



PROJECT INCEPTION REPORT

Building Climate-Resilient Districts in Indonesia: Case of Sigi District



In collaboration with:
Konsorsium Lingkungan Adaptif, Berketahanan, Inovatif, dan Partisipatif (Kolaborasi) consists of 4 (four) organizations/partners:

1. Koaksi Indonesia as the Lead Organisation;
2. Lingkar Temu Kabupaten Lestari (LTKL);
3. Water Stewardship Indonesia (WSI); and
4. Earth Innovation Institute (EII)

May 2026





Glossary

AF	: Adaptation Fund
AWP	: Annual Work Plan
Bapperida	: Institutional Regional Development Planning, Research, and Innovation Agency
Proklim	: Climate Village Programme, verified climate adaptation and mitigation actions.
Customary Law	: Hukum Adat
DA	: Designated Authority
EE	: Executing Entity
Flash Flood	: Banjir Bandang in Indonesia, sudden flooding caused by extreme
FGD	: Focus Group Discussion
GHG	: Greenhouse Gases
Gotong Royong	: Indonesian tradition of communal cooperation and mutual assistance
IEC Materials	: Information, Education, and Communication materials and tools developed based on local context to disseminate climate adaptation knowledge
IE	: Implementing Entity
Kemitraan	: Partnership for Governance Reform
KOLABORASI	: Consortium comprising Koaksi Indonesia (lead), LTKL, WSI, and EII
KRB	: Kajian Risiko Bencana (Disaster Risk Assessment)
Landslide	: Downslope movement of soil or rock triggered by extreme rainfall, deforestation, or earthquakes
Maladaptation	: Actions intended as adaptive responses to climate change that inadvertently cause negative environmental or social consequences.
MEL	: Monitoring, Evaluation & Learning
MoU	: Memorandum of Understanding
Nexus	: Integrative framework
OPD	: Organisasi Perangkat Daerah, regional apparatus organisation district-level government work units
RAD API	: Rencana Aksi Daerah Adaptasi Perubahan Iklim, Regional Climate Change Adaptation Action Plan—district-level strategic document
RHL	: Rehabilitasi Hutan dan Lahan, Land and Forest Rehabilitation — replanting and restoring degraded forest and land ecosystems.
RPJMDes	: Rencana Pembangunan Jangka Menengah Desa
TNLL	: Lore Lindu National Park
WG	: Working Group
WEF	: Water-Energy-Food



Table of Content

Glossary	2
Table of Content.....	3
Executive Summary	4
1. Overview	6
2. Inception Phase	8
2.1. Internal Coordination	8
2.2. Inception Workshop Sigi	12
2.3. Field Trip to Sigi District	18
3. Risk Management	23
3.1. Challenges	23
3.2. Opportunity	24
Concluding Remarks	26
Annex	27
1. Annex 1: Meeting of Minutes (MoM) and Zoom Record	27
1.1. Minutes of Coordination Meeting with Kemitraan #1 The full minutes of the meeting are available at [link]	27
1.2. Minutes of The Consortium Meeting The full minutes of the meeting are available at [link]	27
1.3. Minutes of Coordination with Sigi District Government.....	27
1.4. Minutes of Coordination Meeting with Kemitraan #2	27
1.5. Minutes of Inception Workshop in Sigi District.....	27
1.6. Minutes of Field Trip to Sigi District.....	27
2. Annex 2: All Photos of Documentation	27
2.1. Documentation of The Consortium Meeting	27
2.2. Documentation of Coordination with Sigi District Government	27
2.3. Documentation of Coordinator Meeting with Kemitraan #2	28
2.4. Documentation of Inception Workshop in Sigi District	28
2.5. Documentation of Sticky Notes from the Discussion Session in the Forum	29
2.6. Documentation of Field Trip to Sigi District.....	31
3. Annex 3: List of Participants.....	32
3.1. Coordination Meeting with Kemitraan #1	32
3.2. The Consortium Meeting	33
3.3. Coordination with Sigi District Government	33
3.4. Coordination Meeting with Kemitraan #2	34
3.5. Inception Workshop in Sigi District.....	35
3.6. Field Trip to Sigi District	37



Executive Summary

Sigi District in Central Sulawesi Province faces escalating threats from climate change, with intensive climate variability driving significant shifts in the regional water cycle, irrigation systems, and agricultural productivity. Increasing occurrences of flash floods and prolonged droughts pose direct threats to community livelihoods and economic continuity, while the district's existing 2020 disaster risk assessment is incomplete and inadequate as a basis for comprehensive mitigation and adaptation strategies. In response, the Building Climate Resilient District in Indonesia: Case of Sigi District project, funded by the Adaptation Fund and implemented by Konsorsium KOLABORASI (Koaksi Indonesia, LTKL, WSI, and EII) in partnership with Kemitraan as the implementing entity, aims to strengthen community climate resilience through an integrated Water-Energy-Food (WEF) nexus approach.

The project pursues three interconnected objectives: strengthening the enabling environment for adaptation policy implementation, applying the WEF nexus approach to enhance adaptation action, and establishing a Center of Excellence for climate change adaptation at the district level, with implementation focused on six target villages in Dolo Selatan and Gumbasa Sub-districts (Pandere, Pakuli Utara, Simoro, Bangsa, Sambo, and Wisolo villages). Throughout the inception phase from December 2025 to May 2026, the Consortium undertook a comprehensive series of preparatory activities to establish a solid foundation for project implementation.

These included multiple internal coordination meetings with Kemitraan to finalize the sub-grantee agreement and annual work plan, consortium-level coordination to adjust the original work plan to current conditions, and a pre-kick-off meeting with the Sigi District Government attended by the Regent and key OPDs. The phase culminated in an inception workshop in Sigi District featuring a talk show and structured FGD using sticky note discussions, followed by field visits to three target villages (Sambo, Wisolo, and Bangsa) on May 19, 2026, to gather firsthand information across water, energy, and food sectors; identify vulnerable groups; and document existing local solutions.

The inception activities yielded several important findings. Community participants demonstrated strong awareness of climate impacts at the local level, including unpredictable weather; declining water availability during dry seasons; flash floods and landslides during extreme rainfall; crop failures (with maize harvest losses reportedly reaching 80% in some areas); and rising household energy costs, and have already undertaken meaningful community-led adaptation initiatives such as riverbank reforestation, customary forest conservation, and small reservoir construction. However, conceptual gaps remain between understanding of climate change causes and impacts and between mitigation and adaptation actions, with some practices showing potential maladaptive consequences.

Field visits also revealed significant infrastructure gaps, particularly water systems damaged by the 2018 earthquake in Desa Wisolo and recurring flood-drought cycles in Desa Bangsa, alongside notable opportunities including strong leadership commitment from the Regent of Sigi, the existing Sigi Hijau Multi-Stakeholder Partnership Forum, the RAD API draft awaiting legalization, and formally recognized customary territories that provide institutional capital for accelerated implementation.



Looking ahead, the Consortium will focus on several interconnected priorities, including establishing a Climate Adaptation or WEF nexus Working Group under the Sigi Hijau Forum, conducting village-level vulnerability and needs assessments, integrating the WEF nexus approach into the RAD API and updating the expired Disaster Risk Assessment (KRB) document, preparing the six target villages for Climate Village Programme (Proklam) registration, and designing the Center of Excellence as a microsite on the Sigi Hijau platform. Key challenges to be managed include personnel changes across relevant agencies, fiscal constraints from ongoing budget efficiency measures, and the need for differentiated adaptation approaches suited to Sigi's complex topography.

Through the synergy of strong regional government support, active community and women's group participation, local and customary knowledge, and the Adaptation Fund's financing framework, this project is expected not only to reduce climate vulnerability in the six target villages but also to position Sigi District as a national learning center for integrated water, energy, and food management, leaving behind an institutional, knowledge, and best-practice legacy ready for replication beyond the project area.



1. Overview

Sigi District, located in Central Sulawesi Province, Indonesia, faces serious and growing threats from climate change. Intensive climate variability has caused drastic shifts in the regional water cycle, with direct impacts on catchment water balance, irrigation systems, hydropower energy production, and the distribution of goods and services through river networks. Increasing occurrences of flash floods and prolonged droughts pose significant threats to the livelihoods of local communities and the broader economic continuity of the district. The Sigi District Government developed a disaster risk assessment in 2020; however, that assessment did not cover all disaster types and lacked the depth needed to generate critical recommendations for comprehensive mitigation and adaptation strategies. In this context, adaptation is defined as an adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. As climate risks continue to escalate, the Sigi government must identify which risks can be mitigated and which require a dedicated adaptation framework.

This project has been designed to build climate resilience in Sigi District through an integrated Water-Energy-Food (WEF) nexus approach. It is designed to deliver three objectives: strengthening the enabling environment for adaptation policy implementation; applying the WEF nexus approach to improve climate change adaptation action; and establishing a center of excellence for climate change adaptation at the district level. Following comprehensive public consultations conducted across Sigi District, six villages have been selected as pilot implementation sites based on priority criteria encompassing climate hazard exposure, vulnerability levels, key agricultural commodities, Climate Village Programme (Proklim) status, and accessibility from Palu City. The selected villages and their profiles are presented in the table below.

Table 1. Proposed Pilot Villages Based on Priority Criteria

Village	Climate Hazard	Vulnerability Level	Agricultural Commodities	Proklim Village
Pandere	Flash Flood	High	Coconut, Candlenut, Cacao	Not yet
Pakuli Utara	Flash Flood	High	Coconut, Cacao	Not yet
Simoro	Flash Flood	High	Coconut, Cacao	Not yet
Bangga	Flash Flood	Very High	Coconut, Cacao	Not yet
Sambo	Flash Flood	Very High	Paddy, Cacao	Not yet
Wisolo	Flash Flood	Very High	Cacao	Not yet

All six villages are exposed to flash flood hazards with high to very high vulnerability levels, particularly in their agricultural sectors, which constitute the primary livelihood base for local communities. Key commodities cultivated include coconut, cacao, candlenut, and paddy rice. Although none of the villages have yet attained Proklim status, their proximity and accessibility to Palu City ensures practical and effective project implementation and monitoring.



The project responds to challenges identified through previous assessments and confirmed during inception consultations. Prior assessments exhibited diverse range of risks faced by the local communities. They continued to face financial risks, ranging from property damage to loss of income; not to mention highly vulnerable areas were not properly identified, which leading to misdirected interventions and hindering the sustainability of adaptation measures. Communities also continued to face lack of financing for rehabilitation process due to insufficient climate adaptative strategies within RAD-API (Regional Action Plan for Climate Change Adaptation) in Sigi District. In parallel, the absence of an integrated Water-Energy-Food (WEF) Nexus approach results in fragmented resource management, limiting the long-term effectiveness and scalability of adaptation interventions. Thus, the presence of the Centre Excellence is essential to give them documented valuable insights and innovations to strengthen community resilience over time.

