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Indonesia: Infrastructure Improvement for Shrimp Aquaculture Project

(Bali, Banten, Central Java, East Java, Lampung, Nangro Aceh Darusalam, and South Sulawesi Provinces)

Prepared by the Ministry of Marine Affairs and Fisheries for the Asian Development Bank.

ABBREVIATIONS

ADB	_	Asian Development Bank
AH	-	affected household
BAPPENAS	_	Badan Perencanaan Pembangunan Nasional (Ministry of National Development Planning)
BED	_	basic engineering design
BBPBAP	_	Balai Besar Pengembangan Budidaya Air Payau(Main Center for Brackishwater Aguaculture Development)
BPBAP	-	Balai Pengembangan Budidaya Air Payau(Brackish water Aguaculture Development)
BBPBL	_	Balai Besar Perikanan Budidaya Laut (Main Center for Marine
BPKIL	-	Balai Pemeriksaan Kesehatan Ikan dan Lingkungan(Center for Investigation of Fish Health and Environment)
BPIU2K	-	Balai Produksi Induk Udang Unggul & Kekerangan(Broodstock Center for Shrimp and Mollusk)
COL	_	Corridor of Impact
DDR	_	due diligence report
DGA	_	Directorate General of Aquaculture
FA	_	executing agency
IA	_	implementing agency
ICCTF	_	Indonesia Climate Change Trust Fund
IISAP	_	Infrastructure Improvement for Shrimp Aquaculture Project
INDOGAP	_	Indonesian Good Aquaculture Practices
IP	_	indigenous people
IR	_	involuntary resettlement
LAR	_	Land Acquisition and Resettlement
MMAF	_	Ministry of Marine Affairs and Fisheries
NDP	_	National Development Plan
PHLN	_	Pinjaman dan Hibah Luar Negeri(Foreign Loans and Grants)
CPMU	_	Central Project Management Unit
PMC	_	project management consultant
PIU	_	Project Implementation Unit
RPJMN	-	Rencana Pembangunan Jangka Menengah Nasional (National Medium-term Development Plan)
SIA	_	Social Impact Assessment
SPS	_	Safeguards Policy Statement
UPT	_	Unit Pelaksana Teknis (Technical Implementation Init)
WWTP	_	wastewater treatment plant

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EXECUTIVE SUMMARY

Indonesia is among the top five shrimp producers in the world, together with India, 1. People's Republic of China, Thailand, and Viet Nam,¹ and had a global market share of 7.1% in 2019.² Global shrimp production is expected to grow by more than 5.2% annually.³ Indonesia is a top exporter of frozen seawater shrimps, but lags behind its peers in exports of freshwater shrimps, and fresh, salted, or smoked shrimps.⁴ The main farmed shrimp species is the whiteleg shrimp (Litopenaeus vannamei) accounting for 80% of production, which is produced by large companies and around half of the smallholders.⁵ The other half of the smallholders cultivates the tiger shrimp (*Penaeus monodon*) in an extensive way.⁶ In 2019, Indonesia exported shrimp products equivalent to \$1.2 billion to the European Union, Japan, and United States.⁷ The developed countries are increasingly monitoring the quality of shrimp imports for drug and chemical residues, environmental damage, and lack of transparency and traceability.⁸ While the shrimp aquaculture potential is high, several barriers constrain its growth and sustainability. Smallholder farming profitability is constrained by the lack of economy of scale, limited access to finance, unsustainable farming infrastructure and practices, and low bargaining power with aggregators. The low level of certification of farmers, aggregators, and processors also limit the ability to properly trace products, further limiting international buyers' confidence. As the demand for sustainability grows, there is a need to shift toward responsible and transparent production and sourcing.

2. The Infrastructure Improvement for Shrimp Aquaculture Project (the project) will help the Ministry of Marine Affairs and Fisheries (MMAF) in introducing sustainable shrimp aguaculture and improving transparency, and traceability processes towards increased productivity, quality, profitability, and environment sustainability of smallholder's shrimp farming. The project will deliver an integrated investment addressing upstream, production, and downstream processes through infrastructure, capacity support to improve farming practices and post-harvest systems, and value chain strengthening in seven provinces. The project will deliver three outputs: (i) Output 1: quality and sustainable inputs production increased, (ii) Output 2: sustainable aquaculture infrastructure and services developed, and (iii) Output 3: shrimp aquaculture value chain strengthened.

Output 1 will finance the development of a modern broodstock center and two 3. multiplication centers to provide smallholders access to affordable and quality whiteled shrimp broodstock.⁹ To control guality of broodstock and juveniles and water guality in production facilities, the project will also finance construction, modernization, and climate and disaster proofing of seven laboratories under MMAF.¹⁰Under Output 2, the project will upgrade farmers

J. Anderson et al. 2019. Goal 2019: Global Shrimp Production Review. Global Aquaculture Alliance. 4 November.

² FAO. 2019. *Globefish Trade Statistics*. Rome.

³ Globe Newswire.2019. Shrimp: The Future of the \$45+ Billion Market, 2019-2024. 13 June.

⁴ Mainly Asian tiger shrimp and whiteleg shrimp. Daniel Workman. Big Export Sales for Frozen Shrimp. World's Top Exports.

⁵ Whiteleg shrimp production uses semi-intensive or intensive technologies with substantial feed from feed mills, water control with pumps and aerators, high stocking rates, and purchase post-larvae from hatcheries.

⁶ The conventional approach involves limited feed from feed mills and limited water control equipment, often cultivated together with milkfish; gets post-larvae from the ocean; and has low stocking rates.

⁷ Government of Indonesia, Statistics Indonesia. 2021. Jakarta.

⁸ From 2012 to 2017, the segment of sustainably sourced seafood in European markets grew by about 12% while demand for other seafood segments declined. H. Rubel et al. Boston Consulting Group, 2019. A Strategic Approach To Sustainable Shrimp Production in Indonesia: The Case for Improved Economics and Sustainability. 9 In Aceh Besar, Takalar, and Karangasem districts.

¹⁰ In Aceh Besar, Pesawaran, Serang, Situbondo, Karangasem, and Takalar districts.

groups and five MMAF production facilities introducing a sustainable aquaculture model.¹¹The five MMAF production facilities will serve as demonstration plots.¹²Those fifteen (15) MMAF infrastructure subprojects (i.e. broodstock center and two multiplication centers; seven laboratories; and five demonstration ponds) are all located on the MMAF managed land.

4. Results of the conducted Involuntary Resettlement (IR) Screening in May 2022 for the fifteen MMAF subprojects confirmed that there is no land of private individuals and or households will be involuntarily acquired for implementation of the subprojects and therefore the Project is categorized as Category C for IR as per the Asian Development Bank (ADB) Safeguards Policy Statement (SPS, 2009). All the land areas that have been proposed for development of the hatcheries, laboratories, and pond clusters are owned by the Regional Technical Units (UPTs) and are certified by the National Land Agency.

5. For the subprojects under the Project that are categorized as Category C for IR, a resettlement due diligence report (DDR) is required to assess the past and present land use, land acquisition and ownership status and to demonstrate that there is no involuntary land acquisition for implementation of the subprojects. This DDR has been prepared for the subprojects that will be implemented in seven (7) provinces (Aceh, Lampung, Banten, Central Java, East Java, Bali, and South Sulawesi). The document is developed based on the results of the desk review (secondary documents and land certificate validation), site visits to the proposed areas for implementation of the subprojects in the provinces, consultations with the stakeholders, and the household survey.

