Initial Environmental Examination

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Viet Nam: Water Efficiency Improvement in Drought Affected Provinces

Dak Nong Province

Cu Jut and Dak Mil Subprojects

Prepared by the Central Office for Water Resources Projects (CPO) - Ministry of Agriculture and Rural Development for the Asian Development Bank.

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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
AP	affected person/people
asl	above sea level
CEP	Commitment on Environmental Protection
CPC	Commune People's Committee
CPO	Central Project Office for Water Resources Projects
CPMU	Central Project Management Unit
CSC	Construction Supervision Consultant
DARD	Department of Agriculture and Rural Development
dBA	decibel
DONRE	Department of Natural Resources and Environment
DPC	District People's Committee
EHS	environment, health and safety
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EM	Ethnic minority
EMDF	Ethnic Minority Development Framework
EMP	Environmental Management Plan
EMR	environmental monitoring report
EPC	Environmental Protection Commitment
EPP	Environmental Protection Plan
EPS	Environmental Protection Scheme
ESS	Environment Safeguard Specialist
FI	financial intermediary
GRM	grievance redress mechanism
ha	hectare
HDPE	high-density polyethylene
HH	household
HVC	high-value crop
IEE	Initial Environmental Examination
IEMA	independent environmental monitoring agency
IEMC	independent environmental monitoring consultant
IPM	Integrated Pest Management
ISRP	Irrigation Subsector Restructuring Plan
IWR	irrigation water requirement
IWRP	Institute of Water Resources Planning
km	kilometre
l/s	Litres per second
LHS	Law on Hydraulic Structures
LIC	Loan Implementation Consultant
masl	meter above sea level
m	meter
mg/l	milligram per liter
mm	millimeter
MONRE	Ministry of Natural Resources and Environment
PC	People's Committee
PCC	People's Committee and Commission

PIC	Project Implementation Consultant
PMU	Project Management Unit
PPC	Provincial People's Committee
PPE	personal protective equipment
PPMB	Provincial Project Management Board
PPMU	Provincial Project Management Unit
PPTA	Project Preparatory Technical Assistance
QCVN	National Technical Regulation
RAP	Resettlement Action Plan
RF	Resettlement Framework
SEA	strategic environmental assessment
SERD	Southeast Asia Department
SEMP	Site Environmental Management Plan
SIEE	Summary Initial Environmental Examination
SIR	Subproject Investment Report
UXO	unexploded ordnance
VND	Vietnamese Dong
WB	World Bank
WEAT	water efficiency application technologies
WEIDAP	Water Efficiency Improvement in Drought Affected Provinces Project

NOTE

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EXECUTIVE SUMMARY

A. Subproject Background

1. The Water Efficiency Improvement in Drought Affected Provinces Project (WEIDAP) aims to improve agriculture water productivity (crop per drop) by increasing water use efficiency in irrigated agriculture in five drought-affected provinces in the Central Highland and South Central Coastal Regions: Binh Thuan, Dak Lak, Dak Nong, Khanh Hoa, and Ninh Thuan. The project is aligned with the Government's *Agricultural Restructuring Policy*, the *Law on Hydraulic Structures*, and the *Irrigation Subsector Restructuring Plan.*[1] The project features: (i) increasing water productivity with the reduction of conveyance losses made possible by piped distribution systems and substantial improvements in operational control; (ii) increased adoption of water efficiency application technologies (WEAT) for climate mitigation, which are also effective in saving energy (through reduced fertilizer applications) and achieving significant labor reductions; (iii) conjunctive use of surface and groundwater–a pragmatic acknowledgement of current irrigation practices and farmers' coping strategies during periods of increasing climate variability; and (iv) reduced operation and maintenance (O&M)–rigorous asset management is central to the project design and provides greater confidence in sustainability of benefits.

2. Dak Nong Province has two proposed subprojects: Cu Jut and Dak Mil. The Cu Jut subproject, located in Cu Jut District, will consist of building 10 permanent weir structures along the Ea Dier River to replace the 10 farmers' temporary weirs, and constructing two new pilot demonstration pumped piped systems to pump water at Weir Nos. 2 and 9. The Dak Mil subproject, located in Dak Mil and Krong No districts of Dak Nong Province, will consist of upgrading and construction works upstream and downstream. The upstream works will comprise the rehabilitation of several small existing reservoirs for irrigation water supply, while the downstream works will replace the farmers' temporary weirs with three permanent weir structures along Dak Sor Stream.

B. Environmental Impacts and Mitigation

3. The subproject has been categorized as B for environment during the project concept note stage as few significant impacts were identified, none of them irreversible. This Initial Environmental Examination (IEE) was prepared to: (i) screen impacts and formulate mitigation measures in three phases of subproject implementation (design and pre-construction, construction, and operation); and (ii) describe the institutional arrangements that will ensure that the subproject environmental management plan (EMP) will be implemented.

4. In the design and pre-construction phase, the potential impacts identified relate to: (i) land acquisition, as 11.6 ha and 3.4 ha of perennial crop lands will be acquired for the Cu Jut and Dak Mil subprojects, respectively; (ii) flooding and landslides, which may occur due to the construction of permanent weirs (10 weirs in Cu Jut and 3 weirs in Dak Mil); and (iii) conflicts of water use when sharing water from Team 1 Reservoir to Reservoir 40 and Thuan Bac Reservoir. To minimize the impacts on land acquisition, the Project Management Unit (PMU) will implement a land acquisition and compensation process before the start of construction to ensure that all affected households (AHs) will receive adequate compensation in accordance with prevailing fair market prices and the Asian Development Bank (ADB) *Safeguard Policy Statement (SPS)* (2009). Moreover, these issues were taken into consideration in the design of the subprojects. To address flooding, each weir has exits to the spillway and an "open-close" way to control floods in the rainy

[1] Ministry of Agriculture and Rural Development (MARD) *Decision No. 802/QD-BNN-TCTL* of 22 April 2014 approving the *Implementation Action Plan for Irrigation Subsector Restructuring Scheme*. Hanoi. Government Publishing Office.

season. In addition, 10-15 meters (m) upstream and downstream of the weirs were designed to prevent landslides caused by water flow at the weirs. The water balance calculations undertaken by the Institute of Water Resources Planning (IWRP) showed that there will adequate water for irrigating the subproject watering area, taking into account the existing and increased command area requirements.

5. The potential negative impacts and mitigation measures during the construction phase are described below.

6. **Air pollution**. This impact will arise from dust and gas emissions and noise caused by excavation and leveling activities from the operation of construction machinery/ equipment, including cement mixing stations, and vehicles transporting construction materials. In the Dak Mil subproject, the specific locations that are likely to be affected are the residential areas near the reservoirs of Team 1, Team 2, 40, and 35B. In the Cu Jut subproject, no civil works will be undertaken near the residential areas. To minimize these impacts, contractors will be instructed to suppress dust by keeping excavated soil and stockpiling moist soil, as well as minimizing gas emissions through proper maintenance of construction machines and transport vehicles and turning off the machines when not in use.

7. **Noise.** The noise impacts from the Cu Jut subproject are likely to be negligible as the construction of the 10 weirs will be undertaken far from the residential areas. However, in the Dak Mil subproject, noise impacts are likely to affect nearby residential areas during the day as a result of cutting and drilling activities, the operation of machines, and construction activities at the reservoirs of Team 1, Team 2, 40, 35B, Jun Juh, Dar Sor, and E29. To reduce the impact, construction work will be done only during daytime.

8. **Surface water impacts due to Cu Jut subproject civil works**. Ea Dier River, the main water source, will likely be affected by runoff and discharges, including domestic and toxic wastes, from the operation of workers' camps and construction activities. To minimize the impacts, the contractor will avoid land excavation during heavy rains, provide workers' camps with sanitation facilities, and implement waste management (i.e., collect, classify, and treat all wastes) in compliance with government regulations.

9. In the Dak Mil subproject, all reservoirs of Team 1, Team 2, 40, and 35B along Dak Sor stream, where the three weirs will be constructed, as well as Thai Ba Long canal and D1, 2, 3, 4 of Duc Minh communes, will likely be affected by runoff and discharges, including domestic and toxic wastes, from the operation of workers' camps and construction activities. To minimize the impacts, the contractor will avoid excavations during heavy rains, provide workers' camps with sanitation facilities, and implement waste management (i.e., collect, classify, and treat all wastes) in compliance with government regulations.

10. **Occupational and community health and safety risks.** These are likely to occur at the work sites in both subprojects due to the operation of machines, excavated and uncovered holes, and possible conflicts between the locals and subproject migrant workers. To minimize the impacts, contractors will provide workers with adequate personal protective equipment (PPE) and given training on health, safety, and community relationships.

11. Potential traffic accident risks and traffic disturbances are likely to occur from civil works in the Dak Mil subproject, when contractors prepare to install the pipeline from Reservoir 40 to Thuan Bac Reservoir and Reservoir 35B and during the construction of the reservoir embankments and community roads along Thai Ba Long canal in Duc Minh commune. To minimize the impacts, contractors will train their drivers and collaborate with local traffic agencies

to install traffic signboards at the sites. The adverse impacts will be adequately addressed through the proposed mitigation measures contained in the EMPs of both subprojects.

12. During the operation phase, the potential negative impacts identified relate to water quality in the reservoirs, especially in the West Reservoir, where the raw water used for drinking could deteriorate due to the improper management of domestic wastes, herbicides, and hazardous wastes released from community production and human activities in the upstream reservoirs of Team 1, Team 2, 40, and 35B. To minimize the negative impacts, the Dak Nong Department of Agriculture and Rural Development (DARD), the agency responsible for subproject management during the operation phase, will continuously coordinate with the village and district authorities to monitor watershed activities that may contribute to the contamination of raw water. The Independent Environmental Monitoring Consultant (IEMC) will conduct regular monitoring of water quality parameters in the Team 2, Team 1, 40, and 35 B reservoirs, especially the West Reservoir.

13. The project preparatory technical assistance consultant also identified key stakeholders and conducted public consultations from the provincial down to the commune level, with the objective of seeking the views of affected persons (AP) and other stakeholders regarding the proposed subprojects. The participants are highly in favor of the subprojects because they believe that the irrigation system improvements will help them cope with the problem of water shortage for their crops during summer and extend their farmlands with high-value crops (HVCs). The participants did not pay much attention to the environmental issue because they know that most of the civil works will be small-scale, and construction will be far from the residential areas. They were more concerned about land acquisition and compensation issues as well as flooding due to the construction of weirs. These issues are addressed in the EMPs for each subproject. The EMPs also include the environmental responsibilities of concerned stakeholders during the construction and operation phases of subproject implementation.

C. Institutional Arrangements

14. The Central Project Management Unit (CPMU) under MARD, the Dak Nong Provincial Project Management Board (PPMB), and the Dak Nong Department of Agriculture and Rural Development (DARD) are the key institutions that will play crucial roles in the implementation of the subprojects, including environment safeguards. The CPMU/Provincial Project Management Unit (PPMU) will recruit one Environment Safeguards Specialist (ESS) under the loan implementation consultant to support subproject implementation in Dak Nong. The ESS will update the EMP, monitor the compliance of contractors with the EMP during the construction phase, and provide training and capacity building on EMP implementation.

15. The PMU will also engage a Construction Supervision Consultant (CSC), who will be responsible for monitoring and supervision of the subproject, including environmental monitoring, and ensure that contractors implement the provisions of the subproject EMP.