Through the successful implementation of this project, six outcomes are anticipated: improved institutional capacity of local stakeholders at the district level for WEF nexus-based climate change adaptation; management instruments to support effective implementation of climate change adaptation efforts at Sigi District developed and operationalized; a participatory WEF nexus-based adaptation action plan developed & applied at the village level; increased economic, social, and livelihood resilience in the local community; learning and communication tools targeted for replication developed based on monitoring, evaluation & learning (MEL) throughout the process; and documented knowledge, lessons learned, and best practices for further replication by the district.

Project Components	Expected Concrete Outputs	Expected Outcomes
Component 1: Strengthened enabling environment to support Adaptation policy implementation in Sigi District	Output 1.1.1. Awareness and understanding of key stakeholders at district level on climate change adaptation based on WEF Nexus strengthened	Outcome 1.1. Improved institutional capacity of local stakeholders at district-level on WEF Nexus-based climate change adaptation
	Output 1.1.2. A district-level working group for climate change adaptation established under the district multi-stakeholder forum	
	Output 1.1.3. Climate change vulnerability assessment using district level data, indicators, and climate modelling based on WEF Nexus approach conducted	
	Output 1.1.4. Tailored technical capacity building on climate change adaptation for relevant stakeholders facilitated	
	Output 1.2.1. Need assessment analysis of effective management instrument conducted	Outcome 1.2. Management instruments to support effective implementation of climate change adaptation efforts at Sigi District developed and operationalized
	Output 1.2.2. Climate change adaptation management instrument developed	
	Output 1.2.3. Target villages facilitated to prepare PROKLIM registration	
Component 2: WEF nexus approach applied to improve the effectiveness of District's Climate Change Adaptation Action Plan	Output 2.1.1. Village level climate change risks and vulnerability assessment conducted	Outcome 2.1. Participatory WEF nexus-based adaptation action plan developed & applied at village level
	Output 2.1.2. WEF nexus-based adaptation options identified by target group (vulnerable groups, farmers, village government staffs)	
	Output 2.1.3. Village WEF nexus-based adaptation action plan developed	
	Output 2.1.4. Village-based adaptive water management and physical infrastructure developed	



Project Components	Expected Concrete Outputs	Expected Outcomes
	Output 2.1.5. Village-based adaptive agriculture management and physical infrastructure developed	
	Output 2.1.6. Village-based adaptive renewable energy management implemented	
	Output 2.2.1. Supply chain mapping of leading commodities and commodities development plan designed	Outcome 2.2. Increased economic, social, livelihood, resilience in the local community
	Output 2.2.2. Options to improve leading commodities value through its derivative products identified and implemented by farmers	
	Output 2.2.3. Technical capacity and tools/machinery for farmers to produce value-added products developed and strengthened	
Component 3: Center of excellence of climate change adaptation at district level	Output 3.1.1. IEC materials and tools design based on local context developed	Outcome 3.1. Learning and Communication Tools targeted for replication developed based on Monitoring, Evaluation & Learning (MEL) throughout the process
	Output 3.2.1. Enhanced knowledge, lessons learned, and best practices through the Center of Excellence digital platform, and best practices developed and launched	Outcome 3.2. Disseminated knowledge lesson learned and best practices for further replication by District

2. Inception Phase

The Climate Change Adaptation Project in Sigi District entered its inception phase in December 2025, culminating in the project kick-off in May 2026. During this period, Koaksi Indonesia, serving as the consortium lead, worked in close collaboration with Kemitraan and other consortium members to sustain ongoing coordination with the Sigi District Government and key local stakeholders, laying the groundwork for smooth and effective project implementation. Between December 2025 and June 2026, a range of activities was undertaken, including internal coordination meetings, government engagements, community consultations, and field visits to build a solid foundation for the project. The activities conducted throughout the inception phase are outlined below.

2.1. Internal Coordination

To maintain alignment with the Sigi District Government, the Regent of Sigi and consortium partners held multiple coordination meetings to agree on the start date of the adaptation program. This coordination process was carried out in several phases alongside Kemitraan as the Implementing Entity (IE), while the consortium, acting as the Executing Entity (EE), established a grievance mechanism as an initial measure for handling complaints. The meetings served to notify participants that the project was in its early phase and that preparations for implementation had commenced. Additionally, several stakeholders at both the district and provincial levels have experienced changes in key personnel within agencies relevant to this program. Given the extended timeframe, spanning approximately ten months from proposal preparation to receiving approval from the Adaptation Fund, these personnel changes required Konsorsium KOLABORASI to re-engage in communication and re-coordination efforts regarding the program's planned implementation. The key focus areas of communication and coordination with the government include:



2.1.1. Meeting Coordination with Kemitraan #1

The Consortium (EE) and Kemitraan (IE) held a coordination meeting on Wednesday, February 25, 2026, at the Kemitraan Office in South Jakarta, covering three main agendas: (1) finalizing the sub-grantee agreement, (2) initiating work on the Annual Work Plan (AWP) 2026, and (3) preparing for the project kick-off. The full meeting minutes are accessible in [Annex 1.1](#). The sub-grantee agreement between Kemitraan and Koaksi Indonesia as the consortium lead has been signed and commenced as of 1st of March 2026 through 29th of February 2028.

Upon the meeting, we have agreed that all SOPs applied throughout the project will be aligned with both the Adaptation Fund (AF) and Kemitraan standards. The Consortium is required to submit progress and financial reports to Kemitraan on a quarterly basis. Kemitraan's role is limited to overall oversight and monitoring, meaning the Consortium bears full responsibility for any liabilities arising from project implementation.

Kemitraan has initiated internal kick-off session with the consortium to walk through SOPs, implementation mechanisms, staffing, budgeting, reporting procedures, and document templates that comply with the AF guidelines.

2.1.2. The Consortium Meeting

The consortium held an internal coordination meeting on Monday, March 2, 2026, at the Koaksi Indonesia Office in South Jakarta, covering three main agendas: (1) preparing the contract between Koaksi Indonesia and consortium members, (2) adjusting the work plan to current conditions, and (3) preparing for the project kick-off. The full meeting minutes are accessible in [Annex 1.2](#).

On the matter of work plan adjustment, LTKL has conducted an assessment to re-evaluate the relevance of the existing work plan against various initiatives already underway for realignment purpose with the current local situation. The assessment results are accessible via the shared link.

Assessment findings identified several areas requiring refinement in the implementation approach. With regard to Output 1.1.2.2, "Drafting Decision Letter (SK) of the Working Group," the Sigi Hijau Multi-Stakeholder Forum has already been established and serves as a recognized coordination working group in Sigi District. However, the assessment found that the forum does not currently incorporate climate change adaptation focus. To align with the intended output and strengthen institutional arrangements for climate adaptation as part of the output 1.1.2.2 target, the project will support the establishment of a climate change adaptation-focused sub-unit under the existing forum structure. Thus, as the follow-up action, the consortium will facilitate stakeholder consultations and brainstorming sessions to define the working group's mandate, roles, functions, and workplan, as well as support the formalization of these arrangements through the relevant district-level decision-making processes. This approach will build on existing institutional mechanisms while ensuring that climate change adaptation is adequately integrated into the forum's coordination and planning functions..



On another note, Sigi District has formulated draft of the RAD API (relation to activity 1.1.4.4 to output 1.1.4). However, further improvements were needed to strengthening the integration of the WEF nexus approach on the draft as well as developing technical guidelines based on the RAD API draft. Follow up actions included coordination with key organizations operating in the six target villages to ensure that interventions are complementary.

Under Component 3, concerning the development of a Center of Excellence for climate change adaptation at the district level, the existing Sigi Hijau Multi-Stakeholder Partnership Forum website presents an opportunity for the Center of Excellence to be developed and integrated as a microsite within that platform. Prior to the event, the Consortium will meet with the Sigi District Government to coordinate their involvement in inviting relevant regional apparatus organisations (OPDs).



Figure 1. The Consortium Meeting

2.1.3. Coordination with Sigi District Government

The Consortium conducted a pre-kick-off coordination online meeting with the Sigi District Government on March 11, 2026, attended by key government officials, including the Regent of Sigi, representatives from Bapperida, the Regional Secretariat (*Sekretaris Daerah – Sekda*), the Office of Food Crops, Horticulture and Plantations, and the Environmental Agency, alongside members of the Consortium from Koaksi Indonesia, LTKL, and WSI. The full meeting minutes are accessible in [Annex 1.3](#). During the discussion on project implementation, the Regent of Sigi expressed full support for the Adaptation Fund (AF) project, noting that it would be particularly helpful in addressing climate-related challenges in Sigi District amid the current budget efficiency constraints. Following are highlighted results from the coordination meeting:

1. **Strong government support for project implementation.** The regional secretariat expressed broad support for the project and confirmed that the selected intervention areas, particularly in Dolo Selatan Sub-district, are appropriate given their climate vulnerability. The regional secretariat also emphasized the need to integrate the AF (Adaptation Fund) project components into the Sigi District Medium-Term Regional Development Plan (RPJMD) so that the project could provide meaningful contribution to its targets.
2. **Opportunities to strengthen the WEF Nexus approach.** The regional secretariat recommended exploring renewable energy options, including geothermal and micro-hydro systems, as part of the project's WEF Nexus framework, particularly in light of ongoing investment interest in plantation sectors such as coconut in Desa Bangsa.
3. **Potential refinement of village-level interventions.** Based on existing water infrastructure conditions, the Office of Food Crops, Horticulture and Plantations suggested



prioritizing investment in other villages (e.g. Bangga, Pakuli Utara, Sambo, Sindoro, and Wisolo) considering the adequacy of current facilities in Pandere Village.

4. **Synergies with existing climate initiatives.** The project was encouraged to build upon and strengthen existing Climate Village Programme (Proklim) achievements through improving existing Proklim scores or expanding the number of Proklim-designated villages.
5. **Capacity development as a key implementation priority.** Bapperida highlighted their readiness to support the project, highlighting that Sigi District's current agricultural focus aligns well with the WEF nexus approach. It was important to strengthen the awareness and the adaptive capacity among farmer groups, particularly youth and millennial farmers, in order to support long-term sustainability of adaptation efforts. A specific focus were given to Desa Bangga as it lies within a transitional climate zone between wet and dry, with the northern part of the village already classified as a wet climate area.
6. **Importance of local participation and workforce engagement.** The involvement of local communities and workforce in project implementation was identified as an important factor for ownership and sustainability.
7. **Opportunities for cross-sector integration.** The environmental agency recommended incorporating environmental management measures, including waste management initiatives, where relevant to support broader climate resilience objectives.
8. **Strong institutional commitment and coordination support.** District government agencies confirmed their readiness to support implementation, including facilitating access to village-level information, coordinating relevant stakeholders, and supporting the project kick-off process.
9. **Potential for replication and scaling.** Stakeholders recognized the project's potential to serve as a model for climate change adaptation and WEF Nexus implementation in Sigi District and beyond.

