷ and the upcoming period of 2025-2029 (mainly on National Priority on Building Environment, Increasing Disaster and Climate Resilience), identifies Pekalongan City, Pekalongan Regency, and Batang Regency as a super-priority and top priority areas for climate resilience activities in the agriculture sector, water sector, and also marine and coastal sector. The policy sees a multi-dimensional (technology, infrastructure, capacity building, and also governance and financing dimension) approach as the key to climate-resilient development, with inclusivity and ecosystem preservation as overarching aspects. These key sectors and multi-dimension approaches are in line with the needs and concerns related to flood resilience building in the Petanglong area. Presidential Regulation No.79/2019 further places Petanglong as an area where economic development needs to be advanced to support the growth of the Central Java economy. However, projects outlined in the Decree focus on structural flood protection measures, with little attention on water resource management, livelihood improvement, and climate-induced flood risk reduction. The Central Java government, through their Petanglong Program, aims to fill this gap by focusing on integrated transboundary water resource management, agroforestry, and livelihoods.

B.1.4. Problem statement, root causes and barriers to action

Problem Statement.

The Petanglong area in Central Java, covering Pekalongan City, Regency, and Batang Regency, faces declining resilience of communities, livelihoods, and watershed systems to increase climate-related water risks. Local populations depend on climate-sensitive sectors such as agriculture and aquaculture, yet their capacity to cope with flooding and water variability remains limited. Intensifying rainfall, land subsidence, sea level rise, and watershed degradation are amplifying these vulnerabilities. By 2035, inundated areas are projected to triple, affecting settlements, agriculture, and industrial lands, while water supply during the dry season remains unreliable. Deforestation, land degradation, and unsustainable agricultural practices upstream have reduced water retention, increased runoff, and intensified downstream impacts. Despite government commitment, multiple systemic barriers hinder climate-resilient development:

- **Limited climate knowledge and capacity:** Communities and farmers lack access to climate information and also resilient farming and adaptive aquaculture methods. Local government officials have insufficient expertise in climate risks, integrated watershed management, and long-term planning.
- **Economic and market constraints:** Short-term economic incentives and high vulnerability among poor farmers and fish farmers discourage adoption of sustainable practices. Market mechanisms rarely reward climate-resilient production: buyers typically prioritize volume and price rather than sustainability or risk reduction, and certification or premium markets remain inaccessible to most small producers. Policy incentives for sustainable practices are also limited or inconsistently implemented, providing little economic signal to shift production systems toward more resilient approaches. Financial institutions perceive smallholder agriculture and aquaculture as high risk due to climate variability, limited collateral, and irregular income streams. As a result, available credit products are often short-term, require formal guarantees, or carry interest rates that are unaffordable for small producers. This limits investment in practices such as improved water management, resilient crops, and sustainable aquaculture systems. At the same time, fragmented value chains and weak producer organizations reduce bargaining power and market access, further constraining incentives to adopt climate-resilient production models.

¹⁷ The RPJMN 2020–2024 (Rencana Pembangunan Jangka Menengah Nasional) is Indonesia's National Medium-Term Development Plan, established through Presidential Regulation No. 18/2020. It serves as a strategic framework for the nation's development over five years, aligning with the Long-Term Development Plan (RPJPN 2005–2025) and the President's vision for 2045.

- **Institutional and governance challenges:** Fragmented policies across agriculture, forestry, water, and climate sectors—combined with limited cross-sector and transboundary coordination—constrain integrated, long-term flood and climate risk management. Although national regulations (MoHA Regulation No. 114/2014 and MoV Regulation No. 16/2025) mandate climate-resilient village development, actual integration of climate risks into village planning remains limited. Village governments often lack the technical capacity to interpret climate information, with relevant data fragmented and not easily accessible at the village scale, resulting in untargeted interventions. Budget constraints further reinforce a preference for short-term infrastructure over long-term adaptation measures that deliver slower, future-oriented benefits.
- **Social and cultural factors:** Women, children, the elderly, and smallholder farmers/fish farmers, who make up a significant portion of the population, have limited decision-making power, minimal access to information, and face cultural barriers to adopting new practices. Flood preparedness plans are largely absent in high-risk areas¹⁸ where the high-risk community is also identified as having a low-flood risk perception¹⁹.

These root causes and barriers reinforce a cycle of environmental degradation, water scarcity, and socio-economic vulnerability. Addressing these root causes requires a holistic approach: strengthening watershed management, promoting climate-resilient agriculture and adaptive aquaculture, improving surface runoff management, restoring degraded ecosystems, providing access to financial products and markets, and enhancing the capacity and inclusion of vulnerable populations. These interventions must be accompanied by economic incentives, integrated policies, and participatory governance to ensure long-term resilience for both communities and ecosystems in the Petanglong area

B.1.5. Alignment with other projects in Petanglong area

BRAVE builds on lessons from MCI's ongoing ZCRA projects, Kemitraan's Adaptation Fund (AF) project, and consultations with communities and local governments. ZCRA's resilient livelihood pilot in 8 villages of Pekalongan City and Regency has promoted climate-smart agriculture and adaptive aquaculture, integrating conservation practices and climate risk considerations, resulting in tangible economic benefits. The pilot includes capacity building, climate field schools including the initiation of climate information system development, community-based business entities for selected commodities, with special attention to women, as well as working with the private sector. BRAVE aims to scale these initiatives by engaging additional farmer and fishfarmer groups, expanding to new villages and new commodities, improving decision-making tools, and strengthening market systems to create a resilient business ecosystem across the Petanglong area. Institutionalizing the model at both community and enabling environment levels (regulatory and financial) will support replication and scaling. Including Batang Regency and the Sengkarang watershed allows a comprehensive landscape approach to flood risks.

BRAVE will also leverage lessons from the AF project "3S Approach to Build Coastal City Resilience", which focuses on downstream areas. However, downstream-only interventions cannot fully address upstream-driven flood risks. BRAVE adopts a holistic landscape perspective, addressing upstream, midstream, and downstream segments, complementing AF interventions and expanding their impact. The project will explore potential linkages with AF interventions. The project's integrated, landscape-based approach ensures synergy with ongoing initiatives while addressing the root causes of flood risk in the Petanglong watershed. BRAVE will capitalize on established relationships by MCI/ZCRA and Kemitraan with local, provincial, and national government agencies to advocate for climate-resilient policy frameworks. These connections will play a pivotal role in boosting BRAVE's efforts to drive policy changes by advocating a climate-resilient policy framework.

B.2.1. Project/Programme description (max. 1,000 words)

B.2.1.1 Project's Design

Goal Statement:

¹⁸ Rahmawati, Rita, Rismawati, Shinta D., Zaduqisty, Esti, 2013. Sistem pengupahan dan pembagian kerja perempuan buruh batik berbasis putting out system di Kota Pekalongan. pp 274-293. Jurnal Penelitian Vol. 10. No. 2. November 2013

¹⁹ Mercy Corps Indonesia, 2020. Climate Risk and Impact Assessment of Kupang Watershed and Coastal Area of Pekalongan City and Regency

IF communities, local governments, and market actors access and apply climate information to guide land use planning, water management, and climate-resilient livelihood practices across the Kupang and Sengkarang watersheds, AND IF enabling policies, institutions, and market systems support these practices,

THEN households and ecosystems across the upstream, midstream, and downstream areas will experience sustained reductions in climate-induced flood and water-related risks, stronger and more diversified livelihoods, and improved watershed resilience,

BECAUSE risk-informed decisions, integrated watershed governance, and climate-resilient value chains collectively address the underlying drivers of vulnerability—such as degraded land, unmanaged runoff, weak institutional coordination, and fragile local economies—resulting in systemic, scalable, and long-term adaptation benefits.

The BRAVE project applies a landscape perspective, planning interventions across agriculture, forestry, and water to balance land use needs while supporting food security, ecosystem conservation, and poverty reduction. By targeting upstream, midstream, and downstream areas, the project tackles the drivers that exacerbate flood risk, land degradation, and community vulnerability, while addressing barriers such as limited climate knowledge, weak governance, market failures, and gender inequities. Its activities integrate livelihoods, ecosystems, adaptive practices, capacity building, and policy landscape improvement, with gender sensitivity ensured through assessments and balanced participation. Building on MCI/ZFRA and AF initiatives and rooted in strong community consultation, the outcomes are a direct response to systemic barriers and are designed to reinforce each other, using Outcome 1 to generate evidence, Outcome 2 to implement climate-resilient practices, and Outcome 3 to create the enabling environment for scaling and replication. The Theory of Change can be found in Annex 2c.

B.2.1.2. Project outcomes, outputs, and activities

Outcome 1: Development planning processes in Sengkarang and Kupang watersheds are participatory and climate-informed

Outcome 1 focuses on integrating climate information into landscape and community planning to strengthen resilience in the Sengkarang and Kupang watersheds. This outcome is implemented in line with locally led adaptation principles, whereby local communities and other local stakeholders are the main subjects of the planning process, and community resilience action plans are developed through bottom-up, participatory assessments conducted in target villages as a follow-up to the watershed-scale, top-down climate risk assessments. Key activities include landscape resilience assessments that combine climate risk and impact analyses with resilient livelihood assessments, linking projected climate impacts to local economic activities. A full assessment will be conducted for Sengkarang with long-term and decadal projections, while for Kupang there will be an updated assessment building on previous work. Complementing this, an ecosystem services evaluation and valuation assessment will be conducted to quantify the benefits of watershed and coastal ecosystem functions for livelihoods, water regulation, and risk reduction, providing an economic basis for adaptation and conservation priorities. This assessment is particularly important given existing challenges in the watersheds, including limited understanding of the technical and economic benefits of High Conservation Value/High Carbon Stock (HCV/HCS) approaches, weak integration of ecosystem considerations into local planning documents, and fragmented stakeholder coordination. By quantifying ecosystem values and upstream–downstream linkages, the assessment will help make the economic case for nature-based solutions and support prioritization of conservation and resilience investments. Initial consultations with local stakeholders, including PDAM Krompeng, also suggest potential pathways for future incentive mechanisms for watershed management and conservation. These assessments inform the development of an integrated impact-based forecasting system for agriculture and aquaculture, while also serving as a technical reference for participatory community planning processes that translate watershed-scale climate risks into locally appropriate adaptation actions by translating complex climate information into practical guidance for planting, harvesting, feeding schedules, and water management. The system is designed in collaboration with IPB university and sectoral agencies, with community needs and preferences to enable alignment with Indonesia's formal village development planning mechanisms as the critical inputs, ensuring scientific evidence underpins risk-informed decision-making and provides a model for broader adoption at provincial and national levels.

In accordance with the Minister of Home Affairs Regulation (Permendagri) No. 114/2014 on Village Development Guidelines, the project will explicitly link its participatory climate risk assessments and community resilience action plans with the mandatory village planning instruments (RPJMDesa - Village Medium-Term Development Plan) and RKP Desa – Village Annual Work Plan. This ensures that community climate resilience action plan, Climate Information System (CIS) decision making toolkit, and adaptation actions can be formally integrated into village deliberation processes (Musyawarah Desa) and incorporated into village budgets (APBDes)

As a basis for the further process, 33 resilient community groups represent the final selection of 33 villages located across two watersheds, identified following the completion of the Climate Risk and Impact Analysis (CRIA) update for the Kupang watershed and the development of CRIA for the Sengkarang watershed. The initial identification of 33 resilient community groups are identified from the baseline study of climate risk and impact assessment for Kupang watershed (2020) and selected to be fair representation of 3 segments of watersheds (upstream, midstream and downstream). Since the selection will be on the basis of the updated climate risk and impact profile for those watersheds, including for the land-use dynamic affecting those profiles (for the upstream and mid-stream villages consideration). These villages were selected based on their climate risk and impact profiles, which also consider land-use dynamics influencing vulnerability—particularly in upstream and mid-stream areas. The composition of each group will be determined through careful consideration of community power dynamics and gender dynamics, informed by assessments conducted during the participatory, bottom-up climate resilience process using community-based vulnerability, risk, and resilience

measurement tools. We will ensure that socially and economically vulnerable groups are adequately supported to engage meaningfully within these groups

These groups, with 495 members (with around 40% are women) will be trained in different climate resilience context such as risk-informed planning, climate information use, disaster response and gender-sensitive approaches. The formation and capacity building of these groups will ensure the meaningful participation of vulnerable groups, including women and climate-exposed households, throughout the planning, decision-making, and implementation processes. The training topics will be tailored to the specific interventions planned for implementation in that particular community. Participatory planning processes with community groups, local government, and sectoral agencies will lead to the development of 33 community resilience action plans that explicitly integrate climate adaptation and gender considerations and contribute to improving management of 3,700 hectares of productive land. Each plan will also include a participatory monitoring framework with capacity building, community level indicator development, and regular multi-stakeholder evaluation forums, to support adaptive implementation.

The blue green space establishment will involve at least 8 villages that is subset from the 33 villages, in priority upstream and midstream locations and building on preliminary hydrological and spatial analysis conducted during the PPF phase. Before proceeding with the BGS construction, we will carry out technical assessments (e.g. hydrodynamic modelling, infiltration testing, geotechnical surveys, and water quality sampling) during the inception phase. Technical assessments are essential to finalize site selection, validate design assumptions, and ensure ESS category C compliance. The technical assessments will be reviewed by the PSC and GCF as appropriate. This will be followed by site-level stakeholder consultations with government agencies, village authorities, and communities to assess local risk perceptions, environmental conditions, and community receptivity to Blue Green Space interventions. Technical assessments, including physical and drainage analyses, mapping, and field inspections, will support site feasibility and the securing of necessary permissions, while ensuring that blue-green spaces function as flood regulators during wet periods and as recreational public spaces during dry periods, while enhancing biodiversity and infiltration capacity. This process will allow those core functions and co-benefits to be explicitly considered and integrated in the technical assessment and design process.

A set of Blue Green Space site selection criteria has been added to the Pre-FS Annex Blue Green Space Study section 3.4 Site Selection.

| No | Prioritisation criteria | Criteria & indicators | Description |
|-------------------------|--|---|---|
| Physical criteria | | | |
| 1 | Maximising the area of the blue green space | Area (m ²) | The plot size is to be a minimum of 2,500 m ² , and unlikely to be over 15,000 m ² . |
| 2 | Maximising area served by blue green space and number of beneficiaries | Area (km ²) No of beneficiaries | The area served is to be at least 1 km ² with priority given to larger catchments, although typically not exceeding 5 km ² . |
| 3 | Predominantly flat terrain within a 1000 m radius | Flatness of the area of 1000 m (%) | Slope preferably does not exceed 12%, with preference for flatter terrain. The exact value to be confirmed during the design phase. |
| 4 | Condition of the drainage network around the area | The presence of drainage around the location | The area shall be served by an existing and adequate drainage network, with sufficient capacity and structural condition to safely convey overflow from the blue-green space under design storm conditions. |
| | | Cleanliness of drainage | Preference is given to areas with well-maintained and clean drainage systems. |
| 5 | Groundwater in and around the area (radius 0-100 m), and groundwater in the lowland/lower area | Average of groundwater depth (during the rainy season) (cm) | Areas with greater groundwater depth are preferred, with minimum assumed depth of 50 cm. |
| 6 | Land use/cover in and around area | Land use in the targeted area | The blue-green space is assumed to be located on underutilized land (e.g., shrubland or unmanaged areas). |
| 7 | Proximity to settlement | Distance (km) | The space is to be situated no more than 5 km from settlements, with priority given to nearer locations. |
| Socio-economic criteria | | | |

| | | | |
|---|---|------------|--|
| 8 | Acceptance of the blue-green space by the surrounding community | Permission | The blue green space must require permission from the surrounding community. |
|---|---|------------|--|

A set of exclusion criteria will be followed to ensure that activities related to the blue-green space component of this project are aligned with GCF investment criteria and GCF ESS Category C. Sites will be excluded from consideration if they meet any of the following conditions:

Physical exclusion criteria

- Sites that are not currently served by an existing drainage system.
- Sites currently under productive use (e.g., agriculture or active economic use). Land that will result in the reduction or displacement of existing productive land for local farmers or communities. This includes any site requiring physical displacement of people or demolition of residential or commercial structures.
- Sites with the presence of contamination posing risks to community health and safety.
- Sites with unclear, disputed, or insecure land ownership or tenure status.
- Sites located in or near sensitive or critical habitats, including protected areas or zones supporting threatened species.
- Sites that may impact cultural heritage, sacred sites, or areas of historical or archaeological significance.
- Sites with poor geotechnical conditions that would necessitate major engineering interventions beyond the scope of small-scale nature-based solutions.
- Sites requiring extensive earthworks, deforestation, or prolonged use of heavy machinery to limit construction scale to small, low-impact interventions

Socio-economic exclusion criteria

- Sites for which the project implementors are unable to obtain necessary permits or stakeholder approvals for development, particularly by residents of the surrounding settlements.
- Sites for which a management plan endorsed by the relevant working group is rendered impossible to be approved and enforced.
- Sites for which a budget plan that adequately covers operational and management costs and does not demonstrate potential for economic returns or income generation is rendered impossible to be established.

In addition to the above, the project implementors will:

- Develop a standardized site-screening checklist that operationalizes all exclusion criteria to be completed and signed off by the working group for each of the 12 candidate sites before any proceed to detailed design.
- Confirm land-use/zoning alignment for each site under Ministerial Regulation No. 14/2022 and local spatial plans and provide documentation of this alignment in the baseline report during the landscape design for blue-green space activity.
- Ensure minimum a preliminary geotechnical and ecological assessment for all candidate sites at the baseline report during the landscape design for blue-green space activity.

Building on the PPF blue-green study, these steps will culminate in landscape designs of blue-green spaces including options such as flood buffers, wetlands, riparian zones, and urban green areas. Together, these activities enable data-driven, gender-sensitive, and climate-resilient planning, linking scientific evidence with actionable community strategies for sustainable development. This approach reinforces local ownership, enhances social inclusion, and aligns with GCF principles on country ownership and locally led climate action. The main outputs and activities are shown below.

Outcome 1: Development planning processes in Sengkarang and Kupang watersheds are participatory and climate-informed

| | | |
|--|-------|--|
| Output 1.1 Climate-based evidence is available to targeted communities and project stakeholders for climate-resilient planning | 1.1.1 | Conduct climate risk and impact assessment for Sengkarang watershed and updating the climate risk and impact assessment for Kupang watershed |
| | 1.1.2 | Develop ecosystem service evaluation and valuation assessment |

| | | |
|--|--------|--|
| Output 1.2. Community-based climate change adaptive management plans and designs have been developed to enhance community resilience | 1.2.1 | Formation and strengthening of climate-resilient community groups in target villages |
| | 1.2.2 | Develop community resilience action plans through inclusive stakeholder participation |
| | 1.2.3. | Conduct Hydrological analysis of watershed area to inform development of blue green spaces |
| | 1.2.4. | Securing approval of blue green spaces sites through stakeholder validation and risk perception analysis |
| | 1.2.5 | Landscape design of the blue-green space |

Outcome 1 directly addresses the barriers related to limited climate knowledge and capacity, fragmented institutional coordination, and weak integration of climate information into planning processes. The development of climate risk and impact assessments, ecosystem service valuation, and localized climate information systems responds to the lack of accessible and usable climate data identified as a major constraint for communities and local governments. The formation and strengthening of climate resilient community groups and the development of participatory community resilience action plans help overcome institutional and governance barriers by enabling coordinated, cross-sectoral planning and ensuring climate risks are formally integrated into village planning instruments such as RPJMDesa and RKP Desa. Capacity building activities targeting community members and local authorities also address social and cultural barriers by empowering vulnerable groups, including women, to actively participate in decision-making and climate-resilient planning processes. Through these interventions, Outcome 1 establishes the foundational knowledge, governance structures, and participatory mechanisms necessary to support long-term climate-resilient development across the watershed landscape.

Outcome 2: A Resilient Community and Ecosystem from Better Runoff Management and Climate-Resilient Livelihoods Across the Watersheds

Under Outcome 2, the project will deliver measurable climate resilient livelihood outcomes, with 520 households (approximately 2,080 people) adopting climate resilient agriculture and aquaculture practices across the Kupang and Sengkarang watersheds. These results directly address the climate impact identified under Outcome 1, including the effect of increasing temperature, erratic rainfall, upstream erosion, flood hazards, coastal inundation, and salinity intrusion to the livelihood of the communities. Under Outcome 2, the project will deliver measurable outcomes related to climate resilience in livelihoods, with 520 households (approximately 2,080 people) adopting climate-resilient agricultural and aquaculture practices across the Kupang and Sengkarang river basins. This outcome directly addresses the climate impacts identified under Outcome 1, including the effects of rising temperatures, erratic rainfall, upstream erosion, flood hazards, coastal inundation, and salinity intrusion on community livelihoods. Community selection was conducted through an assessment based on climate resilience criteria generated from the participatory process in Outcome 1 and the prioritization results for the community resilience action plan. More specifically, interventions will be implemented in 25 villages with agriculture and aquaculture characteristics and 8 villages with blue green spaces, ensuring that there is no overlap in interventions across the 33 villages. Based on location, only 15 villages in the upstream and midstream areas are implementing the Climate-Smart Agriculture and Conservation intervention, while only 10 villages in the downstream and coastal areas are implementing the Aquaculture and Value-Added Scheme. Meanwhile, 8 villages will be selected to implement the Blue Green Space.

To overcome barriers affecting upstream and midstream communities particularly on limited adaptive farming knowledge, inadequate access to climate information, and degraded land conditions, the project will implement climate smart agriculture (CSA) based on community prioritized measures identified through participatory planning processes. CSA interventions will strengthen farmers' adaptive capacity, reduce climate-induced production losses, and enhance watershed stability through introduction of water and soil conservation principles. These interventions will be implemented in 15 villages located in upstream and midstream areas, where farmers will adopt climate-smart agriculture practices integrated with conservation measures to address land degradation and reduce runoff risks. Activities include establishing regenerative agriculture demonstration plots, conducting climate field school trainings for priority commodities (e.g., coffee and carrot), expanding and contextualizing the Climate Information System (CIS), and strengthening local farmer organizations for sustained adoption. Farmer groups will lead the design and implementation of CSA activities, supported by technical facilitation to ensure practices are locally appropriate, gender responsive, and climate informed.

To address climate risks in coastal and downstream areas particularly the sea level rise, tidal flooding, and declining aquaculture productivity, the project will introduce adaptive aquaculture systems in 10 target villages located in downstream and coastal areas. Interventions will promote resilient practices such as floating net systems, relocating ponds inland, applying silvofishery models, and enhancing management for grouper and milkfish production. These measures will be complemented by improved feeding practices, water quality management, and support for value added aquaculture initiatives led by women's groups. Aquaculture farmer groups and women's groups will lead day to day implementation, while Mercy Corps Indonesia and relevant sectoral agencies will provide support, technical assistance to ensure sustained and climate responsive practice adoption.

The implementation of climate field school both for agriculture in upstream area and for aquaculture in downstream area will in collaboration with the Regional Climatology Agency. The resulting training modules will enable the agency to replicate and implement similar climate-responsive agriculture and aquaculture field schools across Central Java.

A participatory community-based monitoring framework will be implemented to enable continuous learning and adaptive management. Communities and local stakeholders will jointly define indicators, monitor resilience outcomes, and adjust

interventions as climate conditions evolve. This approach strengthens local ownership, institutionalizes climate responsive decision making, and ensures that adaptation actions remain effective, equitable, and aligned with long term resilience pathways.

Climate rationale for the chosen commodities. The chosen commodities, grouper, carrot, milkfish, and robusta coffee, are central to local livelihoods and markets but increasingly vulnerable to climate change. Grouper faces declining wild catches as safe fishing periods shrink, making climate-resilient aquaculture a sustainable adaptation pathway despite past challenges with contamination, flooding, and feed management. Carrot, an important upstream crop, is more climate-tolerant than other vegetables but suffers major yield losses from drought, waterlogging, and disease; its storability and less extensive chemical use and strong demand make it a viable adaptation option compared to potato. Milkfish, Pekalongan's primary aquaculture commodity, is severely threatened by subsidence, sea-level rise, and tidal flooding, with pond areas significantly reduced, requiring urgent adaptive systems to sustain production and livelihoods. Robusta coffee is highly sensitive to rainfall extremes, drought, and pests, which reduce both yield and quality, but it also plays a vital role in watershed protection, making resilient coffee systems critical for both farmers and ecosystem stability. Beyond its economic role, coffee farming, in particular in agro-forestry systems, maintains vegetation cover in critical catchment areas, linking climate-resilient coffee production to both livelihood security and water resource protection.

The project also supports participatory land use and conservation implementation, including floodplain restoration, bioswales, and vegetative-based technologies to promote sustainable soil, hydrology, and biodiversity management. Collectively, these interventions will provide adaptation benefit to approximately 14,160 people by improving watershed health, promoting sustainable land use, and restoring ecosystem services. With all evidence and proven model in-place, the project aims to strengthen village engagement by improving access to localized, practical climate information through simplified datasets and an enhanced Climate Information System (CIS). Village governments will be trained to interpret climate risks and integrate them into their annual and medium-term plans and budgets using CIS-decision making toolkits. In alignment with Ministry of Home Affairs Regulation No. 114/2014, participatory climate risk assessments and community resilience action plans will be directly linked to village planning instruments (RPJMDesa and RKPDesa), ensuring that climate actions are formally incorporated into Musyawarah Desa (village planning deliberation) processes and village budgets (APBDes). The project will also encourage sustained adaptation financing by supporting villages and districts to allocate Village Funds, APBD/APBDes, and sector budgets while exploring opportunities for blended finance. Not only targeting the proportion for those with climate, but we will examine the relevance of activities to the potential for under village fund financing. The potential for financing using village funds for addressing climate change, based on the Ministry of Village Regulation, is specifically regulated to address the impacts of climate change, including drought, flood, and landslide control, handling and anticipating sea level rise or seawater intrusion, and other climate change adaptation activities. However, the regulation does not specify a specific percentage for CCA. To ensure adequacy, mainstreaming process of CCA needs and village programming will be conducted. To ensure coordinated financing and transboundary implementation, advocacy for policy change will be conducted at multiple levels, not only at the village-level planning and budgeting level, but also at the city/regency level to ensure alignment between villages, that will be implemented under Outcome 3.

Runoff management will be strengthened through the establishment of four blue-green spaces, involving at least 8 villages, in priority upstream and midstream locations. Building on result from detail hydrological analysis and site level stakeholder consultations on risk perception and technical-environmental analyses under Outcome 1 the project will carry out a sectoral risk and opportunity assessment and planning for the multi-functional use of blue-green spaces to guide the utilization of each blue-green space. Each site is co-designed with government officials, village representatives, and the project team and validated through public consultations, alongside the establishment of blue-green space management working group formalized under a Mayor's or Regent's Decree to ensure coordinated planning, implementation, and oversight and ensuring consistency and commitment among those involved in the BGS planning discussions for effectiveness and efficiency. These will ensure that physical, hydrological, and landscape plans are responsive to community needs. In parallel, the project will ensure that all required permissions are secured prior to MoU establishment, including consent not only from landowners but also from surrounding communities, where community consent is not obtained, the blue-green space will not be implemented in that location. Blue-green space design options have been explored at the PPF stage. Four indicative sites have been identified, all of which meet the preliminary requirements for establishment based on spatial and hydrological analysis and discussion with local governments. Preliminary design options for each of the four sites are available in the Study on Blue-Green Space that is attached as an appendix to the Pre-Feasibility Study. Integrated systems and procedures for monitoring and communication of blue-green space risks will be developed for each site to track performance and manage flood risk and ensuring no social and environmental risks are breached. We will use monitoring data to refine BGS performance and adjust designs as needed. We will also conduct infiltration tests, soil surveys, rainfall frequency analysis, and peak flow attenuation modelling for BGS design validation. Site-specific operational and management arrangements will also be incorporated to ensure the structures function as flood regulators during wet periods and as recreational public spaces during dry periods, while enhancing biodiversity and infiltration capacity. Sub-district contingency plans are also established, with training for local committees to improve flood preparedness, response, and early action. This intervention reduces flood risk for 121,036 people and contributes to the long-term resilience of both communities and ecosystems across the watersheds. The operation and maintenance plan for the blue-green space will be developed during project implementation, following the establishment of the project's Standard Operational Procedure.

Activities under Outcome 2 ensure the sustainable implementation of those planned under Outcome 1. The pilot implementation of climate-smart agriculture, adaptive aquaculture, and water runoff management will demonstrate the validity of chosen approaches. These interventions will be prioritized based on the Community Resilience Action Plans developed under Outcome 1, considering their relevance to the BRAVE project scope, the urgency and cost-effectiveness, potential support from relevant stakeholders, the expected benefits for communities and the surrounding landscape, as well as the acceptance and willingness of target communities

to participate in the proposed interventions, From the results of prioritization together with stakeholders using these criteria, MCI as Executing Entity will have full authority to decide on the interventions needed on these 33 villages selected.

Outcome 2: Communities in the targeted watersheds implement climate-resilient livelihoods and integrated watershed/runoff management practices that reduce climate-related risks

| | | |
|--|-------|--|
| Output 2.1 Communities in the targeted watersheds are supported to implement the climate-informed and climate-resilient livelihood options | 2.1.1 | Conduct climate-smart field schools for agriculture and aquaculture to promote climate-resilient farming and adaptive aquaculture practices. |
| | 2.1.2 | Expand and contextualize the Climate Information System (CIS) to support community resilience action plan implementation across upstream, midstream, and coastal communities, focusing on coffee, carrots, milkfish, and grouper commodities |
| | 2.1.3 | Build the financial and business management capacity of farmer and fish-farmer groups to function as aggregators for their members |
| | 2.1.4 | Implement participatory conservation measures and establish climate smart agriculture demonstration plots |
| | 2.1.5 | Establish adaptive aquaculture demonstration plots complemented with improved feeding management practices and introduce value added schemes for women farmer groups |
| | 2.1.6 | Facilitate village engagement and advocacy in upstream, midstream, downstream and coastal communities to support knowledge exchange with farmer and fish-farmer groups |
| Output 2.2. Integrated runoff management and flood preparedness systems established in targeted sub-districts | 2.2.1 | Establishment of blue-green spaces informed by sectoral risk and opportunity assessment |
| | 2.2.2 | Provide systems and procedures for monitoring, communication and operational management of blue-green spaces |
| | 2.2.3 | Securing validation of designs and establishment of blue-green spaces management working groups |
| | 2.2.4 | Develop sub-district level contingency plans |
| | 2.2.5 | Train local communities on flood preparedness and response |

Outcome 2 responds primarily to economic, environmental, and technical barriers that limit the adoption of climate-resilient livelihood practices and sustainable watershed management. The introduction of climate smart agriculture and adaptive aquaculture addresses the limited technical capacity and degraded land conditions that contribute to declining productivity and increased vulnerability to climate risks. Demonstration plots, climate field schools, and expanded Climate Information System services respond directly to knowledge gaps among farmers and fish-farmers, enabling them to adopt locally appropriate and climate informed production methods. Participatory conservation activities, blue-green space development, and integrated runoff management interventions address environmental degradation and unmanaged surface runoff, which were identified as key drivers of flooding and ecosystem decline. In parallel, strengthening farmer and fish-farmer groups and supporting financial and business management capacity addresses market and financial barriers that restrict investment in climate resilient practices. Together, these interventions enable communities to transition from vulnerability to resilience by improving livelihoods while restoring ecosystem functions and watershed stability.

Outcome 3: Enabling Environment to Replicate and Scale-Up Climate-Resilient IWRM

Outcome 3 focuses on creating an enabling environment to ensure the sustainability, replication, and scaling-up of climate-resilient Integrated Water Resource Management (IWRM) and livelihood practices. Evidence-based policy recommendations are developed through analyses at national, provincial, and local levels, complemented by multi-level advocacy dialogues with government, academia, private sector, communities, and media. Communication and media outreach activities will reinforce policy narratives and advocacy objectives while also supporting broader visibility of project results. Lessons learned, evidence, and key insights, including findings from climate risk assessments and ecosystem service valuation analyses, will be synthesized and disseminated through targeted media products and a maintained knowledge repository to inform policymakers and practitioners. Evidence generated through ecosystem valuation will support advocacy efforts by demonstrating the economic benefits of ecosystem functions and climate-resilient investments, helping strengthen justification for public investment decisions (e.g., APBD/APBDes), prioritization within planning instruments (RTRW/RPJMD), and the exploration of incentive-based financing mechanisms for watershed management such as Imbal Jasa Lingkungan (IJL) and broader financing opportunities. Stakeholders will also receive orientation and practical guidance on how to apply the tools and frameworks developed under the project, enabling project knowledge to be translated into policy formulation and planning processes grounded in scientific evidence and practical experience. This approach strengthens the institutional and regulatory framework, contributing to the broader adoption of climate-resilient practices in line with GCF result areas. A climate-resilient IWRM framework will be co-developed with stakeholders to integrate landscape and climate resilience perspectives into policy and planning. A decision-making tool, CIS, is operationalized to translate scientific data into actionable guidance for agriculture and aquaculture, and to some extent for watershed management, accompanied by user guidance and capacity support to enable stakeholders to apply the system effectively. Advocacy supports the inclusion of IWRM principles into local and provincial policies, promoting a systematic approach to risk-informed water management. These interventions ensure that climate-resilient planning is embedded into governance structures and local decision-making

processes. The integration of climate-resilient IWRM and livelihood approaches into local and provincial policies is intentionally designed to promote strong local ownership, institutional anchoring, and long-term sustainability, ensuring that climate-resilient practices are maintained and scaled beyond the project lifecycle

To reinforce economic sustainability, climate-resilient livelihood business models are developed for key commodities (grouper, milkfish, coffee, and carrot), linking farmers, farmer groups, MSMEs, financial actors, markets and technical service providers. Within this market system development approach, community organizations and producer groups are positioned as prominent market actors, playing active roles in aggregation, service delivery, coordination with buyers, and engagement with financial institutions. Climate-resilience criteria generating from the participatory process under Outcome 1 and the result of prioritization of community resilience action plan will be explicitly embedded into business model design to ensure the models are both commercially viable and resilient to climate risks. Four business models are adopted, with four organizations (including off-takers, agriculture/aquaculture input providers, and financial institutions) formalizing engagement through MoUs or other means of agreements. Bundled service schemes are developed per commodity, providing technical advisory and access to financial products. Technical advisory services may include financial literacy, financial readiness, and climate-resilient production guidance, which will include support for application processes, onboarding, and access to instruments such as savings schemes, parametric insurance, and microfinance that incentivize climate-resilient investments. The general scheme might be similar across commodities, but the specifics may vary.

It is important to note that consultations have been conducted with a range of financial service providers, including national commercial bank (BRI), regional development bank (Bank Jateng), microfinance institution (BPR Jateng), non-bank financial institutions (PNM), and insurance companies (Zurich Syariah and ACA Asuransi). In addition, consultations were held with key ecosystem actors operating within a closed-loop model, such as input suppliers, off-takers, and aggregators (e.g., Petung Bumi Makmur and Moya Bahari Perdana). These consultations explored several areas, including the potential for bundling parametric insurance with loans and savings, defining participant eligibility criteria in agreement with financial service providers, conducting financial literacy and strengthening financial management capacities (such as separating business and household finances and calculating the cost of goods sold), and insurance awareness. The bundled services are designed to function as a de-risking mechanism, with clearly defined roles for each stakeholder to reduce the likelihood of non-performing loans. This includes a repayment mechanism whereby proceeds from harvest sales are transferred directly into participants' savings accounts.

As a follow-up to these consultations, there is potential demand from 400-600 program participants for bundled loans, parametric insurance, and savings/digital payment services with 30% potential active user. The bundled financial services package is designed to combine access to credit, savings mobilization, and risk protection to support climate-resilient livelihoods. Assuming an average loan size of IDR 5 million per beneficiary, the loan component provides working capital aligned with agricultural and aquaculture production cycles. To strengthen financial resilience, participants are expected to build regular savings over a two-year period at IDR 100,000 per month, which serves not only as a liquidity buffer but also as an emergency fund to absorb shocks. In addition, these savings can function as an alternative source for future insurance premium payments, helping to sustain participation in the insurance scheme beyond the initial support period. In parallel, participants are enrolled in parametric insurance schemes, with a premium of IDR 500,000 per year for two years, providing protection against climate-related risks (e.g., extreme rainfall or flooding) that may affect production.