5. The DDR confirms that (i) there are no residents or farmers within the areas where the MMAF's hatchery, laboratory, and pond cluster locations to be constructed; (ii) there will be no private land of individuals and or households that will be acquired for implementation of fifteen subprojects in the provinces. All proposed infrastructure are located on the UPT managed land with clear fences and boundary and have certificates from the National Land Management Agency (BPN).

6. Once the detailed engineering design (DED) of the subprojects is available, <u>the DDR will</u> <u>be updated</u> to ensure that - based on the DED of the subprojects – there is no involuntary land acquisition by the subprojects. Another public consultation will also be done to the communities living in the project areas. If there is involuntary land acquisition by any subproject activities– land acquisition and resettlement will be planned, implemented, and monitored following the provisions of the existing relevant laws and regulations of the Government, the ADB's SPS (2009) and the Community Development Framework (CDF) that has been prepared for the Project.

7. The Project level grievance redress mechanism (GRM) will be established at the start of the project and will be disseminated to the project communities and posted in the public places by the executing agency.

8. The DDR and the updated DDR when the DED of the subprojects are available will be disclosed in the websites of ADB and the executing agency. The documents will also be posted in the public places (meeting venues, the offices, etc.) of the project communities.

¹¹ This includes provision of inlet reservoir to stabilize water, wastewater treatment facility, canal and ponds upgrading, and replanting of mangroves in inlet and outlet canals to improve water quality.

¹² In Jepara, Tangerang, Pasuruan, Pinrang, and Takalar districts.

I. THE PROJECT DESCRIPTION

A. Project Background

1. Indonesia is among the top five shrimp producers in the world, together with India, People's Republic of China, Thailand, and Viet Nam,¹ and had a global market share of 7.1% in 2019.² Global shrimp production is expected to grow by more than 5.2% annually.³ Indonesia is a top exporter of frozen seawater shrimps, but lags behind its peers in exports of freshwater shrimps, and fresh, salted, or smoked shrimps.⁴ The main farmed shrimp species is the whiteleg shrimp (Litopenaeus vannamei) accounting for 80% of production, which is produced by large companies and around half of the smallholders.⁵ The other half of the smallholders cultivates the tiger shrimp (Penaeus monodon) in an extensive way.⁶In 2019, Indonesia exported shrimp products equivalent to \$1.2 billion to the European Union, Japan, and United States.⁷ The developed countries are increasingly monitoring the guality of shrimp imports for drug and chemical residues, environmental damage, and lack of transparency and traceability.⁸ While the shrimp aquaculture potential is high, several barriers constrain its growth and sustainability. Smallholder farming profitability is constrained by the lack of economy of scale, limited access to finance, unsustainable farming infrastructure and practices, and low bargaining power with aggregators. The low level of certification of farmers, aggregators, and processors also limit the ability to properly trace products, further limiting international buyers' confidence. As the demand for sustainability grows, there is a need to shift toward responsible and transparent production and sourcing.

2. The Infrastructure Improvement for Shrimp Aquaculture Project (the Project) will help the Ministry of Marine Affairs and Fisheries (MMAF) in introducing sustainable shrimp aquaculture and improving transparency, and traceability processes towards increased productivity, quality, profitability, and environment sustainability of smallholder's shrimp farming. The project will deliver an integrated investment addressing upstream, production, and downstream processes through infrastructure, capacity support to improve farming practices and post-harvest systems, and value chain strengthening in seven provinces. The project will deliver three outputs: (i) Output 1: quality and sustainable inputs production increased, (ii) Output 2: sustainable aquaculture infrastructure and services developed, and (iii) Output 3: shrimp aquaculture value chain strengthened.

3. **Output 1: Quality and sustainability of inputs for shrimp production increased.** This output will finance the development of a modern broodstock center and two multiplication centers to provide small scale hatcheries access to affordable and quality whiteleg shrimp broodstock. The project will facilitate transfer of knowledge from the Oceanic Institute of Hawaii to MMAF in producing high quality genetic shrimp fry. To control quality of broodstock and juveniles, and water quality in production facilities, the project will finance construction, equipment, and climate and

¹ J. Anderson et al. 2019. <u>Goal 2019: Global Shrimp Production Review</u>. *Global Aquaculture Alliance*. 4 November.

² FAO. 2019. *Globefish Trade Statistics*. Rome.

³ Globe Newswire.2019. <u>Shrimp: The Future of the \$45+ Billion Market, 2019-2024</u>. 13 June.

⁴ Mainly Asian tiger shrimp and whiteleg shrimp. Daniel Workman. <u>Big Export Sales for Frozen Shrimp</u>. *World's Top Exports.*

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⁷ Government of Indonesia, Statistics Indonesia. 2021. Jakarta.

⁸ From 2012 to 2017, the segment of sustainably sourced seafood in European markets grew by about 12% while demand for other seafood segments declined. H. Rubel et al. Boston Consulting Group. 2019. <u>A Strategic Approach</u> <u>To Sustainable Shrimp Production in Indonesia: The Case for Improved Economics and Sustainability</u>.

disaster proofing of seven laboratories under MMAF. All facilities will incorporate gender responsive and inclusive features.⁹ The project will train MMAF staff in operating and maintaining these facilities. This output will also help small and medium seed suppliers to comply with national broodstock breeding protocols, good hatchery practices, and biosecurity and environment monitoring procedures. It will strengthen farmers capacity in producing their own feed aligned with the national fish feed self-sufficiency program (*Gerakan Pakan Mandiri* or GERPARI).¹⁰

4. Output 2: Sustainable aquaculture infrastructure and services developed. This output will support establishment and strengthening of farmers groups enabling smallholders, including women farmers, to consolidate their production facilities under a cluster approach. Local facilitators will support them in developing sustainable aquaculture development plans (SADPs) as the basis for investment in their respective clusters. The SADP will also help farmers to access credits and explore partnerships with the private sector. The project will upgrade traditional ponds introducing a sustainable aquaculture model. Selected MMAF production facilities will also be upgraded following this model as demonstration sites. The sustainable aquaculture model aims to increase production, while minimizing impact on the ecosystem. For each cluster, the project will (i) rehabilitate or upgrade as relevant associated infrastructure (canals, production roads, inlet reservoir, wastewater treatment facility, and access to the electricity grid);¹¹ and (ii) purchase equipment towards semi-intensive aquaculture production.¹² Farmers will plant and maintain mangrove trees in inlet and outlet canals and along the shoreline, to help improve water quality and reduce soil erosion.¹³ This output will support MMAF in establishing O&M guidelines and upgrade its infrastructure registry information system to a full asset management information system for infrastructure lifecycle management. The project will strengthen famers technical capacity, including women farmers, to adhere to the INDOGAP guidelines for environmentally and economically sustainable shrimp production.¹⁴

5. **Output 3: Shrimp aquaculture supply chain strengthened.** This output will build men and women farmers' capacity in food safety, handling and cold chain management, transformation, and marketing. Towards improved transparency, the project will facilitate registration of broodstock and feed suppliers, farms, aggregators, and processors into the INDOGAP system and transactions in the MMAF's STELINA. Towards a harmonized regulatory framework, the project will assist MMAF in preparing quality standards, and in reviewing and rationalizing regulations and incentive systems for sustainable aquaculture.¹⁵

6. **Approach.** The project will apply a sector approach in selecting farmers subprojects that are outside MMAF land.¹⁶ To be financed under the project, these subprojects needs to comply

⁹ These include lactation rooms, separate male and female toilets, and separate male and female prayer rooms.