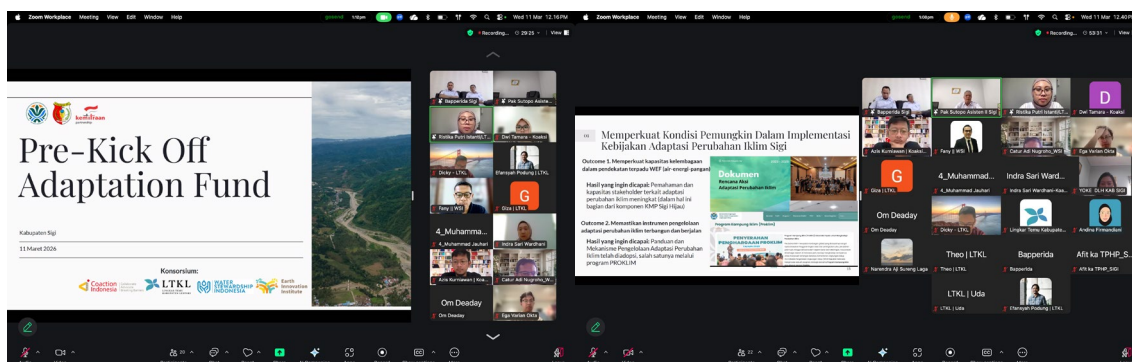


Figure 2. Coordination with Sigi District Government

2.1.4. Coordination with Kemitraan #2

The Consortium and Kemitraan held an initial kick-off meeting on Friday, May 15, 2026, conducted online via Teams meeting, covering three main agendas: reviewing the donor agreement and reporting plan, discussing the finance and budget plan, and understanding the procurement process. The full meeting minutes are accessible in [Annex 1.4](#).

Following the internal meeting with Kemitraan, the Consortium proceed with the official offline kick-off in Sigi District on May 18, 2026 and established a grievance mechanism that is easily applicable for both Consortium members and beneficiaries.

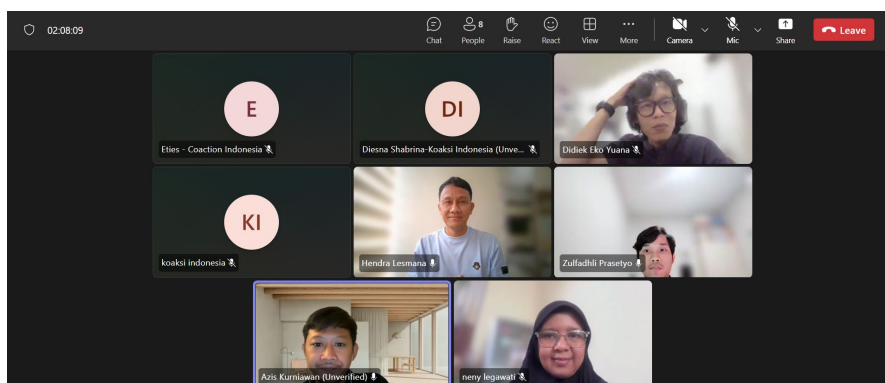


Figure 3. Coordination with Kemitraan #2

2.2. Inception Workshop Sigi

The inception workshop and kick-off of the Sigi District Climate Change Adaptation Program was held on Monday, May 18, 2026, at the Sigi Regent's Office Hall, Sulawesi Tengah Province. The event was conducted in a hybrid format, combining an in-person session at the Regent's Office Hall with an online participation option via Zoom Meeting. Notably, a sign language interpreter was also present throughout the event to ensure accessibility and inclusive participation for the deaf community. Key takeaways from the workshop as follow:

1. **Strong institutional commitment to climate adaptation.** The Sigi Regent Government reaffirmed its commitment to addressing climate change impacts as it was is a shared responsibility. They also expressed hope that this collaboration would deliver real solutions for communities facing floods and droughts.
2. **Recognition of adaptation as a priority development agenda.** The Sigi Regent Government highlighted the growing importance of climate change adaptation in strengthening community resilience, complementing ongoing climate mitigation efforts.
3. **Validation of Sigi District as an appropriate intervention area.** The workshop reaffirmed the relevance of Sigi District as a project location due to its high exposure to climate-related hazards, including floods, landslides, and droughts.
4. **Endorsement of the Water-Energy-Food (WEF) Nexus approach.** The government stakeholders recognized the potential of the WEF Nexus framework to address interconnected climate risks while supporting sustainable livelihood development, particularly in the agricultural sector. They acknowledged that agriculture is the primary sector expected to improve community welfare and regional income and committed the local government to working alongside NGOs and other parties to support farmers in the face of the climate crisis.
5. **Importance of governance and multi-stakeholder collaboration.** Effective climate adaptation was recognized as requiring strong coordination among government institutions, civil society organizations, communities, and development partners.
6. **Agriculture identified as a key adaptation sector.** Stakeholders emphasized the strategic role of agriculture in improving community welfare and strengthening resilience to climate-related impacts.
7. **Commitment to inclusive participation.** The provision of sign language interpretation during the workshop demonstrated the project's commitment to ensuring accessibility and meaningful participation of persons with disabilities.



8. **Formal launch of project implementation.** The signing of the Memorandum of Understanding (MoU) and the official opening of the programme marked the commencement of project implementation and strengthened stakeholder ownership of the initiative

The full meeting minutes are accessible in [Annex 1.5](#).

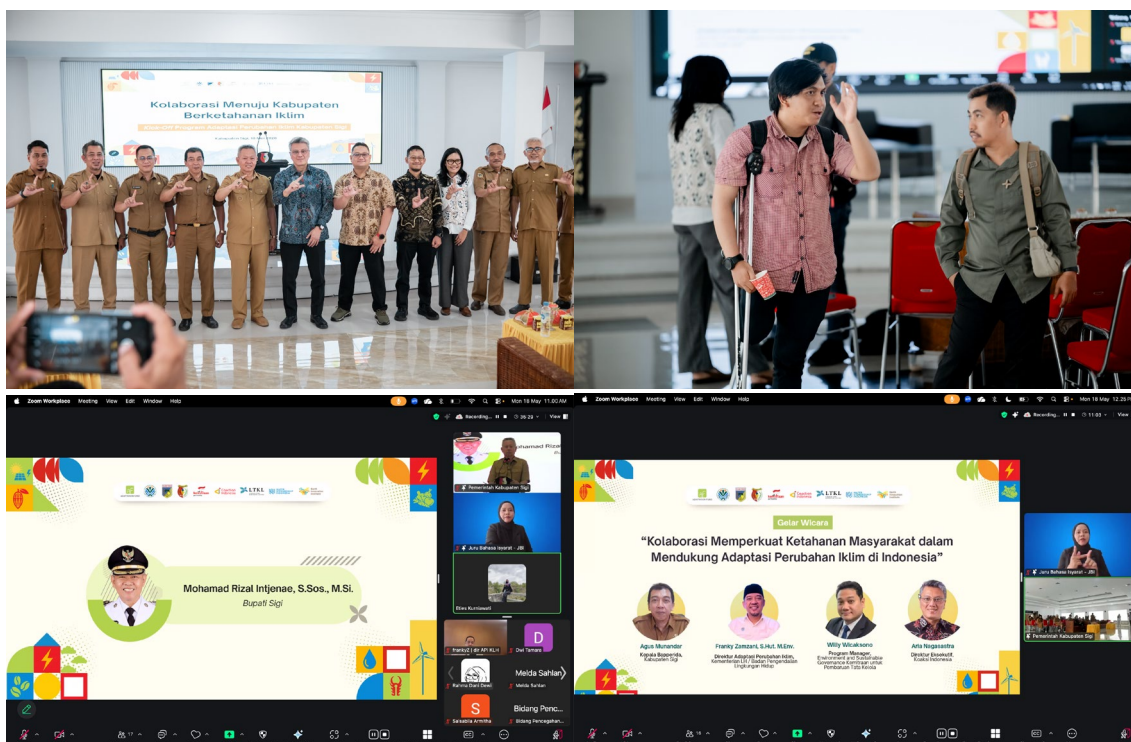


Figure 4. Inception Workshop Sigi

2.2.1. Talkshow

The talk show was moderated by the Planning and Policy Manager of LTKL and featured four speakers. The Director of Climate Change Adaptation at the Ministry of Environment explained that while mitigation focuses on reducing climate risks, adaptation directly addresses the impacts felt by communities and is therefore essential to sustaining livelihoods. Indonesia faces significant climate projections, particularly in Sulawesi, including rising temperatures, shifting rainfall patterns, and sea level rise, with impacts spanning environmental, economic, social, cultural, and productivity dimensions. The government applies a combined top-down and bottom-up policy approach, integrating climate issues into national and regional development plans while also promoting community-based adaptation actions, with priority areas covering food, water resources, energy, health, and ecosystems.

The Head of Bapperida of Sigi District acknowledged the district's commitment to environmental conservation while noting key challenges, including limited mitigation capacity, land degradation, low fiscal capacity, and high vulnerability to natural hazards. He also pointed out that increasingly unpredictable weather patterns are directly impacting agriculture, making a shift in community mindset a critical challenge. The Head of Bapperida also noted it holds significant potential for developing agro-ecotourism and sustainable environmental tourism.



Sigi District was positioned as a potential model of best practice for climate change adaptation in Indonesia. The talk show concluded with four key points: climate change adaptation requires multi-stakeholder collaboration; local governments play a strategic role in strengthening climate resilience; the WEF nexus approach offers an integrative solution for regional development; and meaningful community participation, including vulnerable groups, is essential to program success.



Figure 5. Talkshow Session

2.2.2. Discussion

The discussion and question-and-answer session opened with inputs from several stakeholders that were led by Azis Kurniawan, Project Manager of the Adaptation Fund in Sigi District. In this session, Azis elaborated on the relationship between climate change mitigation and adaptation, explaining how mitigation-specific issues, such as land use change, deforestation, agricultural emissions, energy sector emissions, and population and economic growth, contribute to the increase of greenhouse gases (GHG). It drives climate phenomena, including changes in rainfall patterns, rising surface temperatures, air pressure shifts, and sea level rise. These phenomena subsequently generate specific climate risks such as floods, landslides, droughts, strong winds, and coastal flooding. Mitigation and adaptation are cross-cutting efforts and mutually reinforcing. Their impacts are directly felt across the water, energy, and food sectors that underpin the daily lives and livelihoods of communities in Sigi District.

To deepen understanding and capture the concerns of those present, participants representing various stakeholder groups were invited to share their perspectives through a sticky note exercise. Each participant was asked to respond to two questions: on red sticky notes, they wrote their answers to "What climate change impacts in the water, energy, and food sectors have you felt in Sigi District?", and on green sticky notes, they responded to "What efforts have you already undertaken to reduce those climate change impacts?"