D. Conclusion

16. This IEE for the Dak Nong Province subprojects was undertaken to determine the environmental issues and concerns associated with the proposed irrigation schemes, following the modifications of the initial plans that were presented during project preparation. The modifications made are considered more suitable in terms of ensuring better irrigation water quality and quantity. The assessment confirmed that the subproject remains classified as Category B for environment based on the ADB SPS (2009).

17. There are expected beneficial impacts on health and well-being of people from the proposed irrigation schemes in Dak Nong Province. Besides, most of the environmentally negative impacts are expected to occur during the construction phase, are not expected to cause irreversible and significant adverse environmental impacts, and are easily controllable through the adoption of appropriate and conventional mitigation measures. All adverse impacts will be addressed by the proposed mitigation measures outlined in the subproject EMP, including the institutional responsibilities for implementing the said measures.

18. The IEE concludes that the subproject, combined with available information on the affected environment, is sufficient to identify the scope of environmental impacts of the subproject. No further environmental impact assessment is, therefore, required**.** The ESS will update the EMP before the finalization of the detailed design of the subproject.

INITIAL ENVIRONMENTAL EXAMINATION OF THE DAK NONG PROVINCE SUBPROJECTS

I. SUBPROJECT BACKGROUND

1. Located in the central highlands, Dak Nong Province experienced a prolonged drought from 2012–2016, recorded as the driest period in 40 years, with dry season river flow levels dropping to between 20-30% of average annual figures. The frequency and intensity of such dry spells have increased in recent times under the influence of the El Niño. Over this period, storage capacities of irrigation reservoirs from Da Nang to Phu Yen reached 60-80% of design capacities, while in Khanh Hoa, Ninh Thuan and Binh Thuan, Dak Lak and Dak Nong,[2] only 30-50% was achieved. The economic consequences of persistent drought in the region are significant in an environment where competition for water is increasing across multiple sectors.

2. Under this situation, Dak Nong Province was selected among five provinces to be supported by the Water Efficiency Improvement in Drought Affected Provinces Project (WEIDAP). The Ministry of Agriculture and Rural Development (MARD), the executing agency (EA) supports the improvement of the management efficiency of existing irrigation works, especially in the drought-affected provinces of Viet Nam, to facilitate economic restructuring within the sector, with a specific orientation towards higher value crops and sustainable development.

3. Aligned with the Government's *Agricultural Restructuring Policy*, the *Law on Hydraulic Structures*, and the *Irrigation Subsector Restructuring Plan*, the subproject aims to: (i) improve the quality of service delivery in irrigation systems, promote the economic use of water and serve agricultural production with increased diversification in response to climate change; (ii) contribute to the improved productivity, quality, and development of modernized irrigated agriculture, prioritizing the main upland crops and fisheries; (iii) promote revenue generating services from irrigation works to maximize the potential and capacity of existing irrigation schemes, ensuring sustainable financing for organizations managing the exploitation of irrigation and reduced subsidies from the state budget.

4. Priority subprojects were identified during the project preparatory technical assistance (PPTA). Dak Nong Province will have two subprojects: CuJut subproject and Dak Mil subproject. The Cu Jut subproject, located in Cu Jut district, will consist of (i) building 10 permanent weir structures along the Ea Dier River to replace the 10 temporary farmers' weirs, and (ii) constructing two new pilot demonstration pumped piped systems. The Dak Mil subproject, located in Dak Mil and Krong No districts, will rehabilitate 24 existing irrigation structures and will replace the farmers' temporary weirs with three permanent weir structures along Dak Sor Stream.

II. POLICY, LEGAL, AND ADMINISTRATIVE FRAMEWORK

5. The subprojects will comply with the requirements of the Asian Development Bank (ADB) Safeguards Policy Statement (SPS) (2009) and the Government of Viet Nam's *Guidelines on Implementation of Law on Environmental Protection,* 2014. *Decree No. 18/2015/ND-CP* has detailed information on environmental protection assessment, environmental impact assessment (EIA), and environmental protection plans. However, certain activities commonly associated with infrastructure subprojects, such as quarry operations, extraction of gravel, etc., will require permission from the relevant provincial level authorities. Depending on the scale, some construction activities on the proposed road, such as bridge or spillway, may require a separate

[2] These are the south central coastal provinces targeted by the project. The two Central Highlands provinces include Dak Lak and Dak Nong.

EIA.

A. ADB Requirements

6. ADB's SPS (2009) imposes safeguard requirements for all its funded projects. The SPS (2009) clarifies the reason, scope, and contents of the environmental assessment. It emphasizes environmental and social sustainability in pursuit of economic growth and poverty reduction in Asia and the Pacific. Therefore, the objectives of the SPS are to:

- Avoid adverse impacts of projects on the environment and affected persons (AP), where possible;
- Minimize/mitigate and/or compensate for adverse impacts on environment and AP when avoidance is not possible; and
- Help borrowers/clients to strengthen their safeguard systems and develop the capacity to manage environmental and social risks.

7. **Environment categorization.** ADB uses a classification system to reflect the significance of a project's potential environmental impacts. A project's category is determined by the category of its most environmentally sensitive component, including direct, indirect, cumulative, and induced impacts in the project's area of influence. Each proposed project is scrutinized as to its type, location, scale, and sensitivity and the magnitude of its potential environmental impacts. Projects are assigned to one of the following four categories:

- **Category A.** A proposed project is classified as category A if it is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works. An environmental impact assessment is required.
- **Category B.** A proposed project is classified as Category B if its potential adverse environmental impacts are less adverse than those of Category A projects. These impacts are site-specific, few if any of them are irreversible, and in most cases, mitigation measures can be designed more readily than for category A projects. An initial environmental examination is required.
- **Category C.** A proposed project is classified as category C if it is likely to have minimal or no adverse environmental impacts. No environmental assessment is required although environmental implications need to be reviewed.
- **Category FI.** A proposed project is classified as category FI if it involves an investment of ADB funds to or through a financial intermediary (FI).

8. The IEE Report should include the EMP that specifies the proposed mitigating measures specific to a potential impact, environmental monitoring requirements, institutional arrangements, and budget requirements.

9. ADB also requires public disclosure for Category A and B projects. For Category A, there should be at least two consultations, once during the early stages of the EIA and once when the draft EIA is available prior to ADB loan appraisal. For Category B, the draft IEE report should be available to interested stakeholders before project approval and posted on the ADB's website upon Board approval of the project. Viability and existence of the project are also required.

B. Government's Legal and Institutional Framework

10. Viet Nam's *Law on Environmental Protection (Law No. 55/2014/QH13)* dated 23 June 2014 provides the basis for the country's environmental laws and EIA system. The implementation of this law is guided by implementing guidelines, amendments, regulations on impact assessments, as well as sanctions on violations, incentives, regulations on waste management, and national technical regulations or standards on environmental quality.

11. *Decree 19/2015/ND-CP* dated 14 February 2015 provides guidelines for the implementation of several articles of the law pertaining to the assignment of environmental management responsibilities among ministries, provinces, and people's organizations (POs).

12. *Decree 18/2015/ND-CP* dated 14 February 2015 contains the requirements for Environmental Protection Plan (EPP), Strategic Environmental Assessment (SEA), EIA, and Environmental Protection Scheme (EPS). It also provides a list of project categories requiring an EIA Report (EIAR); 113 project types are listed in Annex II.

13. *Decree No. 80/2014/ND-CP* issued on 6 August 2014 regulates drainage and treatment of wastewater in urban areas, industrial zones, economic zones, processing and export zones, and rural residential areas. It also prescribes the rights and obligations of organizations, individuals, and households with activities related to drainage and treatment of wastewater within Viet Nam's territory.

14. *Decree No. 179/2013/ND-CP* dated 14 November 2013, prescribes sanctions for administrative violations on the domain of environmental protection. *Decree No.59/2007/NĐ-CP* dated 9 April 2007 and *Decree 38/2015/ND-CP* dated 24 April 2015 contain provisions on the management of wastes and scraps, including hazardous wastes.

15. *Circular 27/2015/TT-BTNMT* issued by the Ministry of Natural Resources and the Environment (MONRE) dated 29 May 2015 provides detailed guidance for SEA, EIA, and Environmental Protection Commitment (EPC).

16. The environment standard that the subproject will be meeting and will be monitored against:

- National Technical Regulations on air and noise quality

  - QCVN 05: 2013/BTNMT on ambient air quality
  - QCVN 26: 2010/BTNMT on noise
  - QCVN 27: 2010/BTNMT on vibration

- National Technical Regulations on water quality
  - QCVN 01: 2009/BYT on drinking water quality
  - QCVN 02: 2009/BYT on domestic water quality
  - QCVN 08: 2008/BTNMT on surface water quality
  - QCVN 09: 2008/BTNMT on underground water quality
  - QCVN 14: 2008/BTNMT on domestic wastewater

17. By law, investors and enterprises are required to submit EIAs and EPCs for their projects; government guidelines prescribe the format and content of EIA and EPP reports. Implementation of each of the subcomponents under a project will require compliance with these government-mandated procedures. In this case, the responsibility for compliance rests with the designated CPMU and PPMU.

18. Even though this IEE is written mainly to respond to ADB's requirements for due diligence review of environmental safeguards, it will also serve as reference for the CPMU, during the project's detailed design phase, in preparing compliance documents in the form of an EPC for each subproject for clearance by the provincial Department of Natural Resources and Environment (DONRE) in accordance with Viet Nam's EIA system. Current national standards for construction safeguards (covering environmental protection, workers, and public safety), as well as standards governing water and air quality, will be used as references in assessing environmental impacts and formulating mitigation measures and monitoring plans.

19. With regard to the institutional framework, environmental management is administered at the national level by MONRE. Aside from MONRE, the environment divisions in the various line ministries are tasked with environmental management functions related to specific sectors.

20. At the provincial level, the relevant management authorities are the Departments of Natural Resources and Environment (DONREs), which carry out their environmental protection activities through their respective environment divisions. DONRE is under the purview of MONRE only in relation to administrative matters and technical guidance. For all other purposes, the DONRE operates under the direct control of the respective provincial governments, through the Provincial People's Committees (PPCs).

C. International Conventions

21. Viet Nam is a party to several international conventions that are relevant to environmental management. None of the conventions has any direct or specific relevance for this IEE as the Project does not encounter any areas of environmental sensitivity covered by the conventions.

Convention Title	Convention date	Viet Nam participation
Convention on Wetlands of International Importance Especially as Waterfowl Habitat (RAMSAR)	1971	[20 September 1988]
Protocol to Amend the Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Paris.	1982	
Convention Concerning the Protection of the World Cultural and Natural Heritage	1972	[19 October 1987]
Convention on International Trade in Endangered Species Wild Fauna and Flora	1973	[20 January 1994]
UN Environmental Modification Convention (ENMOD)	1977	[26 August 1980]
FAO International Code of Conduct on the Distribution and Use of Pesticides		
Montreal Protocol on Substances that Deplete the Ozone Layer	1987	[26 January 1994]
London Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, London.	1990	
Copenhagen Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, Copenhagen.	1992	
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	1995	[13 March 1995]
United Nations Framework Convention on Climate Change	1992	[16 November 1994]
Convention on Biological Diversity	1992	[16 November 1994]

III. DESCRIPTION OF THE PROJECT

A. Cu Jut Subproject

22. The Cu Jut subproject is located in the north of Dak Nong Province, about 100 km north of Gia Nghia and 25 km southwest of Buon Ma Thuot, the provincial capital. The principal source of water for the subproject is the Ea Dier River, which is regulated by storage in Dak Drong and Dak Dier reservoirs.