¹⁰ A grant from the Global Environment Facility (GEF) is proposed to complement those activities by engaging feed suppliers in diversifying feed raw material to reduce reliance on fish wild catch and imported raw material, and improve tracking of shrimp feed.

¹¹ The project will promote fair water allocation among water users and include climate and disaster proofing, and gender responsive and inclusive features. The project will exclude clusters requiring land acquisition or resettlement.

¹² Equipment includes among others wastewater equipment, water pumping, paddle wheel, generator, liner, grower and finisher for shrimp feed, spiral and plastic hose, diluted oxygen and pH meters, refractor salinometer.

¹³ This will contribute to the National Mangrove Rehabilitation program, with the goal of restoring 600,000 hectares of mangroves by 2024.

¹⁴ Training programs will cover pond water quality, wastewater management, cleaning technology, feed management, disease and biosecurity management, financial literacy, and mangrove management.

¹⁵ Under the proposed GEF grant, BAPPENAS will prepare a national action plan for shrimp aquaculture adopting an aquaculture management area approach including climate change mitigation and resiliency and conduct strategic coordination to institutionalize sustainable aquaculture development nationwide.

¹⁶ Including canals, water treatment and production facilities outside MMAF land. A subproject is defined as a cluster of farmers within a hydraulic unit or tertiary block.

with the applicable selection criteria described in the Project Administration Manual (PAM) Section II. Implementation Plans (D. Selection and Approval of Subprojects). For each subproject, a sustainable aquaculture development plan (SADP) will be prepared following the template provided in the PAM. The project theory of change and approach and relevant technical guidelines are presented in the PAM.

B. Subproject Locations and Activities

7. The project targets seven (7) provinces considered as priority under the Aquaculture Masterplan 2020–2024 of the MMAF. The proposed subproject sites are in Lampung (Pesawaran), Banten (Serang and Tangerang), Central Java (Jepara), East Java (Pasuruan and Situbondo), South Sulawesi (Takalar and Pinrang), Bali (Karangasem), and Nangro Aceh Darusalam (Aceh Besar) provinces (Figure 1). The locations are managed by the relevant MMAF Technical Units (UPTs): *Balai Besar Pengembangan Budidaya Air Payau (BPBAP)* in Jepara, *Balai Pengembangan Budidaya Air Payau (BPBAP)* in Aceh Besar, *BPBAP* in Situbondo, *BPBAP* in Takalar, *BBPBL (Balai Besar Perikanan Budidaya Laut) Lampung, Balai Produksi Induk Udang Unggul & Kekerangan* (BPIU2K) Karangasem, and *Balai Pemeriksaan Kesehatan Ikan dan Lingkungan (BPKIL)* Banten.

8. The Output 1 will finance the development of a modern broodstock center and two multiplication centers to provide smallholders access to affordable and quality whiteleg shrimp broodstock.¹⁷ To control quality of broodstock and juveniles and water quality in production facilities, the project will also finance construction, modernization, and climate and disaster proofing of seven laboratories under MMAF.¹⁸ Under the Output 2, the project will upgrade shrimp ponds of cluster's farmers groups and five MMAF's shrimp production facilities.¹⁹ The five MMAF production facilities will serve as demonstration ponds for sustainable aquaculture.²⁰ Those 15 MMAF infrastructure subprojects (i.e. broodstock center and two multiplication centers; seven laboratories; and five demonstration ponds) are all located on MMAF's land. The overview of those 15 MMAF subprojects is presented in Table 1 below and shown in Figure 1.

¹⁷ In Aceh Besar, Takalar, and Karangasem districts.

¹⁸ In Aceh Besar, Pesawaran, Serang, Situbondo, Karangasem, and Takalar districts.

¹⁹ This includes provision of inlet reservoir to stabilize water, wastewater treatment facility, canal and ponds upgrading, and replanting of mangroves in inlet and outlet canals to improve water quality.

²⁰ In Jepara, Tangerang, Pasuruan, Pinrang, and Takalar districts.

Output 2
UPT's Pond Clusters (upgrading)
Jepara, Central Java
Tangerang, Banten ^a
Pasuruan, East Java ^a
Pinrang, South Sulawesi ^a
Takalar, South Sulawesia

Table 1: Subproject Locations in each Project's Output

Ponds installation is located outside of UPT office complex.

Figure 1: Project Locations



Source: Ministry of Marine Affairs and Fisheries.

II. THE RESETTLEMENT DUE DILIGENCE

Objective of the Resettlement Due Diligence Α.

9. The objective of this resettlement due diligence is to identify the past and present land use, land acquisition and ownership status of the proposed project areas and to demonstrate that there are no involuntary land acquisition activities for the construction of government's proposed infrastructures (the hatcheries, laboratories and UPT's pond clusters). These are the project's investments/interventions that have been identified dung the project's processing stage.

10. For infrastructures to be developed on the selected farmer's groups owned private land and ponds, these will be identified during the project implementation, a separate document will be prepared during the project implementation. If there is involuntary land acquisition by any subproject's activities – land acquisition and resettlement will be planned, implemented and monitored following the provisions of the existing relevant laws and regulations of the Government, the Asian Development Bank's (ADBs) SPS (2009) and the Community Development Framework (CDF) that has been prepared for the Project

B. Method

11. The method used for preparation of the due diligence report (DDR) includes document reviews, land certificate validation, site visits to verify the status of land use of the proposed locations, consultations with the project communities and relevant agencies, and the household survey. The detailed assessment is presented as below:

- (i) The project team reviewed the IR screening document that had been prepared by the ADB transaction technical assistance (TRTA) team. The Corridor of Impact (COI) by the subprojects is obtained from the basic engineering design (BED) reports that have been prepared by the Directorate General of Aquaculture (DGA), MMAF.
- (ii) Site visits in selected subproject locations to verify the status of land use and land ownership.
- (iii) Validation of land certificates for the land owned by UPTs.
- (iv) Consultations with DGA and each UPT to confirm the status of land use of the locations as well as the past land use and land acquisition.
- (v) Review of maps of the proposed subproject sites.
- (vi) Conduct a household survey to collect the socioeconomic data and information of the project communities that included the land use and land ownership.

12. Results of the desk reviews, consultations and site visits were discussed with the project communities and relevant agencies and reflected in this DDR.

III. SCOPE OF LAND ACQUISITION BY THE SUBPROJECTS

13. The sites for the fifteen infrastructures to be implemented in the MMAF managed land have been identified in the Basic Engineering Design (BED) of the subproject.²¹The UPTs have proposed the specific locations to construct the hatchery, laboratory, and ponds. The farmer's ponds under Output 2 will be designed during project implementation.

14. Safeguard operational policies seek to avoid, minimize, or mitigate adverse environmental and social impacts, including protecting the rights of those likely to be affected or marginalized by the development process. In line with that, project activities will not only avoid negative social impacts, but also land acquisition and resettlement impacts. The subprojects have selected the sites on the land that involuntary land acquisition is not required. The conducted IR screening in May 2022 confirmed that all subproject sites are not on private lands of individuals and or households that need to be involuntarily acquired. The Involuntary Resettlement (IR) Screening Forms are attached in the Annex 1.