Figure 6. Participants wrote their answers on red and green sticky notes

The complete collection of participant responses can be found in [Annex 2.6](#), with the following summary below.

Perceived Climate Change Impacts to WEF Nexus (Red Sticky Notes)

- Unpredictable weather and irregular rainfall patterns make it difficult for rain-dependent farmers to determine planting seasons.
- Unreliable weather forecasts affect drought conditions and agricultural activities.
- Decreasing water availability for irrigating farmland.
- Increasing risk of fires.
- Unstable water supply due to alternating heavy rainfall and dry seasons.
- In certain areas, groundwater is becoming increasingly deep and difficult to access.
- Changes in planting seasons across the food sector.
- Increased floods and landslides due to extreme rainfall, alongside declining water quality.
- Water sector: declining river flow during dry season and flood risk during extreme rainfall.
- Energy sector: rising household and business energy costs, particularly due to increased air conditioning use.
- Food sector: disruption to planting patterns.
- Declining volume and quality of water, leading to reduced agricultural production and rising food prices.
- Climate change is altering planting schedules and reducing harvest yields, also crop failures.
- Reduction in community-managed land area due to erosion.
- Increasing pest and disease attacks on crops.
- Firewood as an energy source is becoming increasingly scarce.
- Rising temperatures leading to increased energy demand, particularly through greater air conditioning use.
- Disruption of the hydrological cycle.

Efforts to Reduce Climate Change Impact (Green Sticky Notes)

- Wisolo Village has conducted tree planting, flood-prevention greening, and bamboo cultivation initiatives.



- At the household level, planting trees and vegetation around homes to lower indoor temperatures and improve airflow, reducing the need for air conditioning.
- Implementation of the Land Rehabilitation and Reforestation (RHL) program / tree planting under the Sigi Hijau initiative.
- Application of customary law to regulate land clearing and logging, in collaboration with Lore Lindu National Park (TNLL).
- Socialization and education on climate change adaptation.
- Development of the Regional Climate Change Adaptation Action Plan (RAD API) document.
- Strengthening multi-stakeholder institutions.
- Promoting organic and environmentally friendly farming and plantation practices.
- Proposed use of solar-powered water pumps for irrigation.
- Mitigation through the adoption and use of renewable energy.
- Greening initiatives around water sources.
- Cultural-based lifestyle adaptation.
- Construction of small reservoirs (*embung*).
- During dry season, supplying water using pumps; during rainy season, more frequent use of herbicides and pesticides.
- Tree planting and greening, particularly along riverbanks.
- At the local government level: developing low-carbon development documents, promoting renewable energy use, and integrating climate issues into regional planning documents.
- Using water according to actual needs.
- Land and yard greening as a mitigation measure.
- Conserving energy and minimizing electricity use (e.g., air conditioning).
- Saving water and maintaining environmental cleanliness.
- Raising community awareness on the importance of preserving and restoring natural conditions.
- Reducing the use of plastic materials.
- Revising the Disaster Risk Assessment (KRB) document to update hazard data and align it with regional development planning.

Overall, participants understood how climate change affects their daily lives, particularly within the water, energy, and food sectors. Their responses on the red sticky notes accurately captured felt impacts such as irregular rainfall, declining water availability, crop failures, and rising energy costs, which align well with the WEF nexus framing introduced during the session.

However, there was a notable gap in conceptual clarity between climate change causes and climate change impacts. Several responses on the red sticky notes blurred the distinction, describing symptoms such as floods, droughts, and unpredictable weather without connecting them to underlying drivers such as greenhouse gas emissions or land use change. This suggested that while participants are highly aware of climate impacts at the local level, their understanding of the specific causes and mechanisms of climate change remains limited.

Participants also appeared to conflate direct and indirect climate impacts, for example, citing erosion as a climate impact when it is more accurately attributable to land clearing and deforestation. Equally notable was the absence of perspectives on how climate change



disproportionately affects vulnerable groups such as women, pregnant mothers, the elderly, and persons with disabilities, as most responses framed impacts in general terms or focused on farmers as the primary affected group. These gaps signal important entry points for capacity building, particularly in sharpening the distinction between climate-driven and human-induced environmental pressures and in strengthening gender- and inclusion-responsive adaptation perspectives.

On the green sticky notes, the efforts documented were largely appropriate and relevant, covering reforestation, renewable energy adoption, organic farming, water conservation, and institutional measures such as RAD API development and low-carbon planning. These responses reflected a reasonable range of both community-level and government-level adaptation and mitigation actions. Notably, some responses also reflected indigenous knowledge-based approaches, including the application of customary law (Hukum Adat) to regulate land-clearing practices and collaborative conservation efforts with Lore Lindu National Park (TNLL), as well as architectural adaptations such as optimizing airflow design in homes to reduce dependency on air conditioning. That said, some responses conflated mitigation and adaptation measures without distinguishing between the two, and a few responses, such as increased pesticide use during rainy seasons, may warrant further discussion as they could introduce unintended environmental consequences.

In summary, participants showed strong awareness of climate impacts at the local level and are already undertaking meaningful responses but would benefit from further capacity building to sharpen their understanding of the distinction between climate change causes and impacts and the difference between mitigation and adaptation actions.

In the other discussion, among the stakeholders, a representative from Gumbasa Sub-district highlighted that the area is severely affected by floods, landslides, and droughts across nearly all of its territory, with increasingly unpredictable weather patterns leading to crop failures. The representative raised a question regarding the strategy for synchronizing the District Medium-Term Development Plan (RPJMD) with village-level development plans (RPJMDes). Bapperida of Sigi District responded by outlining planned steps, including encouraging villages to share their RPJMDes with the district government, establishing synchronization forums between village and district levels, strengthening village data quality, and improving coordination with relevant agencies.

The Sigi District Disaster Risk Reduction Forum noted that the district's Disaster Risk Assessment (KRB) document had expired in 2025 and needs to be updated to reflect current hazard conditions. In response, the Executive Director of Koaksi Indonesia noted that one of the program's objectives is to synchronize various planning documents based on concrete and context-specific data. Yayasan Sheep Indonesia raised concerns about the ongoing challenges in developing local climate change adaptation documents, particularly in coordinating OPDs to focus on adaptation efforts, and noted that Sigi District's complex topography presents additional implementation challenges. In response, it was clarified that each region requires a differentiated adaptation approach suited to its specific conditions, so the program will be concentrated in two sub-districts and six target villages, and Sigi District is envisioned as a center of learning for integrated water, energy, and food management best practices.



The FGD facilitation session further explored climate change impacts through the nexus lens—with questions explicitly framed around the water-energy-food nexus framework—and community efforts to reduce climate risks. Representatives from Desa Simoro shared that extreme heat has caused significant declines in maize crop quality, with harvest failures reaching up to 80%, while heavy rainfall has triggered floods and landslides, and that weather patterns have become increasingly difficult to predict. Community responses have included tree planting along riverbanks, reforestation of mountainous areas, and efforts to protect water sources and reduce landslide and flood risks. Representatives from Desa Bangga similarly noted that tree planting along river corridors has been carried out as an environmental mitigation measure. The FGD session concluded with the observation that extreme heat drives drought and reduced agricultural yields; heavy rainfall triggers floods and landslides; and reforestation and environmental conservation are critical steps in strengthening community adaptation to climate change.



Figure 7. Discussion

2.3. Field Trip to Sigi District

Following the kick-off meeting, the consortium conducted field visits to three target villages in the Dolo Selatan sub-district on Tuesday, May 19, 2026—Sambo Village, Wisolo Village, and Bangga Village—to gather firsthand information on local conditions across the water, energy, and food sectors as well as to identify vulnerable groups and existing local solutions. It is important to note that of the six target villages selected for project implementation, only three (Sambo, Wisolo, and Bangga) were visited during the field trip on May 19, 2026, while the remaining three villages (Pandere, Pakuli Utara, and Simoro) have not yet been visited during the inception phase.

This phased approach was taken to ensure that initial field engagement could be conducted in depth and with sufficient time allocation per village, given the limited duration of the inception field visit and the need to focus on villages with the highest vulnerability classification (very high) as an entry point for the consortium's site-level understanding. Field visits to Pandere, Pakuli Utara, and Simoro are planned to be conducted in the next implementation phase as part of the village-level needs assessment and WEF nexus-based vulnerability assessment activities under Output 2.1.1 and Output 2.1.2, ensuring that all six target villages receive an equivalent depth of engagement before the development of village adaptation action plans. Therefore, the full meeting minutes of field visits are accessible in [Annex 1.6](#).



2.3.1. Sambo Village

In the water sector, residents still rely on river water for daily needs, including bathing, despite the water being turbid and not fully hygienic. The village has the Kuwala water source, which is considered relatively adequate but requires quality testing to confirm its suitability for drinking and agricultural use. Previous water storage infrastructure was damaged by flooding, and residents expressed a need to strengthen water storage and distribution systems, including the possibility of water purification and retribution-based operational management. Irrigation water management is currently carried out independently by the community through shared scheduling and nighttime irrigation monitoring initiatives.

In the energy sector, the main electricity source is PLN, though power outages remain frequent, ranging from a few minutes to a full day, particularly during heavy rain and lightning. Certain areas, especially Hamlet (Dusun) 2 and 3, still lack adequate street lighting, which hampers daily activities and evacuation routes during emergencies. A significant portion of residents still use firewood for cooking, particularly during economically difficult periods or when gas is difficult to obtain, and there is a noted need for backup energy sources for places of worship and village health facilities.

In the food sector, Desa Sambo is recognized as one of the rice production centers in Dolo Selatan with approximately 317 hectares of productive rice fields. However, flooding, water shortages during dry seasons, and rat pest attacks have caused harvest declines in several seasons. Interest among younger generations in farming is declining, as many opt to work in Palu or Morowali, while several local micro and small enterprises involving banana and shallot products have not yet developed optimally.

On vulnerable groups, the elderly, pregnant women, toddlers, and children are identified as the most affected during floods, and the community sees a strong need for safe shelters and designated evacuation points for these groups. Women's groups are notably active in social and community health activities, including Posyandu, local food management, and the "Perempuan Tangguh" initiative. Stunting remains a community concern, with residents calling for more comprehensive education on nutrition, sanitation, and healthy lifestyles beyond standard height and weight measurements.

On local solutions, the community has undertaken various local adaptation actions, including constructing additional drainage channels in agricultural areas, utilizing bore wells during droughts, and managing water distribution through communal cooperation. Residents have also developed local food products and household-based enterprises such as moringa processing and women's MSME activities as a means of strengthening household food security.