Together, this bundled-service approach is also designed as a de-risking mechanism, with clearly defined roles across aggregators, financial institutions, input providers, and market actors to reduce barriers for both smallholders and lenders. Thus, it reduces risk for both farmers and financial institutions, improves loan performance, and creates a more bankable and resilient livelihood system, while supporting the long-term sustainability of insurance uptake and financial inclusion beyond the project period. This is particularly relevant in Indonesia, where average farm sizes are often only 0.3–0.5 ha, making direct engagement with individual farmers less attractive due to high transaction costs and concerns around non-performing loans (NPLs). Community organizations and producer groups therefore serve not only as aggregators of products, but also as intermediaries for market access, input provision, and financial services. Based on market assessments, the project identified a potential market pool of 400–600 participants for bundled financial products and services. Rather than targeting immediate large-scale adoption, the project adopts a use-case approach, where early implementation demonstrates viability and generates evidence for future scaling. This assumption is grounded in Mercy Corps Indonesia's implementation experience across multiple closed-loop model initiatives, which show gradual uptake dynamics due to initial barriers such as financial literacy, risk aversion, and access constraints. It is further supported by evidence from the Financial Services Authority (OJK), indicating that active utilization rates of financial products are closely linked to portfolio quality considerations, particularly non-performing loan (NPL) risks, where conservative uptake assumptions are necessary to ensure financial sustainability and realistic market penetration. This approach directly contributes to the project's market and finance transformation pathway; one of the three core paradigm shifts under BRAVE. By operationalizing closed-loop business models and bundled financial services, the project moves beyond one-off financial access toward systemic de-risking and sustained private sector engagement.

At the same time, it reinforces:

- Community empowerment, by equipping farmers and MSMEs with the capacity and financial tools, including digital marketing channels to make climate-informed investments; and
- Systemic governance change, by embedding these models within institutional frameworks and partnerships that can be scaled beyond the project lifecycle.

As a result, BRAVE aims to shift the system from fragmented, subsidy-driven financing toward integrated, market-based climate finance pathways, ensuring long-term sustainability and scalability. This design is expected to strengthen the agency and commercial viability of community-based organizations, enabling them to move beyond beneficiaries to function as sustainable, locally anchored economic actors within the value chain. Companies are expected to scale these models in their operations in other locations, indirectly reaching significantly more farmers. While uptake targets are conservatively estimated, the project invests in creating enabling conditions for longer-term expansion through strengthened financial literacy, business management support, social inclusion and market assessments, and co-development of fit-for-purpose financial products with financial institutions. The objective is to create evidence and business cases that enable partners to scale these models beyond the project timeframe using their own resources. To further support scalability and attract greater private-sector investment, the project will develop a specialized knowledge product documenting the business model development process using the bundled-services approach. This knowledge product will serve as a use-case reference for promotional efforts, pitching to broader stakeholders (especially private-sector actors) and reinforcing the investment potential of climate-resilient livelihood models. Outcome 3 will involve regular monitoring and evaluation activities on technical performance of the close-loop model, which will inform the refinement of the project approach and activities.

Outcome 3: Enabling environment to replicate and scale-up climate-resilient IWRM exists

| | | |
|---|-------|---|
| Output 3.1. Government stakeholders, academia, private sector, community and media are informed of best practices of climate-resilient and climate-informed livelihood options, and policy recommendations. | 3.1.1 | Conduct policy analysis at provincial and local level to inform evidence-based policy recommendations |
| | 3.1.2 | Facilitate multi-level advocacy and policy dialogues to advance the integration of Integrated Water Resources Management (IWRM) principles into local and provincial policies |
| | 3.1.3 | Develop and disseminate a summary for policy makers based on lessons learned |
| | 3.1.4 | Co-develop climate-resilient IWRM framework through stakeholder consultation (to integrate landscape and climate resilience perspectives) |
| | 3.1.5 | Conduct media outreach and visibility campaigns and maintain knowledge repository |
| | 3.1.6 | Co-develop decision-making tools for sector-specific (CIS) with relevant local partners |
| | 3.1.7 | Amplify the project learning and evidence to inform the climate resilience policy development at the national level |
| Output 3.2. Communities in the targeted watersheds have access to supports with climate-resilient livelihood business models and finance | 3.2.1 | Detailed Market scoping analysis both for agriculture and aquaculture commodities |
| | 3.2.2 | Improve network with off takers, aquaculture and agriculture input providers |
| | 3.2.3 | Strengthen networks and facilitate linkages with financial institutions and technical assistance advisory groups, to improve access to finance and market opportunities. |
| | 3.2.4 | Develop bundled service business models for selected aquaculture and agriculture commodities |
| | 3.2.5 | Document and disseminate lessons learned on the replication potential of business models |
| | 3.2.6 | Conduct regular monitoring and evaluation on technical performance of the closed-loop model. |

Outcome 3 addresses institutional, policy, and market barriers that limit the sustainability and scalability of climate-resilient interventions. Policy analysis, multi-level advocacy, and the co-development of climate resilient IWRM frameworks respond to fragmented governance structures and weak coordination across sectors and administrative levels. The development of decision-making tools such as the Climate Information System and the integration of climate-resilient planning into local and provincial policies strengthen institutional capacity and promote long term adoption of risk informed planning practices. In addition, the development of bundled service business models and strengthened linkages with financial institutions address market and financial barriers by improving access to finance, technical services, and climate resilient market opportunities. These interventions create enabling conditions that support replication, scaling, and long-term sustainability of adaptation measures beyond the project implementation period.

The three outcomes of the project are closely interlinked, forming a continuous cycle of evidence generation, implementation, and scaling for climate-resilient watershed management. Outcome 1 provides scientific foundation by generating climate and landscape data, conducting risk and impact assessments, and developing resilient livelihood analyses and impact-based forecasting systems. This evidence-based approach ensures that the planning of climate-resilient activities under Outcome 2, such as climate-smart agriculture, adaptive aquaculture, and blue-green space development, is informed by robust climate projections and local ecosystem understanding, maximizing their effectiveness and relevance. Outcome 2 operationalizes the plans from Outcome 1, implementing tangible interventions that enhance socio-economic and ecosystem resilience. The lessons, successes, and challenges from these activities feed directly into Outcome 3, guiding the development of enabling policy frameworks, business models, and market systems needed for replication and scaling. Conversely, the enabling environment established under Outcome 3, through policy adoption, decision-making tools, and inclusive market systems, reinforces Outcomes 1 and 2 by facilitating sustained use of climate information, promoting broader stakeholder engagement, and supporting the long-term viability of community and ecosystem interventions. Together, the three outcomes create a reinforcing loop where science, action, and enabling

conditions continuously inform and strengthen one another, ensuring sustainable, scalable, and climate-resilient watershed management.

Figure 1 below provides a simplified correlation between climate variability and risk, as well as its derivative impacts described in the previous section and interventions under the intervention focus of the BRAVE project.

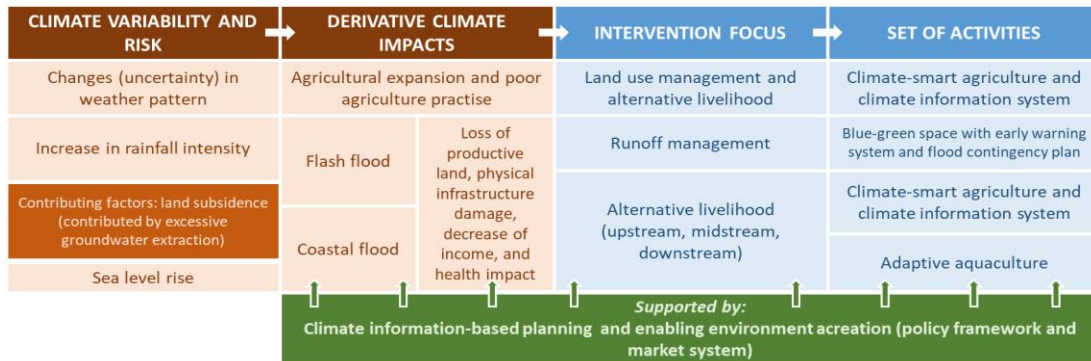


Figure 1: Correlation between Climate Variability, Risk, Derivative Impacts and Project Interventions

The project generates multiple co-benefits that extend beyond its primary objective of climate-resilient watershed management, spanning environmental, social, and economic dimensions. Environmentally, interventions such as blue-green spaces, and conservation enhance ecosystem health, biodiversity, water retention, and climate mitigation. Socially, resilient community groups, participatory planning, and training strengthen local decision-making, gender inclusion, food security, and disaster preparedness. Economically, climate-smart agriculture and adaptive aquaculture increase productivity, stabilize incomes, and create value-added opportunities, while bundled financial services improve access to credit, insurance, and technical support. Together, these interventions create a virtuous cycle, enhancing ecosystem resilience, community well-being, and sustainable livelihoods for long-term climate adaptation.

Project location. The intervention area for BRAVE was carefully selected based on initial field observations, the CRIA, and opportunities to create synergies with existing initiatives in the Petanglong area. This includes complementing the Adaptation Fund Project of Kemitraan, which focuses on strengthening climate resilience in the coastal area of Pekalongan City. A total of 33 villages across the Kupang and Sengkarang watersheds will be directly involved in the project, with tailored interventions based on local priorities and climate risks. As the Petanglong area is characterized by a high level of flood risk, driven by a combination of tidal flooding, sea-level rise, land subsidence, and increasingly erratic rainfall patterns. This creates a highly dynamic context where conditions can shift rapidly within a single season. Recognizing this dynamic context, the BRAVE project will adopt a flexible and adaptive approach to planning and implementation. The project design intentionally accounted for potential overlaps and synergies with other ongoing initiatives, ensuring complementarity rather than duplication. As implementation proceeds, the project will maintain a mechanism for monitoring changes in the physical environment, flood risk patterns, and stakeholder activities. These observations will inform regular updates to the project’s operational plan, and any significant changes will be treated as part of the project’s operational risk framework.

The design of the BRAVE project ensures sustainability through operational and maintenance (O&M) systems as well as long-term financial viability. From a technical perspective, sustainability is anchored through a robust O&M system that is built into every stage. Systematic climate risk and impact assessments, resilient livelihood analyses, ecosystem services valuation, and the integration of climate projections are embedded into the land use, conservation, and livelihood planning. These are supported by the establishment of climate-resilient community groups, targeted capacity building on risk-informed planning and climate information services, the development of climate-smart agriculture and aquaculture demonstration plots, and the institutionalization of blue-green space management, contingency planning, and community-based monitoring and response systems. Budget allocations for community groups, capacity building, and climate-smart field schools and demonstration plots ensure that local actors gain the skills required to operate, maintain, and monitor the interventions beyond the project lifespan

On the financial side, the project establishes self-sustaining revenue pathways through bundled service business models for priority commodities (enhancing value-added production particularly for women’s groups, improving feeding and farming efficiencies, and expanding access to markets and financial services. These interventions create diversified income streams that allow communities to finance ongoing adaptation, enhance creditworthiness, and institutional uptake and long-term government commitment.

2.2. Outcome mapping to GCF results areas and co-benefits categorization

Fill in the GCF results area table below to map each project/programme outcome identified in section B.2.1 to the contributing GCF results area(s) by referring to the description of eight results areas provided in the guidance note.

| Outcome number | GCF Mitigation Results Area (MRA 1-4) | | | | GCF Adaptation Results Area (ARA 1-4) | | | |
|----------------|---------------------------------------|---------------------------------|---|--------------------------------|---|--|---|--|
| | MRA 1 Energy generation and access | MRA 2 Low-emission transport | MRA 3 Building, cities, industries, appliances | MRA 4 Forestry and land use | ARA 1 Most vulnerable people and communities | ARA 2 Health, well-being, food and water security | ARA 3 Infrastructure and built environment | ARA 4 Ecosystems and ecosystem services |
| Outcome 1 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Outcome 2 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Outcome 3 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

If any co-benefits have been identified in section D.3, fill in the co-benefit table below to map each co-benefit to the corresponding category as defined in the FP guidance note.

| Co-benefit number | Co-benefit | | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| | Environmental | Social | Economic | Gender | Adaptation | Mitigation |
| <u>Co-benefit 1:</u> Enhanced access to income generation opportunities . | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <u>Co-benefit 2:</u> Equitable participation in the planning process and shared resilience benefits for women, men, and communities | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

B.3. Implementation / institutional arrangements (max. 750 words)

Project Implementation Structure. The implementation of the BRAVE project is structured around clearly defined legal, institutional, and fiduciary arrangements to ensure effective execution, accountability, and sustainability. The project aligns with the fiduciary standards and project management responsibilities of the Accredited Entity (AE), *Kemitraan*, and the Executing Entity (EE), *Mercy Corps Indonesia*.

Kemitraan, with GCF accreditation under basic and specialized fiduciary standards, will be responsible for:

- Overseeing the project implementation by the EE.
- Ensuring fiduciary compliance and safeguard standards are met.
- Submitting periodic reports to GCF and receiving GCF disbursements.
- Disbursing funds to the EE based on the approved disbursement plan.
- In addition to oversight role, Kemitraan will also take lead as part of the Executing Entity in implementing activities, which aligning to Kemitraan's role as part of PSC member.

A funded activity agreement, in the form of a non-reimbursable grant agreement, will be executed between GCF and Kemitraan, which will include all terms for disbursement, reporting, safeguards, and monitoring. A Subsidiary Agreement will be established between Kemitraan and MCI to govern project execution. The Subsidiary Agreement will specify roles and responsibilities, performance requirements, fiduciary obligations, procurement and safeguard procedures, grievance redress mechanisms, financial management protocols, and reporting requirements. The Subsidiary Agreement will reflect alignment with GCF-approved proposal terms.

MCI will be the main Executing Entity responsible for implementing and managing the BRAVE project according to the approved proposal and implementation plan to ensure a successful, effective, and timely delivery of the BRAVE project. MCI is a non-government organization with significant project portfolios in climate adaptation

and resilience, as well as economic development across different areas in Indonesia. The Monitoring, Evaluation, and Learning system (See Annex 14) will be developed and implemented by the EE to track progress and outcomes. Reporting will be done regularly by the EE to the AE. Before project commencement, a detailed coordination scheme will be established between the EE and Kemitraan to ensure they can track the progress of the project. A coordination mechanism between AE and EE will be institutionalized through joint oversight meetings (likely quarterly reviews between Kemitraan and MCI) and the establishment of a Project Steering Committee (PSC), composed of representatives from Kemitraan, MCI and key government agencies and local partners. The main function of PSC is to provide strategic oversight, ensure coordination among relevant governments and stakeholders, and guide high-level decision-making. There will also be Stakeholder Advisory Forums (SAF), as a platform of consultation forums. SAF will primarily play a role in stakeholder inclusion and ensure that each community or representative including 20% women are given the opportunity to provide input or feedback to the implementation stages. The SAF will be conducted annually, complementing the involvement of the project partners in regular monitoring, and will include community representatives, local government, civil society actors, and implementing partners, to ensure inclusion and feedback loops. To ensure representation of gender equity and social inclusion context in the composition of SC, we will also include the representatives of government, social and cultural divisions in the Regional Development Planning Agency.

The Project Management and Implementation Unit (PMIU) will oversee day-to-day project execution, including technical delivery, procurement, financial management, and monitoring and evaluation. The EE will start to recruit the PMIU team members, which consists of fully dedicated managerial and technical staff. Early in the project initiation phase, the EE and PMIU will collaborate to develop a comprehensive Project Implementation Plan (PIP). This PIP serves as the guiding reference for the PMIU as they carry out their roles and responsibilities. The EE holds the responsibility of supervising PMIU's activities, including ensuring strict adherence to the PIP and the EE's standards, policies, and procedures. The PMIU has the responsibility to regularly report the project progress to the EE. The EE will then review and submit the regular report, both the technical and financial reports, to the AE.

The PMIU will work with implementing partners to execute the project on the ground sub-contracting through third parties. MCI will enter into contractual arrangements (e.g., MOUs or service agreements) with:

- *Local Partners* (NGOs, universities, and research institutions). Potential partners include: Bintari (aquaculture, blue-green space), Pekalongan and Diponegoro University (risk assessment, aquaculture), IPB University (risk assessment, agriculture, CIS).
- *Financial institutions and cooperatives* to co-create financial instruments and supporting access to credit (e.g. ACA Insurance, BRI, Bank Jateng, PNM Mekar, Si Panen, Local Credit Union, and KOSPIN JASA are among the identified financial partners).
- *Professionals*. NGOs, technical experts, practitioners, professional associations and the private sectors that can provide technical advisory services or consultancy. This includes PT. Katata, Cognitia, Indonesian Landscape Architecture Association, and Indonesia Planners Association.
- *Community groups* will also play a key role in community empowerment activities. Among community groups that have been identified are: farmers, fish farmers, and agroforestry.

There will be some fund flow to the implementing partners to support the executing some components for the project implementation through the services agreement scheme. The pre-identified activities that will be sub-contracted are:

- CCRIA update for the Kupang watershed and CRIA development for the Sengkarang watershed, subcontracted to Diponegoro University and IPB University.
- Market system development analysis, subcontracted to Cognitia.
- Expansion of Climate Information Services (CIS), subcontracted to IPB University.
- Ecosystem services valuation analysis, subcontracted to the Indonesian Landscape Architecture Association.
- Development of demonstration plot (demplot) sites, subcontracted to Pekalongan and Diponegoro University (aquaculture), IPB University (agriculture), and Bintari (aquaculture and blue-green space).

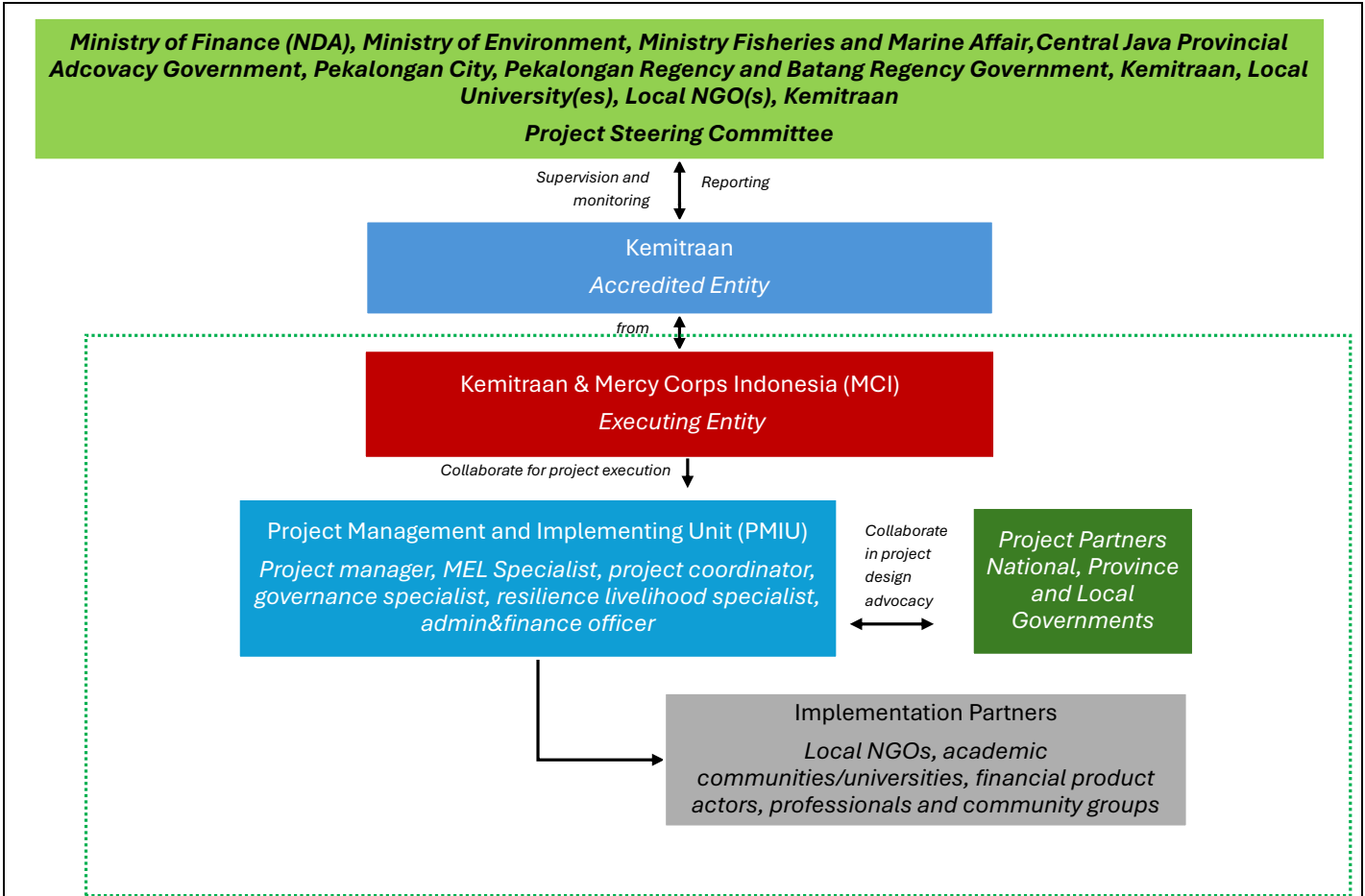


Figure 2 Implementation arrangements for the Brave Project

In addition to implementation partners, the BRAVE project will engage with project partners. We define project partners as those who will collaborate with the project in the participation process and explore advocacy opportunities. PP's role enriches project implementation by providing input during project development, such as involvement in determining priority communities/areas. These project partners encompass national, provincial, and local governments, and their collaboration will primarily revolve around shaping the project's design and advocacy efforts. During the initial stages of the project, the PMIU will initiate coordination efforts to actively incorporate their insights into the project's approach. The government actors to be involved are, but not limited to: the Ministry of Environment, the National and Regional Development Planning Agency, the Regional Water Resource Management Agency, the Regional Disaster Management Board, and the Watershed Management Board. Despite this identification, the BRAVE project will still conduct a stakeholder mapping early in the project implementation stage to further identify potential stakeholders to be involved. *Figure 2* presents the implementation arrangement of the involved actors in the project.

The AE, in collaboration with the EE, will be responsible for monitoring and reporting on project performance in line with the GCF's Integrated Results Management Framework (IRMF) and the AE's internal standards. Progress will be tracked through measurable indicators, with baselines, targets, and means of verification defined in the project's results framework. Annual Performance Reports (APRs) will be submitted to the GCF Secretariat, and an mid-term and terminal evaluations will be carried out during and after project implementation. The monitoring and evaluation will be undertaken in a participatory and gender-responsive manner, aligned with national systems where feasible. Details of the IRMF, are provided in Annex 2a, while the M&E plan is in Annex 14.

The planned flow of funds of the GCF funding is shown in *Figure 3* below. GCF grant proceeds will be made available to Kemitraan, as the Accredited Entity, subject to the terms and conditions of the Funded Activity Agreement. Kemitraan maintains a segregated account to receive and manage GCF funds and is responsible for financial reporting, audit compliance, and onward disbursements. Kemitraan will also take Executing Entity role by implementing particular activities under outcome 3. Based on the Implementation Agreement and periodical (in accordance with the agreement) disbursement requests, Kemitraan will transfer funds to MCI using predefined tranche mechanisms. The specific amount of each periodical disbursement request between Kemitraan and MCI will be further agreed upon, with the

primary consideration being MCI's cash flow requirements as the EE. Each disbursement will be conditioned on the delivery of verified technical and financial progress reports. MCI will manage the allocation and disbursement of funds through its internal financial management system. All transactions are subject to internal audit and compliance procedures under MCI's fiduciary standards, including procurement audits, financial controls, and external annual audits. Furthermore, the PMIU will plan and request the project's procurement to be proceeded by the procurement team of MCI, in which the latter will then carry out the procurement process as requested. The PMIU will diligently adhere to the established procurement plan, while also maintaining strict compliance with the procedures and policies of MCI as the EE.

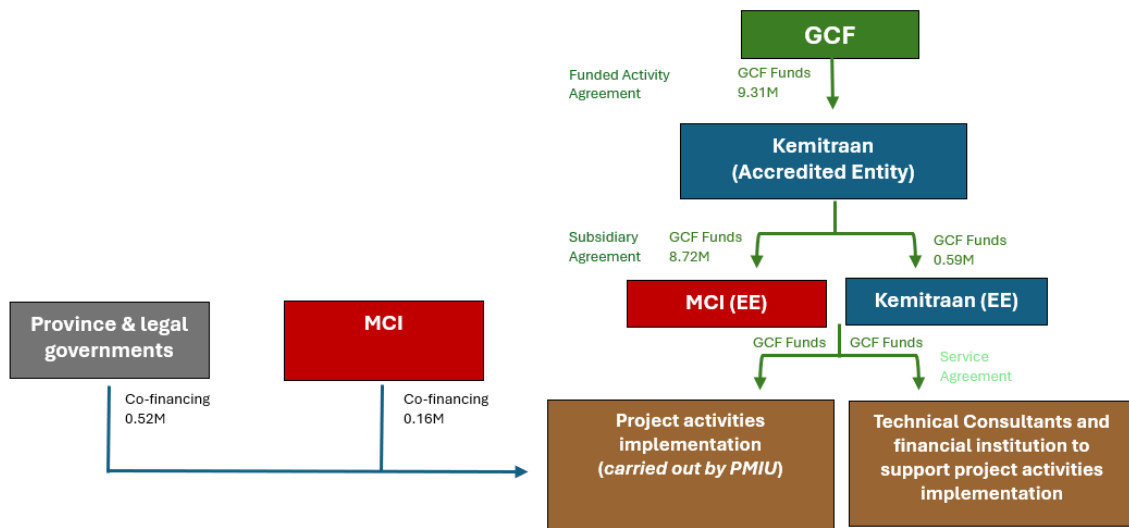


Figure 3: Flow of Funds for BRAVE Project

Kemitraan, as the AE, is accredited under GCF's basic fiduciary standards and specialized fiduciary function for project management. It has the capacity and systems in place to: monitor fiduciary integrity across financial flows, enforce environmental and social safeguard compliance, manage stakeholder engagement and grievance redress mechanisms, and ensure anti-money laundering and corruption controls. Kemitraan's oversight role ensures that all financial flows from GCF to final beneficiaries are aligned with GCF's fiduciary and accountability framework. During the implementation, the PMIU will always adhere to the policies of Kemitraan and MCI to ensure that the activities will not pose negative impacts to the involved actors, the surrounding community and environment. Kemitraan has a robust and comprehensive Social Safeguard Policy. In addition, Kemitraan will also taking role in implementing activities under Outcome 3 output 3.1, particularly activity 3.1.2 in facilitating multi-level advocacy and policy dialogues to advance the integration of Integrated Water Resources Management (IWRM) principles into local and provincial polices; and 3.1.7 to amplify the project learning and evidence to inform the climate resilience policy development at the national level. This is fully aligning with the role of Kemitraan as part of the Project Steering Committee member, leading the high-level stakeholder's engagement.

Meanwhile MCI's Code of Conduct details the standards of behavior and conduct expected from the team members. MCI's has the following policies, Sexual Exploitation and Abuse Policy; Child Safeguarding Policy; Ethics Compliant and Whistleblower Policy; covers sexual exploitation, harassment, soliciting sexual activity, child abuse and act/threat of physical violence by staff or partner. MCI also has GESI minimum standards and GESI integration toolkit that should be adhered to and used by all projects implemented by MCI.

C. FINANCING INFORMATION

C.1. Total financing

| (a) Requested GCF funding (i + ii + iii + iv + v + vi) | | Total Amount: <u>9,310,960</u> | | Currency: <u>USD</u> | | |
|--|----------------------|--------------------------------|----------------|----------------------|------------------------------|------------|
| GCF Financial Instrument | | Amount | Currency | Tenor & grace | Pricing | |
| (i) | Senior loans | <u>Enter amount</u> | <u>Options</u> | <u>Enter years</u> | <u>Enter %</u> | |
| (ii) | Subordinated loans | <u>Enter amount</u> | <u>Options</u> | <u>Enter years</u> | <u>Enter %</u> | |
| (iii) | Equity | <u>Enter amount</u> | <u>Options</u> | | <u>Enter % equity return</u> | |
| (iv) | Guarantees | <u>Enter amount</u> | <u>Options</u> | <u>Enter years</u> | | |
| (v) | Reimbursable grants | <u>Enter amount</u> | <u>Options</u> | | | |
| (vi) | Grants | <u>9,310,960</u> | <u>USD</u> | | | |
| (b) Co-financing information²⁰ | | Total amount | | Currency | | |
| | | <u>688,921</u> | | <u>USD</u> | | |
| Name of institution | Financial instrument | Amount | Currency | Tenor & Grace | Pricing | Seniority |
| <u>Mercy Corps Indonesia</u> | <u>In-kind</u> | <u>165,158</u> | <u>USD</u> | <u>N/A</u> | <u>N/A</u> | <u>N/A</u> |
| <u>PemKab Pekalongan</u> | <u>In-kind</u> | <u>205,975</u> | <u>USD</u> | <u>N/A</u> | <u>N/A</u> | <u>N/A</u> |
| <u>PemKot Pekalongan</u> | <u>In-kind</u> | <u>157,950</u> | <u>USD</u> | <u>N/A</u> | <u>N/A</u> | <u>N/A</u> |
| <u>PemProv Jateng</u> | <u>In-kind</u> | <u>159,838</u> | <u>USD</u> | <u>N/A</u> | <u>N/A</u> | <u>N/A</u> |
| (c) Total investment (c) = (a)+(b) | | Amount | | Currency | | |
| | | <u>9,999,881</u> | | <u>USD</u> | | |
| (d) Co-financing ratio (d) = (b)/(a) | | <u>6.89%</u> | | | | |
| (e) Other financing arrangements for the project/programme (max ½ page) | | <u>N/A</u> | | | | |

C.2. Financing by component

²⁰ If the co-financing is provided in different currency other than the GCF requested, please provide detailed financing information and a converted figure in the GCF requested currency in the comment box. Please refer to the date when the currency conversion was performed and the reference source.

Please provide an estimate of the cost per component (in line with Components described in Section B.2.1 above) and disaggregate by sources of financing as Annex 3. Also, ensure consistency with the Logical Framework (Annex 2a) and Timetable (Annex 2b) of the project/programme.

| Component | Output | Indicative cost Options | GCF financing | | Co-financing | | |
|---|---|--|----------------|----------------------|----------------|----------------------|-----------------------|
| | | | Amount Options | Financial Instrument | Amount Options | Financial Instrument | Name of Institutions |
| Outcome 1 The development planning processes in Sengkarang and Kupang watersheds are participatory and climate-informed | Output 1.1 The targeted communities and project stakeholders have access to integrate climate-based evidence for climate resilient planning | 390,428 | 367,311 | Grant | 21,875 | In-kind | Mercy Corps Indonesia |
| | | | | | 1,242 | In-kind | PemKab Pekalongan |
| | Output 1.2 Community-based climate change adaptive management plans and designs have been developed to enhance community resilience | 931,383 | 897,953 | Grant | 6,437 | In-kind | PemProv Jateng |
| | | | | | 9,493 | In-kind | PemKab Pekalongan |
| | | | | | 17,500 | In-kind | Mercy Corps Indonesia |
| | Outcome 2 Communities in the targeted watersheds implement climate-resilient livelihoods and integrated watershed/runoff management practices that reduce climate-related risks | Output 2.1 Communities in the targeted watersheds are supported to implement the climate-informed and climate-resilient livelihood options | 4,389,003 | 4,308,477 | Grant | 15,518 | In-kind |
| 7,005 | | | | | | In-kind | PemKot Pekalongan |
| 7,128 | | | | | | In-kind | PemProv Jateng |
| 50,875 | | | | | | In-kind | Mercy Corps Indonesia |
| Output 2.2 Integrated runoff management and flood preparedness systems established in targeted sub districts | | 847,795 | 780,355 | Grant | 23,671 | In-kind | PemKab Pekalongan |
| | | | | | 41,077 | In-kind | PemKot Pekalongan |
| | 2,692 | | | | In-kind | PemProv Jateng | |
| Outcome 3: Enabling environment to replicate and scale-up climate-resilient IWRM exists | Output 3.1 Government stakeholders (national, provincial, district, and sub-district) | 1,011,216 | 605,216 | Grant | 156,051 | In-kind | PemKab Pekalongan |
| | | | | | 106,368 | In-kind | PemKot Pekalongan |
| | | | | | 143,581 | In-kind | PemProv Jateng |

| | | | | | | | |
|--------------|--|-----------|-----------|-------|---------|-----------------------|--|
| | levels), academia, private sector, community and media are informed of best practices of climate-resilient and climate-informed livelihood options, and policy recommendations | | | | | | |
| | Output 3.2 Communities in the targeted watersheds have access to supports with climate-resilient livelihood business models and finance | 1,126,963 | 1,085,963 | Grant | | | |
| 3,500 | | | | | In-kind | PemKot Pekalongan | |
| 37,500 | | | | | In-kind | Mercy Corps Indonesia | |
| MEL and CARM | Baseline evaluative data collections and alignment the MEL system with GCF framework | 19,680 | 19,680 | Grant | | | |
| | Regular monitoring and data collection against logframe indicators and annual assessment | 112,400 | 112,400 | Grant | | | |
| | Midline evaluative data collections | 19,680 | 19,680 | Grant | | | |
| | Assessment and build capacity of the project team in monitoring, reporting and evaluation to support project improvement | 95,900 | 95,900 | Grant | | | |
| | Stakeholder consultations for evaluation purposes | 50,000 | 50,000 | Grant | | | |
| | Endline evaluative | 13,120 | 13,120 | Grant | | | |

| | | | | | | | |
|------------------------------------|--|-----------|-----------|-------|---------|---------|-----------------------|
| | data collections | | | | | | |
| | MEL Staff | 64,555 | 64,555 | Grant | | | |
| | CARM Sensitization Workshop with integrated beneficiary feedback mechanisms for evaluation purpose | 56,200 | 56,200 | Grant | | | |
| | CARM and MEL visibility | 37,898 | 37,898 | Grant | | | |
| Contingency Fund | | 333,666 | 333,666 | Grant | | | |
| PMC | | 499,994 | 462,586 | Grant | 37,408 | In-kind | Mercy Corps Indonesia |
| | | | | | | | |
| Indicative total cost (USD) | | 9,999,881 | 9,310,960 | | 688,921 | | |

C.3 Capacity Building and Technology development/transfer

The BRAVE project will strengthen community capacity through the formation of climate-resilient community groups and targeted training on risk-informed planning, gender-sensitive approaches, and the use of climate information. Climate-smart field schools will build farmers' and fish farmers' skills in resilient agriculture and adaptive aquaculture, while farmer groups will receive support in financial and business management to function as aggregators. Communities will also be trained in flood preparedness and response to enhance local disaster risk management.

C.3.1 Does GCF funding finance Capacity building activities?

Amount: 1,123,407 USD

C.3.2. Does GCF funding finance Technology development/transfer?

C.4. Justification for GCF funding request (max. 500 words)

Rationale for GCF funding. Indonesia faces significant challenges in mobilizing sufficient finance for climate adaptation. Current government budgets are not sufficient to cover the investment required for climate adaptation, leaving a substantial financing gap to be filled. This gap is increasing. Most public funding is directed toward post-disaster reconstruction and hard-structure flood control measures, such as seawalls, spillways, and river channelization, with limited attention to preventive, ecosystem-based, or livelihood-centered resilience measures. This funding bias results in residual losses being borne by vulnerable communities, exacerbating financial insecurity and reinforcing existing socio-economic inequalities. The CRIA undertaken highlights how these communities are disproportionately exposed to flood risks and have limited resources to undertake adaptation measures independently. While some decision-makers acknowledge the importance of integrating ecological and livelihood functions into flood management, policy and investment priorities remain dominated by structural interventions and fragmented approaches. The link between flood resilience and sustainable livelihoods is under-addressed, leaving a critical gap in adaptation finance and institutional frameworks. This gap is particularly urgent given that climate change is projected to intensify flooding and disrupt local economies, amplifying both direct and secondary impacts on communities. Without strategic interventions, communities will continue to face recurrent losses, undermining long-term development and resilience objectives.

Constraints to alternative financing options. The BRAVE project explored alternative financing mechanisms, including government funds, loans, and private sector investment, but found these largely unfeasible due to structural, financial, and institutional barriers:

1. *Limited public financing and structural bias:* Local governments continue to prioritize structural flood defenses, largely overlooking ecosystem-based interventions and community-focused resilience measures. Budgeting

frameworks reinforce this bias, leaving minimal room for innovation in preventive, non-structural approaches. The BRAVE project aims to shift this perspective by generating robust evidence demonstrating the value of ecosystem and livelihood interventions, thereby encouraging public investment in more integrated and community-centered approaches.