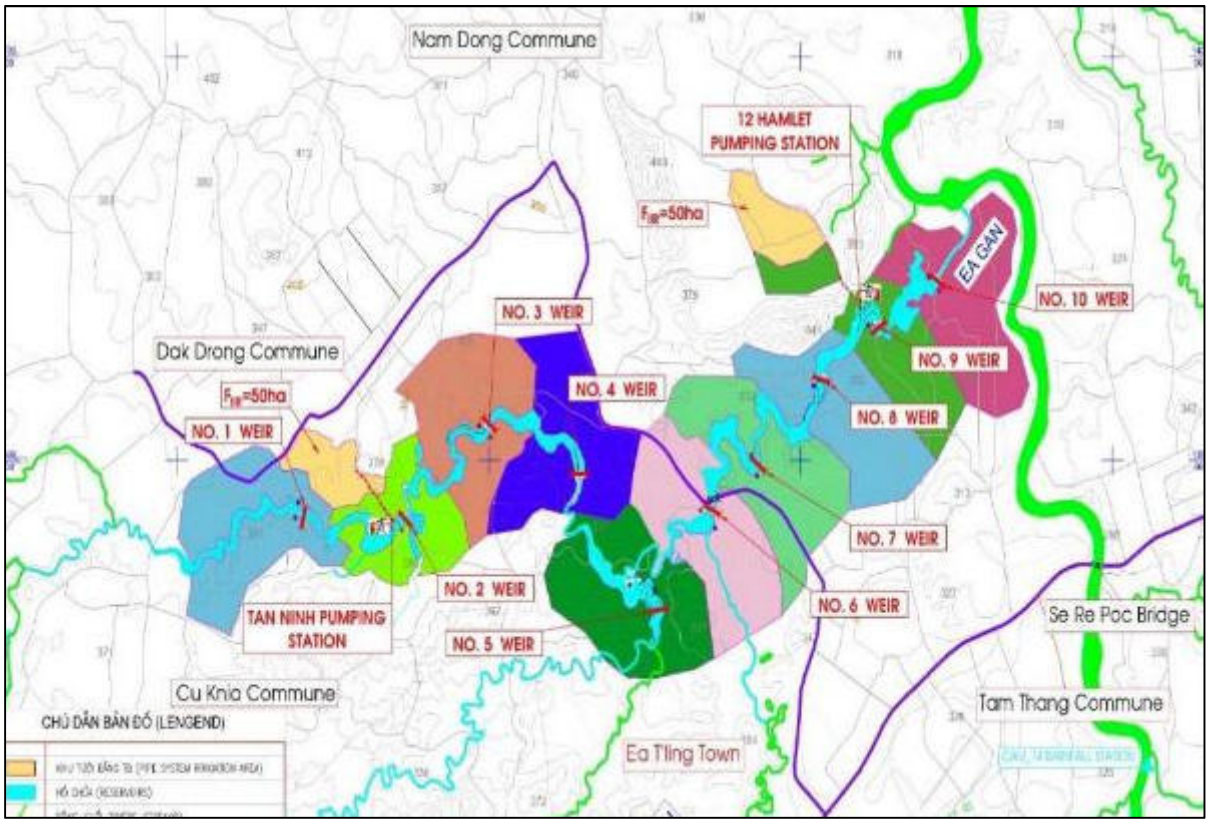
23. The Cu Jut subproject is located entirely within Cu Jut District, a rural district of Dak Nong Province. The proposed Cu Jut subproject will comprise 10 discrete investments of weirs and two pilot pumping stations: one located in Village 12, Nam Dong commune to pump water at the location of Weir No. 9, and the second is situated in Tan Ninh Village of Dak Drong Commune to take in water at the location of Weir No 2. The total subproject command area is 2,163 hectares (ha) located in six communes of Nam Dong, Dak Drong, Cu Knia. Ea Tling, Truc Son, and Tam Thang. The specific locations of the weirs are shown in **Table 1 and Figure 1.**

Table 1: Locations of the Proposed Civil Works of Cu Jut Subproject

Barrage	Name of Commune	Barrage	Name of Commune
Weir No. 1	Cu Knia	Weir No. 6	Nam Dong and Ea T'linh
Weir No. 2	Cu Knia and Truc Son	Weir No. 7	Nam Dong and Tam Thang
Weir No. 3		Weir No. 8	
Weir No. 4	Cu Knia and Ea T'linh	Weir No. 9	
Weir No. 5		Weir No. 10	

Source: MARD. 2017. Feasibility Study Report on the Cu Jut Subproject, Dak Nong Province. July 2017.

Figure 1: Layout of Cu Jut Subproject



Source: MARD. 2017. Cu Jut Subproject Concept Design. Dak Nong Province. May 2017.

1. Subproject Specifications

24. The subproject construction work will consist of: (i) 10 permanent weir structures to replace the farmers' temporary weirs located along the Dier River; and (ii) two new pilot demonstration pumped piped systems to take water in at the location of Weir Nos. 2 and 9; and (iii) access roads.

a. Weirs

25. The technical designs of the 10 weirs are similar. They will involve reinforcement of the operational gates for discharging floodwaters combined with spillways. The final design has an average of 1.5-m high fixed weir crest, but long weirs with no horizontal constriction of flow. Weir widths range from 20-50 m. Raised embankments upstream of the weirs will reduce the likelihood of the weirs being outflanked. Details of the weir structures are presented in **Table 2**.

Table 2: Details of the Weir Structures

Weir	Weir Design Characteristics				Service Area (ha)
	CA (km^2)	DF (cumec)	Width (m)	UD ($m^3/s/m$)	
1	79	119	20	5.95	203
2	83	122	20	6.10	186
3	90	127	20	6.35	216
4	95	129	20	6.45	226
5	188	239	30	7.97	224

Weir	Weir Design Characteristics				Service Area (ha)
	CA (km^2)	DF (cumec)	Width (m)	UD ($m^3/s/m$)	
6	195	245	35	7.00	215
7	208	249	40	6.23	218
8	212	257	40	6.43	225
9	216	260	50	5.20	225
10	217	261	50	5.22	225
Total					**2,163**

CA=catchment area; DF=1-in-50-year design flood; UD=unit discharge.
Source: English summary of the NDC revised subproject design report.

b. Pilot Pumping Stations and Main Pipelines to Watering Areas

26. Two pilot pumping stations (PSs) are proposed to irrigate about 100 ha of the watering areas of Tan Ninh Village and Village No.12. Some 50 ha of Tan Ninh village will be irrigated by the PS installed at the location of Weir No. 2, with capacity of Q=200 m^3/h, H=23 m, and 50 ha of Village 12 will be supplied by the PS at the weir location of No. 9 with Q= 200 m^3/h and H=33 m. The main pipeline system will be spread out at the outlets of watering areas that are located far from Ea Dier River.

27. The two piped distribution system layouts were designed to meet the modern irrigation level of service adopted for WEIDAP, with farmers' fields within 500 m of the pipeline. Required high-density polyethylene (HDPE) pipe diameters range from 90-315 millimeters (mm) (Tan Ninh) and from 125-315 mm (Village 12). Pipe lengths and densities are 1,176 m and 23.5 m/ha, and 2,045 m and 40.9 m/ha, respectively.

c. Access Roads

28. To improve access and link to the bridge crossing, 10.95 km of a 4-m wide concrete paved road is proposed.

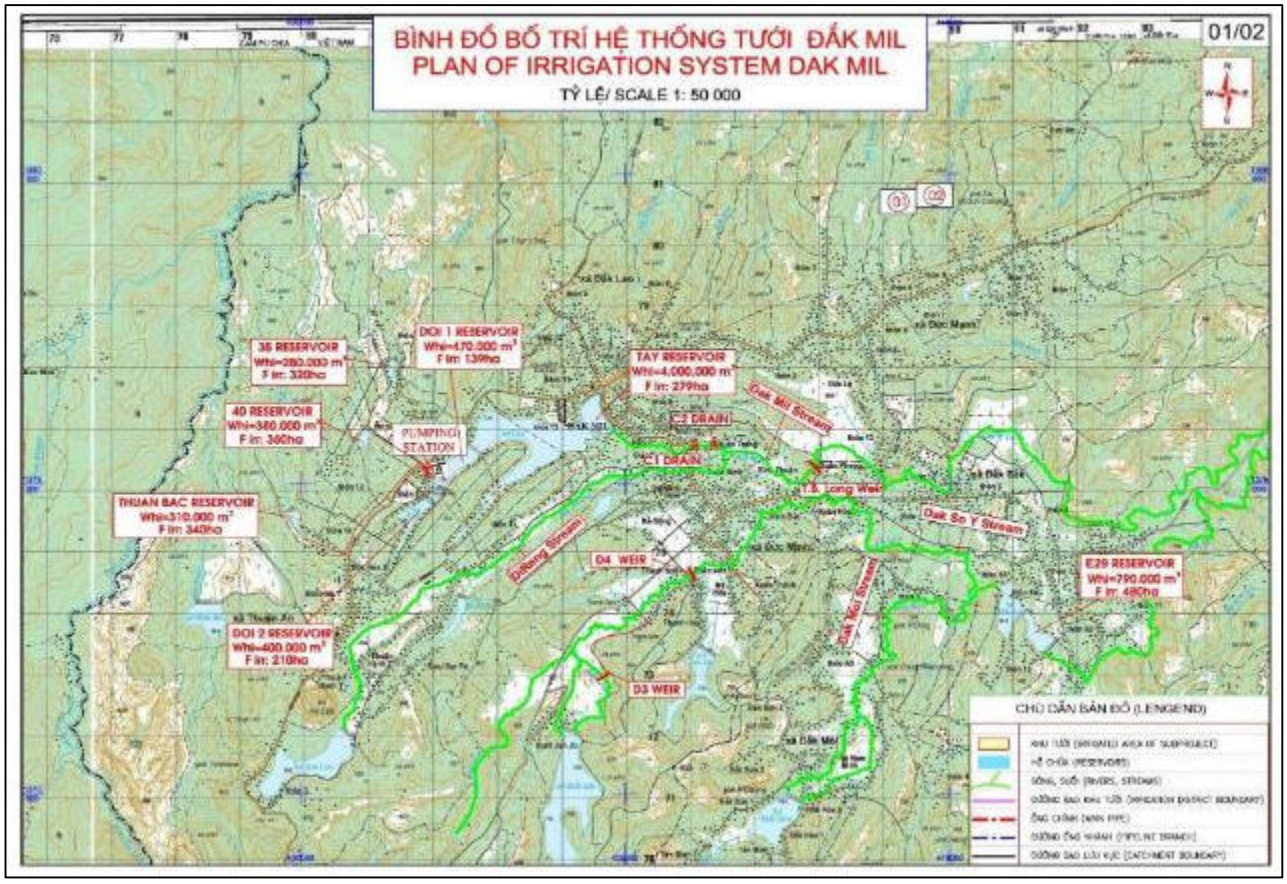
B. Dak Mil Subproject

1. Subproject Location

29. The Dak Mil subproject is located in the north of Dak Nong Province, about 70 km north of Gia Nghia and 60 km southwest of Buon Ma Thuot. The principal source of water for the subproject is the Dak Sor River, regulated by storage in a number of reservoirs in its upper reaches.