15. The project site plan map also shows that the subproject sites are in the complex area of the UPTs, while some other areas are in the development area of the UPT (installation owned by the UPT).

16. UPT officers also confirmed during the consultations that the proposed sites for the hatcheries, laboratories and UPT's pond clusters are owned by UPTs with certificates from the National Land Management Agency (BPN). Most of the land for hatcheries and laboratories is presently vacant. Meanwhile, the pond clusters will be the existing ponds owned by the UPTs.

17. Results of the site visits show that there are no residents or farmers living within the areas of the MMAF's hatchery, laboratory, and pond cluster locations. The allocated areas for construction of the proposed infrastructures are on the government land with clear boundary and fenced. No private assets (i.e., trees, crops) are identified in the allocated areas as they are government own compound.

18. Thus, there will be no private land of individuals and or households that will be acquired for implementation of fifteen subprojects in the provinces. All proposed infrastructures are located on the UPT managed land.

19. Informal land users, however, were reported to use some of the UPT La Garuda pond areas of Takalar UPT. These are the original landowners who are using the government land for shrimp/fish farming activities. It was informed that the UPT does not have plan to develop the areas where the informal land users are located. Involuntary land acquisition or resettlement is not expected. This, however, needs to be reconfirmed during the final detail design of subproject activities. If some involuntary resettlement impacts are identified to these informal land users, DGA should inform ADB and prepare the required mitigation plan for the affected households to submit to ADB for review and approval before implementation.

- 20. Detailed description of the subproject locations in the provinces is as below:
 - (i) BPBAP Ujung Batee will develop hatchery and laboratory in Neuhun Village, near its office, requiring 1.05 hectare of land. The selected area is vacant and free of

²¹ Ministry of Marine Affairs and Fisheries.2021. *Consultants' Reports.* Jakarta.

any IR impacts. The land belongs to BPBAP Ujung Batee since 2012 as certified by BPN no. BH 684344.

- (ii) BBPBL Lampung is planning to develop their laboratory on its vacant land (0.05 hectare) in Hurun Village, Pesawaran District. The land belongs to BBPBL Lampung since 2011 transferred from the Ministry of Agriculture as certified by BPN no. 8215529.
- (iii) BPKIL Serang will develop the laboratory in Umbul Tanjung Village, Serang District. The affected area (0.05 hectare) is vacant and free of any IR impacts. The land belongs to BPKIL Serang since 2011 from the Ministry of Agriculture as certified by BPN no. B8148076.
- (iv) BBPBAP Jepara will develop a laboratory and shrimp ponds in Bulu and Kauman Village, Jepara District. The laboratory requires0.05-hectare land on UPT's vacant land. Of the 48.10 hectares the shrimp and milkfish ponds in Bulu and Kauman Village, 5 hectares will be renovated into a pond cluster. UPT also has other ponds in Lontar Village, Tangerang District proposed to be upgraded to pond cluster covering an area of 5 hectares of a total 16.11 hectares, adjacent to the PLTU and ponds owned by Perhutani. The land in Bulu and Lontar belongs to BBPBAP Jepara as certified by BPN. There are 2 certificates in Bulu, no. 3326960 (since 2014) and BL899560 (since 2012). The certificate number in Lontar is BO 638075 (since 2013). Based on the assessment, the plan for Lontar ponds does not have any IR impacts. If during the project implementation phase upon the completion of DED, some IR impacts are identified the required mitigation plan must be prepared and the project requires informing ADB.
- (v) BPBAP Situbondo proposes a laboratory in Klatakan Village, Situbondo District and will renovate ponds in Pulokerto Village, Pasuruan District. The laboratory needs 0.120 hectare of land owned by UPT, while the ponds in Pulokerto require 5 hectares of a total 43.20 hectares of land on UPT's shrimp and milkfish ponds. These ponds are owned by UPT. The location of ponds is bounded by the Welang river to the East and Kramat river to the West. To the North the ponds are bounded by canal and farmer's ponds, while to the South is Sidoarjo Academy of Fishery's ponds. There will be no affected household. The land belongs to BPBAP Situbondo as certified by BPN no. BV 218606 (Klatakan) since 2015 and AW 9111614 (Pulokerto) since 2005. Pulokerto ponds will not affect any household. If during the project implementation phase upon the completion of DED, some IR impacts are identified the required mitigation plan must be prepared and the project requires informing ADB.
- (vi) BPIU2K Karangasem will renovate their existing hatchery (3 hectare) and build a laboratory (0.05 hectare) on their land in Bugbug village. The land belongs to BPIU2K Karangasem as certified by BPN no BK 773520. The land is clear from any impacts.
- (vii) BPBAP Takalar has been planning to develop their business on fish and shrimp cultivation and seedling, and to be the hub in Sulawesi foreastern Indonesia. Balai will build a hatchery (0.075 hectare) and laboratory (0.05 hectare) in Galesong sub-district in Takalar District, in their office complex. The land belongs to BPBAP Takalar as certified by BPN no. BH 773520 and BH 773518.This UPT has also ponds in Lagaruda Village, 20 km from Balai office. They call it La Garuda ponds. Currently, they are developing intensive ponds there and they propose to develop new intensive pond (5 hectare) next to the previous ponds. The land belongs to BPBAP Takalar as certified by BPN no AA 117750.

The UPT also has *other* ponds (41.4 hectare) in Lampa Village, Pinrang District. The ponds are managed traditionally for polyculture (shrimp and milkfish). They

proposed 5 hectares for pond cluster. There is clear boundary between land owned by Balai or UPT. The land belongs to BPBAP Takalar as certified by BPN no 20.19.06.24.4.0002. Although the current position of the Garuda and Pinrang ponds would not have any impacts to the adjacent farmer's lands, they still have potential to affect farmers' land next to the ponds upon the completion of the DED. This will be confirmed during project implementation and the required impact mitigation document will be prepared, as needed. Proofs of land ownership can be seen in **Annex 2**.

Sub-project	Location (District-	Ownership	Required Land	Available	Existing Land	Land Borders (East-West-	IR
Component	Village)	Status	(ha)	Land (na)	Use	North-South)	impacts
BPBAP Ujung	J Batee						•
Hatchery	Aceh Besar - Neuheun	BPBAP Ujung Batee	1	1.0156	Unit Pelaksan a Teknis's (UPT) vacant land	UPT's Ponds – UPT's vacant land – the coast – UPT's canal	No
Laboratory	Aceh Besar - Neuheun	BPBAP Ujung Batee	0.05	0.1327	UPT's vacant land	UPT's vacant land –UPT's building – UPT's local road – UPT's vacant land	No
BBPBL Lamp	ung						
Laboratory	Pesawaran - Hurun	BBPBL Lampung	0.05	0.10	UPT's vacant land	UPT's local road – UPT's vacant land – UPT's building – UPT's vacant land	No
BP2IL Serang	ļ						
Laboratory	Serang - Umbul Tanjung	BBPBL Lampung	0.05	0.50	UPT's existing building	UPT's local road – UPT's vacant land – UPT's building – UPT's vacant land	No
BBPBAP Jepa	ara						
Laboratory	Jepara – Bulu and Kauman	BBPBAP Jepara	0.05	0.10	UPT's laborator y building	UPT's local road – UPT's building – UPT's laboratory – UPT's building	No
Shrimp ponds cluster	Jepara – Bulu and Kauman	BBPBAP Jepara	5	48.10	UPT's shrimp and milkfish ponds	Local road/settlement/ Central Java Province's ponds – UPT's office complex – local road/settlement – local road/settlement	No
	Tangerang - Lontar	BBPBAP Jepara	5	16.11	Shrimp and milkfish ponds	PLTU Lontar – Farmer's ponds – Perhutani's land – UPT and Farmer's Pond	No