Figure 8. Field Trip in Sambo Village

2.3.2. Wisolo Village

In the water sector, Desa Wisolo faces a serious water shortage, as the main water sources remain dependent on rainwater and the Kuwala source. During the rainy season, water is often turbid and muddy, while during dry seasons residents struggle to access clean water. Water infrastructure, particularly piping systems and storage tanks, was damaged in the 2018 earthquake and has not been fully repaired. Residents continue to rely on communal water collection and hand-dug wells during shortages, and turbid water has caused health issues, particularly digestive problems. The community also noted the need for stronger cross-sector coordination on river management and flood handling, which currently falls outside the village government's full jurisdiction.

In the energy sector, while most households have access to PLN electricity, some in mountainous areas lack individual electricity meters and draw power from neighboring households. A significant portion of residents, particularly those in upper and mountainous areas, still use firewood for cooking, sometimes in combination with gas. Household energy costs are considered relatively expensive, with gas prices reaching approximately IDR 50,000 per canister in the village area.

In the food sector, livelihoods are primarily centered on dryland farming and plantations, with key commodities including maize, cocoa, and candlenut. Heat and drought have increased the risk of crop failures. Desa Wisolo is the only village in Dolo Selatan Sub-district without rice fields, making it highly dependent on plantation yields and rainfall for food production. Plantation products are sold to markets in Palu and surrounding areas, while women's MSME groups have begun developing cake and honey products to supplement household income.

Vulnerable groups, toddlers, the elderly, and residents in mountainous areas with limited access to clean water and electricity are identified as the most vulnerable to climate change impacts. Women's groups are actively involved in farming groups and MSME activities to support household economic resilience. The village recorded approximately 100 children aged 0–5 years with 5 stunting cases, making access to clean water, nutritious food, and community health services a key priority.

On local solutions, the community has undertaken efforts including communal water collection, construction of rainwater harvesting tanks, and development of piping systems for household consumption needs. The village government and community have also begun promoting



reforestation and customary forest conservation to reduce flood risks and maintain future water source availability.

As an additional note, Desa Wisolo holds customary territory and customary forest that received formal recognition through a regent's decree since 2016 as a measure to protect the area from uncontrolled land clearing. Land fire risk remains a concern due to hot weather, drought, slash-and-burn land-clearing practices, strong winds, and highly flammable grassland vegetation. Climate change adaptation and environmental conservation efforts are planned to be strengthened through village planning documents, including the Village Work Plan (RKPDDes).



Figure 9. Field Trip in Wisolo Village

2.3.3. Bangga Village

In the water sector, Desa Bangga faces two simultaneous extremes — excess water during the rainy season and drought during the dry season. Dusun 2 and 3 experience clean water shortages and still rely on water tank distribution. Water drilling efforts have been carried out since 2023, but in some areas no water sources have been found due to mountainous geographic conditions. Previous major floods caused irrigation damage and a shift in land use from rice fields to rainfed maize cultivation. River sedimentation is increasing, raising flood risks, and the community identified periodic dredging as a critical need. The village has a history of significant flooding that resulted in residential relocation and changes in community livelihoods.

In the energy sector, PLN is the main electricity source, though the village has also begun using generators and solar panels on a limited scale, primarily for emergency lighting. During disasters or power outages, residents rely on candles, flashlights, and communication tools such as handy talkies to support evacuation coordination.

In the food sector, the majority of residents work in agriculture and plantations, with key commodities including paddy rice, cocoa, maize, chilli, coconut, and moringa. Climate change and post-flood irrigation damage have led to a partial shift from rice cultivation to rainfed maize farming. The village has notable local economic potential, including coconut products that were previously exported through collaboration with Tadulako University, though business development continues to face budget and human resource constraints.



On vulnerable groups, nearly all dusuns in Desa Bangga have experienced relocation due to being in red flood zones, with approximately 142 households relocated following past disasters. The village government, health workers, and the disaster risk reduction forum have begun strengthening family preparedness through disaster mitigation education, emergency preparedness kits, and community socialization. Inclusive Posyandu services and community health programs have also been established to support vulnerable groups, including toddlers and disaster-affected families, through health check-ups and supplementary feeding programs.



Figure 10. Residential Areas Affected by Flooding

On local solutions, the village has drafted a Village Disaster Regulation (Perdes Kebencanaan) to strengthen local-level mitigation and preparedness. The village government noted that local authority over disaster management remains limited and requires stronger regulatory support from the district and provincial levels. The community and village government are actively building a disaster preparedness system comprising evacuation centers, river monitoring, emergency communication tools, and family-level disaster mitigation education.

As an additional note, the community's spirit of mutual cooperation in post-disaster recovery remains strong, though it is beginning to face challenges from shifting participation patterns stemming from previous cash-for-work programs.



Figure 11. Field Trip in Bangga Village



3. Risk Management

3.1. Challenges

The implementation of this project faces a number of challenges identified throughout the inception phase. Several key implementation challenges identified during the inception phase as follow:

1. **Changes in institutional personnel and coordination structures.** The lengthy approval process resulted in changes among key government counterparts, requiring renewed coordination and stakeholder engagement to ensure alignment and ownership of project implementation. The mitigation step were taken by undertaking communication and re-coordination efforts to ensure alignment of the implementation plan; executed by konsorsium KOLABORASI.
2. **Need to update project approaches.** Several project components were originally designed three to four years ago and require adjustment to reflect current conditions, ongoing initiatives, and emerging priorities in the target locations. However, this does not change the outcome or output level of the program.
3. **Planning and policy alignment challenges.** Synchronization between district-level development plans (RPJMD), village development plans (RPJMDes), and climate adaptation priorities requires strengthened coordination mechanisms and stakeholder engagement.
4. **Need to update policy and management instruments.** The Sigi District Disaster Risk Assessment (KRB) document expired in 2025 and therefore needs to be updated to reflect current hazard conditions. The draft of the Regional Climate Change Adaptation Action Plan (RAD API) is already available and is planned for legalization through a governor's regulation in 2027; however, support from Yayasan Sheep Indonesia extends only through 2026, so a post-2026 continuity strategy is required. Coordination among regional apparatus organisations (OPDs) to focus on climate adaptation efforts also still requires strengthening, particularly given Sigi District's complex topography and diverse regional characteristics, which demand area-specific adaptation approaches.
5. **High climate vulnerability and infrastructure constraints in target villages.** In field conditions, the six target villages in the Dolo Selatan and Gumbasa sub-districts have high to very high vulnerability levels to alternating flash floods and droughts. Water infrastructure in Desa Wisolo damaged by the 2018 earthquake has not been fully restored, while Desa Bangga faces clean water shortages in several hamlets and increased river sedimentation that raises flood risks. The authority of village governments over disaster management remains limited and requires stronger regulatory support from the district and provincial governments. Furthermore, shifts in community participation patterns stemming from previous cash-for-work programs may affect the spirit of mutual cooperation (gotong royong in Indonesia) in the implementation of community-based adaptation activities.
6. **Community participation and behavioral challenges.** The discussions during the Inception Workshop also indicate a gap in conceptual understanding among local stakeholders between climate change causes, impacts, and the distinction between mitigation and adaptation actions. Several participant responses conflated the two types of actions, and potentially maladaptive practices were also identified, such as increased



use of herbicides and pesticides during the rainy season, which may introduce unintended environmental consequences. On the human resources side, the declining interest of younger generations in farming—with many migrating to Palu or Morowali—as well as the continued presence of stunting cases in the target villages also represent structural challenges that need to be considered in designing sustainable interventions.

7. **Government's fiscal and operational constraints.** The ongoing budget efficiency measures at the regional government level have constrained fiscal space for climate adaptation activities, meaning that the success of this project will rely heavily on the effectiveness of integration with existing budgeting and planning mechanisms.

3.2. Opportunity

Amid these challenges, the inception phase also revealed a number of strategic opportunities that can be leveraged to accelerate project implementation. Few key opportunities identified during the inception phase were as follow:

1. **Strong political commitment and government ownership.** the Regent of Sigi has expressed full support for the Adaptation Fund project and considers it a relevant response to the district's climate challenges, particularly amid fiscal constraints. The Regional Secretariat has also emphasized the importance of integrating project components into the Sigi District RPJMD so that the project can contribute directly to the achievement of regional development targets. The Sigi Hijau Multi-Stakeholder Partnership Forum can be utilized as a platform for forming dedicated working groups on climate adaptation or the WEF nexus without needing to build new structures from scratch.
2. **Existing policy foundations for climate adaptation.** The availability of the RAD API draft planned for legalization through a governor's regulation in 2027 opened an opportunity for the project to strengthen the integration of the WEF nexus approach, detail post-2026 action plans, and develop derivative technical guidelines. The Sigi Hijau Multi-Stakeholder Partnership Forum's existing website also provided an opportunity to develop the Center of Excellence as a microsite within it, minimizing the need for new digital infrastructure investment while allowing the platform to achieve immediate reach. The latter provided a cost-efficient opportunities for knowledge management and learning
3. **Potential for integrated WEF Nexus interventions and strong local environmental stewardship.** the Regional Secretariat has recommended considering the development of geothermal and micro-hydro energy sources that are relevant to the WEF nexus approach. The customary territory and customary forest of Desa Wisolo, which received formal recognition through a regent's decree in 2016, provided a strong foundation for integrating the application of customary law (Hukum Adat) in regulating land clearing and resource conservation, including through collaboration with Lore Lindu National Park (TNLL). Various adaptation initiatives already undertaken by the community—such as tree planting along riverbanks, reforestation of mountainous areas, rainwater harvesting, the construction of small reservoirs (embung), and the arrangement of homes to improve airflow—can be expanded, systematized, and developed into best practices ready for replication.
4. **Potential for climate-resilient livelihood development.** the six target villages have promising leading commodities (coconut, cocoa, candlenut, and paddy rice) whose value chains can be developed through derivative products, as previously initiated in the coconut export collaboration between Desa Bangga and Tadulako University. Women's groups at



the village level are also already quite active in carrying out Posyandu activities, the Perempuan Tangguh initiative, and household-based MSMEs such as moringa processing, cake products, and honey, all of which can be strengthened in capacity as drivers of household food security and economic resilience. The spirit of mutual cooperation in post-disaster recovery that remains intact within the community also provides valuable social capital for the implementation of community participation-based activities. On the implementation front, the location of the six target villages in Dolo Selatan and Gumbasa sub-districts offers good accessibility from Palu City, supporting the efficiency of activity implementation and monitoring. With the adoption of the WEF nexus approach and the establishment of the Center of Excellence, Sigi District has the opportunity to be positioned as a national learning center for best practices in integrated water, energy, and food management, which can later be replicated in other districts with similar characteristics.