2. *Central government fiscal policies impacting national, provincial and municipal expenditures.* In January 2025, President Prabowo Subianto issued Presidential Instruction Number 1 of 2025, mandating a nationwide budget efficiency initiative. This directive led to a reduction of approximately IDR 306.7 trillion (USD 19.8 billion) across various government sectors. At the provincial and municipal level, this has created a growing financing gap for preventive adaptation measures, particularly those targeting ecosystem and livelihood resilience, which are not immediately visible as high-priority investments.
3. *Capacity limitations:* Local and national governments lack the technical and institutional capacity to generate or translate science-based evidence into actionable, local-scale adaptation plans. Robust data on hydrological systems, ecosystem functions, and livelihood vulnerabilities are scarce. GCF support is critical to fill these gaps, enabling the translation of scientific insights into policy guidance and practical interventions that are both effective and locally appropriate.
4. *Private sector risk aversion:* Transformative livelihood models, such as climate-smart agriculture, adaptive aquaculture, and sustainable forest management, require iterative testing and refinement. Until these models are proven, private investors perceive them as too high-risk ventures. The BRAVE project employs a piloting approach that allows for adaptive learning and iterative development. Concessional funding from GCF is essential to reduce perceived risk and unlock subsequent private investment, creating pathways for sustainable market-based solutions that support both resilience and livelihoods.
5. *Need for a neutral facilitator:* Structuring innovative financing mechanisms for community centered adaptation requires a neutral third-party convener to coordinate among government agencies, local communities, and private actors. The GCF grant allows PMIU, on behalf of MCI as the executing entity, to assume this facilitative role, bridging gaps in stakeholder engagement, aligning interests, and fostering collective ownership of resilience solutions. This platform is crucial to mobilize co-financing, structure investment opportunities, and ensure that adaptation measures are socially inclusive, environmentally sustainable, and financially viable.

Strategic fit and added value of GCF. The BRAVE project aligns directly with the GCF's mandate and strategic objectives in several ways:

- *Supports climate adaptation and resilience* at both community, sub national and landscape levels. By addressing flood resilience through ecosystem-based approaches and climate-resilient livelihoods, the project targets the core vulnerabilities of exposed communities.
- *Promotes integrated water resource management.* The project considers the interconnections between watershed health, flood regulation, and sustainable livelihoods, enabling a shift from sectoral and reactive flood management to landscape-wide, proactive adaptation planning.
- *Introduces climate-compatible technologies and practices,* including impact-based forecasting, landscape resilience assessments, blue-green space, climate-smart agriculture, and adaptive aquaculture. These innovations allow communities to anticipate and respond to climate risks, strengthening both ecological and economic resilience.
- *Catalyzes private sector engagement in adaptation.* The project builds pathways for scalable, climate-resilient enterprises. Once proven, these models can attract private investment, creating sustainable markets and leveraging public funding. GCF support is crucial to de-risk these early-stage interventions, unlocking broader investment potential.
- *Delivers social, economic, and environmental co-benefits,* including gender-responsive outcomes, enhanced community livelihoods, and ecosystem restoration, directly contributing to inclusive and sustainable development objectives.

Given the magnitude of financial, technical, and institutional barriers to community centered flood resilience in Indonesia, the GCF is uniquely positioned to provide grant-based, risk-mitigated financing. The GCF support addresses the limitations of government budgets, compensates for private sector risk aversion, and catalyzes integrated, landscape-level interventions that are currently underfunded. By providing upfront capital and technical support, the BRAVE project enables a shift toward ecosystem-based and livelihood centered adaptation, creating scalable models

for sustainable flood resilience. The estimated cost for all activities are thus considered as incremental costs, which in total is equal to the amount of grant requested from GCF.

Private sector contributions will be integrated into the project design as part of the business models that are developed in BRAVE's implementation phase, particularly under the project activity in developing bundled business models and expanding access to market and finance for farmers. BRAVE will also engage private co-financier (e.g. Bank Rakyat Indonesia, Bank Jateng) as an executing entity for loan financing.

C.5. Exit strategy (max. 300 words)

The BRAVE project is designed to ensure that climate resilience outcomes continue well beyond the project lifetime. The exit strategy is built on five mutually reinforcing pillars: strengthening local capacity and institutional ownership, securing operations and maintenance of key investments, ensuring financial sustainability through private sector engagement, embedding a paradigm shift in planning and governance, and post-exit actions for monitoring and accountability.

Strengthening local capacity and institutional ownership. The project will localize climate information and translate it into formats accessible to farmers, fishermen, and MSMEs. Training will equip communities and local governments with the skills to apply this information in planning and decision-making. At community level, a participatory climate-resilient livelihood transformation plan will act as the reference document to further foster resilient livelihoods in their area. The plans will be developed and integrated into Village Development Plans (RKPDs), ensuring any measures are embedded in policy and resource allocation. Alignment with Indonesia's NDCs, NAPs, RPJMN and climate resilient policies will further embed climate resilience into provincial and national frameworks. **Operations and maintenance.** Key investments such as CIS, and blue-green infrastructure will be taken over to capable institutions, including municipal agriculture agencies, marine and fisheries agencies, and communication and information agency. The project will carefully select the most appropriate agency to be the host of the system, by considering their technical capacity, financial capacity to operate the system and also their network with local actors. The latter consideration point is to ensure that the system will continue to benefit broader stakeholders and not the host solely. These agencies will be trained in operations and maintenance, with budget lines advocated for inclusion in local government financing cycles. MoUs will formalize responsibilities, while local universities and NGOs will provide ongoing technical backstopping.

Financial sustainability and private sector engagement. BRAVE supports closed-loop agricultural and aquaculture models that are profitable, climate resilient, and market-driven. The model would not only support the farmers by improving their productivity but also serve the business interests of each actor involved. 'Champion' companies will be selected that are motivated to drive changes forward. MCI has the expertise and experience in working with such actors on climate-resilient agriculture. By linking farmers and fishers with off-takers, input providers, technical professionals, processors, and financial institutions, these systems reduce risk and guarantee continued market access. Bundled service packages of microfinance, technical advice, and input access will strengthen the bankability of enterprises. The demonstration of viable models will further attract private sector investment and enable replication, ensuring that financial sustainability is market-led rather than donor-dependent.

Contribution to paradigm shift. BRAVE drives a shift from reactive disaster response to proactive, ecosystem-based risk management and resilient livelihoods. The project mainstreams IWRM principles, institutionalizes community-led planning, and aligns with Indonesia's long-term climate and development priorities. This embedding of resilience into governance and market systems ensures systemic change that outlasts the project.

Post-exit actions and monitoring. A basic monitoring system will be sustained by community groups and local institutions to track resilience gains. Separate Monitoring and Evaluation indicators for the exit strategy will be developed and included in the Monitoring and Evaluation Plan to assess the progress of the project. After exit, public agencies will assume financing and oversight roles, while academia and civil society provide accountability and technical support. Knowledge-sharing and policy advocacy will ensure replication across other watersheds and provinces.

Through these measures, BRAVE creates a transition from GCF-supported implementation to nationally owned and community-driven continuation. The project's exit strategy guarantees that its benefits, climate-resilient livelihoods, improved governance, and sustainable ecosystems, are maintained and scaled, contributing to Indonesia's broader climate resilience transformation.

C.6. Financial management/procurement (max. 300 words)

KEMITRAAN conducts all business and accounting activities in accordance with generally accepted accounting principles and the prevailing financial accounting standards in Indonesia. The organization applies a system of double-entry bookkeeping alongside fund accounting to accurately record and classify all business transactions. In fund accounting, resources are classified according to the specific activities or objectives outlined by donors, regulations or limitations imposed by external sources, and directives from the Board of Executives. Registered as an Indonesia national entity, KEMITRAAN follows the Indonesian accounting standards known as PSAK (Pernyataan Standard Akuntansi Keuangan), which is an adoption of IFRS since 2012 – PSAK is translated as Statements of Financial Accounting Standards, issued by the Institute of Indonesia Chartered Accountants. The Project reporting will therefore use the PSAK as the accounting standards and will be audited by the Public Accounting Firm. The Public Accounting Firm must follow the SPAP (Standard Profesional Akuntan Publik or Professional Standards for Public Accountants) issued by the Indonesian Institute of Certified Public Accountants when auditing financial statements in Indonesian. The Indonesian auditing standards (SPSP) however is an adoption of the ISA (International Standards of Auditing) issued by IAASB.

KEMITRAAN uses the accrual basis accounting method to ensure that revenues and expenses are recognized when earned or incurred, providing a true reflection of the organization's financial position. To support accurate and real-time reporting, KEMITRAAN employs a range of integrated systems, including the SUN System for core accounting and financial management, HRIS for human resources, SPARK for procurement, MILA for grant accounting, and TRACY for program management and reporting. These tools collectively enable timely, reliable, and transparent monitoring of financial, administrative, and program activities. The organization has established and maintains a robust internal control framework to ensure compliance with financial and accounting regulations. Audits are conducted periodically to verify adherence to policies and assess performance. Organizational audits occur annually, while project-specific audits are carried out as required based on program or donor needs. The Director, Head, or Senior Manager responsible for operations and finance oversees the maintenance and updating of this policy, subject to approval by the Executive Director. The Finance Manager manages and administers the policy in relation to all financial matters, ensuring that processes are followed consistently across the organization.

Procurement of goods, services, works, or programs is conducted in a fair, competitive, and transparent manner to ensure the organization obtains the best value for money. The selection process is designed to uphold principles of transparency, accountability, effectiveness, efficiency, and participatory engagement, following clearly defined procedures. In general, a competitive process involves at least three qualified prospective bidders or proposers, except in cases of low-value procurement up to IDR 5 million, where direct purchase may be exercised. To ensure proper control and accountability, there is a clear separation of duties among the requestor or user, the buyer, and the payer for all purchases or contracts. KEMITRAAN maintains and regularly updates a database of vendors or institutions, preferably in electronic form, to facilitate the efficient and appropriate selection of suppliers. Where beneficial for operational efficiency and procurement management, KEMITRAAN may enter into long-term contract agreements with selected vendors or organizations, provided that these agreements are established through a competitive and transparent process. KEMITRAAN manages its funds in full compliance with accounting principles and strives to use resources efficiently and effectively. The organization is committed to delivering impactful outputs that align with donor intentions, while consistently implementing risk-based management practices to safeguard resources and optimize the use of funds.

For this project Kemitraan accepts the procurement policies of MCI. MCI has comprehensive Guidelines and SOP that implement Segregation of Duties, the application of procurement principles such as best value for money, fraud prevention, transparency, compliance with laws and regulations, implementation of safeguarding, a Code of Conduct, and other provisions listed in the Procurement Guideline. As a fulfilment of these provisions, MCI enforces the following:

The procurement process aligns with its threshold; the higher the threshold, the more complex the process and the higher the risk, thus requiring stricter regulations.

For routine/recurring needs, and in order to save time while maintaining transparency and accountability, MCI has specific provisions utilizing a Master Service Agreement (MSA) and a Master Purchase Agreement (MPA). The vendor selection for these agreements is conducted through a tender process (even if the value does not meet the standard tender threshold) with a maximum contract period of two years. Examples of such procurements include the selection of a travel agent and an internet service provider.

The procurement process always incorporates the Code of Ethics / Safeguarding provisions, whereby every contract must include these stipulations and be signed by the vendor/consultant. These provisions protect all parties and serve as a form of transparency regarding the values upheld by MCI. MCI provides a dedicated channel if any provision is

violated or harms an involved party during the execution of activities or procurement. The contract and tender process always list the integrity hotline which can be accessed by anyone.

If an error/mistake occurs in the procurement process that is not compliant with the procedure, MCI also has rules that must be followed: detailing the deviation (non-compliance with the rules) and outlining the corrective measures to prevent recurrence. This error must be brought to the attention of the Executive Director so that it can be accounted for during the audit. See Annex 9 outlining the procurement plan.

D. EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

D.1. Impact potential (max. 300 words)

The project is designed to significantly enhance climate-resilient sustainable development across the Kupang and Sengkarang watersheds by integrating ecosystem-based landscape management, climate-resilient livelihoods, inclusive governance, and policy integration. By addressing multiple dimensions of climate risk, the project will strengthen household adaptive capacity, improve ecosystem functions, and create enabling conditions for replication and scaling-up of resilience strategies. The interventions are carefully tailored to deliver measurable outcomes at the household, community, landscape, and governance levels, while also contributing to low-emission sustainable development pathways.

Direct household-level impact. The project directly targets 520 households (~2,080 people) to adopt climate-smart agriculture and adaptive aquaculture practices. Interventions include Farmer Field Schools, demonstration plots for coffee, carrots, grouper, and milkfish, and participatory training linking climate information with practical production decisions. These measures will improve agricultural productivity and fish yields under changing climate conditions, while reducing vulnerability to extreme weather events. It is expected that through behavior change, 1165 people will adopt adaptation benefits climate resilient livelihood practices. In addition, 5,900 households (~23,600 people) will benefit from ecosystem management interventions, including soil and water conservation, upstream land-use planning, and participatory conservation plans. It is expected that through behavior change and operationalization of conservation plans, 14,160 people will adopt adaptation benefits through conservation measures.

Community-level resilience and flood risk reduction. The project will support the formation of and build capacity of 33 climate-resilient community groups (one per village, 15 members each) to integrate climate risk assessments, gender-sensitive planning, and CIS data into plans and decision-making. A total of 495 community members will receive targeted training, embedding inclusive, locally-led adaptation at the village level. To reduce climate-induced flood risk, the project will establish four blue-green spaces, integrating hydrological and landscape design, monitoring systems, and community-based governance structures. These spaces will attenuate runoff, lower peak flood discharge, and protect downstream communities. Complementary interventions include four sub-district contingency plans and training of 400 people (≥40% women and vulnerable groups) in early warning, evacuation, and flood response procedures. Together, these measures will directly reduce flood frequency and risk and generate adaptation benefits for 121,036 people living in six downstream sub-districts.

Landscape and ecosystem management. At the landscape scale, the project will bring 3,700 hectares of productive land under improved, climate-informed management through participatory land-use planning, conservation measures, and ecosystem service valuation. These interventions will improve water retention, reduce surface runoff, enhance soil health, and maintain biodiversity, generating long-term co-benefits for both livelihoods and ecosystems. Participatory land-use and water resource management plans will ensure resilience is systematically embedded in watershed governance, reducing downstream flood impacts while supporting sustainable natural resource use.

Livelihood business models and market systems. To ensure sustainability and wider replication, the project will develop and operationalize commodity-specific business models (grouper, milkfish, coffee, carrot), linking farmers and MSMEs to input suppliers, service providers, and off-takers. Under these business models, approximately 400 farmers and fishpond farmers will gain access to financial services, including single and/or blended financial products such as micro-insurance, micro loans/credits, and bundled crop insurance and credits, etc., as part of a closed-loop model scheme. These models will encourage the widespread adoption of climate-resilient practices by providing clear market incentives. It is expected that around 180 farmers and fishpond farmers will access a single financial product, while 220 farmers and fishpond farmers will access a blended financial product, supported by technical advisory services, financial literacy activities, and the dissemination of lessons learned. These activities will improve financial literacy, strengthen adaptive decision-making, and create conditions for replication of climate-smart practices across the watershed. Assuming an average loan size of IDR 5 million per beneficiary, participants are expected to build savings over a two-year period at IDR 100,000 per month, while also enrolling in parametric insurance with an annual premium

of IDR 500,000 for two years, as part of the bundled financial services package. Based on this structure, the BRAVE program is expected to facilitate total lending of IDR 375,000,000–566,000,000 (USD 22,727–34,305), mobilize savings of IDR 288,000,000–432,000,000 (USD 17,455–26,182), and generate parametric insurance premium payments of IDR 120,000,000–180,000,000 (USD 7,273–10,909). This financing component will be pursued from the third year of implementation onward, aligned with the maturation of the closed-loop business model scheme. Overall, the project is expected to catalyze IDR 808,000,000–1,178,037,736 (USD 48,970–71,396) in total private sector financing over five years

Indirect and governance level impact. At the governance level, the project will co-develop one climate-resilient IWRM framework, operationalize sector-specific decision-making tools (CIS), and integrate IWRM principles into three local/provincial policies, creating an enabling environment for long-term, systemic adoption of resilience measures. Through these governance and policy interventions, approximately 1,203,347 people in Pekalongan City, Pekalongan Regency, and Batang Regency are expected to indirectly benefit from better water resource management, scaled-up livelihood business models, and climate-informed governance systems.

| Results Level | Key Indicators | Targets / Impact Numbers |
|--|--|---|
| Direct household-level impact | People adopting climate-smart agriculture and adaptive aquaculture | Adaptation benefits: 1165 people, men: 699, female: 466) adopt CSA and adaptive aquaculture practices |
| | People benefiting from conservation and ecosystem management measures | Adaption benefits: 14,160 people, men: 8,496, female: 5,664 benefits from soil and water conservation, upstream land management, participatory conservation plans (≥40% women) |
| Community-level resilience and flood risk reduction | People are benefiting from reduced flood risk and improved runoff management | Adaption Benefits: 121,036 people, men: 72,622, female: 48,414) benefit from 4 blue-green spaces and contingency plans (≥40% women) |
| | Sub-district contingency plans developed and operational | 4 sub district level contingency plans developed; 400 people trained (≥40% women and vulnerable groups) |
| | Climate-resilient community groups formed and capacitated | 33 community groups (15 members each); 495 trained members (men: 297, female 198) (≥40% women) |
| Landscape and ecosystem management | Area of productive land under improved climate-informed management | 3,700 hectares under improved management practices |
| Livelihood business models and market systems | Commodity-specific climate-resilient business models developed & adopted | 4 business models developed & adopted (grouper, milkfish, coffee, carrot) |
| | Farmers accessing financial products (savings, credit, insurance) | 400 farmers (men:240, female: 140) access financial products; 18 farmer/fish-farmer groups receive technical advisory services |
| Governance and policy enabling environment | IWRM framework co-developed & adopted | 1 climate-resilient IWRM framework adopted |
| | Local/provincial policies integrating IWRM principles | 3 local/provincial policies integrate IWRM principles |
| Indirect Impact | Households benefiting indirectly from replication and scale-up | Adaption Benefit: 1,203,347, men: 597,596, female: 605,751 people) indirectly benefit |

D.2. Paradigm shift potential (max. 300 words)

The BRAVE project is designed to catalyze a fundamental transformation in how communities, governments, and markets respond to climate risks, embedding climate resilience across the Kupang and Sengkarang watersheds. The theory of change is based on the premise that empowering communities with climate information, demonstrating scalable resilient livelihood models, and embedding these interventions into governance systems and markets will bring about a systemic change, beyond a one-off investment, resulting in long-term resilience, reduced vulnerability, and sustainable development.

The TOC goal statement:

IF communities, local governments, and market actors access and apply climate information to guide land use planning, water management, and climate-resilient livelihood practices across the Kupang and Sengkarang watersheds, AND IF enabling policies, institutions, and market systems support these practices,

THEN households and ecosystems across the upstream, midstream, and downstream areas will experience sustained reductions in climate-induced flood and water-related risks, stronger and more diversified livelihoods, and improved watershed resilience,

BECAUSE risk-informed decisions, integrated watershed governance, and climate-resilient value chains collectively address the underlying drivers of vulnerability—such as degraded land, unmanaged runoff, weak institutional coordination, and fragile local economies—resulting in systemic, scalable, and long-term adaptation benefits.

At the activity level, BRAVE helps translate climate information into accessible, context-specific knowledge products for farmers, fish farmers, and decision-makers. It delivers targeted training through CSA field schools, demonstration plots for key commodities (coffee, carrots, grouper, and milkfish), and practical capacity-building on adaptive aquaculture and soil-water conservation. At the institutional level, the project facilitates participatory development of climate-resilient livelihood transformation and land use plans and integrates them into Village Development Plans, ensuring continuity and ownership. Complementary outputs include the establishment of four dual-purpose blue-green spaces, designed using hydrological modeling to attenuate runoff, reduce downstream flooding, and enhance ecosystem services. Sub-district contingency plans and community training strengthen preparedness. The project also develops four commodity-specific climate-resilient business models, links MSMEs to markets and financial services, and pilots bundled service schemes that combine technical advice, market access, and financial products.

Outcomes and transformational pathways. Collectively, these activities generate outcomes that move beyond project-specific benefits toward systemic resilience:

- *Empowered communities:* Households evolve from passive recipients of aid to informed, proactive managers of climate risk. Through risk-informed decision-making platforms and participatory planning, communities adopt CSA and adaptive aquaculture practices, diversify income streams, and invest in flood-proofing and other adaptive measures.
- *Institutionalized resilience:* Local governments adopt climate-resilient planning tools, mainstream IWRM into development plans, and coordinate across administrative boundaries. This creates durable governance frameworks for climate risk reduction and watershed management.
- *Private sector engagement:* MSMEs and local financial institutions adopt climate-resilient business models, de-risk investments, and expand climate-smart value chains, making resilience economically viable and scalable.

BRAVE is designed to produce broad, replicable impacts:

Scaling up: Participatory planning processes, pilot demonstrations, and market-proven resilient livelihood models create clear pathways for adoption in other areas.

Replication: Replication potential is high: the project demonstrates tested business models, participatory planning processes, and risk-informed governance structures that can be replicated across Indonesia's other critical watersheds. Innovations such as impact-based forecasting, dual-purpose blue-green spaces, and closed-loop agriculture/aquaculture systems can be adapted by other communities and local governments.

Knowledge sharing: Lessons, tools, and innovations, such as impact-based forecasting, closed-loop agriculture/aquaculture, and dual-purpose blue-green spaces, are systematically documented and disseminated, creating a multiplier effect across neighboring villages, districts, and even other watersheds. For more effective dissemination and broader reach, the establishment of various discussion forums by from the previous ZCRA program can be optimized, such as spatial management forums, disaster management forums, CSR forums, watershed management forums, and coastal management forums. Regarding media channels, both conventional and digital, several networks established by ZCRA can also be continued. Mainstream media channels (CNN Indonesia, BBC Indonesia, Tribun Jawa Tengah, Radar Jawa Tengah, etc.) and online media (mongabay, Tanahair.net, etc.) will be maintained to maximize the impact.

An enabling environment is fostered through sustained policy advocacy, integrating IWRM and resilience principles into three local and provincial policies, strengthening institutional mandates, and creating incentives for continued

investment in climate-smart solutions. Financial inclusion measures help sustain household adaptation efforts and encourage private-sector engagement.

Contribution to climate-resilient development pathways. By embedding evidence-based decision-making, ecosystem-based flood management, and climate-resilient livelihood practices into community and government systems, the BRAVE project fosters long-term, durable change that aligns with Indonesia's National Action Plan for Climate Change Adaptation (RAN-API) and supports national Second NDC targets. BRAVE transforms development pathways from reactive and fragmented approaches into proactive, integrated, and inclusive climate-resilient planning. It leaves behind strengthened governance, finance, and market systems capable of sustaining and scaling resilience interventions well beyond project closure. Through these mechanisms, BRAVE demonstrates a paradigm shift toward systemic, climate-resilient sustainable development that benefits communities, ecosystems, and institutions.

D.3. Sustainable development (max. 300 words)

The BRAVE project will generate environmental, social, economic, and gender-sensitive development co-benefits, contributing to multiple Sustainable Development Goals (SDGs), including SDGs 5, 8, 11, 12, 13, and 15. These co-benefits arise as additional positive outcomes of the project's interventions, beyond the primary objective of reducing climate vulnerability in the Petanglong watershed.

Environmental co-benefits. Beyond strengthening climate resilience, BRAVE will generate environmental improvements through enhanced ecosystem stewardship and sustainable resource management. Adoption of climate-smart agriculture and adaptive aquaculture will encourage reduced reliance on chemical inputs, supporting better water quality in rivers and ponds. Blue-green spaces will create greener surroundings, contributing to biodiversity protection and improved micro-climatic conditions. These environmental co-benefits support ecosystem health while also providing long term ecological services such as improved water regulation and habitat connectivity.

Social co-benefits. The project will strengthen community organization, knowledge sharing, and collective resource management beyond the immediate climate adaptation benefits. Participatory planning processes and the formation of community groups will enhance local governance capacity and social cohesion, enabling communities to collaborate on water management, livelihood planning, and risk reduction. Capacity-building activities will increase technical knowledge and skills supporting long-term community leadership. Participatory planning platforms will also enhance community awareness and decision-making capacity, contributing to more inclusive and transparent local governance processes.

Economic co-benefits. BRAVE will contribute to strengthening local value chains and market linkages for climate-resilient agricultural and aquaculture commodities. The development of bundled service models and market system linkages will improve producer access to technical services, finance, and off-takers, enhancing the efficiency of local production systems. The project will also support entrepreneurship and diversification of local livelihoods, including value added activities and new service roles within community groups and producer networks. These economic co-benefits can stimulate local job creation, improved business skills, and stronger local market ecosystems, creating conditions for sustained economic growth beyond the project duration.

Gender sensitive development co-benefits. BRAVE integrates gender equality and social inclusion through participatory planning, targeted capacity building, and equitable access to livelihood opportunities. Gender-responsive training and livelihood support will strengthen women's economic participation, particularly in value added activities and small-scale enterprise development. Implementation of the Gender Action Plan (Annex 4) will also strengthen awareness of gender equality among local institutions and communities, contributing to more inclusive governance and improved recognition of women's roles in natural resource management.

The project's environmental and social risk assessment concluded that the proposed activities pose minimal environmental, social, and institutional risks, as they are small-scale, localized, and manageable through appropriate mitigation measures. An Environmental and Social Action Plan has been prepared to guide risk mitigation and safeguard compliance (Annex 10).

By generating these additional environmental, social, economic, and gender benefits alongside its core climate resilience objectives, the BRAVE project contributes to sustainable development outcomes that extend beyond climate adaptation, strengthening the long-term sustainability and scalability of interventions across the watershed.

D.4. Needs of recipient (max. 300 words)

According to the World Bank Climate Change and Development report for Indonesia²¹ the eastern and western portions of Indonesia's most densely populated island, Java, as well as the coastal regions of Sumatra, parts of western and northern Sulawesi, and southeastern Papua islands are all highly vulnerable to multiple climate hazards, including drought, floods, landslides, and sea level rise. According to a vulnerability mapping exercise conducted for Southeast Asia, the western and eastern parts of the island of Java are considered hotspots for the impacts of multiple climate hazards²². As further highlighted under Indonesia's PBI policy, Central Java Province is projected to experience the highest climate-related GDP losses in the coastal subsector and the third highest in agriculture²³.

At the project level, MCI/ZFRA's CRIA shows that the economic impacts of climate change in the Kupang watershed and in the coastal villages of Sengkarang watersheds are already significant and projected to rise sharply. A 2020 analysis of 42 high-flood-risk villages estimated total annual losses from flooding at approximately USD110.7 million, including damage to infrastructure such as roads and repeated household repairs like raised floors and flood-damaged homes. Additional losses from reduced productive land, primarily used for agriculture and aquaculture, were valued at around USD24 million, bringing total annual losses to USD 134.7 million. These costs exceed the capacity of local budgets, forcing municipalities to divert funds from other development priorities to finance ongoing recovery and repair efforts. It was projected that 42 villages/kelurahan will have high and very high-risk profiles in 2035, and more than 5,700 hectares in 38 of the villages/kelurahan will be permanently inundated, with a projected annual loss increasing considerably at USD2.2billion. The permanently inundated area covers settlement, agricultural land, and fishponds located in Pekalongan City and the coastal parts of Pekalongan Regency.

The project responds to economic and social development needs by targeting areas in Petanglong where climate-induced flooding poses severe socio-economic risks, particularly for vulnerable communities reliant on agriculture, aquaculture, and fisheries. Among BRAVE's intervention areas, 10 villages, are projected to face high to very high flood hazard levels and 9 villages with high to very high flood risk levels. BRAVE addresses these vulnerabilities by promoting climate-resilient agriculture and aquaculture, strengthening ecosystem-based flood management, and supporting diversified livelihoods to reduce dependence on flood-prone land. These measures aim to lower vulnerability at both household and community levels, delivering tangible economic, social, and environmental benefits while creating a model that can be replicated in other high-risk areas across Central Java. Annual flood-related losses in high-risk villages are estimated at USD 134.7 million, straining local budgets and limiting development investments. By combining adaptive agriculture, aquaculture, watershed management, and inclusive livelihood diversification, BRAVE helps strengthen local economies and enhance social resilience, empowering women, youth, and marginalized groups through participatory planning, capacity-building, and community-led institutions.

There is an absence of alternative sources of financing. Local governments in the affected districts face constrained budgets and competing priorities. Structural flood protection measures outlined in national and provincial plans are insufficiently funded, and municipalities lack the financial capacity to implement integrated water resource management, livelihood adaptation, and ecosystem-based interventions. Private capital is limited due to insufficient market mechanisms for climate-resilient investments. BRAVE fills this financing need by leveraging Adaptation Fund resources and mobilizing private sector participation through its market systems development approach, establishing sustainable investment pathways that would otherwise remain unavailable to local communities.

BRAVE recognizes the need for strengthening institutions and implementation capacity. Effective flood risk management and climate adaptation require strong institutional coordination, technical expertise, and local engagement. BRAVE strengthens capacities at multiple levels by supporting local government planning, multi-stakeholder governance, and technical training in climate-smart agriculture, adaptive aquaculture, and watershed management. The project builds on the lessons and institutional arrangements of MCI/ZFRA and other Adaptation Fund initiatives, ensuring continuity and scalability. Knowledge-sharing platforms, participatory monitoring, and collaborative governance mechanisms will reinforce institutional learning, enabling local governments and communities to respond proactively to climate risks while ensuring long-term sustainability.

D.5. Country ownership (max. 500 words)

²¹ World Bank Group. (2023, April 28). Indonesia Country Climate and Development Report. World Bank Publications (Report No. 39750). Washington, DC: World Bank Group.

²² <https://climateknowledgeportal.worldbank.org/country/indonesia/vulnerability>

²³ National Development Planning Agency, 2021. Executive Summary: Climate Resilience Development Policy 2020-245

Country ownership is embedded in the BRAVE project, from its co-design to its implementation arrangements.

The proposal was developed in close partnership with the Government of Indonesia, including the National Designated Authority (NDA), the Ministry of Environment (KLH), as well as provincial and local governments in Central Java, Pekalongan City, Pekalongan Regency, and Batang Regency. During development, KLH and subnational authorities were actively engaged in shaping project objectives and activities to ensure alignment with Indonesia's NDC, RPJMN 2020–2024, PBI Policy, and regional development strategies. The NDA was engaged throughout the design phase to ensure alignment with Indonesia's Second NDC, RPJMN 2020–2024, and sectoral strategies. The project contributes to the PBI policy by addressing priority risks in agriculture, water, and coastal sectors. Its market systems development component introduces private sector engagement in adaptation, responding to national calls for multi-stakeholder involvement. A formal no-objection letter from the NDA confirms BRAVE's consistency with national priorities. See Annex 1.

BRAVE's interventions are fully aligned with government initiatives on watershed management, disaster risk reduction, and climate-resilient agriculture and aquaculture. By coordinating with RPJMN 2020–2024, the PBI Policy, and Presidential Regulation No. 79/2019, the project strengthens institutional ownership, avoids duplication, and ensures long-term sustainability. The PBI Policy identifies Pekalongan City, Pekalongan Regency, and Batang Regency as priority areas for climate resilience interventions in agriculture, water, and marine/coastal sectors. It emphasizes a multi-dimensional approach with inclusivity and ecosystem preservation as overarching principles, directly addressing flood resilience needs in Petanglong. Presidential Regulation No. 79/2019 designates Petanglong for accelerated economic development, though its projects largely focus on structural flood protection, with limited attention to integrated water resource management and livelihood adaptation. The Central Java Government's Petanglong Program addresses this gap but faces implementation challenges due to budget reallocations. BRAVE will complement these policies and programs by promoting integrated water resource management and climate-resilient livelihoods, filling existing gaps, and ensuring interventions are both policy-aligned and responsive to the watershed's resilience needs.

The Accredited Entity, Kemitraan brings over two decades of experience managing large-scale governance, climate resilience, and community-based adaptation initiatives in Indonesia. Kemitraan has successfully implemented multi-year projects funded by the Adaptation Fund, UNDP, USAID, and the EU, demonstrating strong fiduciary standards, risk management, and safeguards compliance required by international climate finance mechanisms. Under the Adaptation Fund, Kemitraan implemented a flagship project in eight kelurahan of Pekalongan City, focusing on climate-resilient livelihoods and coastal adaptation. The proposed BRAVE project directly complements and enhances these interventions, particularly by addressing upstream and midstream watershed dynamics, economic development, and landscape-scale flood management. Kemitraan's proven ability to facilitate multi-stakeholder governance platforms, including coordination across government, civil society, and private sector actors, positions it well to lead BRAVE as AE. Its governance reform expertise ensures transparent oversight, participatory decision-making, and accountability.

The Executing Entity, Mercy Corps Indonesia, has extensive technical expertise in climate-resilient livelihoods, adaptive agriculture and aquaculture, watershed management, and community-based disaster risk reduction. In Central Java, MCI has successfully led the ZCRA project, piloting climate risk-informed adaptation in the Kupang watershed in Pekalongan City and Pekalongan Regency; using evidence for advocacy at local, province and national level. Lessons learned from ZCRA, including innovative tools like the CRIA and resilient livelihood models, are directly embedded in BRAVE's design, ensuring both continuity and scaling of effective practices. MCI has a strong track record of managing projects of comparable funding scale, with demonstrated ability to mobilize local actors, deliver technical assistance, and build sustainable community-based institutions. Its operational presence in the project area ensures community trust, government buy-in, and effective field-level implementation. Local partners, including foundations, farmer and aquaculture groups, and civil society organizations, will provide specialized expertise in conservation agriculture, ecosystem restoration, and participatory land-use planning.

BRAVE was designed through a participatory process to ensure interventions reflect the priorities of diverse stakeholders. Consultations engaged national, provincial, and local government agencies; women's and farmer groups; community-based organizations; civil society; and the private sector. Through focus group discussions, multi-stakeholder workshops, and bilateral meetings, stakeholders shaped activities that address climate and flood risks while also responding to social, economic, and ecosystem needs across the watershed. The process emphasized women's participation and the inclusion of marginalized groups in decision-making, ensuring that interventions are locally grounded, socially inclusive, and widely supported. The project design was informed by extensive consultations with stakeholders, including local communities, women and farmer groups, provincial and city government agencies, private sector actors, and civil society organizations. The Stakeholder Engagement Plan in Annex 13 describes the process of engagement to date as well as activities to ensure full engagement moving forward.

Selection criteria for interventions included:

- ✓ Contribution to climate risk reduction and flood resilience,
- ✓ Socio-economic benefits for vulnerable groups,
- ✓ Ecosystem restoration and watershed health,
- ✓ Alignment with national and subnational policies, and
- ✓ Feasibility for scaling.

Gender and Environmental/Social Safeguards were central to the process. Dedicated sessions with women, youth, and marginalized communities were conducted to identify barriers to participation and to co-design inclusive solutions such as climate-smart agriculture, adaptive aquaculture, and participatory land-use planning. Gender analysis and engagement as well as Environmental and Social safeguard screening, directly informed activity selection, ensuring that interventions promote equity and minimize risks. A Gender Action Plan (Annex 4) and Environmental and Social Action Plan were developed (Annex 12) to ensure that the project fits Category C.

At the community level, BRAVE builds on relationships established under the MCI/ZCRA and Kemitraan’s Adaptation Fund project, which cultivated trust and participation among farmers, fish-farmers, and women’s groups. Communities were actively involved in shaping intervention design and remain engaged in governance, monitoring, and implementation, including through the formation of producer cooperatives and farmer/fish-farmer corporations.

To extend ownership, BRAVE will establish multi-stakeholder knowledge-sharing platforms that convene government agencies, community organizations, academia, and private sector actors. These platforms will disseminate lessons from ZCRA and Adaptation Fund projects, encourage policy uptake, and promote replication in other priority watersheds. The project also advances Indonesia’s NDC commitments by filling a recognized gap in private sector engagement in adaptation. Through its market systems development approach, BRAVE introduces shared-value partnerships that mobilize private investment, strengthen producer-market linkages, and create a sustainable ecosystem for resilience and inclusive growth.