Table 2: Existing Land, Required Land, Ownership Status and IR Impacts

Sub-project Component	Location (District- Village)	Ownership Status	Required Land (ha)	Available Land (ha)	Existing Land Use	Land Borders (East-West- North-South)	IR Impacts
BPBAP Situb	ondo		(10)				
Laboratory	Situbondo - Klatakan	BPBAP Situbondo	0.12	3.60	UPT's vacant land	UPT's local road in Klatakan– UPT's empty land – UPT's pond – National Road	No
Shrimp ponds cluster	Pasuruan - Pulokerto	BPBAP Situbondo	5	43.20	UPT's shrimp and milkfish ponds	Welang river – Kramat river – canal and farmer's ponds – Sidoarjo Academy of Fishery's (APS) ponds	No
BPIU2K Kara	ngasem	DDILIOK	0.00	0.50			NI-
Hatchery	m - Bugbug	Karangase m	3.00	3.50	existing hatchery	– hill – UPT's local road – coast	NO
Laboratory	Karangase m - Bugbug	BPIU2K Karangase m	0.05	0.70	UPT's vacant land	Small estuary – UPT's local road – UPT's building – coast	No
BPBAP Takal	ar						1
Hatchery	Takalar – Mappakalo mpo	BPBAP Takalar	0.075	0.090	UPT's vacant land	UPT's fence – UPT's hatchery – UPT's fence – UPT's building	No
Laboratory	Takalar - Galesong	BPBAP Takalar	0.05	0.07	UPT's tennis court	Regency's road – UPT's local road– UPT's local road– UPT's local road	No
Shrimp ponds cluster	Takalar - Lagaruda	BPBAP Takalar	5	10.00	UPT's La Garuda Pond	Canal – canal – farmer's ponds – a small river	No
	Pinrang – Lampa	BPBAP Takalar	5	41.40	UPT's ponds	Canal/farmer's ponds – mangrove/coast –village road/canal and settlement – outlet canal and farmer's ponds.	No

Source: Basic Engineering Design Report and TRTA Field Visit 2022.

IV. INFORMATION DISCLOSURE AND PUBLIC CONSULTATION

21. The objectives of information disclosure and public consultation include: (i) disseminating all the information and activities related to the project to UPTs; and (ii) collecting suggestions, concerns, needs or priorities of UPT on the project and its interventions. All engagements have been documented, including minutes of meetings which detailed the discussions and noted any community concerns about the program. Drawn up as well were participant lists disaggregated by gender. The engagement strategy embodies the principles of meaningful consultation, transparency, participation, and inclusiveness ensuring that affected and marginalized groups such as women and the poor are given equal opportunities to participate in the design of the project in accordance with the requirements of ADB's SPS (2009).

22. Meaningful consultation refers to a process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues.

23. A variety of mechanisms for meaningful consultation will be utilized to consult with entitled parties (UPT) and other concerned institution during preparation and implementation of the project: (i) consultations and dissemination of information about the Project and its subproject components; (ii) meetings with fisheries extension workers; (iii) awareness improvement training about possible risks associated with the project.

24. In as much as this project is anchored on strategies, free, prior, and informed consultations at each stage of the project will be conducted to UPT perspectives, issues, and concerns by way of validating broad support for the project. Consultation is a mode of dialog that entails the process of informing and generating awareness and understanding of the concerned about the Project in a manner that will enable UPT and their staff to effectively participate and make informed and guided decisions.

25. Public consultations were conducted in addition to some meetings with the Balai/ regional technical units during field visit (BPPAB Situbondo, BBPBAP Jepara, and BPBAP Takalar). In some locations, consultation was conducted with the field technician of the UPT in existing UPT's ponds. Public consultations with the respective UPT staff, district fisheries agencies, and community living near the subproject sites were conducted. More public consultations will be conducted during project implementation. The CPMU and PIU safeguard officers, supported by the project's consultants and facilitators will all work together to conduct those consultations. Summary of topic discussed, and issue raised during public consultations at preparation stage are detailed in the below table. The consultations were conducted in Pulokerto, Bulu, Lontar, Lagaruda, and Lampa project sites and attended by 2-5 persons (all males). Another round of public consultations will also be done upon the DED completion and DDR updating.

Location	Data	Number of	
Location	Date	Participants	
Pulokerto, Pasuruan	19 January 2022	5 persons (all male)	
Bulu, Jepara	20 January 2022	3 persons (all male)	
Lontar, Tangerang	21 January 2022	4 persons (all male)	
Lagaruda, Takalar	24 January 2022	2 persons (all male)	
Lampa, Pinrang	25 January 2022	3 persons (all male)	

Table 3: Initial Consultations at Planned UPT Pond Clusters

V. INSTITUTIONAL ARRANGEMENTS

A. Institutional Arrangements

26. The parties involved in the project are the Ministry of Marine Affairs and Fisheries, the Planning and Development Agency, the Ministry of Finance, the Coordinating Ministry for Maritime Affairs and Investment as the National Steering Committee, the Secretariat of the General Directorate of Aquaculture as the Central Project Management Unit. Directorate of Germination, Directorate of Areas and Fish Health, and Technical Implementation Units will establish Project Implementation Units. The project will involve the local government, cultivator groups and community institutions as direct beneficiaries benefiting from empowerment and assistance for sustainable shrimp farming. Cultivators will also receive benefits related to marketing management to improve the quality of products that meet export standards.

27. The planning will be carried out by the Central Government (including the Technical Implementation Unit of the DGA).

Project Activities	Unit Involved		
IISAP Implementation	Ministry of Marine Affairs and Fisheries (MMAF) – Executing Agency (EA)		
Output 1: Construction of	 General Directorate of Aquaculture- Implementing Agency (IA) Balai Perikanan Budidaya Air Payau (BPBAP) Ujung Batee – Aceh Balai Perikanan Budidaya Air Payau (BPBAP) Takalar – South		
Broodstock center and	Sulawesi. Balai Pengembangan Induk Udang Unggul dan Kekerangan		
multiplication center	(BPIUUK) Karangasem – Bali		
Output 1: Construction of	 General Directorate of Aquaculture- Implementing Agency (IA) Balai Besar Perikanan Budidaya Air Payau (BBPBAP) Jepara Balai Besar Perikanan Budidaya Laut (BBPBL) Lampung Balai Perikanan Budidaya Air Payau (BPBAP) Ujung Batee – Aceh Balai Perikanan Budidaya Air Payau (BPBAP) Situbondo – East		
Fish and Environmental	Java Balai Perikanan Budidaya Air Payau (BPBAP) Takalar – South		
Health Laboratory	Sulawesi		

Table 4:	Parties	Involved	in Pro	iect Activitie	S
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Project Activities	Unit Involved
	 Balai Pengembangan Induk Udang Unggul dan kekerangan (BPIUUK) Karangasem – Bali Balai Pengujian Kesehatan Ikan dan Lingkungan (BPKIL) Serang – Banten.
Output 2: Construction of UPT's Pond Cluster	 General Directorate of Aquaculture- Implementing Agency (IA) Balai Besar Perikanan Budidaya Air Payau (BBPBAP) Jepara Balai Perikanan Budidaya Air Payau (BPBAP) Situbondo – East Java Balai Perikanan Budidaya Air Payau (BPBAP) Takalar – South Sulawesi.
Output 2: Construction of Farmer Pond Cluster, Irrigation Canal, and Communal WWTP and pond reconstruction.	 General Directorate of Aquaculture- Implementing Agency (IA) Balai Besar Perikanan Budidaya Air Payau (BBPBAP) Jepara Balai Besar Perikanan Budidaya Laut (BBPBL) Lampung Balai Perikanan Budidaya Air Payau (BPBAP) Ujung Batee – Aceh Balai Perikanan Budidaya Air Payau (BPBAP) Situbondo – East Java Balai Perikanan Budidaya Air Payau (BPBAP) Takalar – South Sulawesi.