Concluding Remarks

The inception phase of the Building Climate Resilient District in Indonesia: Case of Sigi District project, which ran from December 2025 to May 2026, has produced a sharper mapping of the needs, opportunities, and implementation challenges in the Sigi District. A series of activities—ranging from internal Consortium coordination meetings, coordination with Kemitraan as the Implementing Entity, meetings with the Sigi District Government, and the implementation of the Inception Workshop to field visits to three target villages in Dolo Selatan Sub-district (Sambo, Wisolo, and Bangga)—has built a strong foundation for the implementation of the project's three main objectives: strengthening the enabling environment for adaptation policy implementation, applying the WEF nexus approach to climate change adaptation action, and developing a Center of Excellence for climate change adaptation at the district level. Field visits to Pandere, Pakuli Utara, and Simoro are planned to be conducted in the next implementation phase as part of the village-level needs assessment and WEF nexus-based vulnerability assessment, ensuring that all six target villages receive equivalent depth of engagement before the development of village adaptation action plans.

The main findings from the inception phase confirm that the people of Sigi have a high level of awareness of the climate change impacts they experience directly—unpredictable weather, declining water flow during dry seasons, floods and landslides during extreme rainfall, crop failures, and rising energy costs—and have already undertaken a variety of community-based adaptation initiatives. However, there remains a conceptual understanding gap between climate change causes and impacts, as well as between mitigation and adaptation actions, which needs to be bridged through consistent capacity building throughout the project cycle. At the same time, supporting structures such as the Sigi Hijau Multi-Stakeholder Partnership Forum, the RAD API draft, and the formal recognition of customary territories provide reliable institutional capital to accelerate implementation.

Going forward, Konsorsium KOLABORASI will focus its next steps on several interconnected priorities, namely: strengthening multi-stakeholder coordination through the establishment of a Climate Adaptation or WEF nexus Working Group under the Sigi Hijau Forum; conducting vulnerability assessments and village-level needs assessments based on the WEF nexus approach as the basis for developing participatory adaptation action plans; integrating the WEF nexus approach into the RAD API draft and other policy instruments, including the updating of the KRB document; preparing the six target villages for Climate Village Programme (Proklam) registration; and designing the architecture of the Center of Excellence as a microsite on the Sigi Hijau platform with content that is accountable to Monitoring, Evaluation, and Learning (MEL) indicators.

Through the synergy of strong support from the regional government; active participation of communities and women's groups; the social capital of mutual cooperation, local and customary knowledge; and the financing framework from the Adaptation Fund, this project is expected not only to reduce climate vulnerability in the six target villages but also to position Sigi District as a national learning center for the integrated management of water, energy, and food. Konsorsium KOLABORASI's continued commitment is to ensure that every intervention is designed based on context-specific data, implemented in a participatory and accountable manner, and leaves behind an institutional, knowledge, and best-practice legacy that can be replicated beyond the project area.

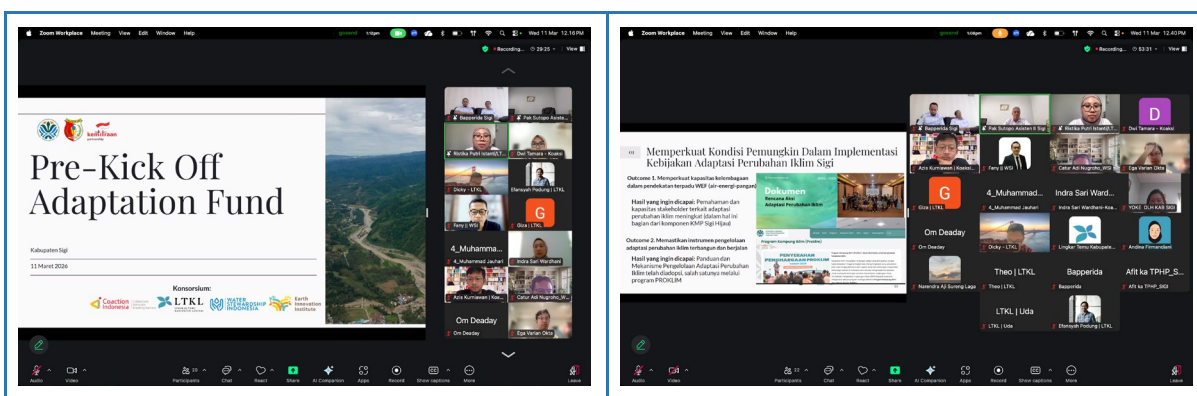


Annex

1. **Annex 1: Meeting of Minutes (MoM) and Zoom Record**
 - 1.1. Minutes of Coordination Meeting with Kemitraan #1
The full minutes of the meeting are available at [\[link\]](#)
 - 1.2. Minutes of The Consortium Meeting
The full minutes of the meeting are available at [\[link\]](#)
 - 1.3. Minutes of Coordination with Sigi District Government
The full minutes of the meeting are available at [\[link\]](#)
 - 1.4. Minutes of Coordination Meeting with Kemitraan #2
The full minutes of the meeting are available at [\[link\]](#)
 - 1.5. Minutes of Inception Workshop in Sigi District
 - o The full minutes of the meeting are available at [\[link\]](#)
 - o The zoom recording can be found here [\[link\]](#)
 - 1.6. Minutes of Field Trip to Sigi District
The full minutes of the meeting are available at [\[link\]](#)
2. **Annex 2: All Photos of Documentation**
 - 2.1. Documentation of The Consortium Meeting

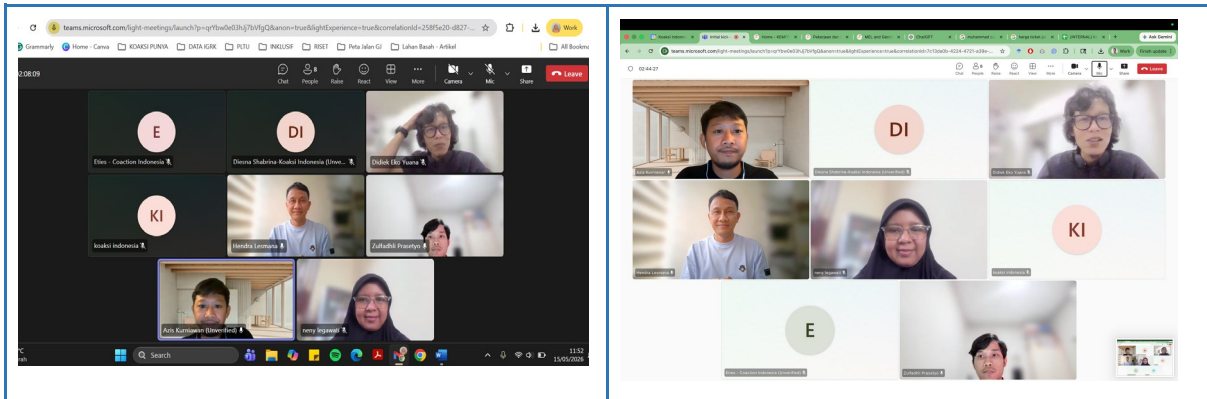


- 2.2. Documentation of Coordination with Sigi District Government



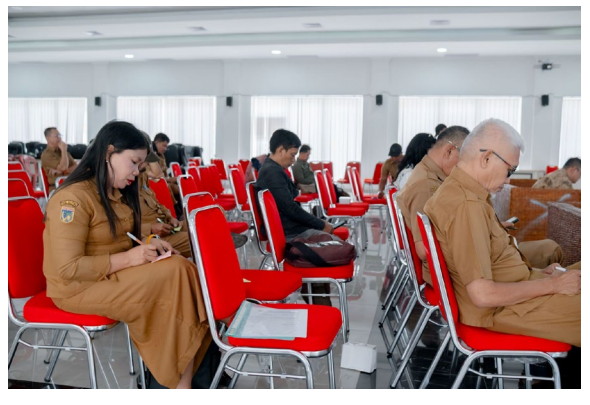
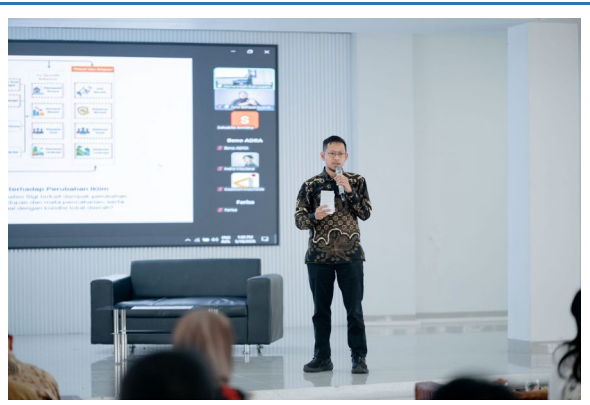
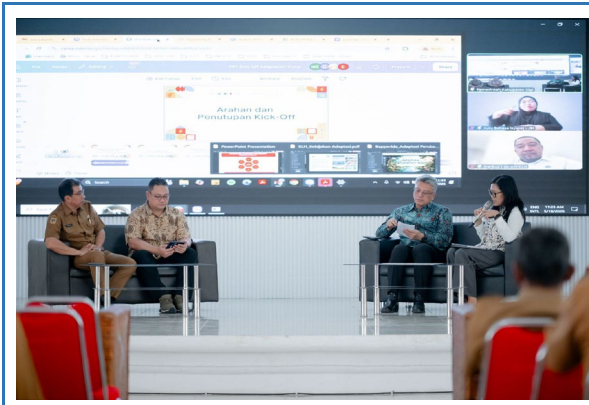


2.3. Documentation of Coordinator Meeting with Kemitraan #2



2.4. Documentation of Inception Workshop in Sigi District





2.5. Documentation of Sticky Notes from the Discussion Session in the Forum

Apa dampak perubahan iklim di sektor Air/Energi/Pangan yang Anda rasakan di Kabupaten Sigi ?

Cuaca Suci & prediksi, atau pola hujan telah meruntun. Sehingga semakin sering banjir. Akibatnya banjir sangat sulit karena produksi Musim Tanaman

Prediksi Cuaca Suci diacu sehingga berpengaruh ke kekeringan dan pertanian

Dampak perubahan iklim

1. Faktor utama Air untuk Mergani, Jalan Pertanian, dan Pertanian, dan lain-lain.
2. Meningkatkan Risiko Kebakaran.
3. Risiko: Air yang tidak ada sangat penting untuk pertanian dan industri.

Dampak

1. Air yang tidak ada akibat air hujan dan Musim kemarau
2. Risiko banjir akibat curah hujan yang tinggi

(1)

*** Air => Di daerah tanah air semakin dalam**

*** Pangan => Perubahan Musim Tanaman**

*** Energi =>**

Banjir dan longsor meningkat karena hujan ekstrem, dan kualitas air menurun

Dampaknya Sangat Terasa di mana Air. Suci berkaitan Tanaman jagung gajah dan banyak 7) mati karena perat.