30. The Dak Mil subproject command area is approximately 5,980 ha and is scattered in the five communes of Thuan An, Dak Lao, Duc Minh, and Long Son in Dak Mil District, and Nam Xuan Commune of Krong No District. The subproject command areas include: (i) from upstream works: the existing structures presently irrigate 3,292 ha of coffee and pepper and 729 ha of rice, but after rehabilitation, they will irrigate 5,251 ha of coffee and pepper and 729 ha of rice; and (ii) downstream works: four new permanent weirs will be constructed to replace the temporary farmers' weirs and serve a total area of 770 ha within 1 km of each weir site. The location of the subproject is shown in **Figure 2**.

Figure 2: Location of the Dak Mil Subproject



2. Subproject Specifications

31. The upgraded and constructed works will include upstream and downstream works. The upstream works will involve the rehabilitation of several small existing reservoirs that will supply irrigation water. More specifically, the subproject will consist of the following civil works:

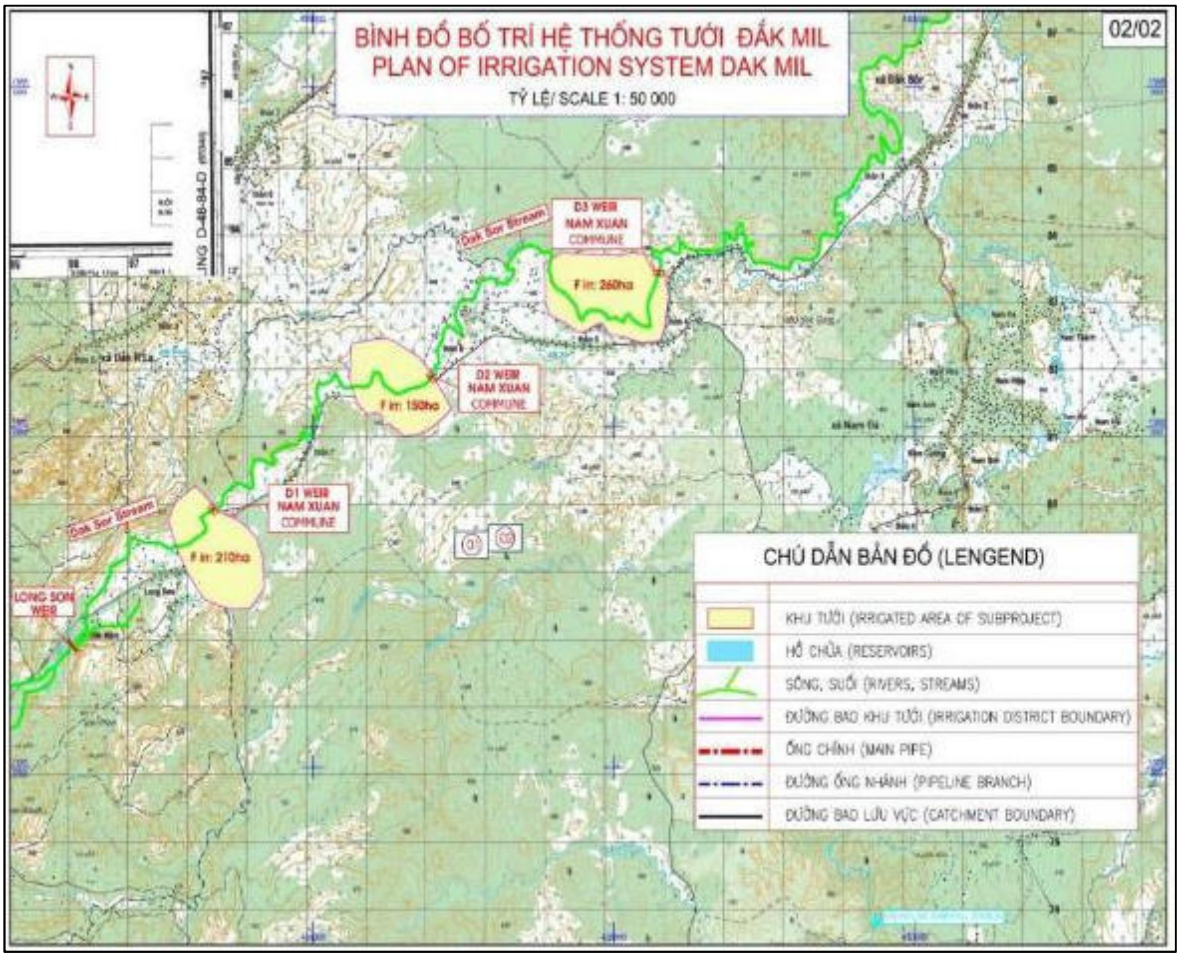
- Rehabilitation to restore the original design of four existing storage reservoirs (Team 1, Team 2, 35B, and 40) serving 1,029 ha of coffee farms;
- Rehabilitation to restore the original design of five existing diversion weirs (Thai Ba Long and four dams: D1, D2, D3, and D4) serving 370 ha of coffee and 67 ha of rice lands;
- A new reinforced concrete box culvert for 2.75 km of the Dak Mil stream;
- A new 0.8 m x 1.0 m offtake for the existing E29 Reservoir;
- Lining of the existing Dak Sor-Long Son Weir with reinforced concrete; and
- A new pumping station to replace the temporary one located on Team No.1 Reservoir to augment supply to the existing interconnected Thuan Bac and Team No. 40 reservoirs.

32. The new pumping station will deliver the peak irrigation water requirement (IWR) in the critical month (April). The peak crop water requirement adopted, based on coffee, is 0.83 l/s/ha for continuous 24 hours/day supply. The new pumping station is designed to deliver 450 m^3/ hr (head=55.0 m) to a service area of up to about 150 ha.

33. Downstream works will consist of three new permanent downstream weirs to replace farmers' temporary weirs, which serve a total of about 770 ha. The service areas are within about 1 km of each weir site (**Fig. 3**). The weirs will be constructed along Dak Sor Stream in Nam Xuan Commune. The conventional weir design includes the following:

- Estimates of 1-in-50-year design flood;
- Detailed topographic survey and mapping of each weir site;
- Conventional hydraulic weir design principles and practices, including consideration of the cost trade-off[3] between: (i) weir height, width, and cost; and (ii) upstream river dike height, length, volume, and cost to ensure that the weir does not fail because of overtopping of its upstream embankments and erosion of its earth abutments;
- Downstream energy dissipation and erosion control, including whether the flow over the weir is critical or subcritical, and design of the stilling basin to ensure that any hydraulic jump is drowned by the normal water level in the downstream channel; and
- Hydraulic gradient and seepage analysis to ensure that the weir structure does not fail by piping or uplift, etc.

Figure 3: Layout of Downstream Work in the Dak Mil Subproject



[3] Narrow and/or high weirs cost less, but require higher and more extensive embankments costing more, and vice-versa.

IV. DESCRIPTION OF THE ENVIRONMENT

A. Physical Environment

1. Topography

34. Cu Jut subproject is located entirely within Cu Jut District, covering the five communes of Đắk Đrông, Cư K'nia, Nam Dong, and Tam Thang in Cu Jut district, which is in basin of Ea Dier River. The subproject has a relatively flat terrain, less fragmented with an average elevation of 400-450 m above sea level (ASL).

35. The Dak Mil subproject is located in Dak Mil and Krong No districts. It will supply irrigation water to six communes (five communes in Dak Mil and one in Krong No). The Dak Mil subproject area has an average elevation of 700-800 m ASL with a typically hilly terrain.

2. Climate

36. The southern part of Viet Nam has a warm temperate climate characterized by dry winters and hot summers. The subproject areas of Cu Jut and Dak Mil have tropical monsoon climate, experiencing a high-temperature baseline with an annual average of 24^{o}C. The average annual humidity in Cu Jut and Dak Mil subproject areas is 82%, and there are two distinct seasons: rainy season from May to October, and dry season from November to April of the following year.

37. Dak Nong Province, where the Cu Jut and Dak Mil subprojects are situated, has been continuously experiencing a series of extreme climatic conditions with an increasing frequency of storms and severe droughts. In the rainy season, floods occur frequently and with greater intensity, causing localized flash floods leading to significant loss of life and property and causing a significant impact on agricultural production. In the dry season, more prolonged heat wave continues to occur with high intensity, which dries out some shallow lakes and causing a serious water shortage for production and daily life of the people. Climate change is likely to result in greater maximum and minimum water levels and greater risk of floods and droughts.

3. Hydrology

38. The principal source of water for the Cu Jut subproject is the Ea Dier River, which is regulated by the main storage in Dak Drong and Dak Dier reservoirs. The Ea Dier River is the left bank tributary of the Ea Gang River, which is itself, a left bank tributary of the Srepok River. Key features of the catchment storage are summarized in **Table 3**.

Table 3: Details of Cu Jut Catchment Storage

Reservoirs	Catchment Area	Catchment Rainfall	Normal Water Level	Dead Storage Level	Total Storage	Dead Storage	Usable Storage
	(km^2)	(mm)	(m)	(m)	(mm^3)	(mm^3)	(mm^3)
Dak Dier	36.0	1700					5.9
Dak Drong	15.4						2.3
Small upstream reservoirs							3.2
Confluence with Srepok	212.0						11.4

Note: 11.4 mm^3 represents the combined storage of Dak Dier, Dak Drong, and upstream reservoirs

39. The principal source of water for the Dak Mil subproject is the Dak Sor River, regulated by storage in a number of reservoirs in its upper reaches. The Dak Sor is the left bank tributary of the Srepok River. The principal storage reservoirs in the catchment are shown in **Table 4.**

Table 4: Details of Dak Mil Catchment Storage

Reservoirs	Catchment Area	Catchment Rainfall	Normal Water Level	Dead Storage Level	Total Storage	Dead Storage	Usable Storage
	(km^2)	(mm)	(m)	(m)	(mm^3)	(mm^3)	(mm^3)
West Reserve (Ho Tay)	6.0	1,700					4.0
Dak Sak	19.0						6.5
Other small reservoirs upstream of Weir D3							7.1
Total	298.3						17.7

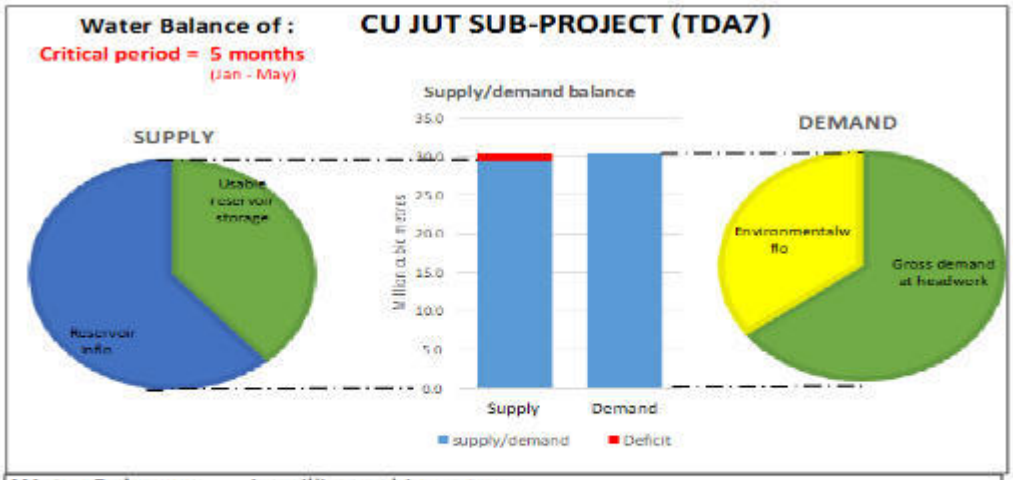
Note: 17.7 mm^3 represents the combined storage of several reservoirs in the catchment

4. Subproject Water Balance

a. Cu Jut Subproject

40. Without weirs, water from Dak Drong and Dak Dier reservoirs flows by gravity to Seropok River through Dak Dier River. The construction of 10 permanent weirs, 1.5 m high along the 25-km Dak Dier River, will supply water to 2,163 ha. Based on the hydrological parameters and gross demand at the headworks, IWRP calculated the subproject water balance and indicated that there will be a water supply deficit of about 1 mm^3 with an efficiency of 85% in five months, January to May. However, given that about 10% of irrigation water will be taken from groundwater, the water supply from the irrigation system will meet the irrigation demand of the subproject with 2,163 ha of mainly coffee and pepper crops. **Figure 4** below presents the water balance assessment.