Overall, BRAVE demonstrates strong country ownership by securing NDA approval, embedding interventions in national strategies and government programs, and institutionalizing mechanisms for learning, replication, and private sector engagement.

D.6. Efficiency and effectiveness

| | | |
|---|--|----------------------------------|
| D.6.1. Estimated cost per t CO ₂ eq, defined as total investment cost / expected lifetime emission reductions (Mitigation and Cross-cutting) | (a) Total project financing | US\$ _____ |
| | (b) Requested GCF amount | US\$ _____ |
| | (c) Expected lifetime emission reductions | _____ tCO ₂ eq |
| | (d) Estimated cost per tCO ₂ eq (d = a / c) | US\$ _____ / tCO ₂ eq |
| | (e) Estimated GCF cost per tCO ₂ eq removed (e = b / c) | US\$ _____ / tCO ₂ eq |
| D.6.2. Expected volume of finance to be leveraged by the proposed project/programme and as a result of the Fund’s financing, disaggregated by public and private sources (Mitigation and Cross-cutting) | (f) Total finance leveraged | US\$688,922 |
| | (g) Public source finance leveraged | US\$688,922 |
| | (h) Private source finance leveraged | US\$ _____ |
| | (i) Total Leverage ratio (i = f / b) | US\$ _____ |
| | (j) Public source leverage ratio (j = g / b) | US\$ _____ |
| | (k) Private source leverage ratio (k = h / b) | US\$ _____ |

D.6.3. Describe how the financial structure is adequate and reasonable in order to achieve the proposal’s objective(s), including addressing existing bottlenecks and/or barriers; providing the minimum concessionally; and without crowding out private and other public investment. (max. 500 words)

The BRAVE project requests concessional finance in the form of grants from the GCF to address climate risks in the Kupang and Sengkarang watersheds. The rationale for concessional is grounded in the high economic and social costs of inaction, the absence of predictable revenue streams from adaptation measures, and the need to correct market failures in climate-resilient public infrastructure and ecosystem-based interventions. Climate change-related damages

in these watersheds already impose annual losses of USD134.7 million (2020 baseline), and projections from the CRIA indicate that, by 2035, annual damages could reach USD2.2 billion, over twenty times the baseline, highlighting the urgent need for substantial intervention. Local governments' fiscal capacity is insufficient to cover the required scale of investment, and private capital is largely absent due to high perceived risks and diffuse, non-monetized benefits. Therefore, concessional grants are deemed the minimum support necessary to make the investment viable, as they absorb early-stage climate and adoption risks, allowing interventions to demonstrate technical, social, and economic feasibility.

The grant structure embodies the principle of minimum concessionally. It provides only the level of support needed to overcome barriers to implementation while ensuring that the measures are scalable and capable of leveraging future private and public financing. Concessionally directly benefits local communities, who build resilience to flooding and climate shocks, improved livelihoods, and access to climate information, as well as local governments, which are enabled to implement long-term adaptation plans despite budget constraints. Without GCF support, expected returns on investment would be negative or insufficient to attract private financing, while with concessional grants, financial and social benefits, including avoided losses, increased agricultural and aquaculture productivity, and strengthened ecosystem services, make the interventions viable.

The BRAVE project is designed to achieve cost effectiveness by integrating adaptation outcomes with measurable economic and social returns. Climate-resilient infrastructure, ecosystem restoration, and livelihood diversification are implemented across upstream and downstream areas, ensuring comprehensive risk reduction. Using climate risk assessments, inundation modeling, and livelihood analyses, the project targets interventions that will reduce projected losses from USD 2.2 billion to lower levels by 2035. Compared to benchmarks in regional climate adaptation projects, the BRAVE project demonstrates both high cost-effectiveness, through reduced infrastructure damage and improved agricultural and aquaculture yields, and strong social impact, particularly for vulnerable households representing 12.5% of the population in these watersheds. More details on the economic feasibility of the project is provided in Annex 10.

Economic and financial analysis indicates that, without GCF intervention, the financial rate of return is insufficient to justify investment due to upfront costs, long payback periods, and non-monetized benefits. With GCF support, the project is expected to achieve positive net present value and adequate rates of return, primarily through avoided flood damages, enhanced ecosystem services, and income gains from climate-smart value chains. Identified financial gaps include upfront investment requirements, risk mitigation for early adopters, and capacity building, which concessional grants effectively address. Constraints to finance access include limited local government budgets, market failures for public goods, and high perceived climate risks.

The project leverages best practices and technology for climate adaptation adopted from other projects, including sub-seasonal to seasonal climate forecasting, impact-based forecasting, climate-smart agriculture (carrot) and adaptive aquaculture (milkfish). Innovations include floating aquaculture nets, multi-use public spaces for runoff management, and bundled market services linking production, processing, and marketing to ensure predictable income streams. These interventions are tailored to local conditions and aligned with industry best practices to maximize resilience, reduce losses, and improve livelihoods.

The project ensures sustainability through a robust Operation and Maintenance plan, community and government capacity building, and market system development. Climate-resilient infrastructure and productive assets will be maintained by local governments, driven by revenues and reduced costs from improved practices. Institutional incentives, such as integration into local development plans, ensure long-term public financing, while value-chain actors benefit from improved supply stability and quality, incentivizing continued investment. Financial incentives and market linkages support private sector engagement, and the project's demonstration effect encourages replication and scale-up.

Confirmed co-financing of USD 688,922, representing 6.89% of the total project budget, from executing entities and local governments provides a catalytic base, with potential to mobilize additional public and private investment through risk reduction, strengthened market access, and policy integration. The concessional structure thus enables immediate adaptation action, catalyzes broader investment, ensures long-term viability of interventions and sustained social, economic, and environmental benefits.

E. ANNEXES

E.1. Mandatory annexes

- Annex 1 NDA No-objection Letter(s) ([Template](#))
- Annex 2 Pre-feasibility (or feasibility) study ([Guidance](#))
- Annex 2a Logical Framework ([Template](#))
- Annex 2b Timetable ([Template](#))
- Annex 2c The Theory of Change
- Annex 3 Budget plan that provides breakdown by type of expense including AE fees ([Template](#))
- Annex 4 Gender assessment and action plan ([Template](#))
- Annex 5 Co-financing commitment letter if applicable ([Template](#))
- Annex 6 Term sheet including a detailed disbursement schedule and, if applicable, repayment schedule
- Annex 7 Risk assessment and management ([Template](#))
- Annex 8 Procurement plan model ([Template](#))
- Annex 9a Legal Due Diligence (regulation, taxation and insurance) ([Template](#))
- Annex 9b Legal Opinion/Certificate of Internal Approvals ([Template](#))

E.2. Other annexes to be submitted when applicable/requested

- Annex 10 Economic and/or financial analysis ([Guidance](#))
(mandatory for private-sector proposals)
- Annex 11 Appraisal, due diligence or evaluation report for proposals based on up-scaling or replicating a pilot project
- Annex 12 Environmental and Social Action Plan (ESAP) ([Template](#))
- Annex 13 Stakeholder Engagement Plan
- Annex 14 Monitoring, Evaluation and Learning Plan
- Annex 15 Climate Risk and Impact Assessment
- Annex 16 Project Exit Strategy
- Annex 17 Site Specific Climate Rationale

***** Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents. *****



MINISTRY OF FINANCE OF THE REPUBLIC OF INDONESIA
DIRECTORATE GENERAL OF FINANCIAL SECTOR STABILITY AND DEVELOPMENT

JUANDA II BUILDING 17TH FLOOR, JALAN DR. WAHIDIN NOMOR 1, JAKARTA 10710

Ref : S-82/SK/2025

22 Desember 2025

Subject: Expression of no-objection for the Funding Proposal application titled Building Flood Resilient Community through Adaptive Livelihood and Runoff Management in Petanglong Area of Central Java Province (BRAVE) submitted by Kemitraan bagi Pembaruan Tata Pemerintahan (The Partnership for Governance Reform) (Kemitraan)

Dear Ms. Mafalda Duarte

We refer to the funding proposal titled Building Flood Resilient Community through Adaptive Livelihood and Runoff Management in Petanglong Area of Central Java Province (BRAVE) submitted by Kemitraan bagi Pembaruan Tata Pemerintahan (The Partnership for Governance Reform) (Kemitraan) to us on October 24th, 2025 (the "**Proposal**").

The undersigned is the duly authorized representative of Directorate General of Financial Sector Stability and Development, Ministry of Finance, the national designated authority of Indonesia.

Pursuant to GCF Decisions B.08/10, B.37/22, and B.41/02, the content of which we acknowledge to have reviewed, in my capacity as representative of the national designated authority of Indonesia, we hereby communicate our no-objection to the Proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Indonesia has no-objection to the Proposal; and
- (b) The Proposal is in conformity with the national priorities, strategies and plans of Indonesia.

We also confirm that our national process for ascertaining no-objection to the Proposal has been duly followed.

Notwithstanding the foregoing, we expect Kemitraan to take the necessary measures to ensure that the project as described in the Proposal are implemented in a manner consistent with applicable national laws.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,



Ditandatangani secara elektronik
Masyita Crystallin
Director General



Secretariat's assessment of SAP070

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|-------------------------|---|
| Proposal name: | Building Flood Resilient Community through Adaptive Livelihood and Runoff Management in Petanglong Area of Central Java Province of Indonesia (BRAVE) |
| Accredited entity: | Kemitraan bagi Pembaruan Tata Pemerintahan (Kemitraan) |
| Country/(ies): | Indonesia |
| Project/programme size: | Micro |

1. The Secretariat has assessed this funding proposal against the GCF investment criteria and its consistency with the GCF safeguards and policies. This proposal is recommended to the Board for approval. The Board may wish to consider approving this funding proposal in accordance with the term sheet agreed between the Secretariat and the accredited entity (AE), and, if considered appropriate, subject to the conditions set out in annex II of document GCF/B.45/02.

I. Secretariat's assessment of the funding proposal against the investment criteria

| Investment criteria | Does the project meet the requirements of the GCF investment criteria? | Strengths / Main points of caution (optional) |
|-------------------------|--|--|
| Impact potential | Yes | <p>Climate risks in the Petanglong area, located in Central Java, include significant changes in unpredictable weather patterns, increased rainfall intensity, and sea level rise, as well as other contributing factors such as land subsidence, which is driven by excessive groundwater extraction and watershed degradation due to unsustainable human activities. The identified climate risks lead to impacts that result in the loss of productive land, damage to physical infrastructure, reduced income, and adverse health effects.</p> <p>Building Flood Resilient Community through Adaptive Livelihood and Runoff Management in Petanglong Area of Central Java Province of Indonesia (BRAVE) aims to strengthen household adaptive capacity, improve ecosystem functions, and create enabling conditions for replication and scaling up of resilience strategies by addressing multiple dimensions of climate risk. The project targets approximately 520 households to adopt climate-smart agriculture and</p> |

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| | | <p>adaptive aquaculture practices. In addition, 5,900 households will benefit from ecosystem management interventions. The project supports the formation of and capacity-building of 33 climate-resilient community groups to integrate climate risk assessments, gender-sensitive planning, and Climate Information System data into local plans and decision-making in line with the GCF Locally Led Climate Action Framework. It brings 3,700 hectares of productive land under improved, climate-informed management through participatory land-use planning, conservation measures, and ecosystem service valuation. Participatory land-use and water resource management plans will ensure resilience is systematically embedded in watershed governance, reducing downstream flood impacts, while supporting sustainable natural resource use.</p> <p>Furthermore, the project aims to improve livelihood business models and market systems. It will develop and operationalize commodity-specific business models (grouper, milkfish, coffee, carrot), linking farmers and micro, small and medium-sized enterprises to input suppliers, service providers, offtakers and financial institutions. Under these business models, approximately 400 farmers and fishpond farmers will gain access to financial services, including single and/or blended financial products such as micro-insurance, micro loans/credits, and bundled crop insurance and credits, etc., as part of a closed-loop model scheme.</p> <p>The project co-develops one climate-resilient Integrated Water Resource Management framework, operationalizes sector-specific decision-making tools using Climate Information System, and incorporates Integrated Water Resource Management principles into three local/provincial policies, creating an enabling environment for long-term, systemic adoption of resilience measures. Through these governance and policy interventions, approximately 1.2 million people in Pekalongan City, Pekalongan Regency, and Batang Regency are expected to indirectly benefit from better water resource management, scaled-up livelihood business models, and climate-informed governance systems.</p> <p>Overall, the project directly benefits 136,360 people and indirectly benefits 1,203,347 people, including 40 per cent women.</p> |
| Paradigm shift potential | Yes | The project has been designed based on learnings from and scaling up of an Adaptation Fund project ¹ implemented by Kemitraan to strengthen climate resilience in the coastal area of |

¹ Adaptation Fund project titled 'Safekeeping-Surviving-Sustaining towards Resilience: 3S Approach to Build Coastal City Resilience to Climate Change Impacts and Natural Disasters in Pekalongan City, Central Java Province'. See www.adaptation-fund.org/project/safekeeping-surviving-sustaining-towards-resilience-3s-approach-to-build-coastal-city-resilience-to-climate-change-impacts-and-natural-disasters-in-pekalongan-city-central-java-province-2/

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| | | <p>Pekalongan City. The project aims to catalyse a fundamental transformation in how communities, governments and markets respond to climate risks, while also embedding climate resilience across the Kypang and Sengkarang watersheds in three ways:</p> <ul style="list-style-type: none"> • Empowering communities: By empowering communities with climate information, demonstrating scalable resilient livelihood models, and embedding these interventions into governance systems and markets, this will bring about systemic change, beyond a one-off investment, resulting in long-term resilience, reduced vulnerability, and sustainable development. Kemitraan and Mercy Corps Indonesia (MCI) have worked closely with the communities in the project area and are optimistic that the level of women participating at the community level will be up to 40 per cent. • Institutionalizing resilience: The project embeds evidence-based decision-making, ecosystem-based flood management, and climate-resilient livelihood practices into community and government systems. It fosters long-term, durable change that aligns with Indonesia’s National Action Plan for Climate Change Adaptation (RAN-API) and supports the country’s second nationally determined contribution targets. BRAVE transforms development pathways from reactive and fragmented approaches into proactive, integrated and inclusive climate-resilient planning. • Engaging with the private-sector and local financial institutions (LFIs): During the design phase, a market system development assessment was conducted to map the value chain commodities, and identify key market actors, challenges and opportunities within the local ecosystem. These engagements helped identify market needs, operational constraints and potential collaboration opportunities to strengthen the value chain. Building on these findings, the project explored the development of a closed-loop business model by identifying potential strategic roles for local community-based units and private-sector actors. <p>Private-sector contributions will be integrated into the project as part of the business models that will be developed in the project’s implementation phase, particularly under the project activity in developing bundled business models and expanding access to market and finance for farmers.</p> |
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| | | <p>LFI services will be bundled with technical assistance and market access, allowing farmers to access financing with reduced risk for lenders. This structure enables the development of innovative financial instruments, such as parametric insurance or input financing linked to contract farming arrangements. Lessons learned from other agricultural projects in Indonesia include tailored microcredit aligned with agricultural cash-flow cycles, combined with affordable risk transfer mechanisms, is needed to address liquidity constraints, reduce reliance on informal lending, and protect farmers from climate and biological risks. Kemitraan and MCI have initiated the engagement with LFIs to explore the replication schemes.</p> |
| <p>Sustainable development potential</p> | <p>Yes</p> | <p>The project generates environmental, social, economic and gender-sensitive development co-benefits, contributing to multiple Sustainable Development Goals, including Sustainable Development Goals 5 (Gender equality), 8 (Decent work and economic growth), 11 (Sustainable cities and communities), 12 (Responsible consumption and production), 13 (Climate action), and 15 (Life on land). These co-benefits arise as additional positive outcomes of the project’s interventions, stretching beyond the primary objective of reducing climate vulnerability in the Petanglong watershed.</p> <p>Environmental: The project generates environmental improvements through ecosystem stewardship and sustainable resource management. Environmental co-benefits support ecosystem health while also providing long-term ecological services, such as improved water regulation and habitat connectivity.</p> <p>Social: The project integrates gender equality and social inclusion through participatory planning, targeted capacity-building, and equitable access to livelihood opportunities. Gender-responsive training and livelihood support will strengthen women’s economic participation, particularly in value-added activities and small-scale enterprise development.</p> <p>Economic: The project contributes to strengthening local value chains and market linkages for climate-resilient agricultural and aquaculture commodities. The development of bundled service models and market system linkages will improve producer access to technical services, finance and offtakers, enhancing the efficiency of local production systems.</p> <p>Financial: The project builds on lessons learned from previous projects in Java, including scaling up an Adaptation Fund pilot project that had been implemented by Kemitraan. Engagement with the private sector and LFIs aims to build sustainable development potential</p> |

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| | | by leveraging partnerships with financial institutions through existing economic development programmes. |
| Needs of the recipient | Yes | <p>Climate risk impact assessments in the Kupang watershed and the coastal villages of Sengkarang have shown economic impacts across 42 high flood risk villages with estimated annual losses from climate risk totaling USD 134 million in 2020. This assessment has been based on both the estimated annual losses from climate risk and the losses from reduced productivity. It is projected that economic loss in these watersheds can reach upwards of USD 2.2 billion by 2035. This includes a rising number of high-risk villages, the total of which is expected to increase and to include permanently inundated areas.</p> <p>Losses in the watersheds due to floods alone are estimated to exceed 40 per cent of the local government budget available which further limits investment available for adaptation.</p> <p>Grounded in the Locally Led Climate Action framework, the project has been developed to strengthen local economies and enhance social resilience by shifting agency, decision-making and implementation responsibilities to local actors, with a focus on empowering women, youth and marginalized groups. It embeds participatory planning, capacity development and community-led institutional arrangements to ensure locally-owned context-responsive outcomes.</p> |
| Country ownership | Yes | <p>As a direct access entity, this is the first funded activity project for Kemitraan that has been developed with support through the Readiness and Preparatory Support Programme and the Project Preparation Facility.</p> <p>The project has been developed in close coordination with the Ministry of Finance (the nationally determined authority) and other relevant ministries and local government actors ensuring alignment with national plans and strategies such as Indonesia’s enhanced nationally determined contribution, national development plans (the National Medium-Term Development Plan, the National Policy on Climate Resilient Development), Presidential Regulations along with relevant sectoral strategies. Furthermore, the project has been included in Indonesia’s GCF Country Programme and remains the highest priority for programming in Indonesia’s project pipeline.</p> |

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| | | Kemitraan’s longstanding partnership and expertise in governance reform, as well as its proven ability to facilitate and manage multi-stakeholder governance platforms, position it as the strong and trusted partner for community-based adaptation initiatives. |
| Efficiency and effectiveness | Yes | <p>The local governments’ budgets are insufficient to cover the required scale of investment needed for the projected climate change related damage in the targeted watersheds. Private capital is difficult to mobilize and largely absent in community-based adaptation due to high perceived risks and diffuse, non-monetized benefits. The GCF grant will support building markets in climate-resilient public infrastructure and ecosystem-based interventions. The projects aim to leverage public and private finance through value chain strengthening while reducing climate risk. Co-financing secured from multiple partners including the executing entity (MCI) and other local governments totals USD 688,922 or 6.9 per cent of the total project budget.</p> <p>The financing requested will provide the resources needed to overcome barriers while also ensuring that the measures are scalable and capable of leveraging future private and public financing. The project is expected to achieve positive net present value and adequate rates of return, primarily through informed/managed flood risks, enhanced ecosystem services and income gains from climate-smart value chains.</p> |

II. Secretariat’s assessment of the funding proposal’s consistency with GCF safeguards and policies

| Consistency with GCF safeguards and policies | Secretariat’s assessment of the project | Remarks (Strengths/Points of caution) |
|---|--|---|
| Environmental and social safeguards, including Indigenous Peoples Policy | Consistent | The project is being proposed as environmental and social safeguards (ESS) category C, in accordance with the GCF revised Environmental and Social Policy, the AE accreditation level and the simplified approval process requirements. Key environmental and social risks are anticipated from the establishment of blue-green spaces, climate information system expansion, climate-smart agriculture activities, and adaptive aquaculture implementation and demonstration plots. The identified key risks and impacts are considered to be small in scale, site-specific, short-term and can be readily mitigated. While the risks are assessed as low, |



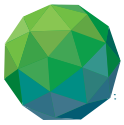
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| | | <p>proportionate mitigation measures along with responsible persons and budget are outlined in the environmental and social action plan (ESAP) prepared for the project. Given that the exact design and locations of the blue-green spaces have not been identified, the ESAP includes screening procedures supplemented with an exclusion list to ensure that the project remains as category C. Blue-green spaces will only be developed on uncontested public or community land that is free of informal settlers, livelihood-use restrictions or any form of encumbrance. Sites will be located outside legally protected areas, critical habitats and any areas requiring land acquisition. Works will be limited to minor landscaping activities and will not involve permanent concrete infrastructure, deep excavation, large-scale soil removal, or any form of river diversion or hydraulic modification. Day-to-day ESAP implementation will be monitored by the Project Management and Implementation Unit (PMIU), under the oversight of the executing entity (MCI) and the accredited entity (Kemitraan).</p> <p>A stand-alone stakeholder engagement plan has been prepared to summarize consultations during the project preparation phase, and outline how stakeholders will be systematically engaged throughout the project cycle to ensure inclusive, meaningful participation, particularly of women, vulnerable groups and affected communities. Implementation of the stakeholder engagement plan involves regular monitoring, annual updates, and includes grievance redress mechanisms to ensure transparency, responsiveness and long-term project ownership and sustainability. The grievance redress mechanism provides accessible, confidential and transparent channels – building on the MCI Community Accountability and Reporting Mechanism and Kemitraan’s complaint system – for all stakeholders, especially vulnerable groups, to submit and resolve environmental, social and sexual exploitation, abuse and harassment related grievances promptly. The GCF Independent Redress Mechanism will also be made available to stakeholders, in case needed.</p> <p>GCF Indigenous Peoples Policy and ESS7 (Indigenous Peoples Policy): The AE confirmed because of its due diligence that there are no Indigenous Peoples within the target areas and that no project activities will affect Indigenous Peoples. The AE verification process relied on available data and was validated through engagement with local authorities, civil society and local communities.</p> |
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| | | <p>Sexual exploitation, abuse and harassment: The revised GCF Environmental and Social Policy adopted by decision B.BM-2021/18 requires safeguarding from SEAH in GCF-financed activities. The project involves activities where SEAH risks may arise such as during community consultations, training, field activities, and interactions between project staff and community members. During operational phases of blue-green infrastructure, SEAH risks may also occur as per stakeholder engagements. While the AE has assessed the risks as low, mitigation measures will be applied as outlined in the ESAP. These include enforcement of code of conduct with specific SEAH provisions for all project staff, partners and contractors, inclusion of SEAH clauses in contracts and partnership agreements, mandatory SEAH awareness training, confidential reporting and referral procedures, incorporating specific procedures for SEAH in the grievance redress mechanism, among others. SEAH mitigation and management will be monitored by the PMIU during implementation.</p> |
| <p>Gender Policy</p> | <p>Consistent</p> | <p>The AE has prepared a gender assessment and action plan in compliance with the GCF updated Gender Policy. The project aims to address gender barriers such as time poverty/care burdens and mobility constraints; limited voice in governance and decision-making; unequal access to assets/credit/markets; occupational segregation and constrained roles in value chains; sector-specific barriers in aquaculture; information/digital gaps; safety/gender-based violence/SEAH risks (including around blue-green spaces); and intersectional exclusion (e.g. female-headed households and women with disabilities). The gender assessment was based on a combination of primary data collection and secondary data collection. Key informant interviews and focus group discussions were conducted, involving government agencies, community members, women’s groups, female-headed households, disability organizations and sector stakeholders across Pekalongan City, Pekalongan Regency, and Batang Regency. Secondary data was also collected through desk reviews of national, provincial, and local statistics; policy documents; and sectoral studies on gender, climate change, livelihoods and disaster risk management. The gender assessment will be further refined at inception stage through baseline information collection.</p> <p>The gender action plan (GAP) outlines activities, indicators and targets for women’s participation and empowerment along with corresponding timelines, budget and required gender expertise. The activities in the GAP will focus on mainstreaming gender and social</p> |

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| | | <p>inclusion across all project components by ensuring gender-responsive planning, targeted capacity-building, equitable participation (with minimum participation targets for women and vulnerable groups), and sex-and disability-disaggregated monitoring. Key interventions promote women’s roles in climate-smart agriculture, adaptive aquaculture value chains, livelihood diversification and community-based planning, while addressing gender constraints. The plan also integrates strong safeguarding and SEAH prevention measures, inclusive design of blue-green spaces, and gender-responsive disaster preparedness and contingency planning. GAP implementation will be overseen by the Project Manager and Steering Committee, with support from a dedicated gender expert at the PMIU.</p> <p>The AE is recommended to ensure alignment of the gender action plan with the gender assessment which will be further refined at inception stage.</p> |
| Risks | Consistent | <p>The grant modality and multi-entity implementation arrangement introduce compliance risks associated with the management of financial flows, procurement activities, and downstream partner engagement. These are mitigated through segregated accounts, milestone-based disbursements linked to verified reporting, structured due diligence on the EE conducted by the AE, risk-based procurement and sanctions screening procedures, audit oversight, and established codes of conduct and grievance mechanisms. Residual compliance exposure relates primarily to the need for sustained enforcement of controls across the transfer of funds, procurement processes, and partner-level execution. However, this is moderated by the institutional frameworks and supervisory arrangements in place. On this basis, the Anti-Money Laundering and Counter-Financing of Terrorism (AML/CFT) and Prohibited Practices compliance arrangements are assessed as consistent with GCF requirements for SAP projects.</p> |
| Fiduciary | Consistent | <p>Kemitraan will serve as both the AE and one of the EEs, retaining overall legal and fiduciary responsibility for the administration of GCF proceeds. Legal arrangements will comprise a funded activity agreement incorporating the Standard Conditions dated 31 January 2026, with project-specific modifications set out in the Term Sheet. Kemitraan will enter into a subsidiary agreement with MCI in the form of a non-reimbursable grant, outlining roles and responsibilities, fiduciary obligations, procurement and safeguard procedures, financial management protocols, and reporting requirements.</p> |

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| | | <p>MCI, as the main EE, will lead day-to-day implementation through a dedicated PMIU responsible for technical delivery, procurement, financial management, and monitoring and evaluation. MCI will engage implementing partners through contractual arrangements such as memoranda of understanding or service agreements. National, provincial and local government entities will participate as project partners, providing policy support, local coordination and in-kind co-financing documented through co-financing agreements.</p> <p>GCF proceeds will be disbursed to Kemitraan, which maintains a GCF account. Kemitraan will transfer funds to MCI in tranches aligned with the project's annual expenditure profile, conditioned on the 70 per cent cumulative expenditure threshold, and delivery of technical and financial progress reports. Delivery of the operations manual – covering implementation arrangements, eligibility criteria, environmental and social plans, and monitoring and evaluation arrangements, and written confirmation of the accounting and auditing standards applicable to the project – is a condition precedent to first disbursement.</p> <p>Financial management relies on Kemitraan's established accounting systems at the AE level and the internal financial management system of MCI at the project level. Procurement will be carried out by MCI in accordance with its procurement policy and the agreed procurement plan, using threshold-based methods and segregation of duties, with prior review by the AE for high-value and non-competitive cases. An annual external audit of the project's financial statements under Section 6.01(b) of the Standard Conditions will cover all GCF Proceeds, including those channelled through Implementing Partners.</p> |
| <p>Results monitoring and reporting</p> | <p>Consistent</p> | <p>The logical framework is broadly aligned with the climate-change rationale and theory of change, and is consistent with Integrated Results Management Framework guidance. The causal pathways from activities to outputs, outcomes and climate impacts are coherent and largely climate-specific rather than development-oriented. Core GCF indicators, complemented by project-level indicators, are generally appropriate for tracking intended results and supporting portfolio-level aggregation.</p> <p>Indicators are, for the most part, well-defined and attributable; however, their robustness will depend on timely baseline validation and the effectiveness of data collection systems at both</p> |

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| | | <p>AE and EE levels. While data sources are identified, clearer provisions for data quality assurance and verification would reduce reporting risks – particularly for decentralized or beneficiary-level data. Further standardization and, where feasible, digitalization of data systems would strengthen data reliability. Targets appear broadly realistic in light of the project scope and AE capacity, though some rely on assumptions that are sensitive to technical and institutional constraints at the EE level. Adaptation beneficiary estimates are conceptually aligned with GCF expectations; however, Kemitraan will be required to establish baseline values and refine target values for selected indicators during the project inception phase.</p> <p>Annex 14 to the funding proposal (M&E Plan) broadly meets GCF requirements, covering monitoring, annual reporting, and interim and final evaluations in line with the monitoring and accountability framework. Roles and responsibilities are clearly defined, and the monitoring and evaluation (M&E) system is appropriately linked to the logical framework. Nonetheless, Kemitraan is encouraged to more explicitly operationalize the use of M&E findings for adaptive management during project execution.</p> <p>Overall, the results framework and M&E design are sufficiently developed and aligned with GCF policies and guidance to support effective results tracking at appraisal. While the framework provides a credible basis for implementation, further strengthening of baselines, data quality assurance arrangements, and the operational use of M&E findings during the project implementation will be critical to ensuring robust, transparent, and credible reporting of climate results over the project life cycle.</p> |
| <p>Legal assessment</p> | <p>Not applicable</p> | <p>The legal arrangements for the project will be based on the revised approach to legal arrangements adopted by the Board pursuant to decision B.42/13. Consequently, they will consist of a project-specific funded activity agreement which incorporates the Standard Conditions (Projects) dated 31 January 2026.</p> <p>The Accredited Entity has provided a legal opinion/certificate confirming that it has obtained all internal approvals and it has the capacity and authority to implement the project.</p> <p>The proposed project will be implemented in the Republic of Indonesia (the “Host Country”), country in which GCF is not provided with privileges and immunities. This means that,</p> |



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| | | <p>amongst other things, GCF is not protected against litigation or expropriation in this Host Country, which risks need to be further assessed. Moreover, the ability of GCF to undertake redress activities and/or investigations in the Host Country may be hindered due to the absence of privileges and immunities for relevant GCF personnel.</p> <p>Therefore, it is recommended that the Board considers whether disbursements of GCF proceeds should only be made after GCF has obtained satisfactory protection against litigation and expropriation in the Host Country, or has been provided with appropriate privileges and immunities for GCF and its personnel.</p> <p>GCF does not hold industrial property protection for its combined logo (sphere with the words “Green Climate Fund”) in the Host Country. This means that, while industrial property protection is pending, (i) GCF’s combined logo could be used by other entities or individuals (including those seeking to impersonate GCF) and (ii) there could be legal claims by entities or individuals asserting their protected trademark, opposing GCF using its combined logo in the country. In both cases, this may lead to reputational risk.</p> <p>To facilitate prompt implementation of the project, it is recommended that any approval by the Board is made subject to the following conditions:</p> <ul style="list-style-type: none">(a) Signature of the funded activity agreement in a form and substance satisfactory to the GCF Secretariat within 180 days from the date of Board approval; and(b) Completion of the legal due diligence to the satisfaction of the GCF Secretariat prior to the signature of the funded activity agreement. |
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Independent Technical Advisory Panel's assessment of SAP070

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|-------------------------|---|
| Proposal name: | Building Flood Resilient Community through Adaptive Livelihood and Runoff Management in Petanglong Area of Central Java Province of Indonesia (BRAVE) |
| Accredited entity: | Kemitraan bagi Pembaruan Tata Pemerintahan (Kemitraan) |
| Country/(ies): | Indonesia |
| Project/programme size: | Micro |

I. Assessment of the independent Technical Advisory Panel

1.1 Overview

1. This funding proposal¹ for a small-sized public sector adaptation project in environmental and social safeguards Category C is submitted through the simplified approval process by the Partnership for Governance Reform (Kemitraan), a national direct access entity from Indonesia, as the accredited entity (AE). Kemitraan is also an executing entity (EE) along with Mercy Corps Indonesia (MCI), another non-governmental organization. The national designated authority for GCF, the Directorate of Multilateral Cooperation and Sustainable Finance in the Ministry of Finance, has signed a no-objection letter for the project. In-kind co-finance totalling USD 688,921 is provided by MCI and provincial governments. The total project size is USD 9,999,881, of which USD 9,310,960 million is proposed as GCF finance. The project implementation period is 5 years, while benefits are calculated over a lifespan of 15 years.
2. The project, Building Flood Resilient Community through Adaptive Livelihood and Runoff Management in Petanglong Area of Central Java Province of Indonesia (BRAVE), aims to strengthen climate resilience across the Kupang and Sengkarang watersheds through a holistic, source-to-sea landscape approach, reducing climate-induced flood and water risks while enhancing resilient livelihoods.
3. The goal statement is that “IF communities, local governments, and market actors access and apply climate information to guide land use planning, water management, and climate-resilient livelihood practices across the Kupang and Sengkarang watersheds, AND IF enabling policies, institutions, and market systems support these practices, THEN households and ecosystems across the upstream, midstream, and downstream areas will experience sustained reductions in climate-induced flood and water-related risks, stronger and more diversified livelihoods, and improved watershed resilience, BECAUSE risk-informed decisions, integrated watershed governance, and climate-resilient value chains collectively address the underlying drivers of vulnerability—such as degraded land, unmanaged run-off, weak institutional coordination, and fragile local economies—resulting in systemic, scalable, and long-term adaptation benefits” (funding proposal section B.2.1.1).

¹ This assessment is based on the funding proposal package received by the independent Technical Advisory Panel on 20 April 2026.

4. The proposed project is designed to have three outcomes, as shown in table 1 below, with outputs and corresponding allocations of GCF finance and co-finance. Detail on the activities under each output is available in section B.2.1.2 of the funding proposal.

Table 1: Structure of the BRAVE project

| Outcome per Component | Outputs of planned activities | GCF finance (USD) | Co-finance (USD) |
|--|---|--------------------------|-------------------------|
| Outcome 1: The development planning processes in Sengkarang and Kupang watersheds are participatory and climate-informed | Output 1.1: The targeted communities and project stakeholders have access to integrate climate-based evidence for climate resilient planning | 366,768 | 23,117 |
| | Output 1.2: Community-based climate change adaptive management plans and designs have been developed to enhance community resilience | 891,090 | 33,431 |
| Outcome 2: Communities in the targeted watersheds implement climate-resilient livelihoods and integrated watershed/run-off management practices that reduce climate-related risks | Output 2.1: Communities in the targeted watersheds are supported to implement the climate-informed and climate-resilient livelihood options | 4,320,012 | 80,526 |
| | Output 2.2: Integrated run-off management and flood preparedness systems established in targeted subdistricts | 781,694 | 67,440 |
| Outcome 3: An enabling environment to replicate and scale up climate-resilient integrated water resource management exists | Output 3.1: Government stakeholders (national, provincial, district and subdistrict levels), academia, private sector, community and media are informed of best practices of climate-resilient and climate-informed livelihood options and policy recommendations | 608,613 | 406,000 |
| | Output 3.2: Communities in the targeted watersheds have access to support with climate-resilient livelihood business models and finance | 1,088,352 | 41,000 |
| MEL and CARM | Outputs related to monitoring, evaluation and learning (MEL), and community accountability reporting framework (CARM) | 469,433 | - |
| Contingency fund | | 333,666 | - |
| Project management costs | | 499,994 | 37,408 |
| Sub-totals | | 9,310,960 | 688,921 |

1.2 Impact potential

Scale: N/A

5. The project targets two of the GCF results areas for adaptation: enhancing the resilience of the most vulnerable people and communities; and improving the resilience of ecosystems and ecosystem services. With respect to adaptation results area (ARA) 2 (health, well-being, food and water security), the AE acknowledged in response to a question from the independent Technical Advisory Panel (iTAP) that “the project includes climate-smart agriculture and aquaculture interventions under Outcome 2” but noted that “[t]he primary objective of these

interventions is to enhance resilience of production systems to climate variability, rather than directly target food security, nutrition, or health outcomes”.²

6. **Climate change risk and impacts.** The funding proposal builds on analysis of historical meteorological trends and future projection models for climate change in Central Java that was conducted through Kemitraan for its Adaptation Fund project³ and through Mercy Corps Indonesia for its Zurich Climate Resilience Alliance (ZCRA) project, including a Climate Risk and Impact Analysis (CRIA). The funding proposal (section B.1.1) and annex 2 feasibility study (section 2.1–2.2) analyse a set of relevant climate hazards – including changes in rainfall patterns, with longer dry spells interspersed with more extreme precipitation events that cause flash floods and landslides, as well as sea level rise and increased storm surges causing coastal flooding.