Dampak sektor Air

- debit air menurun saat kemarau
- suhu banjir saat hujan deras

Dampak sektor Energi

- Biaya yang murah tidak akan meningkat es, dan pemanasan AC

Dampak sektor Pangan

- pengaruh di pola panen

- dampak perubahan iklim menurunkan volume dan kualitas air, mempengaruhi/berkontribusi produksi pertanian sehingga berpengaruh terhadap kesehatan harga

1/2

Adanya penggunaan energi yg berteknologi tinggi sumber daya terbatas

2/2

(2)



1. Apa dampak perubahan iklim di sektor air/ energi/pangan? **sektor Air**

- musim kemarau: sumber air berkurang
- musim hujan: banjir

2. suhu global yg meningkat. kekurangan air bersih. Menimbulkan krisis pangan

Dampak Perubahan Iklim

- + **Ketersediaan Sumber Air**
- + **Salah Pemas**
- + **pengurangan luas lahan produktif**
- + **erosi**

3. **Kualitas air menurun**

- **Perubahan musim tanam**

4. **sektor Pangan**

- * **serangan hama dan penyakit tanaman meningkat**
- * **polusi - tidak sehat**
- **sektor energi**
- **kekurangan bahan bakar fosil**

(3)

1. Karena meningkatnya suhu. Kekurangan atau energi membuat konsumsi peralatan AC yg meningkat.

2. **Banjir**

3. **Keterbatasan**

4. **Salah Pemas**

5. **pengurangan luas lahan produktif**

6. **erosi**

7. **Kualitas air menurun**

8. **Perubahan musim tanam**

9. **Ke Keringan**

10. **Banjir**

(4)

Upaya apa yang sudah Anda lakukan untuk mengurangi dampak perubahan iklim tersebut?

13. **Upaya**

1. Menghambat penggunaan air
2. Ikut berpartisipasi lingkungan dan menjaga kebersihan

14. **Upaya yang dilakukan**

- ⇒ **membantu penanaman lahan sawah atau pertanian**
- ⇒ **menyapa masyarakat sekitar agar sadar di pagi dan sore hari**

15. **Upaya apa yang sudah Anda lakukan untuk mengurangi dampak perubahan iklim tersebut?**

- **jawab:**
- **pengurangan pemakaian bahan-bahan plastik**

16. **Penanaman**

- **Rekayasa Teknologi**

(1)

1. **Desa kami khususnya Desa Wisata**

- **melakukan penanaman pohon, pohon, pohon**
- **bagi pengibahan penanaman bambu dll.**

2. **Upaya pribadi adalah**

- **untuk rumah tangga**
- **penggunaan pohon/ tanaman yg dapat menahan suhu rumah serta menyerap kembali air yang sudah mengalir ke tanah sehingga tidak begitu cepat.**

3. **Upaya yg dilakukan**

- * **penggunaan RTH/ Pemasangan pohon (sisi jalan)**
- * **Penerapan hukum adat terhadap penanaman lahan / penanaman pohon**
- **penggunaan pangan lokal**

4. **Upaya yg dilakukan:**

1. **Sosialisasi & Gerakan**
2. **Penggunaan DOK RAB APP**
3. **Analisis Struktur CR**
4. **Kultur**
5. **Keberhasilan**

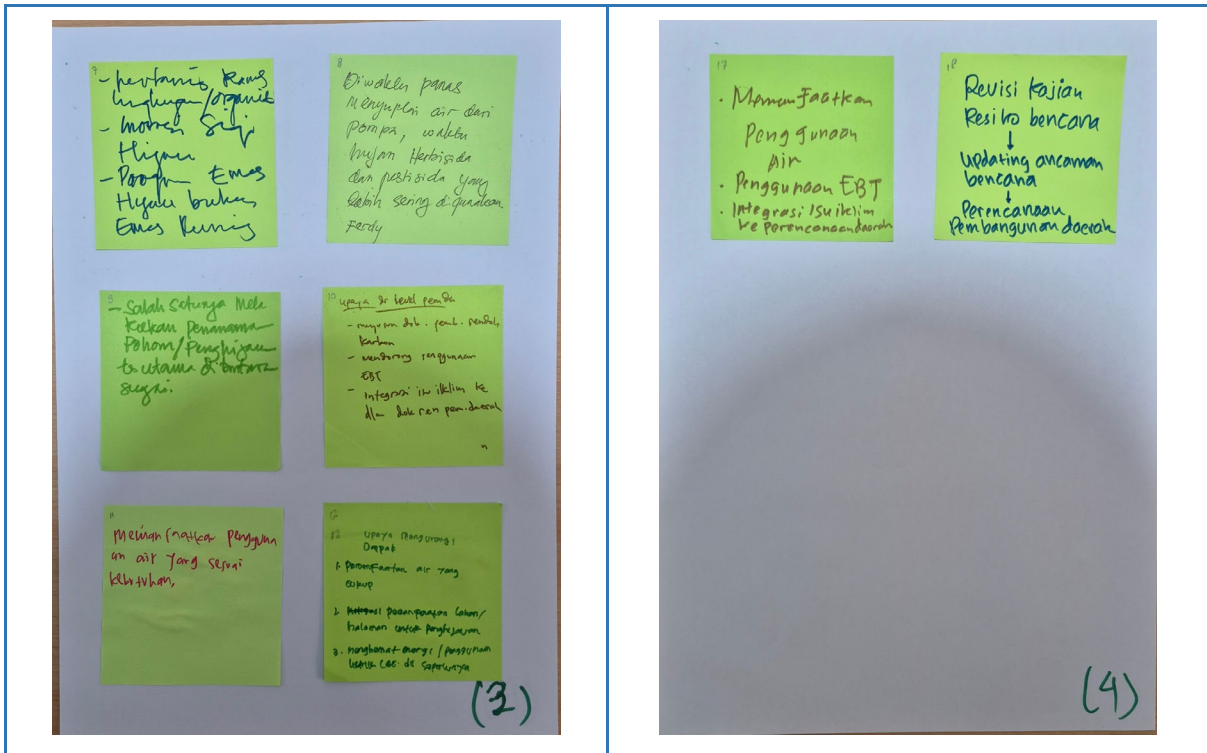
5. **Penanaman**

- **menanam pohon**
- **menanam tanaman yg tahan hama**
- **menanam tanaman yg tahan penyakit**

6. **Upaya yg dilakukan:**

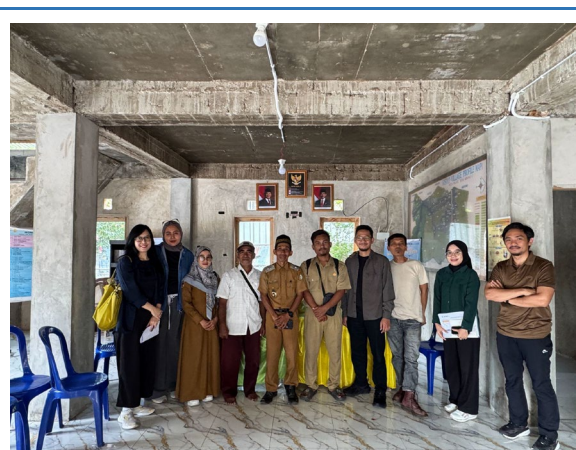
- **mitigasi - pengurangan**
- **penggunaan energi terbarukan**
- **penggunaan air**
- **Adaptasi**
- **kelembagaan**
- **kelembagaan**
- **kelembagaan**
- **kelembagaan**

(2)



2.6. Documentation of Field Trip to Sigi District





Bangga Village



3. Annex 3: List of Participants

3.1. Coordination Meeting with Kemitraan #1

Agendas	Coordination meeting with Kemitraan in Kemitraan's Office
Time	Wednesday, February, 26, 2026
Attendees	<p>Kemitraan</p> <ol style="list-style-type: none"> 1. Hasbi Berliani (Kemitraan - Direktur Tata Kelola Lingkungan dan Pembangunan Berkelanjutan) 2. Retno Utaira (Kemitraan - Direktur Finansial dan Operasional) 3. Didiek Eko Yuana (Kemitraan - Senior Manager Grant Unit) 4. Zulfadhli Prasetyo (Kemitraan - Procurement and General Service Grant Unit) <p>Koaksi Indonesia</p> <ol style="list-style-type: none"> 5. Aria Nagasastra (Koaksi Indonesia - Direktur Eksekutif) 6. Indra Sari Wardhani (Koaksi Indonesia - Direktur Kemitraan Strategis) 7. Azis Kurniawan (Koaksi Indonesia - Manajer Kebijakan dan Advokasi)



- | | |
|--|--|
| | 8. Rahayu Setianingrum (Koaksi Indonesia - Staf Senior Keuangan) |
| | 9. Dwi Tamara (Koaksi Indonesia - Staf Kebijakan dan Advokasi) |

3.2. The Consortium Meeting

Coaction Indonesia Hubungan Akademi Berdaya Bersama

Meeting AF: Tindak Lanjut Pasca Meeting dengan Kemitraan

Hari, tanggal : Senin, 02 Maret 2026
Tempat : Koaksi Indonesia, Jl. Abdul Majid Raya No. 23, Cipete, Jakarta Selatan

No	Nama Lengkap	L/P	Asal Organisasi/Komunitas	Jabatan	Email	Tanda Tangan
1.	Dwi Tamara	P	Koaksi Indonesia	Staf		
2	A. Agus Kurniawan	L	Koaksi Indonesia	PAM		
3	Ratna P. I	P	LTKL	HoS		
4	Chandra G.A.	L	LTKL	ICM		
5	Ega Octa	L	LTKL	PPC		
6	Talita Aki N	L	WSI	Dirleb		
7	Fitrahon Akhs	L	LTKL	L&I		
8.	Andina Kirmandiani	P	LTKL	Awards		
9	Umar	L	LTKL	Tata Kelola		
10	Triyoga	L	EII	KA		

Coaction Indonesia Hubungan Akademi Berdaya Bersama

Meeting AF: Tindak Lanjut Pasca Meeting dengan Kemitraan

Hari, tanggal : Senin, 02 Maret 2026
Tempat : Koaksi Indonesia, Jl. Abdul Majid Raya No. 23, Cipete, Jakarta Selatan

No	Nama Lengkap	L/P	Asal Organisasi/Komunitas	Jabatan	Email	Tanda Tangan
11	Fanny Wadachetama	L	WSI	Chairman		
12	Shinta Maharani	P	Koaksi	Op Manager		
13	Indra Sari W	P	Koaksi Indonesia	Dir. Kemitraan Strategis		
14	Rahayu Setianingrum	P	Koaksi Indonesia	Fin Staff		