Figure 4: Cu Jut Subproject Water Balance Assessment



Water Balance: in million cubic metres

	Supply		Demand
Usable reservoir storage	11.386	Gross demand at headwork	19.768
Reservoir inflow	18.119	Environmental flow	10.69
Total	29.505		30.458
Balance	-0.953	(Deficit)	

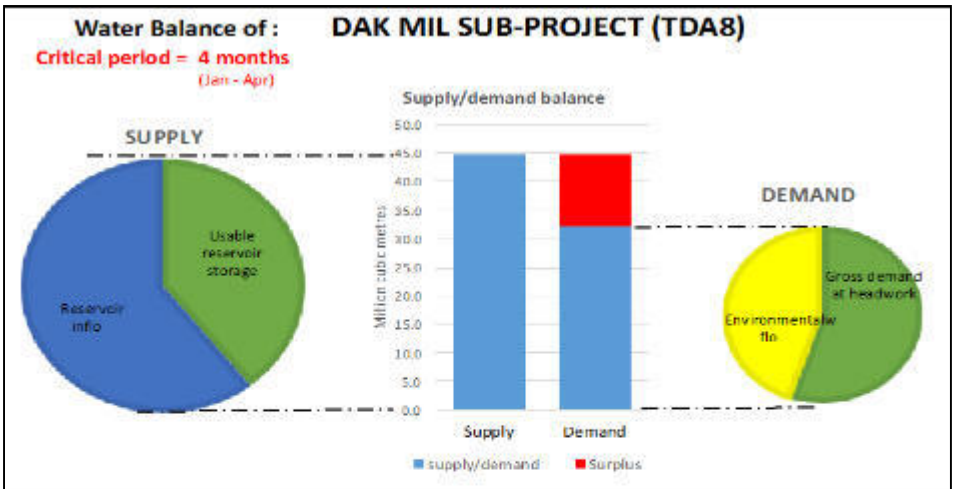
41. The flora in the Ea Dier river ecosystem both upstream and downstream of subproject consists mainly of mosses and water hyacinth. The aquatic fauna consists of small river fish, shrimp and crab. In general, aqua-ecosystem is in poor condition due to pollution by agricultural runoff. These are no endemic or otherwise significant species in the river that need to be protected.

The existing typical views of Ea Dier river

b. Dak Mil Subproject

42. Water balance calculations for this subproject were carried out by IWRP using climate data and reliable rainfall estimates from Dak Mil and irrigation water requirements for the proposed cropping patterns. The results showed that the water supply from the various reservoirs and upstream weirs will meet the irrigation requirement of the subproject area (**Fig. 5).**

Figure 5: Dak Mil Subproject Water Balance Assessment



Water Balance:	in million cubic metres		
	Supply		Demand
Usable reservoir storage	17.690	Gross demand at headwork	17.74
Reservoir inflow	27.141	Environmental flow	14.492
Total	44.831		32.232
Balance	12.599	(Surplus)	

43. Aqua-ecosystem in reservoirs and the canal downstream of the subproject is a modified habitat comprising mainly of mosses, water hyacinth, small fish and shrimp. The ecosystem has limited ecological value and the abstraction of water for the subproject will have limited impacted on this ecosystem.

The typical views of subproject reservoir and canal.

5. Water Resource Quality

a. Surface Water

44. The quality of surface water in both subproject areas is good, as per *QCVN 08/2015/BTNMT,* based on the analysis conducted by the Central Highland Agricultural Environmental Monitoring Center of the Agricultural Institute (CAI) in October 2016. For the Cu Jut subproject area, surface water samples were taken along Dak Dier River; for the Dak Mil subproject, surface water samples were obtained from the various reservoirs of Team 1, 2, 40, 35B, and along the Duc Minh Stream. The results of the water quality analysis are presented in **Tables 5** and **6**.

Table 5: Results of Surface Water Quality Analysis, Cu Jut Subproject

Criteria	Unit	NM01	NM02	NM03	NM04	NM05	NM06	QCVN 08:2008/ BTNMT (B1)
pH	-	7.87	7.14	7.72	7.22	7.14	7.05	5.5 - 9
DO	mg/l	5.75	5.58	4.76	5.75	6.58	6.76	>= 4
TSS	mg/l	41	44	47	41	55	54	50
BOD5	mg/l	9	12	13	9	12	13	15
COD	mg/l	16.5	20	25	12	22	18	30
NO3-	mg/l	0.012	0.015	0.017	0.015	0.015	0.021	10
NO2-	mg/l	0.016	0.016	0.012	0.013	0.016	0.018	0.04
NH4+	mg/l	0.08	0.05	0.06	0.12	0.13	0.12	0.5
PO43-	mg/l	0.124	0.125	0.121	0.12	0.13	0.11	0.3
Zn	mg/l	0.22	0.18	0.22	0.15	0.18	0.20	1.5
Pb	mg/l	NA	NA	NA	NA	NA	NA	0.05
Hg	mg/l	NA	NA	NA	NA	NA	NA	0.001
As	mg/l	NA	0.004	NA	NA	NA	NA	0.05
Total Oil	mg/l	0.02	0.01	0.01	0.02	0.03	0.02	0.1
Coliform	MPN/ 100ml	3,800	3,500	2,500	3,500	3,800	3,600	7,500

Table 6: Results of Surface Water Quality Analysis, Dak Mil Subproject

Criteria	Unit	Team 1	Team 2	35B	40	D3 Duc Minh	D4 Duc Minh	QCVN 08:2015/ BTNMT (B1)
pH	-	7.9	7.14	7.72	7.22	7.14	7.05	5.5 - 9
DO	mg/l	5.45	5.58	4.76	5.75	6.58	6.76	>= 4
TSS	mg/l	56.5	44	47	41	55	54	50
BOD5	mg/l	9	12	13	9	12	13	15
COD	mg/l	16.5	20	25	12	22	18	30
NO3-	mg/l	0.012	0.015	0.017	0.015	0.015	0.021	10
NO2-	mg/l	0.016	0.016	0.012	0.013	0.016	0.018	0.04
NH4+	mg/l	0.08	0.05	0.06	0.12	0.13	0.12	0.5
PO43-	mg/l	0.124	0.125	0.121	0.12	0.13	0.11	0.3
Zn	mg/l	0.22	0.18	0.22	0.15	0.18	0.20	1.5
Pb	mg/l	NA	NA	NA	NA	NA	NA	0.05
Hg	mg/l	NA	NA	NA	NA	NA	NA	0.001
As	mg/l	NA	0.004	NA	NA	NA	NA	0.05
Total grease and oil	mg/l	0.02	0.01	0.01	0.02	0.03	0.02	0.1
Coliform	MPN/100ml	3,800	3,500	2,500	3,500	3,800	3,600	7,500

b. Groundwater

45. The representative groundwater samples taken from households living in the Cu Jut and Dak Mil subproject areas were analyzed for water quality at the Center of Agricultural Institute in October 2016. The results showed that the water is biologically polluted, as the quantity of coliform and *E. coli* in most of the samples exceeded the standards prescribed in *National Technical Regulation (QCVN) 09:2015/BTNMT* (**Tables 7** and **8)**.

Table 7: Results of Groundwater Quality Analysis, Cu Jut Subproject

Parameters	Unit	NN01	NN02	NN03	NN04	NN05	NN06	QCVN 09:2015/ BTNMT (B1)
pH	-	7.15	7.25	7.35	7.3	7.32	7.25	5.5-8.5
TSS	mg/l	.703.1	540.7	631.8	421	456	522	1500
Hardness	mg/l	325	216	322	345	412	305	500
DO	mg/l	3.2	4.2	3.8	3.3	3.5	3.6	-
NH_4+	mg/l	0.05	0.05	0.03	0.02	0.03	0.03	0.1
NO_3-	mg/l	0.15	0.15	0.16	0.15	0.15	0.15	15
NO_2-	mg/l	<0.01	<0.01	<0,01	<0.01	<0.01	<0.01	1
Cl-	mg/l	71	62	68	56	63	59	250
As	mg/l	0.06	0.04	0.03	0.03	0.05	0.04	0.05
Zn	mg/l	0.012	0.017	0.017	0.015	0.015	0.012	3
Pb	mg/l	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.01
Fe	mg/l	0.15	0.15	0.25	0.12	0.22	0.13	5
Hg	mg/l	0.0002	0.0004	NA	NA	NA	NA	0.001
Mn	mg/l	0.025	0.025	0.024	0.015	0.005	0.005	0.5
Coliform	MPN/100ml	8	5	6	2	3	4	3
E. coli	MPN/100ml	1	3	2	NA	1	2	NA

Note: NN01 to NN06 are samples taken from households in the subproject area.

Table 8: Results of Groundwater Quality Analysis, Dak Mil Subproject

Parameters	Unit	Samples Taken from Household Wells Surrounding the Reservoirs						QCVN 09:2015/ BTNMT
		Team 1	Team 2	35B	40	DMS at Weir 3	DMS at Weir 4	
pH	-	7.15	7.25	7.35	7.3	7.32	7.25	5.5-8.5
TSS	mg/l	703.1	540.7	631.8	421	456	522	1500
Hardness	mg/l	325	216	322	345	412	305	500
DO	mg/l	3.2	4.2	3.8	3.3	3.5	3.6	-
NH4+	mg/l	0.05	0.05	0.03	0.02	0.03	0.03	0.1
NO_3-	mg/l	0.15	0.15	0.16	0.15	0.15	0.15	15
NO_2-	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1
Cl-	mg/l	71	62	68	56	63	59	250
As	mg/l	0.06	0.04	0.03	0.03	0.05	0.04	0.05
Zn	mg/l	0.012	0.017	0.017	0.015	0.015	0.012	3
Pb	mg/l	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.01
Fe	mg/l	0.15	0.15	0.25	0.12	0.22	0.13	5
Hg	mg/l	0.0002	0.0004	NA	NA	NA	NA	0.001
Mn	mg/l	0.025	0.025	0.024	0.015	0.005	0.005	0.5
Coliform	MPN/100ml	8	5	6	2	3	4	3
E. coli	MPN/100ml	1	3	2	NA	1	2	NA

Note: DMS=Duc Minh Stream.

c. Air Quality and Noise

46. There are no industries producing discharges and emissions that could result in atmospheric pollution, and pollution from vehicular exhaust emissions is not significant given the absence of traffic congestion. The analysis of air quality measurements conducted by CAI in October 2016 indicated that air quality is generally good in both Cu Jut and Dak Mil subproject areas. All the parameters were within acceptable limits, as contained in *QCVN 05/2013/ BTNMT* (**Tables 9 and 10**).