7. The funding proposal shows that the Petanglong area on the north coast of Central Java, covering Pekalongan City, Pekalongan Regency, and Batang Regency, faces severe and worsening flood risks due to a combination of climate change, sea level rise, land subsidence and watershed degradation. Current flood events already cause extensive infrastructure damage, land loss, and livelihood disruption, with annual economic losses in Kupang watershed area in 2020 estimated at USD 110.7 million (over 40 per cent of the combined local government budgets).

8. Based on climate impact assessments, there is a high likelihood of more frequent extreme rainfall, increased consecutive wet days, sea level rise of 5 millimetres/year, and land subsidence with a medium rate of up to 16.5 centimetres/year, leading to a near-tripling of inundated areas from 1,800 hectares (2020) to 5,700 hectares (2035). It has been estimated that flood hazards will extend inland up to 9.4 kilometres, submerging 90 per cent of mangroves and large areas of settlements, aquaculture and agriculture. Compounding these risks, dry season rainfall is expected to decline, further threatening water supply, agriculture and community resilience in the upland areas.

9. Within this context, 11 village clusters across the Kupang and Sengkarang watershed area of Petanglong have been prioritized as project locations, reflecting a wide range of physical characteristics and climate risk profiles. The coastal clusters that are comprised of West Coastal (Api-api, Pecakaran), Central Coastal (Jeruksari, Bandengan) and East Coastal (Krapyak, Degayu, Klego) are lowland aquaculture areas highly exposed to sea level rise, coastal flooding, land subsidence, and permanent inundation, with high to very high exposure and vulnerability. These hazards result in asset losses, declining income and reduced land productivity, with estimated economic losses reaching USD 121.87 million in Central Coastal, USD 9.42 million in West Coastal, and USD 3.43 million in East Coastal.

10. Among the proposed project’s intervention areas, 10 villages within the clusters are projected to face high to very high flood hazard levels and 9 villages with high to very high flood risk levels. BRAVE addresses these vulnerabilities by promoting climate-resilient agriculture and aquaculture, strengthening ecosystem-based flood management and supporting diversified livelihoods to reduce dependence on flood-prone land. These measures aim to lower vulnerability at both household and community levels, delivering tangible economic, social and environmental benefits while creating a model that can be replicated in other high-risk areas across Central Java.

11. **Complexity of flood risks.** In response to a question about the precise nature of the flood risk in each of the three clusters, and the ways in which pluvial, fluvial and coastal flooding interact, the AE provided the following spatially differentiated summary of the risks:

² Kemitraan written responses to iTAP questions, May 2026.

³ “Safekeeping-Surviving-Sustaining towards Resilience: 3S Approach to Build Coastal City Resilience to Climate Change Impacts and Natural Disasters in Pekalongan City, Central Java Province”.

- (a) Downstream/coastal clusters (West, Central, East Coastal): dominated by coastal flooding, tidal inundation, land subsidence and saline intrusion, often resulting in permanent or semi-permanent inundation. In estuarine zones, river discharge and tidal backflow interact, compounding flood depth and duration. These areas face the highest exposure and economic losses;
- (b) Midstream with urban and small enterprise zone clusters: primarily affected by pluvial (flash) flooding and drainage overflow, exacerbated by land subsidence and limited urban drainage capacity. Flooding is typically recurrent but temporary, with significant impacts on infrastructure and economic activity; and
- (c) Upstream and agricultural clusters: experience flash floods (from extreme rainfall) and drought conditions, driven by watershed degradation and land-use change. These areas contribute to downstream flood amplification through increased run-off and reduced infiltration.⁴

12. **Adaptation impact potential.** The project aims to empower communities with climate information, implement ecosystem-based adaptation measures, demonstrate scalable resilient livelihood models, and embed these interventions in governance systems and markets, resulting in long-term resilience, reduced vulnerability and sustainable development. The project aims to have 136,360 direct beneficiaries (60 per cent male, 40 per cent female), with 1,203,347 people as indirect beneficiaries (49.5 per cent male, 50.5 per cent female). The intended adaptation results are as follows, and are accompanied by clear indicators for measuring progress (see annex 2a to the funding proposal, describing the logical framework):

- (a) **Reduced vulnerability to floods and droughts.** Creation of eight midstream “blue-green spaces” (natural areas which function as flood basins in wet periods and as public parks in dry periods, enhancing water infiltration and storage), flood contingency plans, and climate-smart land and water management will directly protect and provide adaptation benefits to 135,196 people from flood risks and water scarcity;
- (b) **Strengthened ecosystems.** Restoration and improved management of 3,700 hectares of productive upstream land, floodplains and vegetative buffers will enhance water regulation, reduce run-off, and maintain biodiversity. Approximately 14,160 people will receive adaptation benefits from soil and water conservation, upstream land management, and participatory conservation plans;
- (c) **Resilient livelihoods.** Climate-smart agriculture and aquaculture practices will improve productivity and income for 1,165 farmers and their households. Linking farmers and small enterprises to markets and finance will further scale such practices and improve adoption;
- (d) **Gender-responsive adaptation.** Around 40 per cent of direct beneficiaries for activities related to training will be women, with deliberate inclusion of vulnerable groups in decision-making and specific livelihood activities for women's groups; and
- (e) **Long-term scalability.** Institutionalized climate-informed planning, policy adoption, and market systems will enable replication beyond the project area, indirectly benefiting approximately 1,203,347 people across Pekalongan City, Pekalongan Regency, and Batang Regency.

13. Although the modality of the project application is through the GCF simplified approval process and was thus not obliged to conduct a feasibility study, nonetheless Kemitraan has prepared a detailed study on the blue-green space concept (annex 02-02), identifying 12 potential locations according to a clear set of criteria. The AE has also prepared a value chain market study (annex 02-03), analysing in depth the potential expansion of the four target value

⁴ Kemitraan written responses to iTAP questions, 7 May 2026.

chains (coffee, carrot, grouper and milkfish), as well as one value chain that was not prioritized (corn). This background work provides confidence that the planned interventions will be impactful in reducing the target communities' flood exposure, reducing their vulnerability and enhancing their adaptive capacity.

14. The iTAP assesses the impact potential of the project as medium to high.

1.3 Paradigm shift potential

Scale: N/A

15. According to the funding proposal (section D.2 on paradigm shift), "The BRAVE project is designed to catalyse a fundamental *transformation* [iTAP's emphasis] in how communities, governments, and markets respond to climate risks, embedding climate resilience across the Kupang and Sengkarang watersheds. The theory of change is based on the premise that empowering communities with climate information, demonstrating scalable resilient livelihood models, and embedding these interventions into governance systems and markets will bring about a systemic change, beyond a one-off investment, resulting in long-term resilience, reduced vulnerability, and sustainable development."

16. **Incremental vs transformational adaptation.** The iTAP believes that the adaptation approaches being tested in this project can be seen as incremental rather than transformational in their scope (and are limited by the necessity of remaining within risk Category C). With coastal flooding expected to extend up to 9 kilometres inland by 2035, causing permanent inundation across an increasingly large area, questions of more fundamental solutions like relocation of communities must inevitably arise. In response to a question on whether more transformational but controversial options will be discussed as part of the project's work on decadal assessment (activity 1.1.1) and policy/dialogue (output 3.1), the AE confirmed that this is the case: "The BRAVE project recognizes that in several coastal clusters, permanent inundation and land loss may exceed the limits of in-situ adaptation over time ... While BRAVE does not implement relocation directly, it systematically builds the evidence base, institutional readiness and policy alignment necessary for future government-led relocation or economic transition, consistent with a phased adaptation pathway approach."⁵

17. In the follow-up call with the iTAP this was stressed by the AE: "The project is expected to start laying the ground for more difficult conversations in the future ... BRAVE is designed to: (i) enable transformational adaptation pathways by generating the climate projection and risk thresholds to inform long-term, settlement viability; (ii) support integration of this data into spatial and development planning, through multi-level stakeholder engagement, and policy and planning frameworks; and (iii) facilitate policy dialogue with those different levels of stakeholders, on land use, transition, and long-term adaptation options."⁶ The iTAP notes that Mercy Corps Indonesia has already worked with local government to facilitate the voluntary migration of one of the sub-villages in Pekalongan to a new relocation area, despite the many regulatory and safeguards challenges involved.

18. **Shift from grey to green solutions.** Although not discussed explicitly in these terms in the funding proposal, the iTAP considers that the ecosystem- and livelihoods-based adaptation approaches taken by the project, while incremental in nature, do represent an important step towards shifting the paradigm for protection against climate hazards. This approach moves away from an emphasis on costly hard engineered solutions, such as canals and coastal revetments, towards solutions that work within agroecological systems, that may be effective at least in the short term, and are more cost-effective. An example can be seen in the project's approach to the dilemma facing freshwater pond aquaculture in areas that are likely to be

⁵ Kemitraan written responses to iTAP questions, 7 May 2026.

⁶ Follow-up call between iTAP and Kemitraan, 14 May 2026.

flooded or experience saltwater intrusion: a shift to floating aquaculture nets with saltwater species allows such operations to survive intensifying storm surges relatively unscathed.

19. **Long-term sustainability.** No operations and maintenance plans are available yet for key investments such as climate information systems, blue-green spaces and productive assets, though these will be developed. Section D.6.3 of the funding proposal on potential paradigm shift suggests that such infrastructure and assets will be maintained by local governments, “driven by revenues and reduced costs from improved practices”. This appears to the iTAP to be a weakness, since the AE acknowledges in the same section that one of the reasons for seeking a GCF grant is “the absence of predictable revenue streams from adaptation measures” (section D.6.3), though it is true that some fiscal space should be created by avoided disaster mop-up costs. The AE describes integration into local development plans as “institutional incentives ... designed to ensure long-term public financing” which also seems optimistic. For producers and processors, the incentives are clearer – improved supply stability and quality, technical assistance to new livelihoods, and access to buyers and credit. For these value chain actors to continue investing their own resources after the project ends, however, these activities will need to have become profitable. Although production remains vulnerable to the ever more severe impacts of climate change, these risks are mitigated by the inclusion of parametric insurance for producers.

20. **Enabling environment.** The project will localize climate information and translate it into formats accessible to farmers, fishermen and small enterprises. Training will equip communities and local governments with the skills to apply this information in development planning and decision-making. At community level, a participatory climate-resilient livelihood transformation plan will be developed and integrated into Village Development Plans, ensuring any measures are embedded in policy and resource allocation. Subdistrict level contingency plans will be developed for flood response. At local and provincial levels, policy dialogues will advance the embedding of integrated water resource management principles into relevant policies, and develop a relevant framework. Project learning and evidence will be amplified to inform climate resilience policy development at the national level.

21. Evidence on costs and benefits generated through the project’s ecosystem service valuation work will support advocacy efforts, by demonstrating the economic benefits of ecosystem-based adaptation, and enabling comparison with conventional grey infrastructure options. This will strengthen the enabling environment in public investment decisions (e.g. village budgets, regional governments budgets) for ecosystem-based adaptation approaches and planning instruments (e.g. village medium-term development plans, regional medium-term development plans), and the exploration of incentive-based financing mechanisms for watershed management such as Imbal Jasa Lingkungan (IJL)⁷ and broader financing opportunities. In response to a question about the Kupang watershed finance mechanism, the AE confirmed that this is an existing IJL scheme, with villages responsible for maintaining upper watersheds receiving funding for community facilities from the state-owned water utility PDAM Krompeng, and that scope exists to integrate climate risk management into such a scheme and expand it in Sengkarang and other watersheds.⁸

22. **Knowledge-sharing.** Lessons, tools, and innovations, such as impact-based forecasting, closed-loop agriculture/aquaculture, and dual-purpose blue-green spaces, will be systematically documented and disseminated across neighbouring villages, districts and other watersheds. For more effective dissemination and broader reach, the establishment of various discussion forums from the previous ZCRA programme can be optimized, such as spatial management forums, disaster management forums, corporate social responsibility forums, watershed management forums, and coastal management forums. Mainstream media channels (CNN Indonesia, BBC

⁷ Imbal Jasa Lingkungan is the term in Bahasa Indonesia for Payment for Ecosystem Services.

⁸ Follow-up call between iTAP and Kemitraan, 14 May 2026.

Indonesia, Tribun Jawa Tengah, Radar Jawa Tengah, etc.) will be utilized, as well as online media (Mongabay.org, Tanahair.net, etc.) to maximize public awareness.

23. Based on the above, the paradigm shift potential of the project is assessed as medium.

1.4 Sustainable development potential

Scale: N/A

24. The project will contribute to multiple Sustainable Development Goals (SDGs), including SDG 5 (Gender equality), SDG 8 (Decent work and economic growth), SDG 11 (Sustainable cities and communities), SDG 12 (Responsible consumption and production) and SDG 15 (Life on land), in addition to SDG 13 (Climate action). Specific co-benefits are outlined below.

25. **Environmental co-benefits.** Adoption of climate-smart agriculture and adaptive aquaculture practices will reduce reliance on chemical inputs, supporting better water quality in rivers and ponds. Participatory land use and conservation implementation, including floodplain restoration, bioswales and vegetative-based technologies, will promote sustainable soil, hydrology, and biodiversity management. Blue-green spaces will contribute to biodiversity protection and improved micro-climatic conditions, as well as improving water regulation and habitat connectivity.

26. **Social co-benefits.** Participatory planning processes and the formation of community groups will enhance community organization, local governance capacity and social cohesion, encouraging collaboration on water management, livelihood planning and risk reduction. Capacity-building activities will support long-term community leadership, and will enhance community awareness and inclusive decision-making.

27. **Economic co-benefits.** Project activities to strengthen local value chains and market linkages for climate-resilient agricultural and aquaculture commodities should have positive benefits for household cash incomes. Producer access to technical services, finance and off-takers will be improved, enhancing the efficiency of local production systems. Entrepreneurship will be promoted through value added activities and new service roles, stimulating local job creation, and supporting sustained economic growth beyond the project duration.

28. **Gender and social inclusion co-benefits.** Gender equality and social inclusion will be promoted through participatory planning, targeted capacity-building, and equitable access to livelihood opportunities. Implementation of the Gender Action Plan (annex 4) will include gender-responsive training and livelihood support to strengthen women's roles in natural resource management and their economic participation, particularly in value added activities and small enterprise development – including in aquaculture where their role has traditionally been limited. The project aims to expand a loan programme, specifically designed for women on a low income, that already exists in the project landscape, developed by the micro-finance enterprise Permodalan Nasional Madani (PNM) Mekar. This programme shares risk collectively within borrower groups, instead of requiring land certificates as collateral.

29. **Sustainable groundwater extraction.** In response to a question from the iTAP about whether land subsidence is related to unsustainable development pressures, such as overextraction of groundwater, rather than climate change, the AE explained that it is driven by a combination of anthropogenic pressures and natural geological processes, which are compounded by the effects of climate change: "Human-induced drivers include excessive groundwater extraction and unplanned urban development, which accelerate land compaction, especially in urban-coastal areas. In addition, Pekalongan (especially in the downstream and coastal areas) is characterized by young alluvial soils that are still undergoing natural compaction, which constitutes an important underlying geological driver of subsidence. The interaction of these factors with climate-induced sea level rise results in a compounding effect,

increasing relative sea level rise and flood exposure”.⁹ In a follow-up call with the iTAP, the AE indicated that the project will include engaging local government on the issue of sustainable management of groundwater resources to avoid worsening the subsidence problem.¹⁰

30. The iTAP assesses the sustainable development potential of the project as high.

1.5 Needs of the recipient

Scale: N/A

31. Vulnerability to loss and damage from climate change-intensified hazards can be seen throughout Indonesia. According to the World Bank Climate Change and Development report for Indonesia¹¹ the eastern and western portions of Java, as well as the coastal regions of Sumatra, parts of western and northern Sulawesi, and south-eastern Papua islands are all highly vulnerable to multiple climate hazards, including drought, floods, landslides and sea level rise.

32. As highlighted under the Policy on Climate Resilient Development for Indonesia, Central Java Province is projected to experience the highest climate-related gross domestic product losses in the coastal subsector and the third highest in agriculture.¹² The CRIA conducted through the ZFRA programme showed that the economic impacts of climate change in the Kupang watershed and in the coastal villages of the Sengkarang watersheds are already significant and projected to rise sharply. A 2020 analysis of 42 villages at high risk of flood estimated total annual losses from flooding and reductions in productive land at approximately USD 134.7 million. Funds required for recovery and repair already significantly exceed the capacity of local budgets, and projections from the CRIA indicate that, by 2035, annual damages could reach USD 2.2 billion.

33. The project responds to economic and social development needs by targeting areas in Petanglong where climate-induced flooding poses severe socio-economic risks, responding to the pressing needs of communities reliant on agriculture, aquaculture and fisheries facing high to very high flood risk levels. Local governments in the affected districts have constrained budgets and competing priorities. Structural flood protection measures outlined in national and provincial plans are insufficiently funded, and municipalities lack the fiscal capacity to implement integrated water resource management, livelihood adaptation, and ecosystem-based interventions. In particular, the project will address implementation challenges faced by the Central Java Government’s Petanglong programme for the watershed, resulting from budget reallocations. Private capital is limited as an alternative source of funding, due to insufficient market mechanisms for climate-resilient investments, high perceived risks and diffuse, non-monetized benefits.

34. The needs of the recipient are thus seen as high.

1.6 Country ownership

Scale: N/A

35. The funding proposal indicates that the BRAVE project was developed in close partnership with the Government of Indonesia, including the national designated authority, the Ministry of Environment, as well as provincial and local governments in Central Java, Pekalongan City, Pekalongan Regency and Batang Regency. Although no government entity

⁹ Kemitraan written responses to iTAP questions, 7 May 2026.

¹⁰ Follow-up call between iTAP and Kemitraan, 14 May 2026.

¹¹ World Bank Group. 2023. Indonesia Country Climate and Development Report. Available at <https://www.worldbank.org/en/country/indonesia/publication/indonesia-country-climate-and-development-report>

¹² National Development Planning Agency, 2021. Executive Summary: Climate Resilience Development Policy 2020-245

serves as an EE, local government co-finance is provided, and the project will be carried out in close collaboration with regional and local government entities. A formal no-objection letter from the national designated authority confirms that the BRAVE project is consistent with national priorities (annex 1).

36. **Policy and strategy alignment.** Project interventions are aligned with national and regional government initiatives on watershed management, disaster risk reduction, and climate-resilient agriculture and aquaculture. By embedding evidence-based decision-making, ecosystem-based flood management, and climate-resilient livelihood practices into community and government systems, the BRAVE project aligns with the National Action Plan for Climate Change Adaptation and supports several targets of the country's second nationally determined contribution in terms of the Paris Agreement.

37. The funding proposal highlights project alignment with the country's previous official five-year national development plan (Rencana Pembangunan Jangka Menengah Nasional) for 2020–2024, though it has not been updated in relation to the current development plan for 2025–2029.¹³ Alignment is noted with the Policy on Climate Resilient Development, which identifies Pekalongan City, Pekalongan Regency and Batang Regency as priority areas for climate resilience interventions in agriculture, water and marine/coastal sectors. Presidential Regulation No. 79/2019 designates Petanglong for accelerated economic development, though its projects largely focus on structural flood protection, with limited attention to integrated water resource management and livelihood adaptation.

38. **Engagement of stakeholders.** Consultations for the project engaged national, provincial and local government agencies; women's and farmers' groups; community-based organizations; civil society; and the private sector. Through focus group discussions, multi-stakeholder workshops and bilateral meetings, stakeholders shaped activities that address climate and flood risks while also responding to social, economic and ecosystem needs. In the project sites, sessions were conducted with women, youth and marginalized communities to identify barriers to participation and to co-design inclusive solutions such as climate-smart agriculture, adaptive aquaculture, and participatory land-use planning. This process built on relationships established under the MCI/ZCRA and Kemitraan's Adaptation Fund project, which cultivated trust and participation among farmers, fish-farmers and women's groups.

39. The project also advances the nationally determined contribution commitments of Indonesia by filling a recognized gap in private sector engagement in adaptation. Through its market systems development approach, BRAVE will work to mobilize private investment, create new climate-responsive financial products, and strengthen producer-market linkages. The Stakeholder Engagement Plan in annex 13 describes the process of engagement to date, and activities for engagement during the project, including multi-stakeholder knowledge-sharing platforms that bring together government agencies, community organizations, academia and private sector actors for learning, replication and partnership formation.

40. **Capacity of key entities.** As a national direct access entity¹⁴ bringing its first project to GCF, Kemitraan has over 20 years of experience in managing large-scale governance, climate resilience and community-based adaptation initiatives in Indonesia. Kemitraan has successfully implemented projects funded by the Adaptation Fund, United Nations Development Programme, United States Agency for International Development and the European Union, demonstrating strong fiduciary standards, risk management and safeguards compliance. Under the Adaptation Fund, Kemitraan implemented a project in Pekalongan City on climate-resilient livelihoods and coastal adaptation. The BRAVE project directly complements and enhances these interventions, addressing upstream and midstream watershed dynamics, economic development and landscape-scale flood management. Kemitraan's proven ability to facilitate

¹³ The current plan was established by Presidential Regulation No. 12 of 2025.

¹⁴ Kemitraan was accredited to GCF in November 2020.

multi-stakeholder platforms and its governance reform expertise should help achieve strong outcomes.

41. As the EE, Mercy Corps Indonesia has extensive technical expertise in climate-resilient livelihoods, adaptive agriculture and aquaculture, watershed management, and community-based disaster risk reduction. In Central Java, MCI has successfully led the ZCRA project, piloting climate risk-informed adaptation in the Kupang watershed in Pekalongan City and Pekalongan Regency and using evidence for advocacy at local, provincial and national levels. Lessons learned from ZCRA, including innovative tools like the CRIA and resilient livelihood models, have been applied in the BRAVE project, promoting continuity and scale-up. MCI has a strong track record of managing projects of similar scale. Its operational presence in the project area ensures community trust, government buy-in, and effective field-level implementation. Local partners, including foundations, farmer and aquaculture groups, and civil society organizations, will be subcontracted to provide specialized expertise in conservation agriculture, ecosystem restoration, and participatory land-use planning.
42. Country ownership of the project is considered to be high.

1.7 Efficiency and effectiveness

Scale: N/A

43. The BRAVE project is designed to achieve cost-effectiveness by integrating adaptation outcomes with measurable economic and social returns, achieving reduced infrastructure damage, improved agricultural and aquaculture yields, and strong social impact, particularly for vulnerable households representing 12.5 per cent of the population in the target watersheds. Climate-resilient infrastructure, ecosystem restoration and livelihood diversification are implemented across upstream and downstream areas, ensuring comprehensive risk reduction. Using climate risk assessments, flood modelling and livelihood analyses, the project targets interventions that will reduce losses from the projected USD 2.2 billion to lower levels by 2035, although no target figure is provided (see supplementary indicator 3.1 in the logical framework in annex 2a).
44. **Use of best practice.** The project applies global best practices and technologies for climate change adaptation, including sub-seasonal to seasonal climate forecasting, impact-based forecasting, climate-smart agriculture (e.g. carrots) and adaptive aquaculture (e.g. milkfish). Innovations include floating aquaculture nets, multi-use public spaces for run-off management, and bundled market services linking production, processing and marketing. The project builds on the lessons and institutional arrangements of the partners' two previous projects in the landscape, ensuring continuity and scalability.
45. **Return on investment.** The results of an economic and financial analysis (see annex 10) indicate that, without the GCF intervention, the financial rate of return on the proposed activities would be insufficient to justify investment due to high upfront costs, long payback periods, and non-monetized benefits. With GCF support, the project is expected to achieve positive net present value and adequate rates of return, primarily through avoided flood damages, enhanced ecosystem services, and income gains from climate-smart value chains. Identified financial gaps include upfront investment requirements, risk mitigation for early adopters, and capacity-building, which the maximum concessionality of a grant can effectively address. Constraints to accessing finance include limited local government budgets, market failures for public goods, and high perceived climate risks.
46. **Operations and maintenance (O&M).** The funding proposal package does not include an O&M plan, but the exit strategy (section C.5) states that “[k]ey investments such as climate information systems and blue-green infrastructure will be taken over by capable institutions, including municipal agriculture agencies, marine and fisheries agencies, and communication and information agencies”, with these institutions to be selected based on technical and

financial capacity and networks with local actors. The agencies will be trained in O&M, with budget lines advocated for inclusion in local government financing cycles. Memorandums of Understanding will formalize responsibilities, while local universities and non-governmental organizations will provide ongoing technical backstopping.

47. **Producer access to finance.** Although no GCF funds will be used to make loans to producers, the project aspires to catalyse the development of a bundled financial services package combining access to credit, savings mobilization, and risk protection to support climate-resilient livelihoods. Consultations have been conducted with a range of financial service providers, including a national commercial bank (BRI), a regional development bank (Bank Jateng), a microfinance institution (BPR Jateng), a non-bank financial institution (PNM), and insurance companies (Zurich Syariah and ACA Asuransi). In addition, consultations were held with key ecosystem actors operating within a closed-loop model, such as input suppliers, off-takers, and aggregators (e.g. Petung Bumi Makmur and Moya Bahari Perdana).

48. These consultations explored several areas, including the potential for bundling parametric insurance with loans and savings, defining participant eligibility criteria in agreement with financial service providers, conducting financial literacy and strengthening financial management capacities. The AE anticipates potential demand from between 400 and 600 programme participants for bundled loans, parametric insurance and savings/digital payment services, with 30 per cent potential active users (based on conservative assumptions about sustained uptake). Enrolling participants in a parametric insurance scheme with an affordable premium will help protect productive assets purchased through the project from evolving climate risks that may negatively affect production.

49. **Limited project co-finance.** Confirmed co-financing of USD 688,922 from EEs and local governments (PemKab Pekalongan, PemKot Pekalongan and PemProv Jateng), represents just under 7 per cent of the total project budget, and is provided in kind only. The AE suggests that there is “potential to mobilize additional public and private investment through risk reduction, strengthened market access, and policy integration” (funding proposal, section D.6.3).

50. The project’s efficiency and effectiveness is assessed as medium to high.

II. Overall remarks from the independent Technical Advisory Panel

51. The proposed project on Building Flood Resilient Community through Adaptive Livelihood and Runoff Management in Petanglong Area of Central Java Province of Indonesia (BRAVE) has been well planned in a manner that engages all stakeholders. The project has strong potential to reduce vulnerability and exposure of rural village clusters across the Kupang and Sengkarang watershed area to climate change-intensified flooding. The low-risk project utilizes incremental but effective ecosystem and livelihoods-based approaches to adaptation, and engages stakeholders in policy and planning dialogues on more transformational approaches that may be needed in the not-too-distant future, as climate risks continue to evolve.

52. The ITAP recommends that the Board approve this funding proposal.

Response from the accredited entity to the independent Technical Advisory Panel's assessment (SAP070)

| | |
|-------------------------|---|
| Proposal name: | Building Flood Resilient Community through Adaptive Livelihood and Runoff Management in Petanglong Area of Central Java Province of Indonesia (BRAVE) |
| Accredited entity: | Kemitraan bagi Pembaruan Tata Pemerintahan (Kemitraan) |
| Country/(ies): | Indonesia |
| Project/programme size: | Micro |

Impact potential

The AE welcomes that the overall impact potential is assessed by iTAP as **medium to high**. We appreciate iTAP notes in recognising the detailed study on the Blue-Green-Space (annex 02-02) concept as well as the potential location identification with a clear set of criteria. We also appreciate other notes from iTAP, recognising the value chain market study (annex 02-03) with in depth analysis to the potential expansion of the four target value chains commodities (coffee, carrot, grouper and milkfish), as well as one value chain that was not prioritised (corn). We are enthusiast iTAP commented that this background work provides confidence that the planned interventions will be impactful in reducing the target communities' flood exposure, reducing their vulnerability and enhancing their adaptive capacity.

Paradigm shift potential

The AE acknowledges iTAP's assessment of paradigm shift potential as **medium**. We are welcomes constructive observations regarding the weakness and lacking the operations and maintenance plans for key investments such as climate information systems, blue-green spaces and productive assets, as it contradicts with the reasons for seeking a GCF grant is "the absence of predictable revenue streams from adaptation measures" (as referred in section D.6.3 of the Funding Proposal).

In addition, we also acknowledges that that the adaptation approaches being tested in this project can be seen as incremental rather than transformational in their scope (and are limited by the necessity of remaining within risk Category C). However, we appreciate the notes that the project considered by iTAP as incremental in nature, represents an important step towards shifting the paradigm for protection against climate hazards. This approach moves away from an emphasis on costly hard engineered solutions, such as canals and coastal revetments, towards solutions that work within agroecological systems, that may be effective at least in the short term and are more cost-effective.

We will take this constructive feedback into consideration to strengthen the development of the closed-loop model and ensure that the implemented business model is economically viable and sustainable. The operational and maintenance scheme, especially for the blue-

green space and climate information system, will also be included in the development process of the SOP for the handover procedure to the relevant local stakeholders.

Sustainable development potential

The AE welcomes iTAP’s conclusion that the project has high sustainable development Potential and assessed as **high**. We appreciate the iTAP’s recognition that this project will contribute to multiple Sustainable Development Goals (SDGs). We also appreciate iTAPs’ notes that this project contributes to various of co-benefits as outlined in the assessment report.

Needs of the recipient

The AE fully agrees with iTAP’s conclusion that the needs of the recipient are seen as **high**.

Country ownership

The AE fully agrees with iTAP’s conclusion that the country ownership of this project is assessed as **high**.

Efficiency and effectiveness

The AE welcomes that the project’s efficiency and effectiveness is assessed by iTAP as **medium to high**. We acknowledge the limited co-financing contribution to the project and is in the form of in kind only.

Overall remarks from the independent Technical Advisory Panel:

The AE sincerely welcomes iTAP’s overall assessment and recommendation for board approval.

We truly appreciate the notes that the project is recognised as having strong potential to reduce vulnerability and exposure of rural village clusters across the Kupang and Sengkarang watershed area to climate change-intensified flooding. The low-risk project utilises incremental but effective ecosystem and livelihoods-based approaches to adaptation, and engages stakeholders in policy and planning dialogues on more transformational approaches that may be needed in the not-too-distant future, as climate risks continue to evolve.



Gender Assessment and Action Plan

Provision of Project Preparation Services through the GCF Project Preparation Facility (PPF) for the Partnership for Governance Reform (Kemitraan) for the Project *“Building Flood Resilient Community through Adaptive Livelihood and Runoff Management in Petanglong Area of Central Java Province of Indonesia (BRAVE)”*

August 2025

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List of abbreviations

| | |
|-------------|---|
| GBV | Gender-based violence |
| GER | Gross enrolment rate |
| MHH | Male-headed household |
| MMR | Maternal mortality ratio |
| MoWE-CP | Ministry of Women's Empowerment and Child Protection |
| MSME | Micro, small, and medium enterprise |
| PEKKA | Female-headed household |
| Perbup | Regent Regulation |
| Perda | Regional Regulation |
| PKK | Family Welfare Empowerment Group |
| RPJMN | National Medium-Term Development Plan |
| RSIPD | Regional Government Information System |
| SAP | Simplified Approval Process |
| SDG | Sustainable Development Goals |
| STEM | Science, Technology, Engineering, and Mathematics |
| Stranas PUG | National Strategy to Strengthen Gender Mainstreaming |
| ULD | Disability Service Unit |
| UN CEDAW | United Nations Convention on the Elimination of All Forms of Discrimination Against Women |
| VAQ | Violence against women |

1 Introduction and Project Overview

This Gender Assessment has been developed for the Provision of Project Preparation Facility for 'Building Flood Resilient Community through Adaptive Livelihood and Runoff Management in Petanglong Area of Central Java Province of Indonesia (BRAVE) under the GCF Simplified Approval Process (SAP). The objectives of the Gender Assessment are to assess the situation of men and women and the status of gender equality in the project target areas. The objective is to identify risks associated with the project for both women and men, taking into consideration its proposed activities. Upon conducting the risk assessment, the subsequent objective is to develop effective mitigation measures and propose activities that promote women's participation within the project premises.

This Gender Assessment and Action Plan (GAAP) provide a comprehensive analysis of gender impacts and considerations relevant to the GCF project. The assessment integrates national, provincial, and local data, identifying key socioeconomic baselines, existing gender barriers, and specific vulnerabilities within the target area, primarily Pekalongan City and Regency in Central Java.

1.1 Objective

The BRAVE project is designed to build community resilience to climate change in the Petanglong area by focusing on flood resilience, balancing livelihood improvements with ecosystem preservation. The project uses a watershed approach, covering the Kupang and Sengkarang watersheds, to manage the interconnected socio-economic and environmental impacts across the three administrative areas of Petanglong. Key aspects of the project include:

- **Targeted Activities:** The project will implement different strategies for different parts of the watershed.
 - **Upstream:** Focuses on climate-smart agriculture to protect the ecosystem and reduce flood risk in lower areas.
 - **Midstream:** Combines climate-smart agriculture with nature-based solutions and ecosystem approaches to manage runoff and floods through the development of "blue-green spaces."
 - **Downstream:** Concentrates on adaptive aquaculture practices.

1.2 Target beneficiaries

The project aims to benefit 340,000 households of indirect beneficiaries and improved management of 3,700 hectares of productive land. It will contribute to the GCF's USP-2 targets by addressing climate information, food security, ecosystems, infrastructure, and innovation. The project emphasizes a participatory and inclusive approach, showcasing locally led adaptation actions.

1.3 Methodology

The Gender Assessment has been developed using the following approach:

- a. Primary data and information collected through key informant interviews and focused group discussions (FGDs)
- b. Secondary data and information collected through literature review
- c. Concurrent triangulation of primary inputs and secondary data and information collection

From 26th of May 2025 to 9th of June 2025, a total of 18 interviews and 3 FGDs were conducted. Consulted stakeholders included public agencies, civil society organisations and experts.

Based on the Gender Assessment, the Gender and Social Inclusion Action Plan has been developed. The GAAP highlights actions that can be included in the project wide logical framework. The core approach is to embed gender equality and social inclusion across the project activities and operations.

This document follows the structure as proposed by GCF and is closely aligned with the project's activities. Continuous engagement of women and men throughout project implementation is key to a successful roll out of the GAP. Therefore, the Gender and Social Inclusion Action Plan include concrete measures to ensure the equal participation of men and women along with assigned responsibilities and monitoring obligations.

2 Gender Analysis and Assessment

2.1 Socioeconomic and gender baseline information

2.1.1 National strategy

Indonesia's National Medium-Term Development Plan (RPJMN) 2020-2024 established a robust framework for advancing gender equality and women's empowerment, recognizing these as fundamental to achieving broader national development objectives, including economic growth and poverty reduction.¹ This commitment was operationalized through a strong emphasis on gender mainstreaming, involving strategies such as strengthening policies and regulations, accelerating mainstreaming implementation across ministries, institutions, and local governments, and enhancing public understanding of gender concepts.² The plan also served as a crucial instrument for integrating Sustainable Development Goals (SDGs) targets and indicators related to gender into national and sub-national planning processes.³ However, the RPJMN 2020-2024 implementation faced some challenges. There were challenges related to inadequate human resources and the consistent provision and utilization of gender-disaggregated data at various stages of development, which meant that the translation of policy into effective action was difficult, and required further capacity building and consistent application across all government tiers.⁴

Gender equality continues to be a central pillar in Indonesia's National Medium-Term Development Plan (RPJMN) 2025-2029, enacted through Presidential Regulation No. 12 of 2025.⁵ This new plan sets clear goals and indicators for national gender equality priorities, reflecting a strategic integration influenced by collaborative efforts with organizations such

¹ Publication: Indonesia Country Gender Assessment: Investing in Opportunities for Women - Open Knowledge Repository <https://openknowledge.worldbank.org/entities/publication/5d547709-6552-51ee-bf5d-672b328f8663>

² The National Medium-Term Development Plan For 2020-2024 - Perpustakaan BAPPENAS https://perpustakaan.bappenas.go.id/e-library/file_upload/koleksi/migrasi-data-publikasi/file/RP_RKP/Narasi-RPJMN-2020-2024-versi-Bahasa-Inggris.pdf

³ Indonesia's SDGs https://sdgs.bappenas.go.id/website/wp-content/uploads/2023/11/IND_VNR2021_File-upload.pdf

⁴ The National Medium-Term Development Plan For 2020-2024 - Perpustakaan BAPPENAS https://perpustakaan.bappenas.go.id/e-library/file_upload/koleksi/migrasi-data-publikasi/file/RP_RKP/Narasi-RPJMN-2020-2024-versi-Bahasa-Inggris.pdf

⁵ Bridging the Gender Gap in Maluku: The Case for a Regional Action Plan on Gender Equality <https://skala.or.id/en/publications/bridging-the-gender-gap-in-maluku-the-case-for-a-regional-action-plan-on-gender-equality/>

as UN Women.⁶ Notably, gender equality and the empowerment of women are explicitly designated as National Priority 4, alongside education and vocational work, signaling a deepened commitment within the national development agenda.⁷ The upcoming plan introduces additional policies, including an integrated criminal justice system designed to provide comprehensive services to victims of Gender-Based Violence (GBV), with a specific focus on women residing in small islands.⁸ Furthermore, the RPJMN 2025-2029 is expected to prioritize data collection, research, and pilot testing to enhance care services and support care workers, identifying childcare as a key strategic priority.⁹ So there is an evolution in Indonesia's gender policy, moving from broad mainstreaming efforts to more targeted, systemic, and inter-sectoral approaches that aim to address root causes.