3.3. Coordination with Sigi District Government



Agendas	Coordination online meeting with Sigi District Government
Time	March 11, 2026
Attendees	<ol style="list-style-type: none"> 1. Mohamad Rizal Intjenae - Bupati Sigi 2. Sutopo Sapto Condro - Asisten II Bidang Perekonomian Dan Pembangunan Sekretariat Daerah Kabupaten Sigi 3. Kaban - Bapperida Sigi 4. Mohamad Afit - Kepala Dinas Tanaman Pangan, Hortikultura dan Perkebunan 5. Yoke A. Pangandaheng - Kepala Bidang Pengelolaan Sampah, Limbah B3, dan Peningkatan Kapasitas DLH Kabupaten Sigi 6. Muhammad Jauhari - Koordinator dan Pelaksana Harian Kemitraan Multipihak Sigi Hijau 7. Indra Sari Wardhani - Koaksi Indonesia 8. Azis Kurniawan - Koaksi 9. Dwi Tamara - Koaksi 10. Ristika Putri Istanti - LTKL 11. Julia Iksarana - LTKL 12. Efansyah Podung - LTKL 13. Andina Firmandiani - LTKL 14. Ega Varian - LTKL 15. Dicky - LTKL 16. Giza - LTKL 17. Theo - LTKL 18. Uda - LTKL 19. Fany - WSI 20. Catur Adi Nugroho - WSI 21. Deaday - WSI

3.4. Coordination Meeting with Kemitraan #2

Agendas	Initial <i>Kick-off</i> meeting online Koaksi Indonesia and Kemitraan
Time	May 15, 2026
Attendees	<p>Kemitraan (KMT)</p> <ol style="list-style-type: none"> 1. Didiek Eko Yuana 2. Hendra Lesmana 3. Zulfadhli Prasetyo 4. Neny Legawati <p>Koaksi Indonesia</p> <ol style="list-style-type: none"> 1. Azis Kurniawan 2. Rahayu Setianingrum 3. Diesna Shabrina 4. Eties Kurniawati



3.5. Inception Workshop in Sigi District

Offline at Sigi District:

Coaction Indonesia Adaptasi
Abrupt

ADAPTATION FUND

Coaction Indonesia LTKL Earth
Innovation
Institute

Daftar Hadir Kick Off Program Adaptasi Perubahan Iklim
Building Climate Resilient District in Indonesia: Case of Sigi District

Hari, tanggal : Senin, 18 Mei 2026
 Tempat : Kabupaten Sigi

No	Nama Lengkap	L/P	Usia	Asal Organisasi/Komunitas	No. Telepon	Email	Tanda Tangan	Tanda Tangan Persetujuan*
1.	Ayaz	L	30	PPH Sigi				
2.	Cinta Iuliana	P	27	DBI				
3.	Dede	PL	50	USI				
4.	Kerdy	PL	47	USI				
5.	M. Rizan	L	40	(Inspirasi)				
6.	Magfiratu Abawiyah	P	28	Juru Bahasa Lampung				
7.	CHRIS	L	39	PROKUPM				
8.	HERRY SE	L	52	Kantor pusat Bumb...				
9.	HERU M	L	39	DLTA				
10.	Evelyn A	P		Bunda Com				

*saya memberikan persetujuan kepada penyelenggara untuk menggunakan foto/video dan rekaman saya sebagai keperluan publikasi dan laporan.



Daftar Hadir Kick Off Program Adaptasi Perubahan Iklim
Building Climate Resilient District in Indonesia: Case of Sigi District

Hari, tanggal : Senin, 18 Mei 2026
 Tempat : Kabupaten Sigi

No	Nama Lengkap	L/P	Usia	Asal Organisasi/Komunitas	No. Telepon	Email	Tanda Tangan	Tanda Tangan Persetujuan*
21	KORAD BANAWASU Sigi	L	62	DS. POONDEA				
22	SAPRAN	L	47	DS. SOMBLO				
23	MUH. AMIN	L	51	DS. WISOLA				
24	ADAL	L	35	PPAS AGI				
25	Engangot P.	L	33	LTKL				
26	SAHLUB ALUDIN	L	53	SATPOL PP				
27	Kristian Polos	L	37	WUWUW CAPS				
28	Ans. Afri Setuwa	L	43	BSMD				
29	Patio Surti	L	47	OKAD				
30	Moh. Akab	L	54	DKPP				

*saya membenarkan persetujuan kepada penyelenggara untuk menggunakan foto/video dan rekaman saya sebagai keperluan publikasi dan laporan

Daftar Hadir Kick Off Program Adaptasi Perubahan Iklim
Building Climate Resilient District in Indonesia: Case of Sigi District

Hari, tanggal : Senin, 18 Mei 2026
 Tempat : Kabupaten Sigi

No	Nama Lengkap	L/P	Usia	Asal Organisasi/Komunitas	No. Telepon	Email	Tanda Tangan	Tanda Tangan Persetujuan*
31	ARON	L	44					
32	WISNANTO	L	50	OPG P...				
33	Dwi Handayani	P	40	WUWUW CAPS				
34	Aji	L	45					
35	JOHANNES H.	L	43	IRAMA				
36	HEINDRA	L	36	PROSPEK				
37	Edy Saputra	L	46	Diras Part				
38	MOH ANDHICA	L	30					
39	BO UDANO	L	31					
40	Suharsan Selasuh	L	46					



Daftar Hadir Kick Off Program Adaptasi Perubahan Iklim
Building Climate Resilient District in Indonesia: Case of Sigi District

Hari, tanggal : Senin, 18 Mei 2026
 Tempat : Kabupaten Sigi

No	Nama Lengkap	L/P	Usia	Asal Organisasi/Komunitas	No. Telepon	Email	Tanda Tangan	Tanda Tangan Persetujuan*
41	YANCE			-				
42	Bella N. A	P	27	LTKL				
43	Iva Christin	P	32	LTKL				
44	Aziz Kurniawan	L	34	KOANSI				
45	EMES Kurniawan	P	25	KOANSI				
46	Dwi Tamara	P	28	KOANSI				
47	Alfina Damayanti	P	25	KOANSI				
48	Dewi Larasan	P	39	LTKL				
49	Eva Evisin	P	32	LTKL				
50								

Online at zoom meeting:

Agendas	Kick-off meeting online Adaptation Fund Sigi District
Time	May 18, 2026
Attendees	<ol style="list-style-type: none"> 1. Rahma Dani Dewi – Karsa Institute 2. Franky Zamzani – KLH/BPLH 3. Beno Peuru – ADRA 4. Azmi Sirajuddin – EKONESIA 5. Dinefa Yuslima Syaumi, S.T. – BPBD Kabupaten Sukabumi 6. Muharramah, S.IP – BPBD PROVINSI 7. Dwi Roni Marantika – Dinas Kehutanan Provinsi Jawa Timur 8. Muhammad Kurniawan – Indonesian Institute for Energy Economics (IIEE)

3.6. Field Trip to Sigi District



Daftar Hadir Kick Off Program Adaptasi Perubahan Iklim
Building Climate Resilient District in Indonesia: Case of Sigi District

Hari, tanggal: 15 Mei 2016
 Tempat: Kabupaten Sigi, Desa Sambo

No	Nama Lengkap	L/P	Usia	Asal Organisasi/Komunitas	No. Telepon	Email	Tanda Tangan	Tanda Tangan Persetujuan*
1	Ehes Kurniasih	P	25	Koalisi Indonesia				
2	IMIN S	L	69					
3	Jisman	L	52					
4	KHAN	L	49	Pemdes				
5	Ramli Kampali	L	64	Lembaga Adat				
6	HERLINA	P	40	I. 77. per Desa				
7	Dwi Tamara	P	25	WAKA INDONESIA				
8	Alfina Damayanti	P	25	Koors. Indonesia				
9	Geanyah Podus	L	33	LTKL				
10	Aus Kurniawan	L	37	Koors. Indonesia				

Daftar Hadir Kick Off Program Adaptasi Perubahan Iklim
Building Climate Resilient District in Indonesia: Case of Sigi District

Hari, tanggal: 15 Mei 2016
 Tempat: Kabupaten Sigi, Desa Sambo

No	Nama Lengkap	L/P	Usia	Asal Organisasi/Komunitas	No. Telepon	Email	Tanda Tangan	Tanda Tangan Persetujuan*
11	Eva Christin	P	32	LTKL				
12	Fora Dewani	P	35	LTKL				
13	Desai Larasati	P	39	LTKL				
14	SARMAN	L	47	Koors. SAMBO				
15	AKSI	L	52	KCTUA PERMUDA				
16	Drey	L	50	WST				



Daftar Hadir Kick Off Program Adaptasi Perubahan Iklim
Building Climate Resilient District in Indonesia: Case of Sigi District

Hari, tanggal : 19 Mei 2024
 Tempat : Kabupaten Sigi , Desa Wisolo

No	Nama Lengkap	L/P	Usia	Asal Organisasi/Komunitas	No. Telepon	Email	Tanda Tangan	Tanda Tangan Persetujuan*
1	Ehec Kurnawati	P	25	Koaksi Indonesia				
2	A AZIS KURNAWATI	L	34	Koaksi (MAMBOD)				
3	Dwi Tamara	P	25	Koaksi Indonesia				
4	Alfina Damayanti	P	25	Koaksi Indonesia				
5	Dewi Loresan	P	30	LTKL				
6	Iva Christine	P	32	LTKL				
7	Egan Padung	L	33	LTKL				
8	Ferni Duvim	P	33	LTKL				
9	Mah. Amin	L	51	Desa Wisolo				
10	PANUS	L	57	Desa Wisolo				

Daftar Hadir Kick Off Program Adaptasi Perubahan Iklim
Building Climate Resilient District in Indonesia: Case of Sigi District

Hari, tanggal : 19 Mei 2024
 Tempat : Kabupaten Sigi , Desa Wisolo

No	Nama Lengkap	L/P	Usia	Asal Organisasi/Komunitas	No. Telepon	Email	Tanda Tangan	Tanda Tangan Persetujuan*
11	Nuabdi Ari CS	L	29	Pembdes Wisolo				
12	Dedy ATP	L	50	SWI				



**Daftar Hadir Kick Off Program Adaptasi Perubahan Iklim
Building Climate Resilient District in Indonesia: Case of Sigi District**

Hari, tanggal: 19 Mei 2026
Tempat : Kabupaten Sigi, Derm Bangga

No	Nama Lengkap	L/P	Usia	Asal Organisasi/Komunitas	No. Telepon	Email	Tanda Tangan	Tanda Tangan Persetujuan*
1	Ester Kemasach	P	25	Koalisi Indonesia				
2	Gyan Podkey	L	35	LTKL				
3	Alfina Damayanti	P	25	Koalisi Indonesia				
4	Dewi Lanihan	P	39	LTKL				
5	Axx Kurniawan	L	34	Koalisi Indonesia				
6	USMAN	L	43	Pendes				
7	Moh. Bernaldi c. Lemba	L	28	Pendes				
7	Dedy	L	70	WSI				
9	Ira Christina	P	32	LTKL				