Table 9: Ambient Air Quality Measurements, Cu Jut Subproject

Parameters	Unit	AIR 1	AIR 2	AIR 3	AIR 4	AIR 5	QCVN 05:2013/BTNMT Average 1 hour
Temperature	^{0}C	16	15	15	15	16	-
Humidity	%	88.5	86	87.5	86.5	86	-
Wind velocity	m/s	1.2	1.3	0.8	1.1	0.9	-
Pressure	mmHg	742	741	746	745	751	-
SO_2	mg/m^3	0.1	0.1	0.19	0.06	0.22	0.35
CO	mg/m^3	2.4	3	4.7	3.7	5.4	30
NO_2	mg/m^3	0.09	0.1	0.08	0.08	0.1	0.2
Dust	mg/m^3	0.05	0.05	0.09	0.11	0.15	0.3
Noise	dBA	46	52	515	53	65	70*

*QCVN 26/2010/BTNMT; AIR 1, 2, 3, 4, 5 are the sampling locations in the subproject area.

Table 10: Ambient Air Quality Measurements, Dak Mil Subproject

Analysis criteria	Unit	Sampling in Dams of Reservoirs and Canal					QCVN 05:2013/BTNMT 1 hour Average
		Team 1	Team 2	35B	40	Thái Bá Long	
Temperature	^{0}C	29.5	27.2	29.4	27.3	27.1	-
Humidity	%	87	88.6	88.8	86.1	89	-
Wind Velocity	m/s	1.2	1.3	0.8	1.1	0.9	-

Analysis criteria	Unit	Sampling in Dams of Reservoirs and Canal					QCVN 05:2013/BTNMT 1 hour Average
		Team 1	Team 2	35B	40	Thái Bá Long	
Pressure	mmHg	742	741	746	745	751	-
SO2	mg/m^3	0.05	0.05	0.047	0.048	0.061	0.35
CO	mg/m^3	2	2	2	2.1	2.7	30
NO2	mg/m^3	0.036	0.044	0.033	0.041	0.047	0.2
Dust	mg/m^3	0.05	0.05	0.06	0.06	0.04	0.3
Noise	dBA	55.4	55.6	58.5	47.6	62.5	70*

*QCVN26/2010/BTNMT

B. Main Socioeconomic Features

1. Population and Ethnic Minorities

47. The Cu Jut subproject beneficiary area comprises of six communes of Nam Dong, Dak Drong, Cu Knia, Ea T'ling, Truc Son, and Tam Thang in Cu Jut District. The total population of subproject communes was 74,613 from 16,791 households (2016). Ethnic minorities (EMs) account for 42% of the total. Among EM groups, 84% are migrant EM groups of Tay, Nung, Dao, Muong, H'Mong, and Thai from other provinces, and 16% are indigenous EM groups of E De and M'Nong. The population and EMs in the subproject communes are shown in **Table 11**.

Table 11: Population and EMs of Cu Jut Subproject

Items	Ea T'ling	Nam Dong	Dak Drong	Tam Thang	Cu Knia	Truc Son	Entire Subproject Area
Population (number)	15,878	17,248	15,380	13,976	8,860	3,271	74,613
Number of households (HHs)	3,842	4169	3282	2889	1,857	752	16,791
Number of EM households	638	1,218	2,789		1,404	158	6,207
Number of indigenous EM HHs	369	4	58	709	0	0	1,140
Number of migrant EM HHs	269	1214	2731	62	1404	158	5,838

Source: Cu Jut District PC Report, 2016.

48. Dak Mil subproject is located in Dak Mil and Krong No districts of Dak Nong Province. Their combined 2015 population was 182,458 from 41,344 households. The EM population accounts for 28% of the total participating district population. There are about 20 EM groups in the two districts, including the Ede, Mo Nong (M'Nong), Tay, Nung, Thai, H'Mong, and Dao, among others. The E De and Mo Nong are aboriginals (indigenous people) of the province, while the other ethnic groups migrated from other provinces, especially from the northern mountainous provinces during the 1990s. Among the EM population, 31% are indigenous EM groups, and the remainder are migrant EMs (69%) (**Tables 12** and **13).**

Table 12: Population and EM in Dak Mil Subproject Districts

Item	Province	Dak Mil	Krong No	Total, Project Districts
Population (number of persons)	603,541	108,533	73,925	182,458
Number of HHs	144,132	24,075	17,269	41,344
EM population as a whole	187,414	21,988	29,847	51,835
Indigenous EM population	61,627	8,490	7,545	16,035
Migrant EM population	125,787	13,498	22,302	35,800

Table 13: Population and EMs in Dak Mil Subproject Communes

Item	Subproject Communes				
	Dak Lao	Duc Minh	Thuan An	Long Son	Nam Xuan
Population	253,400	361,800	61,940	30,580	30,540
No. of HHs	3,857	-	-	369	1,538
% EM persons	6.52	8	27.19	94	75

2. Employment, Income, and Living Standards

49. The Cu Jut subproject area covers the Ea T'Linh Town and the five communes of Cu Knia, Nam Dong, Tam Thang, Dak Drong, and Truc Son. Agriculture and forestry contribute a big share to the gross domestic product (GDP) of these communes (90% in Dak Drong; 83.5% in Cu Knia). Annual income per capita in 2016 of Ea T'Linh Town and these five communes ranged from 22.1 million Vietnamese Dong (VND) (Dak Drong) to 40.1 million VND (Ea T'Linh Town). Almost all local residents are farmers earning their living through the cultivation of coffee, pepper, paddy, vegetable, maize. The number of poor households in Truc Son Commune is very high at 43.1% (**Table 14**).

Table 14: Details of Income and Poverty Rate of Cu Jut Subproject Communes

Items	Commune/Town					
	Cu Knia	Ea T'ling	Nam Dong	Tam Thang	Dak Drong	Truc Son
Land area						
Average annual income per capita (million VND)	34.4	40.1	35.2	30.5	22.1	25.3
GDP structure						
Agriculture, forestry (%)	83.5	16.3	52	53	90	60
Industry, construction (%)	16.5	48	27	40	10	30
Service, commerce (%)		78.9	21	7.0		10
% of poor households	9.72	14.37	6.78	7.65	12.3	43.1
% EM persons*	80	12	30	29	7.8	-

Source: Socioeconomic reports of PCs of Ea T'Linh Town and the communes of Cu Knia, Nam Dong, Tam Thang, Dak Drong, and Truc Son, end-2016.

50. The total command area of Dak Mil subproject is 5,980 ha in five communes of Dak Lao, Duc Minh, Thuan An, Long Son, and Nam Xuan. Agriculture and forestry contribute a big share to the GDP structure of these communes (over 80% in Thuan An, Long Son, and Nam Xuan). Average annual income per capita in 2016 was high in Duc Minh (VND 40 million) and Dak Lao (VND31.5 million) and very low in Long Son (VND 17.1 million) and Nam Xuan (VND21.5 million). As soil in these communes is fit for coffee and pepper, almost all households grow coffee and pepper; only a small number of households raise rice, vegetable, and maize. The ratio of poor households is high in Long (**Table 15**).

Table 15: Details of Income and Poverty Rate in Dak Mil Subproject Communes

Items	Commune/Town				
	Dak Lao	Duc Minh	Thuan An	Long Son	Nam Xuan
Natural land area ($km^{2)}$	253.4	36.18	61.94	30.58	30.54
Average annual per capita income (million VND)	31.5	40	28	17.1	21.5
GDP structure					
Agriculture, forestry (%)	56.3	62.5	80	93.5	92
Industry, construction (%)	23.5	6.5	20	4.2	8

Service, commerce (%)	20.2	28		2.3	
% of poor households	3.2	5.3	3.42	32.6	27.4
% of poor EM households	16.1	23.03	65.9	94.2	87.4
% EM persons	6.52	8	27.19	94	75

Source: Socioeconomic reports of PCs of Dak Lao, Duc Minh, Thuan An, Long Son, and Nam Xuan, end-2016.

C. Main Environmental Features

1. Cu Jut Subproject

a. Weir D1

51. Weir D1 is located in Cu Knia Commune with a concrete access road. Stream water is mainly used for watering coffee and pepper trees. Both sides of the stream are covered with thick bushes that contribute to preventing the banks from landslides and soil erosion. Construction of the weir may: (i) affect water quality due to construction wastes, such as cement residues and sediment; (ii) cause traffic accident because of increased transportation in the rural area; and (iii) damage the community roads due to heavy transport vehicles. The location of Weir 1 is shown in **Figure 6**.

Figure 6: Location and Watering Area of Weir D1

b. Weir D2

52. Weir D2 is located in Cu Knia and Truc Son commune, with a narrow access road to the construction site. The civil works may affect water quality, cause traffic accidents, and damage community roads due to heavy transportation (**Fig. 7**).

Figure 7: Location and Watering Area of Weir D2

53. Weir D3 is also situated in Cu Knia and Truc Son communes. Landslides have occurred due to cultivation activities, which may become more serious once the weir is put into operation (**Fig. 8**).

Figure 8: Location and Watering Area of Weir D3

54. Weir D4 is located in Cu Knia and Ea T'ling communes. Water is used solely for irrigation. Access to the working site is through a small unpaved road (**Fig. 9**).

Figure 9: Location and Watering Area of Weir D4

55. Weir D5 is located in Cu Knia and Ea T'ling communes, which can be accessed through a small unpaved road (**Fig. 10**).

Figure 10: Location and Watering Area of Weir D5

56. Weir D6 is situated in Nam Dong and Ea T'ling communes. The access road is sloping and narrow (**Fig. 11**).

Figure 11: Location of Weir D6 and its Access Road

57. Weir D7 is located in Nam Dong and Tam Thang communes. The construction site is far from residential area. Similar to other weir construction, the civil works may cause water pollution, traffic accidents, and damage to the community road (**Fig. 12**).

Figure 12: Location of Weir D7 and its Access Road

58. Weir D8 is located downstream of the bridge in Nam Dong and Tam Thang communes (**Fig. 13**).

Figure 13: Location of Weir D8

59. Weir D9 is located in Nam Thang and Nam Dong communes. Both sides of the riverbank are covered with vegetation. Private land is located about 50 m from the riverbank, and no households are found near the worksite (**Fig. 14**).

Figure 14: Location of Weir D9

60. Weir D10 is in Nam Thang commune. Both sides of the riverbank are covered with vegetation. Private land is located about 50 m from the riverbank, and there are no households near the worksite. Access to the area is through a trail made by the villagers (**Fig. 15**).

Figure 15: Location of Weir D10 and its Access Road

Location of the spillway

Access road will be upgraded / watering area

2. Dak Mil Subproject

61. Weir Team 2 reservoir located in Thuan An commune is surrounded by residential areas. Its water is being used for the irrigation of coffee and pepper, and its dam serves as a community road. Construction work may cause traffic disturbance and water pollution due to excavated soil and wastes (**Fig. 16**).

Figure 16: Location of Team 2 Reservoir

62. Team 1 reservoir is situated in Daklao Commune. Its water is being used for the irrigation of coffee and pepper. The reservoir is also the outlet of a drainage system, where domestic waste is discharged into, thereby polluting the water polluted (**Fig. 17**).