2.1.2 Education

Indonesia has made progress with respect to educational attainment, with high lower secondary completion rates for both girls (98.1%) and boys (99.1%) in 2023, and near-universal adult literacy rates, recorded at 97.0% for females and 95.0% for males in 2020.¹⁰

By 2019, the nation reached a Gender Parity Index (GPI) of 1.00 for school enrollment rates among children aged 7-12 years, indicating equal participation.¹¹ This is a significant improvement from a GPI of 0.89 in the 1970s.¹² For 13-15-year-olds and 16-18-year-olds, the GPI stabilized above 1.00 from 2015-2019, reaching 1.02 and 1.03 respectively, showing a slight female advantage at the secondary level.¹³ This trend continues into tertiary

⁶ Progress in Indonesia country in 2024 - | UN Women Transparency Portal

<https://open.unwomen.org/sites/default/files/phpwkhtmltopdf/ID-progress-notes-2025-06-12%2008%3A38%3A47.pdf>

⁷ Government and UN Launch Programmes for Jobs, Skills and Social Protection

<https://indonesia.un.org/en/295953-government-and-un-launch-programmes-jobs-skills-and-social-protection>

⁸ Indonesia | UN Women Transparency Portal <https://open.unwomen.org/en/country-results/ID>

⁹ The Care Economy in Indonesia: A Pathway for Women's Economic Participation and Social Well - World Bank Documents and Reports

https://documents1.worldbank.org/curated/en/099080924014518193/pdf/P5004341d18f240de1bbd51bc3d3920e343.pdf?_gl=1*dfznp4*_gcl_au*MTY4Mjg3ODY1NC4xNzlwNDY4NTEz

¹⁰ Indonesia | World Bank Gender Data Portal

<https://genderdata.worldbank.org/en/economies/indonesia>

¹¹ Inclusion in Indonesia's Education Sector A Subnational review

<https://documents1.worldbank.org/curated/en/603641592335430591/pdf/Inclusion-in-Indonesias-Education-Sector-A-Subnational-Review-of-Gender-Gaps-and-Children-with-Disabilities.pdf>

¹² Ibid

¹³ Ibid

education, where the gross enrolment rate (GER) for higher education reached 39.37% by the end of 2022, with female GER at 33.55% and male GER at 28.91%.¹⁴

However, persistent gender disparities are evident in higher education, especially in Science, Technology, Engineering, and Mathematics (STEM) fields, where women are underrepresented in certain disciplines and the STEM workforce.¹⁵ A digital literacy divide also persists, with men generally exhibiting higher digital literacy, particularly among older age groups.¹⁶ Ingrained social norms and cultural expectations continue to influence educational and career choices.¹⁷ There are significant subnational variations.

There is persistently low and stagnant female labor force participation rate (FLPR). In 2024, the FLPR was 52.6% for females compared to 81.4% for males, representing one of the largest gender gaps in the region, a disparity that has remained largely unchanged for over two decades despite educational gains and declining early marriage rates.¹⁸ The persistence of this gap is attributed to structural barriers, including occupational sex segregation and limited access to credit and markets for women-owned micro, small, and medium enterprises (MSMEs).¹⁹ One of the factors for this is the "care economy," where the scarcity of affordable and quality childcare services often compels many women to withdraw from the labor market after marriage and childbirth.²⁰ Analysis indicates that increasing public expenditure on childcare to 0.5% of GDP from its current 0.04% could significantly boost the female labor force participation rate to 58% and contribute an additional \$62 billion (0.7 percentage points) to the economy, underscoring the direct economic benefits of investing in care services.²¹

¹⁴ Technology in education: a case study on Indonesia - UNESCO Digital Library, accessed on August 4, 2025, <https://unesdoc.unesco.org/ark:/48223/pf0000387827>

¹⁵ Gender issues remain challenge in STEM workforce: Ministry - ANTARA News
<https://en.antaranews.com/news/335869/gender-issues-remain-challenge-in-stem-workforce-ministry>

¹⁶ Gender gap in digital literacy across generations: Evidence from Indonesia
<https://ideas.repec.org/a/eee/finlet/v58y2023ipds1544612323009601.html>

¹⁷ Gender and education in Indonesia
<https://blogs.worldbank.org/en/eastasiapacific/gender-and-education-indonesia-progress-more-work-be-done>

¹⁸ The National Medium-Term Development Plan For 2020-2024 - Perpustakaan BAPPENAS
https://perpustakaan.bappenas.go.id/e-library/file_upload/koleksi/migrasi-data-publikasi/file/RP_RKP/Narasi-RPJMN-2020-2024-versi-Bahasa-Inggris.pdf

¹⁹ Gender Equality for Growth Research and Analytical Program in Indonesia - World Bank
<https://www.worldbank.org/en/country/indonesia/brief/gender-equality-for-growth-research-and-analytical-program-in-indonesia>

²⁰ Ibid

²¹ Ibid

In Central Java, 2015 data showed 97% of 6-year-olds participated in organized learning, but children from the poorest households were three times less likely to complete secondary school.²²

For Batang Regency, Central Java, the latest available data from 2023 further illustrates these trends:

- The male population aged 10 and over who completed primary education was slightly higher (77.86%) than females (75.23%).
- However, in school participation rate, females showed better overall access in several age groups: 100% for females aged 7-12 years (vs. 97.78% for males), 68.09% for females aged 16-18 years (vs. 60.31% for males), and 25.26% for females aged 19-23 years (vs. 11.33% for males).
- Conversely, the percentage of the population aged 10 and over without a diploma was slightly higher for females (24.78%) than for males (22.16%).
- For the elderly population in Batang Regency (2023), 89.30% completed elementary school or less, with a slight gender difference (88.82% male and 89.72% female).
- Literacy rates among the elderly in Batang Regency in 2023 showed a significant gender gap: 84.50% of elderly men were literate compared to only 62.85% of elderly women.

For Pekalongan Regency, Central Java, the average length of schooling for the population was 7.47 years in 2023, which is below the Central Java provincial average of 8.01 years.²³ This indicates that, on average, residents of Pekalongan only complete up to the 7th grade.²⁴

2.1.3 Poverty

Indonesia has achieved historic lows in its national poverty rate, reaching 8.47% in March 2025²⁵, following a temporary increase during the COVID-19 pandemic.²⁶ A substantial segment of Indonesian households remains economically insecure. Approximately 30% of

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²³ Rata-rata Lama Sekolah Penduduk Kabupaten Pekalongan Capai 7,47 Tahun pada 2023
<https://databoks.katadata.co.id/layanan-konsumen-kesehatan/statistik/ea5332a9db843f8/ratarata-lama-sekolah-penduduk-kabupaten-pekalongan-capai-747-tahun-pada-2023>

²⁴ Ibid

²⁵ BPS: Urban Poverty on the Rise as Poverty Rates in Rural Areas Drop - News En.tempo.co
<https://en.tempo.co/read/2032485/bps-urban-poverty-on-the-rise-as-poverty-rates-in-rural-areas-drop>

²⁶ Indonesia records progress on key dimensions of poverty before the pandemic
<https://www.undp.org/indonesia/press-releases/indonesia-records-progress-key-dimensions-poverty-pandemic>

households are considered vulnerable to falling into poverty if confronted with economic shocks.²⁷

Multidimensional poverty showed significant improvement in its global index value by 2017²⁸, and the government has also adopted new national tools to address persistent non-income deprivations more effectively.²⁹ Severe multidimensional poverty also saw a significant decrease, falling from 1.24% in 2012 to 0.4% in 2017.³⁰ Geographic disparities between urban and rural areas remain, but recent data suggests a shift, with rural poverty declining faster than urban poverty, which experienced a slight increase in early 2025.³¹

Poverty in Indonesia disproportionately affects certain demographic groups, with female-headed households and children facing distinct vulnerabilities. Female-headed households³² and children³³, continue to face distinct challenges, often exacerbated by the prevalence of informal employment.³⁴ Recent data indicates that as of 2024, approximately 14.37% of the Indonesian workforce is classified as female breadwinners, with nearly half of these women providing 90-100% of their household income.³⁵ This underscores their significant and often primary economic role. During the COVID-19 crisis, a higher proportion of FHHs (56.7%) reported having no savings to cushion the economic impact, compared to male-headed

²⁷ Poverty & Equity Brief - World Bank Documents and Reports

<https://documents1.worldbank.org/curated/en/099124001062512710/pdf/IDU1bc79f79214c1314c0d19a351de1a45668677.pdf>

²⁸ Indonesia records progress on key dimensions of poverty before the pandemic

<https://www.undp.org/indonesia/press-releases/indonesia-records-progress-key-dimensions-poverty-pandemic>

²⁹ Indonesia making calculated changes to alleviate poverty - ANTARA News.

<https://en.antaranews.com/news/359733/indonesia-making-calculated-changes-to-alleviate-poverty>

³⁰ Indonesia - Human Development Reports, accessed on August 4, 2025,

<https://hdr.undp.org/sites/default/files/Country-Profiles/MPI/IDN.pdf>

³¹ BPS: Urban Poverty on the Rise as Poverty Rates in Rural Areas Drop - News En.tempo.co

<https://en.tempo.co/read/2032485/bps-urban-poverty-on-the-rise-as-poverty-rates-in-rural-areas-drop>

³² More Indonesian women take on breadwinner role: Statistics Indonesia – OBSERVER

<https://observerid.com/more-indonesian-women-take-on-breadwinner-role-statistics-indonesia/>

³³ Indonesia records progress on key dimensions of poverty before the pandemic.

<https://www.undp.org/indonesia/press-releases/indonesia-records-progress-key-dimensions-poverty-pandemic>

³⁴ Enhancing Public Finance for More Inclusive Social Protection for Children in Indonesia – Unicef

<https://www.unicef.org/indonesia/media/23856/file/budget-brief-social-protection.pdf>

³⁵ More Indonesian women take on breadwinner role: Statistics Indonesia – OBSERVER

<https://observerid.com/more-indonesian-women-take-on-breadwinner-role-statistics-indonesia/>

households (MHHs) (50.6%), indicating greater financial precarity.³⁶ Women in Indonesia continue to face higher rates of vulnerable employment (59.4% for females versus 45% for males in 2023).³⁷ This means women are less likely to have formal work arrangements, social protection, and safety nets, which inherently increases their susceptibility to poverty and economic shocks.³⁸

2.1.4 Health

Indonesia's health sector has made progress. There is an increased life expectancy of 71 years in 2023³⁹ and a declining total fertility rate of 2.1 births per woman, approaching replacement levels.⁴⁰ Indonesian women also exhibit a slightly better life expectancy than men, reaching 73.3 years for females compared to 69.4 years for males in 2020.⁴¹ Child mortality rates have also seen substantial reductions, with the under-five mortality rate estimated at 20.6 per 1,000 live births⁴² and the neonatal mortality rate at 10.53 per 1,000 live births in 2023.⁴³ Furthermore, national efforts have led to a notable decrease in child stunting, reaching 19.8% in 2024.⁴⁴

Some critical health challenges persist, specifically concerning women's and child health. The maternal mortality ratio (MMR) remains comparatively high, with recent figures ranging

³⁶ Boosting Productivity Through Human Capital Development Program (Subprogram 1): Summary Poverty Reduction and Social Strategy <https://www.adb.org/sites/default/files/linked-documents/54461-001-sprss.pdf>

³⁷ Indonesia | World Bank Gender Data Portal. <https://genderdata.worldbank.org/en/economies/indonesia>

³⁸ Ibid

³⁹ Indonesia - World Bank Open Data <https://data.worldbank.org/country/indonesia>

⁴⁰ World Population Prospects 2024: Summary of Results https://population.un.org/wpp/assets/Files/WPP2024_Summary-of-Results.pdf

⁴¹ A Gender Equity Report - Gender Equity Unit <https://genderhealthdata.org/wp-content/uploads/2024/03/Indonesia-Gender-Report-website.pdf>

⁴² Ibid

⁴³ Predictors of Survival in Under-Five Children with Low Birth Weight: A Population-Based Study in Indonesia – MDPI <https://www.mdpi.com/2039-4403/15/7/238>

⁴⁴ NUTRITION – Unicef. <https://www.unicef.org/indonesia/media/24466/file/nutrition-updates-volume-6.pdf>

from 140⁴⁵ to 173⁴⁶ deaths per 100,000 live births in 2023, significantly above the SDG target of 70.⁴⁷ This high MMR is exacerbated by stark sub-national disparities⁴⁸ and systemic quality deficits in healthcare, where a high proportion of maternal deaths are preventable due to inadequate clinical skills, insufficient infrastructure, and delayed referrals⁴⁹, even with high rates of skilled birth attendance.⁵⁰

Adolescent fertility rates continue to be a concern, with conflicting data highlighting either stagnation or slow decline, but consistently indicating rates significantly higher than regional averages.⁵¹ This issue is deeply rooted in legal (example, the Criminal Code Article 283) and cultural barriers that restrict access to sexual and reproductive health services for adolescents and unmarried couples.⁵² Maternal and adolescent malnutrition, particularly anaemia, remains a foundational challenge, undermining long-term child health despite progress in stunting reduction.⁵³

⁴⁵ Indonesia | World Bank Gender Data Portal

<https://genderdata.worldbank.org/en/economies/indonesia>

⁴⁶ Landscape Analysis on Maternal and Neonatal Health and Nutrition in Indonesia

https://www.nutritionintl.org/wp-content/uploads/2025/07/MNHN-Landscape-Analysis-Indonesia_Mar-2025_Final.pdf

⁴⁷ Indonesia | World Bank Gender Data Portal

<https://genderdata.worldbank.org/en/economies/indonesia>

⁴⁸ (PDF) Trends and causes of maternal mortality in Indonesia: a systematic review

https://www.researchgate.net/publication/382691311_Trends_and_causes_of_maternal_mortality_in_Indonesia_a_systematic_review

⁴⁹ Understanding the Causes of Maternal Mortality in Indonesia – MAMPU

https://mampu.bappenas.go.id/wp-content/uploads/2018/04/1.1.-MAMPU_Monash-Maternal-Mortality-Literature-Review_CLEAN.pdf

⁵⁰ Predictors of Survival in Under-Five Children with Low Birth Weight: A Population-Based Study in Indonesia - MDPI, accessed on August 4, 2025, <https://www.mdpi.com/2039-4403/15/7/238>

⁵¹ Indonesia | World Bank Gender Data Portal

<https://genderdata.worldbank.org/en/economies/indonesia>

⁵² Young Indonesians Experiences of Gender and Sexuality - Johns Hopkins Bloomberg School of Public Health. <https://publichealth.jhu.edu/sites/default/files/2025-05/Young-Indonesian-Experiences-of-Gender-and-Sexuality-English.pdf>

⁵³ Landscape Analysis on Maternal and Neonatal Health and Nutrition in Indonesia

https://www.nutritionintl.org/wp-content/uploads/2025/07/MNHN-Landscape-Analysis-Indonesia_Mar-2025_Final.pdf

There are also unmet needs in family planning⁵⁴, driven by legal restrictions⁵⁵, partner opposition, and fear of side effects⁵⁶, limit universal access to modern methods (77% of women satisfied with modern methods⁵⁷).

2.1.5 Representation and decision making

Women's representation in political decision-making positions remains low despite affirmative policies. In 2014-2019, women held 16.72% of seats in the Indonesian Parliament (DPR) and 25.76% in the Regional Representatives (DPD).⁵⁸ While the proportion of women candidates has increased, the share of seats won by women has grown only gradually. At the village level, women's representation in village institutions is often below 10%, with around 40% of villages having no female representatives in the Village Council (BPD).⁵⁹ This is influenced by traditional norms where women are seen as responsible for domestic activities and less engaged in the public sphere.

According to the ZFRA GESI analysis, in households, decision-making power generally rests with the male head of the family, especially in patriarchal communities.⁶⁰ In the analysis 58% of survey respondents indicated joint decision-making between spouses, women's influence is often limited and dependent on their role within the family.⁶¹ Men typically handle substantial financial matters, while women manage smaller tasks.⁶²

2.1.6 Gender-based violence and sexual harassment

There have been advancements made in addressing violence against women (VAW) and improving health outcomes during the RPJMN 2020-2024 period. The National Survey on VAW (SPHPN, 2024) reported that approximately 1 in 4 women in Indonesia experienced physical and/or sexual violence in their lifetime, a rate notably lower than the 2023 global

⁵⁴ Women's Health in Indonesia: Progress, Challenges, and the Road Ahead

<https://sciencewatchdog.id/2025/03/10/womens-health-in-indonesia-progress-challenges-and-the-road-ahead/>

⁵⁵ BERANI Empowering Lives – Unicef

<https://www.unicef.org/indonesia/media/18791/file/BERANIBooklet-BERANIEmpoweringLives.pdf>

⁵⁶ Women's Health in Indonesia: Progress, Challenges, and the Road Ahead

<https://sciencewatchdog.id/2025/03/10/womens-health-in-indonesia-progress-challenges-and-the-road-ahead/>

⁵⁷ <http://genderdata.worldbank.org/en/indicator/sp-dyn-tfrrt-in>

⁵⁸ FAO Gender Assessment in Agriculture in Indonesia

⁵⁹ *Ibid.*

⁶⁰ ZFRA GESI analysis

⁶¹ *Ibid*

⁶² *Ibid*

average of 1 in 3 women.⁶³ Positive trends include a 2.5% reduction in domestic violence cases compared to 2021, and a decrease in both online gender-based violence and Female Genital Mutilation/Cutting among women aged 15-49, with the latter specifically attributed to the effectiveness of ongoing prevention efforts.⁶⁴ Despite these overall positive developments, there is still some ground left to cover. Higher instances of violence were reported among women residing in urban areas, those with at least a high school education, and employed women. Women are also significantly more vulnerable to sexual harassment in public transport. Early marriage is widespread, with one in nine women married before age 18, and girls who marry early are six times less likely to complete upper secondary school and more likely to face domestic violence.⁶⁵ Additionally, younger women, particularly those aged 15-24, remain more susceptible to online gender-based violence.⁶⁶

2.1.7 Demographics

The total population of Indonesia was 283.5 million as of 2024.⁶⁷ Specifically, the female population in 2023 was recorded as 139,934,300 in 2023.⁶⁸ The female labor force participation rate has seen a marginal increase to 53.27% in 2023⁶⁹, but continues to exhibit stagnation around the 50-53% mark over the past two decades⁷⁰, maintaining a substantial disparity compared to male participation rates. This persistent gender gap is a function of deeply entrenched socio-cultural norms, particularly the impact of marriage and childbearing, which frequently lead to women withdrawing from the workforce and often shifting into the

⁶³ Progress in Indonesia country in 2024 - | UN Women Transparency Portal

<https://open.unwomen.org/sites/default/files/phpwkhtmltopdf/ID-progress-notes-2025-06-12%2008%3A38%3A47.pdf>

⁶⁴ Ibid

⁶⁵ ZFRA GESI analysis

⁶⁶ Progress in Indonesia country in 2024 - | UN Women Transparency Portal

<https://open.unwomen.org/sites/default/files/phpwkhtmltopdf/ID-progress-notes-2025-06-12%2008%3A38%3A47.pdf>

⁶⁷ Indonesia - World Bank Data <https://data.worldbank.org/country/indonesia>

⁶⁸ Indonesia: Female labor force participation. Retrieved from

https://www.theglobaleconomy.com/Indonesia/Female_labor_force_participation/

⁶⁹ Ibid

⁷⁰ Social Norms and Women's Economic Participation in Indonesia. Retrieved from

<https://investinginwomen.asia/wp-content/uploads/2023/05/Lembaga-Demografi-Faculty-of-Economics-and-Business-Universitas-Indonesia-Social-Norms-and-Womens-Economic-Participation-1.pdf>

informal sector.⁷¹ The scarcity of affordable and quality childcare services is identified as a critical structural barrier.⁷²

2.1.8 Gender Roles in Aquaculture and other subsectors

Across different regions and subsectors, women have diverse roles, which show that they contribute to the economic activities of the region. In the villages of Jolotigo and Silurah, in the former, almost all coffee farming activities are carried out by men, and in the latter, women are involved in post-harvest activities and sorting of coffee beans. The role of women in post-harvest and sorting is an asset. It shows that women already have critical skills in improving coffee quality. Moreover, women are pivotal in the agricultural communities, as even in Simego, they are a part of various activities, including farm labour, decision-making on purchasing inputs, and selling produce in local markets, while balancing farm work with domestic duties.

While farming for corn in Jolotigo Village, Talun District, Pekalongan Regency, women are considered to be of paramount importance during harvesting and post-harvest (drying), pivotal to maintaining product quality. Capacity building in this area can empower women and increase added value. Lastly, women are also involved in the farming of milkfish commodity. Tasks such as pond management and other physically demanding tasks are male-dominated, yet women play a prominent role in lighter tasks or supporting roles, with men and women being involved in agriculture and aquaculture labour being a commonality. Women often play crucial roles in post-harvest activities such as sorting, processing (e.g., preparing for presto milkfish), and direct selling in local markets.

2.2 Legal, Institutional and Policy Framework

2.2.1 International Pledges

Indonesia has ratified key international instruments, including the UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (1979) and is committed to the Beijing Declaration and Platform for Action (1995). The country has also adopted the Sustainable Development Goals (SDGs), with SDG 5 specifically targeting gender equality and women's empowerment. In 2015, Indonesia pledged to reduce the gender gap in labor force participation by 25% by 2025 as part of the G20 commitments.⁷³

The updated Gender Policy requirements of the Green Climate Fund emphasise a set of objectives aimed at making projects gender-responsive across design, implementation, and

⁷¹ Women's Labour Force Participation in Indonesia: An Empirical Analysis.

https://melbourneinstitute.unimelb.edu.au/_data/assets/pdf_file/0005/4622468/wp2023n06.pdf

⁷² Gender Equality for Growth Research and Analytical Program in Indonesia.

<https://www.worldbank.org/en/country/indonesia/brief/gender-equality-for-growth-research-and-analytical-program-in-indonesia>

⁷³ Indonesia Country Gender Assessment Investing in Opportunities for Women, World Bank

monitoring. Moreover, through the policy requirements, there is an attempt at inclusive participation where women are engaged in consultations and decision-making, coupled with capacity building through gender-responsive approaches.

The prepared Gender Assessment and Gender Action Plan (GAP) centres around the updated Gender Policy as the basis for its preparation, with the suggested interventions and indicators aiming to respond to the requirements and objectives set out by GCF. Therefore, the GCF's Updated Gender Policy requirements serve as the foundation for preparing a gender assessment and action plan that not only mitigates risks but also actively promotes women's empowerment.

2.2.2 National and local legal framework

At the national level, the Indonesian Constitution guarantees equal rights for men and women, supported by various laws and regulations. Key legislation includes:

- **Law No. 13 of 2003 on Manpower (Labor Law)**, amended by **Law No. 6 of 2023** to enact a Government Regulation in Lieu of Law on Job Creation. This law governs employment terms, though it contains provisions that can inadvertently create an unequal playing field for women (e.g., differential parental leave policies).
- **Law No. 23/2004 on the Elimination of Domestic Violence**: This law serves as the primary legal framework for addressing domestic violence in Indonesia. It defines domestic violence as a criminal act and outlines protections for victims.
- **Law No. 35 of 2014 for Child Protection**: Beyond this, the government has continued to issue new regulations. This includes the comprehensive online child protection regulation enacted in March 2025.
- **Law No. 18/2017 on the Protection of Indonesian Migrant Workers**: This law is the current framework for protecting Indonesian migrant workers.
- **Regulation of the Indonesian Migrant Workers Protection Board No. 1 of 2021**.
- **Law No. 7 of 2017 on General Elections**: Mandates at least 30% female representation among parliamentary candidates.
- **Law No. 6/2014 on Village Development, amended by Law No. 3 of 2024 (Village Law)**: Explicitly acknowledges the vital role of women in rural economy and supports their empowerment at the village level.
- **Presidential Instruction No. 9/2000 on Gender Mainstreaming**: This instruction remains a foundational policy for gender mainstreaming in Indonesia. Its principles have been integrated into various national development plans and policies at both the national and local levels.
- **National Medium-Term Development Plan (RPJMN) 2020-2024**: This plan has concluded, with Indonesia now transitioning into the new planning cycle. The RPJMN 2020-2024 set specific targets for gender equality in education, employment, and political representation.

- The **RPJMN 2025-2029** guides the country's current development priorities, including gender equality and mainstreaming targets as described earlier in this document.

2.2.3 National and local institutional framework

Indonesia continues to prioritize gender mainstreaming, led by the Ministry of Women's Empowerment and Child Protection (MoWE-CP), which provides technical assistance and assesses performance. The commitment is solidified by the National Strategy to Strengthen Gender Mainstreaming (Stranas PUG), a presidential regulation currently in the legal harmonization stage. This national strategy aims to address existing challenges in gender mainstreaming across the country. A significant recent development is the integration of gender-responsive budget tagging into the new Regional Government Information System (SIPD), a move intended to provide a clearer framework for sub-national governments and address the previous inconsistencies caused by system transitions and a lack of clear central guidance.

The government is also working to strengthen the implementation of Gender-Responsive Budgeting. The goal is to promote the use of this new tagging system in the preparation of regional government budgets, with a planned promotion for the 2026 fiscal year. In collaboration with the Ministry of Finance and other stakeholders, clear guidelines are being developed for regional governments to use the new budget tagging system. This initiative, which focuses on 812 sub-activities across seven critical sectors, aims to improve accountability, ensure resources are allocated equitably, and refine policies based on gender-disaggregated data.

2.2.4 BRAVE project target area regulations

All three jurisdictions operate within the overarching national framework established by Presidential Instruction No. 9/2000 mentioned above, and the Ministry of Home Affairs' guidelines, which require them to formalize gender mainstreaming and budgeting. They all have established, or are in the process of establishing, legal and institutional structures to support these efforts, whether through specific regional regulations, work plans, or dedicated working groups:

Pekalongan City has formally committed to gender mainstreaming in its development through a series of public policy documents. The central legal instrument is *Peraturan Daerah Kota Pekalongan Nomor 13 Tahun 2014*, which was established to address 'disparities and gender injustice' by integrating gender perspectives into the planning, budgeting, implementation, monitoring, and evaluation of development policies.⁷⁴ This commitment is also reflected in the city's latest planning documents, such as *Peraturan Wali Kota Pekalongan Nomor 23 Tahun 2024*, which outlines the 2025 regional work plan.

⁷⁴ Walikota Pekalongan Provinsi Jawa Tengah Peraturan Daerah Kota Pekalongan Nomor 13 Tahun 2014 Tentang Pengarusutamaan Ge. <https://peraturan.bpk.go.id/Download/250658/94perda-no13-th-2014.pdf>

Pekalongan Regency has produced a highest number of such policies in Central Java, including 17 Regional Regulations (*Perda*) and 25 Regent Regulations (*Perbup*), which points to a strong formal commitment to gender mainstreaming.⁷⁵

Batang Regency has developed a detailed and comprehensive legal framework for gender mainstreaming in the region. This is codified in the recent *Peraturan Daerah Kabupaten Batang Nomor 2 Tahun 2024*, which provides a clear legal basis and a roadmap for gender mainstreaming implementation.⁷⁶ The regulation has explicit objectives of providing a reference for government officials to integrate gender into all stages of development planning, from budgeting to monitoring and evaluation.⁷⁷

2.3 Review of Gender and Vulnerable Groups in the Target Area

2.3.1 Population and households

Pekalongan City recorded a population of 318,180 in June 2024,⁷⁸ with a projected population density reaching 13,667 people per square kilometer by 2035. Pekalongan Regency, in contrast, had a population of 1.019 million in mid-2024, with a lower but still substantial density of 1,200 people per square kilometer.⁶ Over the past five years, Pekalongan Regency has experienced a Compound Annual Growth Rate (CAGR) of 2.72%. The combined population for the Greater Pekalongan Area, encompassing both the City and Regency, is estimated at approximately 1.2 million residents. This high and increasing population density, particularly in urbanized areas, directly correlates with a higher level of exposure to environmental hazards such as floods and tidal inundation.

The age distribution in Pekalongan City (June 2024) indicates that 66.56% (211,790 individuals) are of working age, 22.59% (71,876) are children aged 0-14 years, and 10.85% (34,515) are senior citizens.⁷⁹ Pekalongan Regency (June 2024) presents a similar demographic profile, with 64.5% (662,170 individuals) in the working age bracket (15-59

⁷⁵ Kabupaten Pekalongan Terbanyak Membuat Kebijakan PUG - Suara Merdeka,

<https://www.suaramerdeka.com/jawa-tengah/pr-0487575/kabupaten-pekalongan-terbanyak-membuat-kebijakan-pug>

⁷⁶ BUPATI BATANG PROVINSI JAWA TENGAH PERATURAN DAERAH KABUPATEN BATANG NOMOR 2 TAHUN 2024 TENTANG PENGARUSUTAMAAN GENDER DENGAN R,

<https://peraturan.bpk.go.id/Download/354924/ph001515-peraturan-daerah-no-2-tahun-2024.pdf>

⁷⁷ *Ibid.*

⁷⁸ 2024 BPS Data: 22.59% of Pekalongan City's Population is Still Children – Databoks

<https://databoks.katadata.co.id/en/demographics/statistics/2ff3c66b32349b8/2024-bps-data-2259-of-pekalongan-citys-population-is-still-children>

⁷⁹ *Ibid.*

years), 23.46% (240,820) children (0-14 years), and 12.04% (123,550) elderly (over 60 years).⁸⁰

Data from neighboring Batang Regency (2023) further highlights that elderly women outnumber men, with a sex ratio of 87.58, meaning 87.58 men per 100 women. A significant portion (37.83%) of the elderly population in Batang are widowed, with women forming the majority of this group. The confluence of high population density and a substantial demographic proportion of inherently vulnerable groups, such as children and the elderly, creates a situation that amplifies overall community vulnerability. A denser population means more individuals are directly exposed to hazards, and within this exposed group, a larger percentage possesses reduced mobility, diminished physical resilience, and increased reliance on external support during crises.⁸¹ This situation could place strain on emergency services and community support systems, potentially overwhelming them during large-scale disaster events. The rapid population growth adds to this challenge by intensifying demands on already strained resources- this could lead to unplanned urban expansion into high-risk areas, deepening the cycle of vulnerability.⁸²

2.3.2 Climate change impacts and vulnerabilities

Based on the ZFRA GESI analysis, flood was the most commonly experienced disaster, followed by coastal flood, extreme wave and abrasion, drought, and landslide in Pekalongan City and Regency. Women are cited as the most vulnerable group, followed by people with disabilities, ethnic minorities, and elderly people. The target area on the north coast of Java Island faces complex flooding issues due to land subsidence, tidal flooding, and river overflows, exacerbated by sea-level rise and extreme rainfall.

Vulnerable groups, including women, children, the elderly, and people with disabilities, face disproportionately heightened risks from these climate impacts.⁸³ Research indicates that women, boys, and girls are 14 times more likely than men to die during a disaster, and women constitute 80% of individuals displaced by climate change.⁸⁴ Their primary caregiving responsibilities often impede their ability to evacuate promptly or safely. The lack of private

⁸⁰ *Ibid.*

⁸¹ Gender equality in the context of multi-hazard early warning systems and disaster risk reduction - World Meteorological Organization WMO <https://wmo.int/ar/node/25533>

⁸² Pekalongan Flood Risk and Impact Assessment <https://zcralliance.org/blogs/pekalongan-flood-risk-and-impact-assessment-predicts-90-of-the-city-will-be-inundated-by-2035-how-is-climate-change-impacting-indonesia/>

⁸³ Assessment of the sensitivity of climate risk variables in opposed to climate hazards (study case: Pekalongan City) https://www.bio-conferences.org/articles/bioconf/pdf/2025/22/bioconf_fisaed2025_01020.pdf

⁸⁴ Women's leadership and gender equality in climate action and disaster risk reduction in Africa - Food and Agriculture Organization of the United Nations <https://openknowledge.fao.org/server/api/core/bitstreams/7b990a1d-1da7-45ac-8d56-2647a3c30e65/content>

property, limited access to high-yielding varieties, agricultural inputs, training, extension services, credit, and markets, coupled with restricted decision-making power, significantly increases the vulnerability of female farmers to changing climatic conditions.

2.3.3 Women in the agricultural sector

Under Indonesian law, both men and women are legally entitled to land ownership and inheritance rights. However, in practice, women frequently possess less actual ownership. For instance, in Java, approximately 65% of land owned by married couples is registered solely under the husband's name.⁸⁵ Cultural and religious practices often impose limitations on women's land rights and their control over shared property. Specifically, customary and Islamic laws, which remain widely followed, tend to favor men in inheritance distribution.⁸⁶ This unequal access to land directly translates into unequal access to credit, as land certificates are commonly utilized as collateral for loans.⁸⁷

2.3.4 Decision-making power and participation in governance

According to the ZFRA GESI analysis, regional governments face significant challenges in integrating gender mainstreaming into all areas of development due to the absence of updated, clear directives from the central government. The analysis further suggests that this gap creates inconsistencies, particularly in aligning regional initiatives with national gender mainstreaming goals. For instance, despite progress in regions like Central Java, where gender-sensitive budgeting is mandated through a governor's circular, the lack of coordination at the national level slows broader implementation across other regions. Based on our fieldwork data, one government entity reiterated this issue and flagged that the government of Pekalongan regency is in the process of drafting a regional regulation on gender mainstreaming, which is currently under discussion in the local legislative council.

The issue of gender mainstreaming is not yet fully understood by the Government of Pekalongan Regency, despite prior training on the preparation of documents that should include gender analysis- KII Stakeholder

If this regulation is approved, a Regional Action Plan Document on Gender Mainstreaming will be prepared within one fiscal year. This should alleviate issues stemming from lack of female participation as well as incorporation of gendered activities as part of local initiatives.

⁸⁵ Rural Women's Land Rights in Java, Indonesia: Strengthened by Family Law, But Weakened by Land Registration <https://core.ac.uk/download/pdf/267981641.pdf>

⁸⁶ Land Ownership and Women Empowerment | WRI Indonesia <https://wri-indonesia.org/en/insights/land-ownership-and-women-empowerment>

⁸⁷ Climate Risk And Impact Assessment Pekalongan <https://zcralliance.org/resources/item/climate-risk-and-impact-assessment-pekalongan/>

2.4 Gender expertise in the partner organisations (MCI and Kemitraan)

2.4.1 MCI

In the area of Gender and Social Inclusion, MCI has conducted extensive work that extends beyond Indonesia's borders, reflecting its commitment and experience to inclusive development. With MCI being a global humanitarian organisation serving the vulnerable communities, they believe in building trust as the cornerstone for their work and ensuring they do not cause any harm. As a result, they have drafted an extensive document highlighting the ethical principles embedded in their policies and procedures, serving as their Code of Ethics. The Code of Ethics covers a range of scenarios and dilemmas that practitioners may come across in the field, and this serves as a framework on how to respond while ensuring the highest ethical standards.