Source: Readiness Criteria Document of IISAP, 2022.

B. Roles and Responsibility of Relevant Agencies

28. The working mechanism is based on the roles and responsibilities of each institution/agency to implement the project. The Executing Agency is responsible for the overall implementation of the project. The Central Project Management Unit (CPMU) will manage and prepare project reports for submission to the relevant government agencies and ADB. In carrying out project activities, CPMU is supported by the Project Management Consultant (PMC). The Technical Implementation Unit (UPTs) will establish Project Implementation Unit to implement field works with beneficiaries. Local governments play a role in preparing regulations on sustainable management of fisheries resources and farmers can receive direct benefits through training activities.

29. The organizational structure is in Annex 3. The division of work and responsibilities of each implementer is described in the following table.

Institution	Division of work	Responsibility
Asian Development Bank	Lenders / grants	 Providing financing of the project Carrying out regular reviews of project implementation Facilitating project implementation, including ensuring all parties involved in the project comply with all agreements in the project
Ministry of National Development Planning (BAPPENAS)	National Steering Committee	 Coordinating the activities of various institutions for complex national issues. Monitoring and evaluating overall project performance and results.

Table 5: Division of Work and Responsibility

Institution	Division of work	Responsibility
		 Reviewing and approving any proposed changes to the main project scope. Acting as the secretariat of the National Steering Committee Ensuring the implementation of firm policies and strategies Facilitating and supporting the EA and IA in any issues related to project implementation on a national scale. Conducting an annual review of project progress and direction to harmonize with national priorities
Ministry of Finance	National Steering Committee	 Licensing of loans and grants, as well as supervision of project implementation to comply with regulations related to PHLN. Providing loan and counterpart funds Negotiations signed loans and loan agreements. Allocating and realizing the counterpart budget on time. Processing and submitting reimbursement requests to ADB. Communicating with ADB for any loan amount reallocation amendments Monitoring project implementation and audit to ensure compliance with PAM documents and loan agreements and amendments if any.
Ministry of Marine Affairs and Fisheries (MMAF)	Borrower	 Coordinating planning and implementation of PHLN activities in the marine and fisheries sector
General Directorate of Aquaculture	Executing Agency (EA)	 Overall responsibility for the implementation of activities Preparing the regulation to handle Grievance Redress Mechanism. Ensure project's compliance with ADB SPS (2009)
Secretariat of General Directorate of Aquaculture	Central Project Management Unit (CPMU)	 Implementing management support activities, preparing and submitting the project reports. (Supported by a secretariat consisting of representatives of concerned Directorates The project management office (PMO) secretariat will be headed by Secretary Directorate General of Aquaculture and staffed with financial management, monitoring and reporting, procurement, social and environmental safeguards, gender, and technical personnel) Implementing and managing project's Grievance Redress Mechanism
Implementation Unit of	Unit (PIU)	technical activities in the field

Institution	Division of work	Responsibility
General Directorate of Aquaculture	Grant executor	 Responsible for implementation of all subproject's activities under each implementing agency's purview Ensuring subproject's activities compliance with government's regulations and ADB SPS (2009), CDF, IPPF Reviewing and updating of the DDR prepared based on the DED Preparing the required mitigation plan if IR impacts are identified in the subproject areas upon the completion of DED Recruiting consultants for all subprojects under its purview Preparing safeguards planning documents, implementing environmental and social safeguards plans, and monitoring safeguards related activities for ADB and government requirements. Undertaking day-to-day implementation activities Supervising design, supervision, and management consultants. Managing the procurement process (preparing bidding documents, managing bidding process, submitting required documents to ADB for required clearances) Implementing procurement, safeguards activities and gender action plan Managing financial management including preparing the budget, annual projections, process invoices and withdrawal applications etc. Carrying out several grant activities. Carrying out several grant activities
Shrimp Cultivator	Benefit recipients	 Carrying out several project activities and training participants.

Source: Readiness Criteria Document of IISAP, 2022.

VI. MONITORING AND REPORTING

30. The project does not require external monitoring for the hatcheries, laboratories, and pond clusters development. CPMU and PIUs are responsible for internal monitoring and compliance ensuring that the process and stages are done according to the principles of safeguard policy. Internal monitoring and supervision will focus on the following aspects:

- (i) Hatcheries, laboratories, and pond cluster development in all locations will be conducted in accordance with applicable regulations.
- (ii) Ensure compliance with ADB SPS (2009) on environmental and social safeguards
- (iii) Public information dissemination and consultations procedures are followed.
- (iv) Adherence to grievance procedures, and resolution of outstanding issues requiring management's attention.
- (v) The benefit provided from the project.

31. The primary responsibility for internal monitoring lies with PIU, which will be responsible for overseeing the formation, function, and activities in the field and, through semi-annual project progress reports, summarizing the progress and compliance of hatcheries, laboratories, and pond cluster development.

32. All monitoring data on hatcheries, laboratories, and pond cluster development will be collected to ensure sex disaggregation. The Social Safeguards Specialists and supporting Project Management Consultant will support the PIU in establishing a system to implement the internal monitoring plan and support the PIU in carrying out of internal monitoring to assess whether the principles of social safeguards are implemented properly.

33. Internal monitoring will be conducted through the physical development of hatcheries, laboratories, and UPT's pond clusters until completion. The construction of 15 infrastructures will also use supervision consultants. Internal monitoring will monitor contractors and supervision consultant's activities in each UPT. The internal monitoring reports should be submitted to ADB after physical development is completed.

VII. CONCLUSION AND RECOMMENDATION

34. Results of the document reviews, consultations with relevant agencies, site visits and the household survey during the project preparation show that the proposed infrastructure activities do not envisage any involuntary land acquisition and resettlement impacts. The proposed infrastructures located within the UPT's land that is with clear ownership.

35. However, there are potential social safeguard impacts in some of the proposed sites as (i) the assessment has been made based on the basic design engineering, thus the final land requirement is yet to be confirmed; (ii) presence of informal land users within the UPT's cluster pond complex; and (iii) close proximity of the UPT lands with the surrounding communities/ privately own assets, consequently any expansion from the existing land might trigger IR impacts. Thus, this DDR will be updated upon the completion of detailed engineering design during project implementation for each subproject site. The respected PIU will be responsible to review and update the DDR for the infrastructures constructed in its respective location. The updated DDR must be submitted to ADB for review and approval prior to award of civil work contracts.