Figure 17: Location of Team 1 Reservoir and Status of Sanitation

Drainage system discharging into the reservoir

Household toilets located on the reservoir's bank

63. The civil works will include: (i) reinforcement of both sides of the existing dam and spillway; (ii) construction of a new culvert as an intake for water regulation; and (iii) upgrading of the access road. There are no protected and sensitive areas that will be potentially affected by the civil works. However, dust, noise, and transportation disruption will cause temporary disruptions, and water pollution could result from construction wastes during the construction phase if no mitigation measures are applied.

a. Reservoir 40 and Pumping Station

64. The civil works will include: (i) construction of a pumping station with a capacity of 450m^3/h to pump water from Doi 1 Reservoir through the two pipelines towards Reservoir 40 and Thuan Bac Reservoir; (ii) reinforcement of both sides of the existing dam; and (iii) construction of a new spillway and culvert.

65. The pumping station will be located on public land on the bank of Doi 1 Reservoir, and the pipeline will be built along the community road and cross the district road before it divides into two

lines. One will discharge water to Reservoir 40 and the other to Thuan Bac Reservoir. Traffic disturbances may occur during pipe installation across the provincial road, the community road may be damaged, and water pollution may occur due to pipe construction (**Fig. 18**).

Figure 18: Community and Provincial Roads Pipeline along and across Reservoir 35, B Area

Community road will be upgraded with concrete

The asphalt road to be crossed by the pipeline

The dam of reservoir needs upgrading

66. Reservoir B area is located in Dak Lao commune. The civil works will include: (i) construction of a new spillway and water intake culvert; and (ii) reinforcement of both sides of the dam and access road. There are no protected and sensitive areas to be potentially affected by the civil works. However, dust, local transportation disruption, and water pollution from construction activities may occur if no mitigation measures are applied.

b. Upper Canal of Dak Mil Stream

67. The spillway and small canal to water the paddy fields will be upgraded. The location of civil works is within a rice field. No sensitive areas are found in the area, which could be affected by construction. However, construction materials, such as sand, cement, and stone residues, as well construction and solid wastes may affect the agricultural land surrounding the proposed canal and spillway (**Fig. 19**).

Figure 19: Location of Weir of Dak Mil Stream

Spillway and canal will be upgraded

Rice field located nearby

c. Thai Ba Long Canal

68. Thai Ba Long canal is located in Duc Minh Commune and irrigates the surrounding paddy fields. Construction may cause a temporary disruption of community transportation. Wastes could affect the agricultural land located along both sides of the canal, and irrigation service may be disrupted during the upgrading of the canal (**Fig. 20**).

Figure 20: Location of Thai Ba Long Dam and its Access Road

Thai Ba Long Canal

Canal will be upgraded with a concrete lining

d. Spillway D2

69. Spillway D2 is located in Duc Minh Commune and aims to irrigate the paddy fields. The quality of agricultural land located along both sides of the access road and the upgraded canal will likely be affected by construction wastes, such as residues of cement, sand, and stones, if no mitigation measures are applied. Temporary disruption of community transportation may also occur during construction (**Fig. 21**)**.**

Figure 21: Location of Spillway D2, Duc Minh, and Access Road

Paddy fields are located along both sides of the access road

Canal and spillway will be upgraded

e. Spillway D3

70. Spillway D3 is located in Duc Minh Commune and waters coffee and pepper growing areas. The civil works will consist of the construction of the spillway and 1.5 km of its access road. The site is located far from the residential area, and no sensitive areas will be potentially affected by the construction (**Fig. 22**).

Figure 22: Location of Duc Minh Weir D3

Canal for upgrading

Access road to be upgraded

f. Spillway D4

71. Spillway D4 is located in Duc Minh Commune. Civil works will include upgrading of the spillway and its access road. The site is located far from the residential area, and no sensitive areas will be affected by the construction (**Fig. 23**).

Figure 23: Location of Weir D4, Duc Minh, and Access Road

Spillway to be upgraded

Access road for upgrading

g. Spillway Jun Juh

72. Spillway Jun Juh is located in Dak Sak Commune. Civil works will involve upgrading of its headworks. The site is located far from the residential area and no sensitive areas will be affected by the construction (**Fig. 24**).

Figure 24: Location of Jun Juh Reservoir

The existing dam

Its headworks will be upgraded

h. Spillway Dak Sor

73. Spillway Dak Sor is located in Dak Sak Commune. The civil works will include reinforcement of the spillway combined with discharging flood and water regulation. Water quality and community transportation will be affected if no mitigation measures are applied (**Fig. 25**).

Figure 25: Location of Spillway Dak Sor

Waterway will be upgraded

Access road will be upgraded

i. Dak Sor Dam

74. The civil works will be located far from the residential area, and no traffic roads cross the construction sites. However, water quality could be affected due to improper waste management at the site if no mitigation measures are adopted (**Fig. 26**).

Figure 26: Location of Dak Sor Dam

Waterway will be upgraded

Access road will be upgraded

j. Weirs D1, D2, D3 along Dak Sor Stream

75. Weirs D1, D2, and D3 are located along Dak Sor Stream in Nam Xuan Commune (**Fig. 27**). The construction sites are located far from residential areas.

Figure 27: Location of Weirs D1, D2, and D3 along Dak Sor Stream

Location of D2 Weir

Location of D1 Weir

	
Location of D3 Weir	Watering area of D2

V. ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

76. The potential environmental impacts of the Dak Nong subprojects were evaluated in the areas of influence of the subproject component sites. At the proposed sites, temporary disruption and nuisance impacts may be experienced, mainly during the construction period. The potential environmental impacts were identified based on the project activities that may occur in each component and evaluated based on the environmental and social baseline situation in the subproject area. The identification of environmental impacts was based on available technical information related to subproject component design and operation, field visits, information from stakeholders, as well as feasibility study and previous IEE reports of the proposed subproject.

77. The potential environmental impacts, as well as the mitigation measures during the pre-construction, construction, and operational phases were assessed, as provided below. The assessment criteria used were in line with ADB's SPS (2009) and Government of Viet Nam standards based on the *Environmental Protection Law of 2014*. Where there are conflicts between Government of Viet Nam standards/guidelines and the ADB SPS, the latter will prevail as the policy for the subproject implementation. The EMP also is also presented below, including mitigation measures and monitoring plan for the implementation of the subproject.

A. Anticipated Benefits from the Project

78. Some beneficial impacts are expected from the proposed irrigation projects in Dak Nong Province. The principal economic benefits are better returns from planting HVCs and more cost-effective utilization of irrigation water by the farmers via the introduction of high-technology irrigation systems and improved access to reliable irrigation water supply. Moreover, the implementation of the proposed irrigation project will reduce the dependence of farmers on groundwater sources for their water requirement.

79. In general, the provision of sustainable and sufficient irrigation water supply is expected to result in improved economic conditions and, consequently, better quality of life for the communities. The immediate impact will be sustainable and reliable irrigation water supply that will translate into higher service levels, particularly in terms of coverage of agricultural areas. There will be longer supply windows that would eventually lead to 24-hour supply in the service areas. Water pressure will likewise improve. Farmers will also need less time and effort in securing water for their crops.

80. There will also be employment or livelihood benefits for the local people. Contractors will use local labor for simple works, creating jobs, raising income, and, thus, contribute to alleviating poverty in the local communities in the short term. Local people in the residential areas of the subproject communes will benefit from subproject construction through their participation in the civil works. In order to support creating jobs for locals, there should be coordination between the contractor and commune people's committees (CPCs) of the subproject communes, as well as in nearby communes, in recruiting local laborers (contractors often prefer to engage their own trained workforces rather than training unskilled laborers). The duration of the impact is also short, only during the 24month construction period.

B. Potential Negative Impacts

1. Cu Jut Subproject

a. Pre-construction Phase

i. Improper Subproject Location and Design

81. **Impacts.** The subproject is planned to replace the farmers' temporary weirs with 10 permanent weir structures along the Dier stream and two new pilot demonstration pumped piped systems. Improper irrigation scheme locations and design and water balance calculations will result in adverse impacts on local people, such as flooding and landslides during the rainy season and conflicts in water use among water users in the command areas during the driest months.

82. **Mitigation measures.** The PPTA has taken these issues into consideration in the design of the facilities. The basic design proposes the proper location of weirs by replacing the temporary ones constructed by villagers, and the other design parameters considered water balance in the summer time and flooding during the rainy season.

ii. Impact on Land Acquisition and Community Assets

83. There will be limited land acquisition required for the development of the subproject component facilities. Likewise, it is anticipated that there will be minimal acquisition required for temporary use of land or loss or damage to assets. Approximately 11.6 ha of perennial crop land will be affected by the Cu Jut subproject.

84. **Mitigation measure.** An updated Resettlement Action Plan (RAP) for the subproject has been prepared separately to ensure that any loss of land, trees, or damage to property will be subject to compensation in accordance with the WEIDAP Resettlement Framework.

iii. Unexploded Ordnance (UXO)

85. Data on bombs dropped by US forces between 1968 and 1972 are available at the concerned government agency. A survey on UXO is required for this subproject before construction.

b. Environmental Impacts during Construction

i. Water Pollution

86. **Impact.** Surface water of the Dak Dier River could be polluted due to: (i) ground preparations for construction and foundation excavation, causing water turbidity; (ii) construction materials, such as cement residues, sand, and soil; (iii) domestic wastes at sites and from workers' camps, which are discharged directly by runoff to the river. All these will affect river water quality and cause sedimentation.

87. **Mitigation measures.** Contractors will be required to:

- Prepare a side canal to keep water flows normal before starting weir construction;
- Contain soil and vegetation during site clearance;
- Transport excavated soil immediately to regulated disposal sites;
- Properly manage all construction and domestic wastes at sites and prohibit all wastes disposed directly into the river, especially for management of hazardous wastes, Contractors will strictly comply with regulations specified in *Circular 36/2016/BTNMT,* specifically the following:
  - The storage area for all hazardous substances should be located away from the river.
  - Ensure that safe storage of fuel, other hazardous substances are agreed by PPMU/ CSS and have necessary approval/permit from DONRE and local authorities;
  - Equipment/vehicle maintenance and refueling areas should be confined to the area in an especially designed site to contain spilled lubricants and fuels; and
  - Ensure all storage containers are in good condition to avoid leaking into environment.
- Workers' camps, if needed, will be constructed far from the river and provided with adequate latrines and dustbins. Wastes will be collected and treated properly through an economic contract with local environmental cooperatives/companies.

ii. Disturbance of Cultivation Activities

88. **Impact.** Construction of pilot pumped pipe system in Tan Ninh Village and Village 12 may interfere with the cultivation activities of villagers during the installation of pipes through farmlands.

89. **Mitigation measures.** Contractors will be required to:

- Cooperate with local people and authorities in planning the arrangements and timing of the pipe installation to avoid disturbances on cultivation activities;
- Not temporarily stockpile and store construction materials in a manner and location that may prevent farmers from their cultivation activities;
- Prepare a temporary access road for farmers before installing the pipeline across their access roads;
- Immediately rehabilitate the excavated areas and any damaged road and path sections to the access roads; and
- Select the best working method for installing pipes at sites based on real farming status to avoid any damage to trees standing nearby and to compensate farmers whose trees are damaged or died due to subproject construction.

iii. Traffic Accidents and Damage of Community Road

90. Most of the access roads to the 10 proposed sites of weir construction are rural roads, either concrete or unpaved. Most of these roads are narrow, with sight obstructed by trees at both sides of the road. Locals in motorcycles use the roads at high speed because of the very low traffic density. Traffic accidents and damage to the community roads are likely to occur from use of the roads for transporting construction materials and the increased traffic density at the subproject sites.