Apart from the Code of Ethics, MCI has credible work in developing strategies and action plans associated with Gender and Social Inclusion. The "Gender Equality, Diversity and Social Inclusion Strategy" (2020-2023) presents a thorough plan to remove barriers, address root causes of inequalities and promote gender equality. The document, covering three years, sets a plan for success along with the inclusion of women, girls, men, boys and LGBTQI+ persons in communities. The Strategy, drafted by MCI, is inspired by the inclusive feminist principles and approaches that they believe can provide a powerful framework and path forward for the organisation. Mercy Corps has a two-layered agenda towards inclusiveness, with one side focusing on the internal teams and another emphasising the programmes being carried out. Furthermore, each has a dedicated framework on how to improve inclusivity and empowerment. At the end, the combination of both sides being gender-sensitive and inclusive would be pivotal in ensuring the best results.

MCI has published a Gender Equality and Social Inclusion Integration Toolkit, designed to guide and help team members integrate GESI meaningfully into Programs. Mercy Corps came forward with five GESI Minimum Standards that were created to assist team members in integrating GESI into programs. These standards are to be considered as the first steps to support the integration and implement a GESI Responsive program, and they are considered as the minimum of what is needed. By integrating GESI, MCI ensures all participants can influence the program approaches and benefit equitably from activities while considering different needs, vulnerabilities, and capacities. The five standards are associated with the phases of the programme, namely identification, design, planning, implementation and closure. MCI ensured that GESI components be considered during the programme lifecycle, such as designing a tailored GESI strategy. The Minimum Standards have been integrated into Mercy Corps' Program Management Policy. Internally, MCI reinforces its commitment to GESI through inclusive recruitment practices and regular staff training on gender and social inclusion.

In the ZFRA (evolved into ZCRA) program, MCI has operationalized Gender Equality and Social Inclusion (GESI) principles by conducting participatory risk assessments that actively engage women and marginalized groups, while also encouraging youth involvement. The program facilitates inclusive community forums where diverse voices contribute to climate resilience planning. Specific activities include gender-sensitive capacity building, such as

adaptive skills training to enhance women's economic resilience, the promotion of equitable access to climate adaptation resources, and the integration of GESI indicators into monitoring frameworks. Community engagement is carried out through participatory approaches that foster local ownership and ensure that interventions reflect the real needs and aspirations of the communities.

Lastly, MCI has published the ZFRA GESI Analysis Report, providing insights on barriers and challenges for women, men, and vulnerable populations to engage and benefit from Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) efforts. This report, findings from which have also been cited in this document, provides local-level nuanced information. The report emphasised the enhancement of resilience of urban and rural communities to climate hazards, the promotion of adoption of good climate resilience practices, an increase in funding and improvement in policy making to ensure climate resilience for communities. The report includes a thorough literature review and primary data analysis to understand the climate-induced vulnerability faced by women. They have adopted a mixed methodology, using both qualitative and quantitative data collection related to DRR and CCA, utilising the gender and inclusion lens. While the study had constraints, such as a limitation on the key stakeholders being engaged for KIIs, there were extensive thematic areas thoroughly researched with several recommendations. This included the recommendation that to ensure projects have greater inclusion, empowerment and gender-responsive approaches in decision-making and climate resilience efforts, steps need to be taken both at the planning level and implementation levels. This will also apply to the BRAVE project, where it is expected that the project focus on overarching goals that promote the active participation and empowerment of women and marginalised groups, with a particular emphasis on inclusive decision-making processes and GESI-sensitive policy advocacy.

2.4.2 Kemitraan

Kemitraan has produced ample literature on Gender and Social Inclusion, with the aim of addressing the vulnerabilities and building resilience among the communities, especially women. Kemitraan, in their Gender Assessment and Gender Action Plan, emphasised that in disasters, women are more vulnerable than men. Due to limited access to resources such as financial, natural, institutional and social, women are more likely to suffer. Moreover, women's productive and reproductive activities make them disproportionately vulnerable to changes in biodiversity, cropping patterns and diseases.

Kemitraan aspires to uphold the significance of gender equality and social inclusion at all levels. The organisation aims to establish fair, democratic, and sustainable governance for the people of Indonesia. It advocates for institutionalising the principles of good and clean governance among government, civil society, and business, while considering human rights, gender balance, the marginalised, and environmental sustainability.

Kemitraan has published its GESI policy, and the objective of that policy is to have it implemented across four interconnected levels:

- At the institutional level, to not only allocate necessary resources to support GESI, but also to support the adoption and implementation of a gender equality and social inclusion approach by incorporating social and cultural diversity in governance.

- At the project level, to ensure equal and inclusive participation of women and members of marginalised groups.
- It is also implemented at the stakeholder level to contribute to the inclusivity of diverse groups that serve as stakeholders of Kemitraan.
- Lastly, Kemitraan aims to develop an institutional culture and enabling environment that integrates gender equality and social inclusion across diverse stakeholders and relevant policy processes, frameworks, and initiatives on good governance.

Kemitraan, in their Gender Action Plan, has provided a comprehensive overview of the gender disparities across gender in Pekalongan by pointing out that, due to traditional gender roles, women are more concerned with the household tasks and caregiving duties. Thus, they are more impacted by floods that inundate the home and cause illnesses in children, and with the city being at near the coast, floods are frequent. Despite efforts in the city, the villages and peri-urban areas have not been incorporated into gender-related disaster prevention and management. Considering the dilemmas, Kemitraan prepared a Gender Action Plan based on a holistic gender analysis. The plan identified the difference in gender roles, access, participation, benefits, and control of women and men in relation to climate change adaptation in the city. The document aimed to facilitate the integration of gender considerations into policies, programs, and strategies related to climate change initiatives.

Considering the emphasis on Pekalongan city, Kemitraan has a Gender Action Plan for Adaptation to Climate Change specific to that place. The priority area they identified, first and foremost, was the lack of decision-making power among the women of the area. This, coupled with the inactive nature of the women's organisation, paved the way for women's low participation and voice in the policy-making and related agencies. To address this, Kemitraan, in their Gender Action Plan, proposed that partnerships can organise separate focus group discussions with women and consultation with Women's Groups to ensure greater involvement of women. Kemitraan, in this document, focused on four more priority areas, where they identified a dilemma, followed by the gaps that led to the issue, and concluded with a potential action to ensure greater inclusivity. At the heart of these suggestions was the effort to address the barriers women face and then work towards policy interventions that can support the women of Pekalongan city.

2.4.3 For BRAVE

In the BRAVE project, a gender consultant will be hired during the inception phase to work closely with the project team in detailing and integrating the Gender Action Plan (GAP) into the Project Implementation Plan. Meanwhile for day-to-day oversight of implementation, a Gender Focal Point will be designated within the project team at a level equivalent to a coordinator (as a functional role rather than a structural position), and will be trained directly by the Mercy Corps Asia Regional Social Integration Advisor. This role will support and maintain direct coordination with the Program Manager as well as direct communication line with the Mercy Corps Asia Regional Social Integration Advisor, to ensure the effective implementation of the integrated GAP. All project team members will receive briefings and induction on safeguarding and Mercy Corps Indonesia's GEDSI policies, delivered by the Mercy Corps Asia Regional Social Integration Advisor. In addition, annual refresher sessions will be conducted by the Mercy Corps Indonesia Gender Focal Point and the BRAVE Project Gender Focal Point.

A total of USD 14,000 is allocated in Year 1 to engage a Gender Consultant who will support the project during the inception phase in refining and operationalizing the Gender Action Plan (GAP) and ensuring its integration into the Project Implementation Plan. To ensure sustained oversight of gender integration throughout project implementation, a Gender Focal Point will be designated within the project team as a functional role embedded in the existing team structure. An additional incentive of USD 11,250 is allocated over the five-year implementation period, provided on top of the staff member's base salary in line with the program team structure. In addition, the project allocates USD 12,000–15,000 USD over five years to support the involvement of the Mercy Corps Asia Regional Social Integration Advisor and Mercy Corps Indonesia Gender Focal Point, who will provide technical guidance, quality assurance, and periodic capacity strengthening to ensure alignment with GEDSI and safeguarding standards throughout project implementation.

2.4.4 Sexual Exploitation, Abuse, and Harassment (SEAH) Risks and Mitigations

The project incorporates a range of measures to prevent and respond to Sexual Exploitation, Abuse, and Harassment (SEAH), guided by Mercy Corps Indonesia's (MCI) existing safeguarding frameworks. MCI's Code of Ethics and Prevention of SEAH (PSEAH) Policy provides the foundation for prohibiting SEAH across project operations, including requirements for contractors, subcontractors, and partners to adhere to the same standards through procurement clauses and compliance checks.

The project also utilizes Mercy Corps' Community Accountability Reporting Mechanism (CARM), which allows both community members and project workers to confidentially submit complaints or feedback, including SEAH-related concerns, through multiple channels. In cases of reported incidents, Mercy Corps follows a survivor-centered response approach, ensuring survivors receive appropriate support services and assistance with reporting to authorities where needed. Additional mitigation measures include safeguarding provisions in procurement processes, compliance briefings for partners and consultants, and ongoing awareness raising. Outreach materials and further gender-sensitive communication on SEAH risks will be developed during project implementation to strengthen community awareness and prevention.

The risk of SEAH in the project is assessed as low likelihood and low impact across national, societal, and project levels. At the national level, potential risks include limited legal frameworks, weak enforcement mechanisms, and low prosecution rates related to SEAH. These will be mitigated through strict enforcement of the Accredited Entity's SEAH policy and engagement with relevant government ministries and gender-based violence networks. Societal risks include sociocultural norms that may not challenge SEAH, low public awareness of rights, and limited survivor services, which will be addressed through community sensitization, training for project stakeholders, collaboration with local authorities, and the identification of male champions to support safeguarding efforts. Project-level risks, such as limited protection services in the project area, potential fears among women that participation could expose them to SEAH, or increased vulnerability in certain project activities, will be mitigated through awareness campaigns, community consultations, partnerships with government stakeholders, and the dissemination of SEAH prevention

messages and reporting mechanisms, including the use of accessible grievance redress systems for communities and project workers.

2.5 Results of Consultations

2.5.1 Overview of consultation events

For a coherent understanding of gender related issues, gaps and feedback from relevant stakeholders, we deployed multiple tools for carrying out primary research. Over a span of three weeks, we conducted key informant interviews and focus group discussions that enhanced our understanding of the prevailing gender related concerns and dilemmas.

The data collection began with the interviews. From 26th of May 2025 to 9th of June 2025, a total of 18 interviews were conducted. The stakeholders of these interviews varied from each other with the team approaching a diverse range of respondents. Considering the need for understanding the perspective of the government, the interviews incorporated government personnel. The stakeholders included the Ministry of Women's Empowerment and Child Protection, relevant local agencies in Central Java, Pekalongan City and Pekalongan Regency, Disability Inclusion Services Units existing in Central Java and Pekalongan Regency, and KIIs with specific village members.

After the conclusion of the key informant interviews, the focus shifted towards Focus Group Discussions. There were three focus group discussions that took place with the total number of participants exceeding ninety over the course of the three sessions.

To ensure inclusivity and diversity, with the aim of including local communities representing men, women, boys and girls, not only the interviews, but also the Focus Group Discussions consisted of diverse organisations across the various regions of the project. Through this, the inclusion factor was well-incorporated, with the annexure providing more details, and it also ensured that the consultations served as a true representation and reflection of the three target areas in Petanglong. Through a selective and targeted approach, the people interviewed hailed from pivotal agencies, such as the Planning Agency, Women's Empowerment, Child Protection, Population Control, and Family Planning Agency, Agriculture and Food Service Agency, Fisheries and Maritime Agency, Children's Forum, Female Head of Family and many more agencies from Pekalongan City, Pekalongan Regency, and Batang Regency.

A summary of relevant issues raised, and responses provided through the KII and FGD data collection is given below:

Table 1 Summary of consultations

| Summary of key aspects | Raised by | Response |
|---|---|--|
| <p>Barrier to participation: The potential barriers to participation can be categorised in three ways. Internal: lack of knowledge, technology, and financial access. In the inundated or flooded area, there is a lot of sexual violence, divorce, and early marriage. This also hinders women's participation. Women face social and cultural constraints, limited skills, low income, and restricted mobility due to caregiving responsibilities.</p> | <p>BRAVE FGD Gender Action Plan – Pekalongan City, Ministry of Women Empowerment and Child Protection, Psychologist and Head of Population Control and Family Planning Social Service Agency of Pekalongan City government, Head of Fatayat NU (Islamic based women organization)</p> | <p>There is a need to promote access to credit for women without collateral, e.g., PNM Mekaar (Microfinance). Many financing programs are available, and information needs to be spread to the fishery and fishery processing. It is necessary to broaden women's access to capital and credit with more accessible requirements.</p> <p>The lack of time due to domestic work limits women's participation in public life and development programs.</p> <p>Trainings should be conducted locally and cover transportation costs and replacement of lost income for female participants to increase accessibility and retention.</p> |
| <p>External: social norms, institutional policies. The stereotype that women, and especially PWDs, will be more of a burden because they are not capable. Segregated organisations such as the female farmer association and the PKK. It tends to limit women's participation, assuming that they have been represented by those organisations.</p> | <p>BRAVE FGD Gender Action Plan – Pekalongan City</p> | <p>Optimise blue space in the midstream because there has been plenty of water in the downstream.</p> <p>Construction of blue-green space creates potential risk for women and PWDs.</p> <p>The provision of blue-green spaces can help in reducing instances of domestic and sexual violence if pathways are safe and accessible.</p> |

| Summary of key aspects | Raised by | Response |
|---|--|--|
| While general organisations are dominated by men. | | |
| Cultural perception and physical constraints (e.g., depth of fishponds) limit women's involvement in fish farming. No women participate in the fish farming, besides the risk of managing fish farming, which is caused by social constructs. | BRAVE FGD Gender Action Plan – Pekalongan City, Milkfish Farmer | Support for PEKKA, so when they participate in the training, the living cost for the family is secured. Blue space needs management, safety procedures, and access for PWDs. |
| Livelihoods: Inconsistent income from male-dominated livelihoods forces women to take on supplementary or primary economic roles. | Staff of LKKP, Milkfish Farmer | Women find ways to meet family needs through small-scale trading or by selling goods to supplement income, particularly when their husbands' earnings are insufficient or inconsistent due to bad weather. |
| Women's Role in the Value Chain for Agriculture and Fisheries: In both agriculture and fisheries, the men are more dominant in decision-making related to land selection. Even with the production inputs, women do not have as significant a role as men. In agriculture, women are active in accessing credit, although financial responsibility remains with men. | BRAVE FGD Gender Action Plan – Batang City, BRAVE FGD Gender Action Plan – Pekalongan City, BRAVE FGD Gender Action Plan – Pekalongan Regency, Head of Fatayat NU, Milkfish Farmer, Female Farmer Jolotigo | Female-Headed Households (PEKKA) contribute by providing skills training for elementary school children and other students through seedling activities, and they also disseminate information by collaborating with government agencies. Women play a role in maintaining agricultural commodities from planting to processing for sale. The Food Security and Agriculture Agency has a program called the Boat School for school dropouts in coastal areas, through which women can work toward capacity-building and contribute to value addition in the fisheries sector. Women are more involved in post- |

| Summary of key aspects | Raised by | Response |
|--|---|---|
| | | harvest activities for both agriculture and fisheries, transforming raw catch into value-added products. |
| <p>Children's Problems: Children in Pekalongan continue to face significant challenges, particularly in the areas of bullying, stunting, and sexual violence. Stagnant water areas can become high-risk zones for sexual violence involving children.</p> | <p>Coordinator of Forum Anak (Children Forum) Kota Pekalongan</p> | <p>The planning and development of blue-green spaces- including parks, recreational fields, and water-related urban areas- are crucial to integrate a child-rights-based approach. This includes ensuring that the design: Considers the specific needs of different age groups and abilities; Provides safe, accessible, and engaging environments for all children; It is accompanied by a maintenance and management strategy to keep spaces clean, active, and well-supervised.</p> |
| <p>Gender Participation in Village Decision-Making: Male representation still significantly outweighs that of women, suggesting a continued need to promote gender-balanced participation in governance processes.</p> | <p>Farmer, Bapperida of Pekalongan Regency</p> | <p>Village development activities no longer involve only men, as the women have begun to play a more active role. Stakeholders in decision-making forums now include the Family Welfare Empowerment Group (PKK), female farmers, religious leaders, and leaders of prayer groups (jamaah). In villages, both men and women have equal access to financial services. In fact, certain microfinance schemes such as PNM Mekaar, a national program specifically designed to support women entrepreneurs are exclusively targeted at women. This indicates the presence of gender-responsive financial</p> |

| Summary of key aspects | Raised by | Response |
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| | | <p>inclusion mechanisms that support women's economic empowerment. Women's participation is often symbolic, as their proposals in forums are not always integrated into final plans. A Regional Regulation on gender mainstreaming is being drafted to provide a legal basis for more inclusive program planning.</p> |
| <p>Issues for PWDs: PWDs have limited access to climate information and the early warning system. Information is not available according to their need, such as sign language or light coding. PWDs are also not invited to the disaster preparedness and disaster management/evacuation simulation. Moreover, data of PWDs (population, type, gender, age, etc) remains a great barrier. Many families hide their disabled children because they feel shame.</p> | <p>Activists of GPAD Pekalongan, Head of Friends of Diffable, Unit LIDI of Disaster Management Agency of Pekalongan Regency, Unit ULD (Disability Service Unit) of Central Jawa Province</p> | <p>GPAD facilitates PWDs to participate in public events/activities. Once a year, a PWD representative is invited to the development planning process. In the development planning, GPAD facilitates PWDs to voice their concerns for an inclusive environment, not just accessible infrastructure. Sometimes, accessible infrastructures are available, but the community does not respect them. However, there is limited access or invitation to other policy developments or regulations. City government involve GPAD to reach PWDs to provide assistance and logistic support distribution. The provision of green and blue spaces gives opportunities for PWDs to improve public space access. The design should consider PWDs' specific needs. Involving the PWDs during the design will provide good insight and get their perspectives on the space. In the later stage, they can also participate in maintaining the space. Data on PWDs remains a great barrier to establishing</p> |

| Summary of key aspects | Raised by | Response |
|---|--|---|
| | | effective services, as many families hide their children with disabilities due to shame, and the data is often stored offline. The participation of PWDs is sometimes passive and limited to mere attendance. |
| <p>PWDs Livelihood: In the economic sector, most PWDs engage in informal work such as batik production, odd jobs, and limited participation in fisheries. Wage disparities remain an issue, especially in informal settings where some workers earn as little as IDR 600,000 per month (minimum wage Rp. 2.5 million per month). Although there have been efforts to support PWD entrepreneurship through government grants and the formation of business groups (KUB), many of these initiatives fall short due to rigid administrative requirements and a lack of follow-up support.</p> | <p>Head of Friends of Diffable, Unit LIDI of Disaster Management Agency of Pekalongan Regency, Bapperida of Pekalongan Regency</p> | <p>There exists a strong advocacy for integrated support models where initial capital (e.g., raw materials), technical assistance, and guaranteed market access are provided together. It was emphasised that the importance of shifting from symbolic inclusion to practical implementation, ensuring that products made by PWDs are purchased and promoted by local institutions. Furthermore, there is encouragement for organisations like Mercy Corps to provide not only training but also operational support and integrated economic opportunities. There is a call for local governments and procurement systems to apply affirmative action policies- such as Law Number 8 of 2016 concerning Persons with Disabilities, which requires private companies to employ at least 1% of persons with disabilities from the total number of employees or workers- to enhance inclusion. PWDs prefer individual ventures over group initiatives due to higher risk of internal conflict. PWDs face both internal barriers (e.g., limited education, skills, or confidence)</p> |

| Summary of key aspects | Raised by | Response |
|--|--|---|
| | | and external ones (e.g., discrimination and lack of inclusive workplaces). Support for driving license issuance for persons with disabilities has been proposed. PWDs have potential in digital marketing skills for the marketing phase of their products. |
| <p>Contingency and Disaster Planning: Climate impacts are not gender-neutral and disproportionately affect women and PWDs. Women and PWDs are often excluded from preparedness simulations. Aid distribution can be uncoordinated, leading to unequal access, especially for female-headed families. The specific needs of vulnerable groups, such as sanitary products and specific nutrition, are often overlooked. Evacuation centers may not be women- and child-friendly, increasing the risk of gender-based violence. The community has become desensitized to tidal flooding as a disaster.</p> | <p>Social Service Agency of Pekalongan Regency, Head of KSB Jeruksari Village, Unit LIDI of Disaster Management Agency of Pekalongan Regency, Head of Fatayat NU, Social Service Agency of Pekalongan City government, Unit ULD (Disability Service Unit) of Central Jawa Province, Ministry of Women Empowerment and Child Protection, The Head of Kelurahan Bandengan, LKKP, Bapperida of Pekalongan Regency</p> | <p>The Social Service Agency suggests that capacity-building initiatives for volunteer networks like TAGANA are needed, including training and disaster evacuation simulations. PWDs require different responses based on their impairments, and evacuation facilities often need to be tailored to their needs, including portable toilets and mobility aids. PWD volunteers are crucial for effectively assisting others, as they feel a greater sense of shared experience. Women's organizations like Fatayat NU have a disaster response unit (GARFA) that addresses the needs of vulnerable groups by providing items such as diapers, sanitary products, and undergarments. Women participate in disaster response efforts, particularly in logistics and public kitchens, but logistics for vulnerable groups are often overlooked.</p> |
| <p>Blue-Green Space Planning: The planning and development of green and blue public spaces presents risks such as the potential for sexual</p> | <p>BRAVE FGD Gender Action Plan – Pekalongan City, Ministry of Women Empowerment and Child Protection,</p> | <p>Blue and green spaces should provide multiple benefits- social, economic, psychological, and environmental- and include productive activities for women. The provision of</p> |

| Summary of key aspects | Raised by | Response |
|--|--|---|
| violence for women and PWDs if not properly managed. Poorly managed public spaces can become hotspots for social issues. The community may not respect or maintain accessible facilities, rendering them ineffective. Proposals for infrastrucute including green/blue spaces may be limited in development planning forums, which focus on physical infrastructure. | Social Service Agency of Pekalongan City government, The Head of Kelurahan Bandengan | safe pathways and public areas can help reduce instances of domestic and sexual violence. The design must consider the specific needs of PWDs, and they should be involved in both the design and maintenance stages to ensure facilities are effective and respected. There is a need to optimize blue spaces in upstream areas. |

2.6 Key recommendations for gender mainstreaming

The following section provides an overview of key recommendations which have been translated into the Gender and Social Inclusion Action Plan:

Output 1.1: Landscape resilience assessment is developed

Output 1.2: Climate Resilient community groups formed and capacitated

Box 1 Relevant issues and barriers related to Output 1.1 and 1.2

- Lack of knowledge, technology, and financial access as internal barriers to participation.
- Stereotypes limiting participation of women and PWDs.
- Inadequate human resources and inconsistent provision/utilization of gender-disaggregated data at various stages of development.
- Lack of comprehensive sex-disaggregated data and robust gender analysis across sectors.
- Weak implementation of gender mainstreaming, particularly at sub-national levels, compounded by limited institutional capacity and lack of clear mandates.

Recommendations:

- **If possible, conduct a comprehensive gender and social inclusion needs assessment in Pekalongan City, Pekalongan Regency, and Batang Regency.** This assessment should specifically identify the unique needs, capacities, and barriers faced by diverse groups, including women, female-headed households, PWDs, children, and the elderly, ensuring that the resilience assessment is truly inclusive and representative.
- **Integrate gender-disaggregated data collection and analysis into all phases of the landscape resilience assessment.** This includes collecting data on land ownership, decision-making roles, access to resources, and exposure to hazards, disaggregated by gender, age, disability status, and other relevant social markers, to inform a nuanced understanding of vulnerability.
- **Engage local women's organizations and community-based organizations from the outset.** Their active involvement will help identify specific community-level vulnerabilities and traditional knowledge related to resilience, ensuring the assessment reflects local realities and facilitates women's participation.
- **Provide gender-sensitive training for staff, consultants and community members involved.** This training should equip them with the skills to conduct gender analysis, identify gender-specific impacts of climate change, and ensure a gender-sensitive approach in data collection, interpretation, and reporting.
- **Ensure the assessment methodology explicitly accounts for the intersectional vulnerabilities of women and PWDs.** This includes assessing barriers to information access (lack of sign language or light coding for PWDs) and the impact of social norms on participation, ensuring these factors are integrated into the resilience analysis.

Output 1.3: Climate-informed land use, water resource, and livelihood action plans developed

Box 2 Relevant issues and barriers related to Output 1.3

- Men are more dominant in decision-making related to land selection and production inputs in agriculture and fisheries.
- Women frequently possess less actual land ownership despite legal entitlement, hindering access to credit.
- Traditional norms and cultural expectations influence educational and career choices, limiting women's roles in certain sectors.
- Weak implementation of gender mainstreaming at sub-national levels, leading to inconsistencies in aligning regional initiatives with national gender mainstreaming goals.
- The issue of gender mainstreaming is not yet fully implemented by the city and regency governments

Recommendations:

- **Ensure equitable representation and active participation of women, including female farmers, female fish farmers, and female-headed households, in all participatory planning processes for land use and water resource management, and livelihood action plan.** This requires setting explicit targets for female participation in village meetings and deliberations, and providing support to overcome time constraints and domestic burdens.
- **Integrate gender considerations into the development of land use and water management plans and livelihood action plan to address unequal access to land and resources.** The plans should explicitly recognize and support women's land rights, their roles in post-harvest activities and fisheries production outcomes, and facilitate their access to credit and productive assets, potentially leveraging microfinance schemes in place.
- **Develop communication strategies that disseminate information about land use and water management plans and livelihood action plan in accessible and culturally appropriate formats for both men and women, including PWDs.** This ensures that all community members are informed and can provide meaningful input, fostering genuine participatory planning.

Output 1.4: Blue-green space mapped and designed

Box 3 Relevant issues and barriers related to Output 1.4

- Construction of blue space creates potential risk for women and PWDs.
- Blue space needs management, safety procedures, and access for PWDs.
- Cultural perception and physical constraints limit women's involvement in fish farming, which could extend to blue-green spaces.
- PWDs have limited access to climate information system, and are not invited to disaster preparedness simulations.
- Accessible public spaces may help reduce instances of domestic violence and sexual abuse, provided pathways remain safe and accessible.
- Limited access to information and digital skills for women, particularly in rural areas.

Recommendations:

- **Prioritize a gender-sensitive and inclusive design process for all blue-green spaces.** This must involve women and PWDs in co-design workshops and consultations to ensure the spaces meet their specific needs, considering safety, accessibility and diverse recreational and livelihood functions.
- **Integrate safety features and mechanisms to prevent gender-based violence (GBV) and sexual harassment into blue-green space designs.** This includes adequate lighting, clear

sightlines, designated safe zones, and accessible pathways from residential areas, particularly in flood-prone zones where GBV is reportedly higher.

- **Ensure blue-green spaces are designed to deliver multiple co-benefits beyond water management, including social, economic, psychological, and environmental advantages.** This could involve incorporating areas for community gatherings, small-scale livelihood activities, and child-friendly play areas, thereby enhancing their utility and community ownership.
- **Develop clear management and maintenance strategies for blue-green spaces that explicitly involve women and PWDs.** This includes establishing community-led management committees with equitable representation, providing training on maintenance, and exploring opportunities for PWDs to participate in maintaining these spaces.
- **Incorporate digital literacy and information access considerations into the design, such as QR codes for information on space use, safety protocols, or climate information, ensuring accessibility for all users.** This can help bridge the digital literacy divide and ensure vital information reaches women and PWDs.

Output 2.1: Climate-smart agriculture implemented in upstream and midstream villages

Box 4 Relevant issues and barriers related to Output 2.1

- Men are more dominant in decision-making related to land selection and production inputs in agriculture.
- Women play a role in maintaining agricultural commodities from planting to processing for sale, but direct engagement in cultivation is limited.
- Persistent gender disparities in higher education, especially in STEM fields, and a digital literacy divide.
- Unequal burden of unpaid care work limits women's time for formal employment and skill development.
- Limited competencies or skills, low-income levels, social and cultural constraints (expectation to remain at home), and limited access to technology/mobility restrictions for women.

Recommendations:

- **Conduct a gender needs assessment specifically for climate-smart agriculture training and implementation in upstream and midstream villages.** This assessment should identify existing knowledge gaps, preferred learning modalities, and specific barriers (such as, time constraints due to care responsibilities, mobility) for women farmers, and tailor training programs accordingly.
- **Design CSA training programs to be gender-sensitive and practical, addressing both men's and women's roles in the agricultural value chain.** While men dominate cultivation, women's significant role in post-harvest processing should be leveraged and enhanced through specific training on value-added techniques, food preservation, and market access for processed goods.
- **Actively engage women's organizations (such as, PKK, female farmer associations) and community-based organizations (CBOs) in the planning and implementation of CSA initiatives.** These organizations can serve as crucial conduits for disseminating information, mobilizing women participants, and providing peer support, helping to overcome social and cultural barriers to participation.
- **Provide support for women's participation in CSA training, where possible, to alleviate the unequal burden of care.** This practical support is essential to ensure women's full and meaningful engagement.

- **Facilitate women's access to climate-smart agricultural technologies and digital literacy training.** This includes introducing appropriate, labor-saving technologies that can reduce women's workload and providing training on digital tools for climate information, market prices, and agricultural best practices, addressing the existing digital divide.

Output 2.2: Adaptive aquaculture is implemented by aquaculture farmer groups

Box 5 Relevant issues and barriers related to Output 2.2

- Cultural perception and physical constraints (such as depth of fishponds) limit women's involvement in fish farming, with no women currently participating in primary fish farming activities.
- Men are more dominant in decision-making related to production inputs in fisheries.
- Women have control over production outcomes in the fisheries sector and are active in accessing credit, though financial responsibility remains with men.
- Limited access to credit for women without collateral.
- Limited competencies or skills, low-income levels, social and cultural constraints, and limited access to technology/mobility restrictions for women.

Recommendations:

- **Incorporate a gender lens while finalizing activities for aquaculture to identify and implement the precise barriers preventing women's participation in primary fish farming activities.** This analysis should inform the design of adaptive aquaculture practices that are physically accessible and culturally appropriate for women, potentially exploring alternative aquaculture methods or roles that accommodate these constraints.
- **Promote and support women's involvement in value-added schemes for aquaculture products, such as fish processing (example- milkfish processing), packaging, and marketing.** This leverages women's existing roles in controlling production outcomes and post-harvest activities, providing income-generating opportunities that are culturally acceptable and economically empowering.
- **Facilitate women's access to credit and financial services without requiring traditional collateral, such as through microfinance programs like PNM Mekaar, which are specifically designed to support women entrepreneurs.** Information about these financing programs should be widely disseminated to fishery and fishery processing groups.
- **Provide targeted technical assistance and training to women's groups on adaptive aquaculture practices, emphasizing value chain enhancement and business management.** This includes training on quality control, hygiene, branding, and market linkages, building their competencies and fostering economic independence.
- **Establish or strengthen women's groups in fisheries sector and integrate them into broader decision-making forums.** This ensures their voices are heard in the development and implementation of adaptive aquaculture strategies, promoting their prominence in the public sphere.

Output 2.3: Runoff management through Blue-Green Spaces established

Output 2.4: Sub-district level contingency plan established

Construction of blue space creates potential risk for women and PWDs; blue space needs management, safety procedures, and access for PWDs.

Box 6 Relevant issues and barriers related to Output 2.3 and 2.4

- PWDs have limited access to climate information system , with information not available in accessible formats (such as, sign language, light coding).

- PWDs are not invited to disaster preparedness and disaster management/evacuation simulations.
- Lack of comprehensive data on PWDs (population, type, gender, age) is a significant barrier.
- Higher instances of violence reported among women in urban areas and those affected by frequent flooding/sea-level rise.
- Uncoordinated relief efforts during emergencies sometimes lead to unequal aid distribution, particularly for female-headed families.

Recommendations:

- **Ensure the design and establishment of blue-green spaces, risk communication procedure and flood contingency plans are fully inclusive and gender-responsive.** This requires active participation of women, female-headed households, and PWDs in the planning, design, and validation processes, ensuring their specific safety, mobility, and communication needs are met.
- **Develop and disseminate early warning information as part of contingency plans (on flood preparedness and response) in multiple, accessible formats, including visual and auditory, and sign language interpretations, and through various channels.** This ensures PWDs and other vulnerable groups receive timely and understandable warnings.
- **Integrate women and PWDs into disaster preparedness and evacuation simulations if these are part of the local community trainings.** These simulations should be designed to identify and address specific barriers to evacuation for these groups, ensuring safe and accessible routes and facilities, and building their capacity to respond effectively.
- **Establish community-led committees for blue-green space management, with mandatory equitable representation of women and PWDs.** This will foster local ownership and ensuring accountability for inclusive practices.
- **Develop flood contingency plans that explicitly address the unique needs of women and vulnerable groups, including female-headed households, children, and the elderly.** This includes ensuring equitable aid distribution, establishing safe and private facilities in evacuation centers (such as separate sleeping areas, GBV support), and providing tailored nutritional support for evacuees.

Output 3.1: Evidence-based policy recommendations developed and disseminated

Box 7 Relevant issues and barriers related to Output 3.1

- Weak implementation of gender mainstreaming, particularly at sub-national levels, due to lack of clear central guidance and inconsistent application.
- The issue of gender mainstreaming is not yet fully understood by the Government of Pekalongan Regency.
- Inadequate human resources and inconsistent provision/utilization of gender-disaggregated data at various stages of development.
- Low women's representation in political decision-making positions and village institutions.
- Limited access or invitation for PWDs to other policy developments or regulations.

Recommendations:

- **Ensure multi-level stakeholder engagement processes (example- consultations, workshops) for policy summary formulation are gender-balanced and inclusive.** This requires proactive outreach to women's organizations, PWD advocacy groups, and female community leaders, providing logistical support to facilitate their participation and ensuring their perspectives are systematically captured.

- **Integrate gender analysis and disaggregated data from the project's lessons learned into the policy summary.** The summary should explicitly highlight gender-specific impacts, successful gender-responsive interventions, and remaining gender gaps, providing evidence-based arguments for policy changes.
- **Emphasize the importance of formalizing mechanisms for continuous engagement of women and PWDs in policy dialogue beyond the project lifecycle.** This could include advocating for quotas or designated seats for women and PWD representatives in policy review committees and planning bodies.

Output 3.2: Enabling policy frameworks adopted for climate-resilient IWRM

Box 8 Relevant issues and barriers related to Output 3.2

- Weak implementation of gender mainstreaming despite existing legal and institutional frameworks, particularly at sub-national levels, compounded by limited institutional capacity and lack of clear mandates.
- Regional governments face significant challenges in integrating gender mainstreaming due to absence of updated, clear directives from the central government.
- The issue of gender mainstreaming is not yet fully understood by the Government of Pekalongan Regency.
- Low women's representation in political decision-making positions and village institutions.
- Limited access or invitation for PWDs to other policy developments or regulations.

Recommendations:

- **Ensure the enabling policy framework explicitly integrates or links to gender-responsive budgeting principles, leveraging the new Regional Government Information System (SIPD) tagging system when this is functional.** The framework should provide clear guidelines for sub-national governments to allocate resources equitably and track expenditures for gender equality outcomes.
- **Incorporate provisions within the policy framework that mandate the systematic collection, analysis, and utilization of sex-disaggregated and disability-disaggregated data across all relevant sectors.** This is crucial for evidence-based policy-making and monitoring progress towards gender equality and inclusion targets.
- **Ensure the policy framework includes specific provisions for the protection and empowerment of persons with disabilities, mandating their inclusion in climate action planning, disaster risk reduction, and livelihood development initiatives.** This should align with Law Number 8 of 2016 concerning Persons with Disabilities, advocating for affirmative action policies in employment and procurement.

Output 3.3: Climate-resilient livelihood business models operationalized

Box 9 Relevant issues and barriers related to Output 3.3

- Women's labor force participation rate is low and stagnant, attributed to structural barriers like occupational sex segregation and limited access to credit/markets for women-owned MSMEs.
- Poverty disproportionately affects female-headed households and women in vulnerable employment.
- PWDs engage in informal work with wage disparities; government grants and business groups fall short due to rigid administrative requirements and lack of follow-up support.
- Limited competencies or skills, low-income levels, social and cultural constraints, and limited access to technology/mobility restrictions for women.
- Cultural perception and physical constraints limit women's involvement in fish farming.