36. Based on the final DED, the DDR prepared will be updated to reconfirm the impacts. If any IR and IP impacts both permanent and temporary is identified, land acquisition and

resettlement will be planned, implemented and monitored by MMAF following the provisions of the existing relevant laws and regulations of the Government, the ADB's SPS (2009) and the Community Development Framework (CDF) that has been prepared for the Project.

37. Meaningful consultation is yet to be conducted in all subproject areas; therefore, more public consultations will be conducted during project implementation period upon the DED completion and DDR updating. The PMC and PIU's safeguard officers will be responsible for conducting the consultation supported by the safeguard consultants and field facilitators.

38. To ensure compliance with ADB SPS (2009), project level grievance redress mechanism must be established early in the project implementation and disseminated to the beneficiaries' communities where the subproject is located. The CPMU and PIUs will be responsible for the establishment, implementation, and management of project's GRM.

Appendix 1A: IR Screening Categorization

INVOLUNTARY RESETTLEMENT/ LAND ACQUISITION SCREENING CHECKLISTS

A. Introduction

1. Each project/subproject/component needs to be screen for any involuntary resettlement impacts and indigenous people impacts which will occur or already occurred. This screening determines the necessary action to be done by the project team.

B. Information on Project/Subproject/Component

- (a) Subproject name: Infrastructure Improvement for Shrimp Aquaculture Project (IISAP)
- (b) Contract package number: INO/ADB55020-001
- (c) District/ Administrative Name: Jepara, Tangerang, Aceh Besar, Situbondo, Pasuruan, Takalar, Pinrang, Karangasem, Pesawaran, and Serang
- (d) Location/ area:
- (e) Civil work dates (proposed):
- (f) Technical Description: **MMAF will develop 3 hatcheries, 7 laboratories, and 5 pond cluster on their owned land.**

C. Screening Questions for Involuntary Resettlement Impact

2. Below is the initial screening for involuntary resettlement impacts and due diligence exercise. Both <u>permanent and temporary impacts</u> must be considered and reported in the screening process.

Involuntary Resettlement Impacts	Yes	No	Not known	Remarks
Will the project include any physical construction work?	Х			All of the projects will include physical construction work.
Does the proposed activity include upgrading or rehabilitation of existing physical facilities?	Х			Yes, only hatcheries will be renovated.
Will it require permanent and/or temporary involuntary land acquisition?		X		There will no land acquisition in all of 15 infrastructure sub- projects (<i>Jepara, Tangerang,</i> <i>Aceh Besar, Situbondo,</i> <i>Pasuruan, Takalar, Pinrang,</i> <i>Karangasem, Pesawaran, and</i> <i>Serang)</i> , because these projects (development of the hatcheries, laboratories, and pond clusters), use the state's land.
Will it require donation or negotiated land acquisition?		X		The 15 infrastructures of IISAP do not require land donation or negotiated land acquisition.

Involuntary Resettlement Impacts	Yes	No	Not known	Remarks
Are there any non-titled people who live or earn their livelihood at the site or within the corridor of impact (COI) / Right of Way (ROW)?		X		There are not any non-titled people who live or earn their livelihood at all of the site that used to construct the infrastructure.
Is the ownership status and current usage of the land known?	X			The land ownership for 15 infrastructures owned BBPBAP Jepara, BPBAP Aceh Besar, BPBAP Situbondo, BPBAP Takalar, BBPBL Lampung, BPIU2K Karangasem, BP2IL Banten respectively.
Will there be loss of housing?		X		No housing and residential land will be lost because the current usage is office complex consisting of official residence, vacant land, hatchery and laboratory building, road, and ponds.
Will there be loss of agricultural plots?		X		Loss of agricultural and other productive assets due to land acquisitions not expected as most of the infrastructures will be built on MMAF land, while for the upgrading of the farmers ponds will increase the value of their productive assets.
Will there be losses of crops, trees, and fixed assets (i.e. fences, pumps, etc.)?	Х			There might be loss of trees, if the infrastructures development will use vacant land that there are trees or uses outdoor tennis court.
Will there be loss of businesses or enterprises?		Х		No, because the businesses or enterprises belong to the UPT.
Will there be loss of incomes and livelihoods?		X		No, there won't be loss of income sources for the people
Will people lose access to facilities, services, or natural resources?		Х		No, the people will not lose access to these things, but the access will stay limited
Will any social or economic activities be affected by land use-related changes?		X		No, if the land use is changed the social and economic activities might be affected but they will not have an adverse impact
Are any of the affected persons (APs) from indigenous or ethnic minority groups?		X		There is no AP from indigenous or ethnic minority groups.



Hatchery and Laboratory Location Plan of BPBAP Ujung Batee, Aceh Besar District



Pond Location of BBPBAPJepara, Jepara District



Pond Cluster Location Plan of BBPBAPJepara in Lontar, Tangerang



Laboratory Site Location Plan of BPBAPSitubondo, Situbondo District

Pond Cluster Location of BPBAPSitubondo in Pulokerto, Pasuruan District





Hatchery and Laboratory Site Location of BPIU2K Karangasem, Karangasem District



Hatchery and Laboratory Location Plan of BPBAPTakalar in Takalar District



Pond Cluster Location of BPBAPTakalar in Lagaruda, Takalar District



Pond Cluster Location Plan of BPBAPTakalar in Pinrang District

Appendix 1B: Photos of Each Location

Proposed Hatchery Location at BPBAP Ujung Batee



Proposed Hatchery Location at Office Complex of BPBAP Takalar





Proposed Hatchery Location at Office Complex of BPIU2K Karangasem





Proposed Laboratory Location at Office Complex of BPBAP Ujung Batee

Proposed Laboratory Location at Office Complex of BBPBL Lampung



Proposed Laboratory Location at Office Complex of BPKIL Banten



Proposed Laboratory Location at Office Complex of BBPBAP Jepara



Proposed Laboratory Location at Office Complex of BPBAP Situbondo



Proposed Laboratory Location at Office Complex of BPIU2K Karangasem



Proposed Laboratory Location at Office Complex of BPBAP Takalar





Proposed Pond Cluster Location at Pond Installation of BBPBAP Jepara in Tangerang District

Proposed Pond Cluster Location at Office Complex of BBPBAP Jepara in Jepara District



Proposed Pond Cluster Location at Pond Installation of BPBAP Situbondo in Pasuruan District



Proposed Pond Cluster Location at Pond Installation of BPBAP Takalar in Takalar District



Proposed Pond Cluster Location at Pond Installation of BBPBAP Takalar in Pinrang District



Appendix 2: The UPTS Land Ownership Certificates

a) HAK PARAI	0 NAMA PEMEGANG HAK
No. 2 Desa / Kel : Tgl. berakhimya hak	= KEMENTERIAN KELAUTAN DAN PERIKANAN Berkedudukan di Jakarta =
b) NIB Letak Tahih .09.12.02235	
c) ASAL HAK	g) PEMBUKUAN
1. Konsens	Kota Jantho, Tgl. 22/01/1986 Kepala Kantor Pertanahan
2. Pemberian hak Fakai	Aceh Besar
3. Ecmecahan / Ecmisahan / Eenggahungan hidang	nd.
d) DASAR PENDAFTARAN	
I. Daftar Isian 202 TglNo.	Ramli Sjamsir, BA
 Surat Keputusan Tgl. No. Permohonan Pemecahan Pemisahan / Penggabungan bidang Tgl. No. 	h) PENERBITAN SERTIPIKAT PENAGANTI Kota Jantho, Tgl. 11/07/2012 Kepala Kantor Penanahan Kabupaten -Kota Aceh Besar
e) SURATUKUR Tgl 28/05/2012 * ^{No} 01/2012 Luas 72,706 M2	NIP UB-505 198003.1.002
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BPBAP Ujung Bate-Aceh