Recommendations:

- **Design resilient livelihood business models that specifically target and address the economic vulnerabilities of women, female-headed households, and PWDs.** This includes identifying and promoting value chains where women and PWDs can participate equitably.
- **Integrate comprehensive support models that combine initial capital, technical assistance, and guaranteed market access for businesses led by women and PWDs.** This shifts from symbolic inclusion to practical implementation, ensuring their products are purchased and promoted by local institutions and procurement systems.
- **Integrate gender-sensitive training and capacity-building programs as part of engagement processes to introduce these business models, focusing on adaptive practices, financial literacy, business management, and digital skills.** These programs should be tailored to overcome existing skill gaps and address social/cultural constraints, potentially offering flexible schedules or on-site childcare.
- **Explore gender-responsive financial inclusion mechanisms to provide accessible credit and financing for women and PWD entrepreneurs.** The business models should facilitate women's active role in accessing credit while also addressing the underlying financial responsibility dynamics within households.

Output 3.4: Inclusive, climate-resilient market systems established**Box 10 Relevant issues and barriers related to Output 3.4**

- Limited access to credit and markets for women-owned micro, small, and medium enterprises (MSMEs).
- Women are more active in accessing credit, although financial responsibility remains with men.
- Women play an important role in post-harvest activities, particularly in the processing of agricultural commodities.
- In terms of access to capital, there is generally no significant disparity between men and women; women often receive preferential treatment through targeted financing schemes
- Limited competencies or skills, low-income levels, social and cultural constraints, and limited access to technology/mobility restrictions for women.

Recommendations:

- **Strengthen women's roles within commodity value chains, particularly in post-harvest processing and value-added activities where they already have significant engagement.** This includes providing targeted training on quality control, market linkages, and business development, and facilitating their integration into actor networks that connect producers to markets.
- **Enhance women's access to tailored financial products, leveraging existing gender-responsive microfinance schemes.** This involves actively disseminating information about available financing programs to women's groups in agriculture and fisheries, and exploring mechanisms to ensure women have greater control over the financial responsibility associated with these loans.
- **Develop continuous technical advisory services that are gender-sensitive and accessible to women and PWDs.** This requires flexible delivery methods culturally appropriate communication, and content that addresses women's specific needs and challenges in accessing agricultural inputs and market information.

3 Gender and Social Inclusion Action Plan

Table 2 Gender and Social Inclusion Action Plan

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|---|---|---|--|---------------------|--|------------------|---------|
| Outcome 1: The development planning processes in Sengkarang and Kupang watersheds are participatory and climate-informed | | | | | | | |
| Cross-cutting | The project will recruit a gender expert as a consultant in the inception period to carry out detailed gender analysis and develop gender action plan, which results will be incorporated into project implementation plan (PIP). Ensuring the PIP reflects women and PWD participation in capacity- building activities and mainstream gender across all project activities. The Project Manager then will ensure the implementation of Gender Action Plan throughout project period | No dedicated gender consultant currently assigned to ensure systematic gender mainstreaming across project activities | One gender consultant recruited in Year 1 of project implementation. | 1 gender consultant | A gender consultant is recruited in Year 1 of project implementation | Kemitraan, MCI | C13,125 |

⁸⁸ The current baseline is narrated in a qualitative manner due to lack of quantitative data values. The baseline will be carried out in quarter 3 & 4 of the Year 1 of implementation, which will cover quantified information specific to indicators

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|----------------------|--|--|--|--|--|------------------|--------|
| Cross-cutting | The project will set up of gender inclusive monitoring system with performance targets disaggregated by gender, age, disability, and geographic location to collect data for monitoring and evaluation per sub-activity. The monitoring system will also ensure that targets defined in this Gender and Social Inclusion Plan are tracked. | Monitoring systems on operational to track gender-disaggregated indicators systematically, | Gender responsive M&E system is operational. | 1 gender responsive M&E system | Year 1- Year 5 | Kemitraan, MCI | 1028 |
| Cross-cutting | Training of MCI's Code of Ethics and GESI minimum standards to project staff and implementation partners | 0% of staff trained on Code of Ethics and GESI Minimum Standards | Percentage of staff trained on the Code of Ethics and GESI Minimum Standards | 100% | Code of Ethics and GESI Minimum Standards is in place and enforced during project implementation | Kemitraan, MCI | 3,981 |
| Cross cutting | Ensure gender-balanced representation in project governance structures, including the Project Steering Committee (PSC). The Project will encourage nomination of women representatives from government agencies, community organisations, women's groups, and disability organisations. Gender matters will be included in the agenda during PSC meetings. | Women are not well represented in similar project specific meetings | Percentage of women represented in Project Steering committee meeting | At least 20% representation of women in the Project Steering Committee and other project decision-making bodies. | Year 1 onwards | Kemitraan, MCI | 22,251 |

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|--|---|--|--|---|------------------------|------------------|--------|
| Output 1.1: The targeted communities and project stakeholders have access to integrate climate-based evidence for climate resilient planning | | | | | | | |
| Activity 1.1.1: Conduct climate risk and impact assessment for Sengkarang watershed (with long-term/decadal projections). Activity 1.1.2: Develop ecosystem services valuation assessment | Climate risk impact, Ecosystem valuation assessments are GESI sensitive | Climate risk assessment and ecosystem valuation data not available in Sengkarang | Number of Gender inclusive climate risk impact and ecosystem valuation assessments completed | 2 studies | Year 1-Y2 (Q1-Q3) | Kemitraan, MCI | 11.966 |
| | | | | | | | 7.528 |
| Output 1.2: Community-based climate change adaptive management plans and designs have been developed to enhance community resilience | | | | | | | |
| Activity 1.2.1: Formation and strengthening of climate-resilient community groups in target villages. | Participation of members from vulnerable groups will be promoted. | No climate resilient groups organized in the project location | Climate Resilient community groups formed and capacitated (gender disaggregated with 40% women trained | 33 climate resilient groups (trained people-women: 198, men: 297, total: 495) | Year 1- Year 2 (Q1-Q3) | Kemitraan, MCI | 6.841 |

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|--|--|--|---|---|---------------------------------|------------------|--------|
| | | | and included in composition of the groups) | | | | |
| Activity 1.2.2. Develop community resilience action plans through inclusive stakeholder participation | <p>The planning process will take into consideration women’s, PWD and vulnerable groups barriers (e.g. suitable location, adequate timing, childcare opportunities, women only groups, if needed, direct invitation of women).</p> <p>Through including women in consultation process (40% of women, vulnerable groups participants), the Plans will explicitly address gender-specific roles, responsibilities, and access to resources (All 33 integrated community-level plans explicitly address gender roles)</p> | Men are more dominant in decision-making | Number of integrated community resilience action plans developed | 33 community resilience action plans developed (Male: 103,745, Female:69,16 Total: 172,908) | (Year 1 (Q4) - Year 5) | Kemitraan, MCI | 31.065 |
| 1.2.3: Hydrological analysis of the watershed area to provide insights into runoff patterns and discharge rates, serving as | The consultations take into consideration women’s barriers (e.g. suitable location, adequate timing, childcare opportunities, women only groups, if needed, direct invitation of women). Mapping and field assessment reports will be GESI sensitive. | Women and vulnerable groups are rarely included in infrastructure planning consultations, and public spaces are often designed without considering gender-specific | Number of blue-green space designs validated by local stakeholders through gender inclusive participation | 4 sites validated for blue green spaces by stakeholders Participating stakeholders: (Male: 25,936 Female: | Year 1 (Q3 -Q4) Year 3 (Q1-Q2) | Kemitraan, MCI | 1.208 |

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|---|---|--|------------|------------------------------|----------|------------------|---------------------------|
| <p>input for site selection and the development of blue-green space design living within the proximity of the indicative location(s)</p> <p>Activity 1.2.4. Securing approval of blue green spaces sites through stakeholder validation and risk perception analysis</p> <p>Activity 1.2.5: Landscape design of the blue-green space</p> | <p>Proportion of women and vulnerable groups participate in consultations with local stakeholders on blue-green spaces site selection (40% of attendees at stakeholder consultations are women and vulnerable groups). The Women Empowerment and Child Protection Agency will be among local government agencies to be consulted in the design process.</p> | <p>safety and accessibility needs.</p> | | <p>17,291, Total: 43,227</p> | | | <p>4,370</p> <p>2,382</p> |
| <p>Outcome 2: Communities in the targeted watersheds implement climate-resilient livelihoods and integrated watershed/runoff management practices that reduce climate-related risks</p> | | | | | | | |
| <p>Output 2.1: Communities in the targeted watersheds are supported to implement the climate-informed and climate-resilient livelihood options</p> | | | | | | | |

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|--|---|---|---|---|----------------|------------------|--------|
| Activity 2.1.1: Conduct climate-smart field schools for agriculture and aquaculture to promote climate-resilient farming and adaptive aquaculture practices. | The field school planning will take into consideration women's barriers (e.g. suitable location, adequate timing, childcare opportunities, women only groups, if needed, direct invitation of women) invitation of vulnerable groups) | Women participate mainly in post-harvest activities and small-scale trading, while men dominate production decisions, land ownership, and access to agricultural inputs | Proportion of women participating in climate-smart field schools (minimum of 40% women participate) | Agriculture communities 300 farmers households (Male: 180, women 120) | Year 2- Year 5 | Kemitraan, MCI | 17.584 |
| | | | | Aquaculture communities farmer groups comprising 220 people comprising farmers (Male: 96, Female: 124) | | | |
| Activity 2.1.2: Expand and contextualize the Climate Information System (CIS) to support community resilience action plan implementation across upstream, midstream, and coastal communities, focusing on | Climate information system set up will be easily accessible to women and PWDs through facilitation provide by the project team | | Percentage of female vs. male farmers and PWDs who have access to the CIS information (40% female participation | Agriculture communities 1200 people in 300 farmers households (Male: 720, women: 420) Aquaculture communities 880 people in 220 households (Male: 529, Female: 352, PWD: 5%) ⁸⁹ | Year 2 | Kemitraan, MCI | 19.625 |

⁸⁹ PWD target is set to 5%. This is in alignment with Population census of Indonesia (2020) which indicates that 5% of Population have some form of disability

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|---|--|---|---|---|--------------------|------------------|--------|
| coffee, carrots, milkfish, and grouper commodities | | | | | | | |
| Activity 2.1.3: Build the financial and business management capacity of farmer and fish-farmer groups to function as aggregators for their members | The PM will review the training materials to ensure that gender aspects are integrated sufficiently | Women participate mainly in post-harvest activities, farmer groups, agricultural and aquaculture decision-making are predominantly male-dominated, with limited female participation in training and climate-resilient practices. | <i>Number of gender inclusive farmer groups strengthened in climate resilient agriculture and aquaculture practices (minimum 40% women participation)</i> | Agriculture communities 6 farmer groups involving 300 HHs (Male: 180, Female: 120) Aquaculture communities 10 farmer groups comprising 160 people (Male: 96, female: 64) | Year 2 | Kemitraan, MCI | 32.775 |
| | Women in Project will receive targeted training on financial literacy and financial management, which will specifically support them in carrying out their roles as financial managers | Women are not engaged in financial and business management activities related to livelihood due to social norms | Number of women capacitated as financial managers through better financial and business management skills | Agriculture 120 females Aquaculture 64 females | Year 2 | Kemitraan, MCI | |
| Activity 2.1.4: Implement participatory conservation | Gender inclusive principles will be applied in preparation of conservation plans and women will be engaged in the | Men dominate decisions related to land selection and production | Proportion of women participating in developing | 18 villages where conservation | Year 2 - Year 5 | Kemitraan, MCI | 78.255 |

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|---|--|--|---|--|----------------|------------------|----------|
| measures and establish climate smart agriculture demonstration plots | conservation implementation, particularly around their farmland. This will be complemented by establishment of 9 demonstration plots for agriculture with inclusive female participation | inputs in agriculture and fisheries. | and implementing conservation plans (minimum of 40% women participants) | activities are conducted 5,900 households Male: 14,160, Female: 9,440, Total: 23,600 | | | |
| Activity 2.1.5: Establish adaptive aquaculture demonstration plots complemented with improved feeding management practices and introduce value added schemes for women farmer groups | Training material for plots will be GESI sensitive and (Access to all 9 demonstration plots is provided equally to women) | Women have lack of access to training on climate smart agriculture | Percentage of women participating in trainings on climate agriculture demonstration plots (minimum of 40% women participants in trainings related to the demonstration plots) | 10 farmer groups comprising 160 people (Male: 96, female: 64) | Year 3 | Kemitraan, MCI | 25.885 |
| | Project team will engage with targeted group of women to acquire their consent and involvement in value added schemes based on needs conveyed | Women's participation in aquaculture production activities and related technical training is very limited due to cultural norms and physical constraints associated with | Number of women participating in value-added schemes (60 woman involved in value-added scheme trained) | 4 women farmer groups (60 females trained) | Year 2- Year 5 | Kemitraan, MCI | 1 25.885 |

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|---|---|---|--|---|--------------------|-------------------|--------|
| | | fishpond management. | | | | | |
| Activity 2.1.6 Facilitate village engagement and advocacy in upstream, midstream, downstream and coastal communities to support knowledge exchange with farmer and fish-farmer groups | Village engagement sessions involving women and men | Women don't have access to awareness raising activities on climate smart agriculture | Number of engagement sessions conducted (40% female participation) | 25 villages 6420 households Male: 15,408, Female: 10,272 Total: 25,680 | Year 3 | Kemitraan, MCI | 20.018 |
| Output 2.2 : Integrated runoff management and flood preparedness systems established in targeted sub-districts | | | | | | | |
| Activity 2.2.1: establishment of Blue green spaces informed by sectoral risk and opportunity analysis Activity 2.2.2: Provide systems and procedures for monitoring, communication and operational | The PM will review the design materials to ensure that gender aspects are integrated sufficiently. There will be Break-out sessions for women-only groups will be part of the consultation processes to allow free expression of ideas and opinions among women and PWDs. The final design and set up of the blue-green spaces incorporates GESI-sensitive features (all 4 blue-green spaces incorporate GESI-sensitive features) | <i>No blue green spaces working groups established and community not engaged for validation</i> | | | Year 2 - Year 4 | | 14.104 |

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|---|--|---|--|---|-----------------|---|---------------------------|
| <p>management of Blue- Geen Spaces</p> <p>Activity 2.2.3: Securing validation of designs and establishment of blue-green spaces management working groups and opportunity assessment</p> | | | <p><i>Number of GESI integrated blue-green spaces established through management working groups</i></p> <p>Percentage of women and PWDs included in membership of Blue Green Spaces working groups</p> | <p>4 blue green spaces formed benefiting- Male: 103,745 Female: 69,163, Total: 172,908 (5% disabled groups)</p> <p>40% of women will be members, number will be determined once blue green spaces working groups are formed</p> | Year 2 - Year 4 | <p>Kemitraan, MCI</p> <p>Kemitraan, MCI</p> | 12.211 |
| <p>Activity 2.2.4: Develop sub-district level contingency plans</p> <p>Activity 2.2.5: Train local communities on flood preparedness and response</p> | The final contingency plan explicitly includes actions and provisions that address the distinct needs of females, PWDs and other vulnerable groups. The gender expert should make sure that the contingency plan clearly identifies, for vulnerable groups, how to access critical resources during an | Disaster preparedness and response systems often do not consider the specific needs of women, PWDs, and vulnerable groups. Women and PWDs are rarely included in preparedness | <i>Number of women trained in flood preparedness and contingency planning (40% female participation)</i> | 400 community members trained (Male: 240, Female 160) | Year 3 - Year 5 | Kemitraan, MCI | <p>3.138</p> <p>5.086</p> |

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|--|--|---|--|---|--------------------|------------------|-------|
| | emergency.(all 4 sub-district plans have GESI provisions) <ul style="list-style-type: none"> The trainings take into consideration women’s barriers (e.g. suitable location, adequate timing, child care opportunities, women only groups, if needed, direct invitation of women) The trainings material will be GESI sensitive and will take into consideration special barriers of vulnerable groups (e.g. suitable location, adequate timing, ethnic groups, if needed, direct invitation of vulnerable groups) | simulations or planning processes. | | | | | |
| Outcome 3: Enabling environment to replicate and scale-up climate-resilient IWRM exists | | | | | | | |
| Output 3.1. Government stakeholder’s academia, private sector, community and media are informed of best practices of climate-resilient and climate-informed livelihood options, and policy recommendations. | | | | | | | |
| Activity 3.1.1: Conduct policy analysis at provincial and local levels to determine policy recommendations Activity 3.1.2: Facilitate multi-level advocacy | Policy recommendations will be GESI- sensitive which will be based on policy analyses that will assess gender biases in existing/ new subsidies and policies (2 out of 2 policy analyses). In addition, representatives of gender-focus and PWD organizations will be involved | <i>Policy analysis and policy dialogues related to watershed management and climate resilience do not systematically incorporate gender equality and social</i> | <i>Number of GESI inclusive policy recommendations shared with policymakers (inclusion of gender-focus and PWD organizations</i> | 2 GESI inclusive recommendations on summaries shared with Policy makers with 10 multi-stakeholder consultations involving | Year 2 - Year 5 | Kemitraan, MCI | 6,071 |

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|---|--|--|---|---|--------------------|------------------|----------------------------------|
| and policy dialogues to advance the integration of Integrated Water Resources Management (IWRM) principles into local and provincial policies Activity 3.1.3. Develop and disseminate a summary for policy makers (SPM) based on lessons learned | in the multi-stakeholder dialogue | <i>inclusion considerations, and engagement of gender-focused or PWD organisations in consultations is limited.</i> | <i>in consultations for development of summary recommendations)</i> | participation of 40% women | | | 163,582 9,273 |
| Activity 3.1.4: Co-develop a climate-resilient IWRM framework through stakeholder consultation (to integrate landscape and climate resilience perspectives) Activity 3.1.5. conduct media outreach and visibility campaigns and maintain | Climate-resilient IWRM will be GESI-sensitive. In addition, representatives of gender-focus and PWD organizations will be involved in the stakeholder consultations . Furthermore, Decision-making tools will be GESI-sensitive and PM will ensure that IWRM principles are GESI sensitive | Current water resource management and planning frameworks do not systematically integrate gender equality and social inclusion considerations or use decision-support tools to assess gender-differentiated impacts. | Number of GESI inclusive IWRM developed through use of decision support tools | 1 GESI inclusive IWRM framework developed | Year 2 - Year 5 | Kemitraan, MCI | 29,705 4,827 1,972 |

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|--|---|---|--|---|-----------------------|-----------------------|---------------|
| <p>knowledge repository</p> <p>Activity 3.1.6 Co-develop decision-making tools for sector-specific (CIS) with relevant local partners</p> <p>Activity 3.1.6. Co-develop decision-making tools for sector-specific (CIS) with relevant local partners</p> <p>Activity 3.1.7. Amplify the project learning and evidence to inform the climate resilience policy development at the national level</p> | | | | | | | 6,604 |
| <p>Output 3.2. Communities in the targeted watersheds have access to supports with climate-resilient livelihood business models and finance</p> | | | | | | | |
| <p>Activity 3.2.1: Detailed Market scoping analysis both for</p> | <p>PM will ensure that the business model is set up such that it is responding to the needs of females and vulnerable groups (poor</p> | <p>Farmer and fish farmer groups are largely male dominated, with limited</p> | <p><i>Number of farmers/fish farmer groups adopting business</i></p> | <p>4 commodity specific business models developed</p> | <p>Year 3- Year 5</p> | <p>Kemitraan, MCI</p> | <p>26,430</p> |

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|--|---|--|---|--|-----------------------|-----------------------|---|
| <p>agriculture and aquaculture commodities</p> <p>Activity 3.2.2: Improve network with off-takers, aquaculture and agriculture input providers</p> <p>Activity 3.2.3: Strengthen networks and facilitate linkages with financial institutions and technical assistance advisory groups, to improve access to finance and market opportunities.</p> <p>Activity 3.2.4: Develop bundled service business models for selected aquaculture and agriculture commodities</p> | <p>households, female-headed households, persons with disabilities) (all 4 commodity-specific business models developed integrate GESI aspects)</p> <ul style="list-style-type: none"> Gender expert will ensure that GESI provisions be made in negotiations with financial actors. (all 4 organisations who participate in the business models (off-takers, input providers and financial institutions) are aware of GESI provisions and considerations) <p>PM will ensure that GESI provisions be made in negotiations with financial actors. This process will include evidence of the type of financial incentives used to encourage women's entry into the market. Women will receive targeted training on financial literacy and financial</p> | <p>participation of women in production and farmer group <i>decision-making</i>.</p> <p><i>Women farmers currently have limited access to agricultural advisory services, credit, and other financial products</i></p> | <p><i>models disaggregated by gender</i> (40% female participants as part of the farmers group)</p> <p>Number of Female farmers accessing technical advisory, financial products (savings, credit, insurance) (40% female farmers)</p> | <p>targeting 400 farmers (Male: 240, female: 160)</p> <p>160 female farmers have access to technical advisory services</p> | <p>Year 3 -Year 5</p> | <p>Kemitraan, MCI</p> | <p>18,858</p> <p>Included in budget for this activity</p> |

| Activities | Measures to strengthen Gender Equity | Baseline ⁸⁸ | Indicators | Target | Timeline | Responsibilities | Costs |
|---|--|------------------------|------------|--------|----------|------------------|---------------------|
| | <p>management, which will specifically support them in carrying out their roles as financial managers. In Both in aquaculture and agriculture sector, the involvement of women farmers in seedling preparation and maintenance, record-keeping, and financial management positions them as key actors in ensuring the continuity of cultivation activities and in maintaining eligibility to access the financial products that will be developed and/or access strengthened</p> | | | | | | |
| <p>Activity 3.2.5: Document and disseminate lessons learned on the replication potential of business models</p> | <p>Evidence of the type of incentives designed to recruit women and increase their capacity will be collected with the project activity reports (included in at least 2 of the 4 lessons learned reports produced and disseminated)</p> | | | | | | <p>3,785</p> |
| <p>Activity 3.2.6 Conduct regular monitoring and evaluation on technical performance of the close-loop model</p> | | | | | | | <p>7,395</p> |

A SEAH risk assessment was carried out as part of the proposal development process. Below is a summary of the SEAH risk screening results and their mitigation measures.

| Risks | Mitigation measures |
|--|--|
| Policy and code of conduct | MCI's Safeguarding Policy covering SEAH, in the Code of Ethics, especially on Sexual Exploitation and Abuse, and Sexual Harassment Commitments |
| Supervision and training | <p>A dedicated focal person for SEAH, as mentioned in the MCI's PSEAH Policy, to act as a trained and designated safeguarding focal point for team members or visitors who wish to report or discuss sexual misconduct</p> <p>Training for all related parties on MCI's Code of Ethics, MCI's Prevention of SEAH Policy, and MCI's CARM Policy</p> |
| Recruitment and performance assessment | <p>Recruitment procedures in place with interview panels staffed by at least two people</p> <p>Candidates' identities checking at interview and reference request</p> <p>Formal contract for all workers</p> <p>Written procedures for performance appraisals, promotions, and any performance-related pay increases</p> |

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| <p>Grievance Redress Mechanism</p> | <p>MCI's CARM System for anonymous feedback, including SEAH-related complaints</p> <p>Community sensitisation process will include efforts to ensure the understanding of communities of their rights to be respect and dignity at all times in their engagement with MCI's programmes</p> <p>Community members and participants should, at a minimum, understand that Mercy Corps holds its team members, partners, contractors and consultants to the highest ethical standards; that they should always be treated with respect and dignity, that all aid is free, and that no one should ever ask anything of them in exchange for assistance, including money, goods, services, or sex.</p> |
| <p>Investigation and response</p> | <p>Under the PSEAH Policy, article 3.1.8. Mercy Corps Team Members, Partners, or Visitors must immediately report any concerns or suspicions regarding sexual exploitation, abuse or harassment by any humanitarian, aid or development worker, whether employed by Mercy Corps, a Mercy Corps Partner or any other humanitarian or aid organization</p> <p>MCI will take position to support for Survivors and to do Survivor-Centred Response. In accordance with the Safeguarding Core Standards Policy</p> |

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| <p>Awareness raising</p> | <p>Gender-sensitive and culturally appropriate outreach materials will be prepared as part of the project implementation</p> <p>Potential SEAH risks will be communicated to the community through CARM Mechanism</p> <p>Regular feedback will be obtained through CARM data collection process</p> |
| <p>Procurement and partnership</p> | <p>All of the consultants will undergo compliance checks, one of which is related to this policy, and we will always have to conduct safeguarding briefings for every consultant and partner selected</p> |
| <p>Physical workspace</p> | <p>Separate facilities for men and women are possible to be provided based on internal needs assessment</p> <p>MCI's Sexual Misconduct Policy covers risks in workplace safety</p> |
| <p>Contextual risks</p> | <p>Work with relevant gender/social welfare Government ministries and departments, other anti-gender-based violence organizations or networks;</p> <p>Strong enforcement of the AEs SEAH (and/or its equivalent) policy;</p> <p>Enforcement of SEAH related laws as it pertains to the project/program.</p> |

| | |
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| | <p>Work with local government or authorities to sensitize community members on SEAH safeguarding;</p> <p>Identify male champions where applicable to act as allies on SEAH safeguarding;</p> <p>Provide SEAH training to project stakeholders and communities.</p> |
| <p>Project risks</p> | <p>As above societal risks and;</p> <p>Support local officials in campaigns on prevention of SEAH;</p> <p>Leverage existing relationships with government stakeholders; identify champions / supporters / changemakers within the government (specifically on SEAH);</p> <p>Conduct SEAH awareness-raising within the community;</p> <p>Where such severe barriers exist, extensive community consultation is required to understand all the social and issues that may further reinforce SEAH – and identify (inclusive and participatory) measures to address these barriers;</p> <p>Undertake SEAH sensitization campaigns/trainings and/or disseminate relevant SEAH messages to the targeted communities;</p> |

| | |
|--|--|
| | <p>Include SEAH messages (including reporting mechanisms) in construction sites, e-buses (and other modes of transport)</p> <p>Provide in the community on SEAH risks, how to report them and the services available including SEAH GRM.</p> |
|--|--|

Monitoring Progress on Gender Action Plan

Progress in implementing the Gender Action Plan (GAP) will be monitored through the project’s Monitoring and Evaluation (M&E) system, which will track gender-related indicators and targets defined in this plan. Data will be collected and reported in a gender-disaggregated manner (including by sex, age, and disability where possible) to assess participation, benefits, and outcomes for women, men, and vulnerable groups.

The Accredited Entity (AE) will report on the implementation progress of the GAP through the Annual Performance Reports (APRs) submitted to the Green Climate Fund during project implementation. These reports will include updates on key GAP activities, progress against indicators and targets, challenges encountered, and corrective actions taken where necessary.

If any significant changes or revisions to the Gender Action Plan are required during implementation, the AE will inform the GCF and provide justification for the proposed modifications, ensuring that gender equality and social inclusion objectives remain adequately addressed throughout the project lifecycle.

Alignment of Gender Targets

The targets outlined in this Gender Action Plan (GAP) are aligned with Indonesia's international and national commitments to gender equality and women's empowerment. At the international level, the GAP supports the achievement of Sustainable Development Goal 5: Gender Equality, as well as the broader gender equality commitments embedded within the United Nations Framework Convention on Climate Change and climate adaptation frameworks. The proposed targets are also consistent with Indonesia's national policy framework on gender equality, including the national strategy on gender mainstreaming and relevant laws and regulations promoting women's participation and protection of vulnerable groups. The GAP targets are further aligned with the gender policy and social inclusion commitments of the Accredited Entity (AE), ensuring that gender equality and social inclusion are integrated across project planning, implementation, monitoring, and evaluation.

The targets presented in this GAP were informed by the gender assessment conducted for the project and by consultations with stakeholders, including both women and men from the project target areas. These consultations included key informant interviews and focus group discussions with representatives from government agencies, community organizations, women's groups, disability organizations, farmer and fisher groups, and other local stakeholders. Feedback from these consultations helped identify barriers faced by women and vulnerable groups and informed the design of practical measures and realistic participation targets. The targets may be further refined during project implementation to reflect evolving local needs and ensure effective gender-responsive project delivery.

Annex A **Consultations**

Gender Disaggregated table on consultations

| Activity | Female | Male | Total |
|---------------------------|-----------|-----------|------------|
| Key Informant Interviews | 15 | 12 | 27 |
| FGD Pekalongan City | 12 | 15 | 27 |
| FGD Pekalongan Regency | 18 | 19 | 37 |
| FGD Batang Regency | 10 | 12 | 22 |
| Total Participants | 55 | 58 | 113 |

Gender Component: Interviews

| No | Date | Name of Interviewee | Organization |
|----|----------------------|---------------------|---|
| 1. | Monday, 26 May 2025 | Mr. A | City Planning Agency of Pekalongan Regency |
| 2. | Monday, 26 May 2025 | Mr. B and Ms. C | Head of Bandengan Village of Pekalongan City |
| 3. | Monday, 26 May 2025 | Ms. D | Disability Inclusion Services Unit of Pekalongan Regency |
| 4. | Tuesday, 27 May 2025 | Mr.C | Simego Village of Pekalongan Regency |
| 5. | Tuesday, 27 May 2025 | Mr. D and Ms. E | Pemosbud Bapperida of Pekalongan Regency/ Government and Socio-Cultural Division- Planning Agency of Pekalongan Regency |

| No | Date | Name of Interviewee | Organization |
|-----|------------------------|-------------------------|---|
| 6. | Wednesday, 28 May 2025 | Mr. E | Fatayat NU of Pekalongan Regency |
| 7. | Wednesday, 28 May 2025 | Ms. F | Sahabat Difabel of Pekalongan City |
| 8. | Wednesday, 28 May 2025 | Ms. G and Ms. H | Health Agency of Pekalongan City |
| 9. | Wednesday, 28 May 2025 | Mr. F | Disaster Management Group Jeruksari Village |
| 10. | Wednesday, 28 May 2025 | Mr. G, Mr. H and Mr. I | Social Agency of Pekalongan Regency |
| 11. | Wednesday, 28 May 2025 | Ms. I | Jolotigo Village Pekalongan Regency |
| 12. | Thursday, 29 May 2025 | Ms. J | Social Agency of Central Java |
| 13. | Thursday, 29 May 2025 | Mr. J | Study Circle of Pekalongan City |
| 14. | Thursday, 29 May 2025 | Ms. K | Disability Inclusion Services Unit of Central Java |
| 15. | Friday, 30 May 2025 | Ms. L, Ms. M, and Ms. N | Female Head of Family of Pekalongan Regency |
| 16. | Friday, 30 May 2025 | Ms O, Ms P, Ms Q | Gerakan Peduli Anak Difabel of Pekalongan City/ Movement to Care for Children with Disabilities |
| 17. | Friday, 30 May 2025 | Ms R | Childrens Forum of Pekalongan City |
| 18. | Tuesday, 10 June 2025 | Ms. S and Ms T | Ministry of Women's Empowerment and Child Protection of Central Java |
| 19. | | | Kemitraan |

Gender Component: FGDs

| No | Date | Location | Participants | Organization |
|----|---------------------------|--|---------------|---|
| 1 | Thursday, 05 June 2025 | Aston Hotel Pekalongan (FGD of Pekalongan City) | 27 attendance | <ol style="list-style-type: none"> 1. Pekalongan City Study Circle of Pekalongan City 2. Aisiyah Organisation of Pekalongan City 3. Farmers of Jeruksari Village 4. Pekalongan City Trade, Cooperatives and SMEs Service 5. Sahabat Difabel of Pekalongan City 6. Bandeng Presto Group of Pekalongan City/ milkfosh group 7. Farmers of Jeruksari village 8. Companion Difable 9. Bandeng Presto Group/ milkfish group 10. Community Empowerment, Women and Child Protection Service of Pekalongan City 11. Female Head of Family of Pekalongan City 12. Head of Krapyak village 13. Regional Disaster Management Agency of Pekalongan City 14. Head of Bandengan village 15. Health Agency of Pekalongan City 16. Planning Agency of Pekalongan City 17. Fisheries and Maritime Agency of Pekalongan Regency 18. Fisheries and Maritime Agency of Pekalongan Regency 19. Head of Degayu village 20. Planning Agency of Pekalongan City 21. Planning Agency of Pekalongan City 22. Argiculture and Food Service Agency of Pekalongan City |

| No | Date | Location | Participants | Organization |
|----|---------------------|---|---------------|---|
| | | | | 23. Fisheries and Maritime Agency of Pekalongan City 24. Subdistrict of North Pekalongan 25. University of Pekalongan 26. Pekalongan City Trade, Cooperatives and SMEs Service 27. Farmers of Jeruksari village |
| 2 | Kamis, 12 Juni 2025 | Meeting Room of Planning Agency of Pekalongan Regency | 37 attendance | 1. Simego Village 2. Forum Serasi Madani of Pekalongan Regency 3. Public Work and Spatial Planning Agency of Pekalongan Regency 4. Public Work and Spatial Planning Agency of Pekalongan Regency 5. Women's Empowerment, Child Protection, Population Control, and Family Planning Agency of Pekalongan Regency 6. Fatayat NU of Pekalongan Regency 7. Female Head Family of Pekalongan Regency 8. KSB (Disaster Management Village) of Jeruksari village 9. Aisiyah Organisation of Pekalongan Regency 10. Childrens Forum of Pekalongan Regency 11. Public Work and Spatial Planning Agency of Pekalongan Regency 12. Fisheries and Maritime Agency of Pekalongan Regency 13. PPDFI of Pekalongan Regency (Disability Group) 14. Childrens Forum of Pekalongan Regency 15. Socio-Cultural Planning Division of City Planning Agency of Pekalongan Regency 16. Field of Socio-Cultural Planning of City Planning Agency of Pekalongan Regency |

| No | Date | Location | Participants | Organization |
|----|----------------------|---|---------------|---|
| | | | | 17. Female head of Pekalongan Regency 18. City Planning Agency of Pekalongan Regency 19. Female of Tratebang village 20. Social Agency of Pekalongan Regency 21. City Planning Agency of Pekalongan Regency 22. City Planning Agency of Pekalongan Regency 23. Health Agency of Pekalongan Regency 24. City Planning Agency of Pekalongan Regency 25. City Planning Agency of Pekalongan Regency 26. Cooperatives, small and medium enterprises, and labor Agency of Pekalongan Regency 27. Cooperatives, small and medium enterprises, and labor Agency of Pekalongan Regency 28. City Planning Agency of Pekalongan Regency 29. City Planning Agency of Pekalongan Regency 30. City Planning Agency of Pekalongan Regency 31. Farmers of Semut Village 32. Female Group of Semut village 33. City Planning Agency of Pekalongan Regency 34. City Planning Agency of Pekalongan Regency 35. Agriculture and food services Agency of Pekalongan Regency 36. Agriculture and food services Agency of Pekalongan Regency 37. City Planning Agency of Pekalongan Regency |
| 3 | Monday, 16 June 2025 | Meeting Room of Planning Agency of Batang Regency | 22 attendance | 1. FORKOMBI (Forum Komunikasi Mahasiswa Batang Indonesia)/ Batang Indonesia Student Communication Forum |

| No | Date | Location | Participants | Organization |
|----|------|----------|--------------|--|
| | | | | 2. Childrens forum of Batang Regency |
| | | | | 3. Childrens forum of Batang Regency |
| | | | | 4. City Planning Agency of Batang Regency |
| | | | | 5. Subdistrict of Wonotunggal |
| | | | | 6. Disability Group of Batang Regency |
| | | | | 7. Food and Argiculture Agency of Batang Regency |
| | | | | 8. Female head of Batang Regency |
| | | | | 9. Women's Empowerment, Child Protection, Population Control, and Family Planning Agency of Batang Regency |
| | | | | 10. Department of Public Works and Spatial Planning of Batang Regency |
| | | | | 11. Department of Public Works and Spatial Planning of Batang Regency |
| | | | | 12. Department of Public Works and Spatial Planning of Batang Regency |
| | | | | 13. Subdistrict of Warungasem |
| | | | | 14. Planning Agency of Batang Regency |
| | | | | 15. Planning Agency of Batang Regency |
| | | | | 16. Planning Agency of Batang Regency |
| | | | | 17. Planning Agency of Batang Regency |
| | | | | 18. Planning Agency of Batang Regency |
| | | | | 19. Planning Agency of Batang Regency |
| | | | | 20. Planning Agency of Batang Regency |
| | | | | 21. Planning Agency of Batang Regency |
| | | | | 22. Planning Agency of Batang Regency |