Lampung Selatan- BBPBL Lampung

PENDAFTARAN - PERTAMA Halaman PAKAI. HAK f) NAMA PEMEGANG HAK 1, No. DEPARTEMEN PERTANIAN REPUT DesaUMBUL TANJUNG. ULINA LORDAL JENDERAL PERIMANAN b) NAMA JALAN/PERSII. g) PENUNJUK c) ASAL PERSIL BEKAS TANAH NEGARA. 1. Konverst 2. Pemberian hak PAKAI. h) PEMBUKUAN 3 Dasenbar SERANG. misahan A.n. BUPATI/WALIKOTAMADYA KDH TK.II Serang. BUPATI/WALIKOTAMADYA Tk.II.Serang. KDH Penggabungan Kepala Kantor Agraria Kepala Kantor Agraria u.b. Kepala Šeksi Pendaftaran Tanah d) SURAT KEPUTUSAN Gubernur Kepala Daerah ttd. ttd. Tk. I.Jawa Barat. JUMALI SUDJENDRO) NIP:010016121.-Tg1.9-10_1987. (DJUM MOCH. DJAMHARI) No:593.321/Sk.407/Dites/ NIP:010019926 .-1987. Ganti rugi/uang wajib **I) SERTIPIKAT** 3 Desember 1988 SERANG. Rp.15.000.-Tel A.n. BUPATI/WALIKOTAMADYA KDH A.n. BUPATI/WALIKOTAMADYA KDH Lamanya hak berlaku Tk. II. Serang. Tk.II.Serang. ABUPAT Kepala Kantor Agraria Kepala Kantos Berakhimya hak u.b. Kepala Seksi Pendaftaran Ta e Teh KANTOR AGRARIA e) SURAT-UKUR-SFRA GAMBAR SITUASI SUDJENDRO MOCH. DJAMHARI NIP:010019926. (DJUMALI NIP:010016121 .-10 - 1 - 1984. Tgl. k) CATATAN MENGENAI PAJAK Tahun Besarnya 49. Penambahan No. Pengurangan Catatan Luas : 59.360.M2.-(Lima puluh sembilan ribu tiga ratus meter persegi)

Jepara- BBPBAP Jepara



Tangerang- BBPBAP Jepara

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Penseeshan / Pemianhan /	
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Daftar Isian 202	SUDARYANTO, SH., MM.
Tgl — A	NIP 19680811 198603 1 001
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Situbondo- BPBAP Situbondo



Pasuruan- BPBAP Situbondo



Karangasem- BPIU2KKarangasem

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Luas :21098 Penunjukan da	3 M² (Dua puluh satu ril n penetapan batas :	bu sembilan puluh delapan oleh : JALSON Untuk An BBAP 1	Meter Persegi) Takatar		
Luas :21096 Penunjukan da	3 M² (Dua puluh satu rit n penetapan batas :	bu sembilan puluh delapan oleh : JALSON Untuk An BBAP 1	Meter Persegi) Takatar		
Luas :2109	8 M² (Dua puluh satu ril n penetapan batas :	bu sembilan puluh delapan oleh JALSON Untuk An BBAP 1	Meter Persegi) Takalar		•

Takalar- BPBAP Takalar



Lagaruda, Takalar - BPBAP Takalar

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		Nomor hak :
	SURATUKUR	
ATINAN	GAMBAR SITUASI	
	Nomor :	
SEBIDANG TANA	H TERLETAK DALAM	
Propinsi :	SULPRED SELECAN	
Kabupaten/Kotamaiya:	TFERIER	
Kecamatan :	MATURA SUNCCU.	
Desa/Kelurabanc :	LAGARUDA.	
Peta :		
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Lembar :	Nomor Pena	
Keadaan Tanah :	ng tanah dipergunakan untuk espang.	
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Keadaan Tanah : <u>Sebida</u> Tanda tanda batas : <u>KP</u> yan Luas : <u>273.927 M2 (Dua ter</u> Penunjukan dan penetapan	ng tanah dipergunakan untuk empang. I sampai dengan KP XXII yang berdiri g ditentukan dalam PMA. No.8/1961, p ratus tujuh puluh tiga ribu sembila persegi). batas : Batan-batan ditnjukkan oleh :	di atas batas dan menemu asal 2 b. n ratus dua puluh tujuh m Alimuddin Gassing/Kepals
Keadaan Tanah : <u>Sebida</u> Tanda tanda batas : <u>XP</u> yan Luas : <u>273.927 M2 (Dua</u> ter Penunjukan dan penetapan	ng tanah dipergunakan untuk ompang. I mampai dengan KP XXII yang berdiri g ditentukan dalam PMA. No.8/1961, p ratus tujuh puluh tiga ribu sembila persegi). butas : Batao-batag ditnjukkan oleh : Desa Lagaruda.	di atas batas dan menemu asal 2 b. n ratus dua puluh tujuh m Alimuddin Gassing/Kopals
Keadaan Tanah : <u>Sebida</u> Tanda tanda batas : <u>KP</u> yan Luas : <u>273.927.M2 (Dua</u> ter Penunjukan dan penetapan	ng tanah dipergunakan untuk ompang. I nampai dengan KP XXII yang berdiri g ditentukan dalam PMA. No.8/1961, p ratus tujuh puluh tiga ribu sembila persegi). batas : Ratap-batag ditnjukkan oleh : Desa Lagaruda.	di atas batas dan mememu asal 2 b. n ratus dua puluh tujuh m Alimuddin Gassing/Kopala
Keadaan Tanah : <u>Sebida</u> Tanda tanda batas : <u>KP</u> yan Luas : <u>273.927 M2 (Dua</u> ter Penunjukan dan penetapan Pemohon : <u>Ir. KISM</u> 0	ng tanah dipergunakan untuk ompang. I pampai dengan KP XXII yang berdiri g ditentukan dalam PMA. No.8/1961, p ratus tujuh puluh tiga ribu sembila persogi). batas : Ratap-batag ditnjukkan oleh : Desa Lagaruda.	di atas batas dan mememu asal 2 b. n ratus dua puluh tujuh m Alimuddin Gassing/Kopala m.Perianian S.J.
Keadaan Tanah : <u>Sebida</u> Tanda tanda batas : <u>KP</u> yan Luas : <u>273.927 M2 (Dua</u> ter Penunjukan dan penetapan Pemohon : " Ir, KISMO	ng tanah dipergunakan untuk ompang. I nampai dengan KP XXII yang berdiri g ditentukan dalam PMA. No.8/1961, p ratus tujuh puluh tiga ribu sembila persegi). butas : Patan-batag ditnjukkan oleh : Desa Lagaruda.	di atas batas dan menemu asal 2 b. n ratus dua puluh tujuh m Alimuddin Gassing/Kepala mn.Pertanian S.J.





Appendix 3: Project Implementation Organizational Structure