91. **Mitigation measures.** The contractors will be required to:

- Conduct transportation road study to assess the status of community road quality and identify any black spots in the roads with a high risk of a traffic accident before construction;
- Collaborate with local transportation agency to install traffic signboards at identified black spots;
- Use appropriate vehicles, based on the road condition, to avoid heavy damage to the community roads; and
- Bear all responsibility for the rehabilitation or compensation for any road damage caused by subproject construction.

iv. Clearing of Vegetation

92. **Impact.** The implementation of the works will require the removal of trees at both sides of the river. The impact of the clearing and grubbing works will be minimal because the existing vegetative cover at the sites consists only of bushes and trees of no economic value.

93. **Mitigation measures.** The contractors will be required to comply with the following guidelines:

- The clearing/removal of trees required for the works will only be undertaken based on an inventory contained in the approved resettlement action plan (RAP) for the subproject and upon securing the requisite permits for tree cutting from the Government.
- Trees and improvements within private lands that will be affected by the proposed subproject will be properly compensated in cash in a timely manner.
- Upon completion of works, the exposed surfaces will be planted with appropriate vegetation to prevent soil erosion.

v. Dust and Noise

94. **Impacts.** Noise and dust will be mainly generated from earthworks, concentrated within a 50-m radius of the work site. Other impacts include emissions from the operation of construction equipment and machinery, fugitive emissions from vehicles plying the area, and fugitive emissions during the transport of construction materials.

95. **Mitigation measures. Contractors will be asked to comply with the following guidelines:**

- Excavated material and stockpiles will be kept moist.
- Watering activities along the community road will be conducted during cutting concrete and excavation activities and leveling after completion of pipe installation to suppress dust at all times and avoid complaints by villagers.
- Transport vehicles will be required to install tarpaulin covers or other suitable material to prevent spillage of the hauled materials.
- Construction equipment and vehicles will, at all times, be well maintained and in good working condition to reduce fugitive emissions.
- Speed limits will be imposed in all areas to minimize dust emission.
- Work at the sites will be limited only during the daytime, from 0700H to 1800H.
- Stationary equipment, like diesel generators, will be installed as far as practicable from sensitive receptors. Buffers will also be established as further mitigation.

vi. Impact on Community Health and Safety

96. **Impact.** During the works, the community may be exposed to health and safety risks from increased vehicular movements in the area and conflicts between local people and migrant workers.

97. **Mitigation measures. The contractors will be required to observe the following:**

- The work sites will be properly secured with fences and access to the area, restricted.
- Speed limits will be strictly enforced during the transport of materials to sites. Drivers who ignore any of the community safety requirements will be removed immediately.
- All loads will be secured, and all loads, which are sources of fugitive emissions (e.g., excavated soil and sand), will be covered with tarpaulins.
- The hiring of qualified construction workers from the villages will be prioritized and done in consultation with local authorities to avoid conflict if migrant workers will be brought to the site.

vii. Occupational Health and Safety

98. **Impact.** During the construction phase, the implementation of the works may result in hazards to the safety of workers, such as tripping, falling from a height, slippery surfaces, carrying heavy loads, and during operation of machines and equipment. The contractor will be required to prepare a site safety plan and designate a safety supervisor, who will ensure that safety measures during construction are implemented. These safety measures include the use of personal protective clothing and equipment and placing of hazard warning signs and excavation covers and barriers. Arrangements for prompt medical attention in the event of accidents will also be made.

99. **Mitigation measures.** The contractor will be required to:

- assess occupational health and safety as a part of site specific EMP prepared before construction commenced;
- provide specific OHS training/briefing to all workers
- provide appropriate Personal Protective Equipment (PPE) to all workers,
- provide first- aid kits at the construction work readily accessible by workers; (iv) ensure that vehicle and equipment operators are properly trained and licensed

c. Environmental Impacts during Operation

100. The potential long-term or permanent impacts of project development are most important and generally determine the level of impact assessment a water supply project requires. The potential long-term impacts include: (i) deterioration of water quality; (ii) occupational health and safety; and (iii) community health and safety.

i. Deterioration of Water Quality

101. **Impact.** The quality of raw water may deteriorate if there are detrimental human activities in the upstream catchment area of the Ea Dier River. This may affect the resulting quality of irrigation water.

102. **Mitigation measures.** The IMC will continuously coordinate with the villages and district authorities on community activities in the catchment area to monitor watershed activities that may contribute to the contamination of raw water. The IMC will also conduct regular monitoring of the water quality parameters of the Ea Dier River.

ii. Leaks in Pipelines

103. **Impact:** There is a potential risk of high water pressure that could cause bursting of pipes, although this is very low-risk occurrence.

104. **Mitigation measures.** The following measures will be implemented:

- Use of durable standard pipes for the pipelines;
- Careful construction supervision by the Contractor to ensure that pipe laying and joining are done according to the highest standards;
- Regular inspection of the network and prompt isolation and repair when leaks occur;
- Preventing locals from occupying the protected right of way (ROW) for cultivation.

iii. Occupational Health and Safety

105. **Impact.** The operation of the system would require equipment, which pose risks to the safety of the workers and staff.

106. **Mitigation measure.** Proper guidance and adherence to occupational health and safety protocols need to be established in the said facilities in accordance with the World Bank's environment, health, and safety (EHS) guidelines (http://www.ifc.org/ehsguidelines) as a minimum standard.

iv. Community Health and Safety

107. The facilities that will be constructed will be properly fenced off and secured to restrict access and intrusion of unauthorized persons. Watchmen/security personnel will be hired to secure the facilities on a 24-hour basis. This would minimize the safety risks to the community.

2. Dak Mil Subproject

a. Pre-Construction Phase

i. Improper Subproject Location and Design

108. **Impacts.** Potential impacts related to project design are: (i) conflict of water use in command areas due to transfer of water from the upstream to downstream reservoirs among the various reservoirs of Team 1, Team 2, 40, 35B, Thuan Bac, and West reservoirs and from sharing water resources in summer for coffee and pepper HVCs and rice fields located along the Duc Minh Stream and Thai Ba Long canal; (ii) local flooding due to construction of three spillways downstream of Dak Sor Stream in Nam Xuan commune for irrigating HVCs.

109. **Mitigation measures.** The PPTA has taken the above issues into consideration. Subproject water balance was calculated to ensure water supply from the reservoirs meet the subproject irrigation demands. The basic design of spillways proposes the proper location of weirs along Dak Sor Stream in Nam Xuan Commune, and other design parameters have considered the water balance in summer and controlled flooding during the rainy season.

ii. Impact on Land Acquisition and Community Assets

110. **Impact.** There will be limited land acquisition required for the development of the project component facilities. Only 3.4 ha of perennial crop land will be acquired for the subproject. Likewise, it is anticipated that there will be minimal acquisition required for temporary use of land or loss or damage to assets for the subproject construction.

111. **Mitigation measure.** An updated RAP for the subproject has been prepared separately to ensure that any loss of land, trees, or damage to property will be subject to compensation in accordance with the WEIDAP RF.

iii. Unexploded Ordnance (UXO)

112. Data on bombs dropped by US forces between 1968 and 1972 are available from the concerned government agency. A survey on UXO is required for this subproject before construction.

b. Environmental Impacts during Construction

i. Water Pollution

113. **Impact.** Surface water in the reservoirs (Team 1, Team 2, 35B, 40, Jun Juh, Dak Sor, E29), Duc Minh stream, Thai Ba Long canal, and Dak Sor River, where three structural permanent weirs will be constructed, could be contaminated and affected by sedimentation due to the improper management of excavated soil, construction including hazardous wastes, and domestic wastes at sites and from workers' camps, and from runoff water during rains.

114. **Mitigation measures.** Contractors will be required to:

- Schedule excavation works during the dry season and stop work during heavy rainfall;
- Properly manage all construction, including excavated soil and domestic wastes, at sites and prohibit the disposal of all wastes into the reservoir canals and Dak Sor River;
- Strictly comply with the regulations on management of hazardous wastes management specified in *Circular 36/2016/BTNMT*, specifically the following:
  - Situate the storage area for all hazardous substances (oil, lubricant, petrol) away from the reservoirs;
  - Ensure that the safe storage of fuel and other hazardous substances is agreed by PPMU/CPC and have necessary approval/permit from DONRE and local authorities;
  - Confine equipment/vehicle maintenance and refueling areas to the designated area to contain spilled lubricants and fuels;
  - Ensure that all storage containers are in good condition to avoid leaks into the environment;
- Construct workers' camps, if needed, far from the reservoirs, canals, and river and provide them with adequate latrines and dustbins;
- Collect and treat all wastes properly through an economic contract with local environmental cooperatives/companies.

ii. Waste Management

- **Excavated Soil**

115. **Impact.** Excavated soil and residues after backfilling the pipeline system will affect the land and cultivation of villagers. They are also sources of dust generation in the dry season and could easily be washed away in runoff to nearby ponds and canals.

116. **Mitigation measures.** Any surplus material will be disposed properly and given for free to interested villagers as backfill materials in coordination with the village authority.

- **Construction Waste**

117. **Impact.** The inert waste that will be generated during the works will consist mainly of scrap wood and metal, cement bags, aggregates, and plastics, which will affect the land in the construction sites and pose a physical danger to farmers.

118. **Mitigation measure.** These wastes will be collected and classified for re-use or recycling and otherwise disposed in regulated Dac Ken landfill of Dac Mil Disstrict to ensure that they pose no danger to people.

- **Domestic Waste**

119. **Impact.** Domestic waste is not anticipated to constitute a significant volume as only small temporary camps will be established at the sites of the facilities. There will be no camps at the work sites for the transmission and distribution pipelines. It is projected that the temporary camps will generate an estimated 0.4-0.5 kg/person/day and would consist mainly of plastic and glass bottles, paper, cardboard, food wastes, and packaging wastes.

120. **Mitigation measure.** The contractor will provide a dustbin for worker camps to ensure that all domestic wastes are collected. The contractor will sign contract with Duc Lap Environment Sanitation Enterprise for transfering and disposing waste to/at Dac Ken Landfill of Dac Mil District PC.

- **Hazardous Wastes**

121. **Impact.** Hazardous wastes, such as containers of paint and solvents and spent batteries, are likely to be generated during the works. Although the volume is anticipated to be small, this type of waste is highly detrimental to the environment and public health.

122. **Mitigation measure.** Secure and controlled storage of all hazardous materials, including resudial fuels and oil, will be ensured by following *Circular 36/2015/BTNMT*. These waste will be transfered and burned at the desinated area of Dac Ken lanfill by Duc Lap Environment Sanitation Enterprise

iii. Disruption of Local Transportation and Damage of Community Road

123. **Impact.** All dams of reservoirs (Team 1, Team 2, 40, 35B, Jun Juh, Dak Sor) are being used as community roads. Therefore, the civil works on these reservoir dams may affect travelers. In addition, the pipeline will be installed along the community road and across the provincial road to discharge water from Reservoir Team 1 to Reservoir 40 and Thuan Bac Reservoir, and may disrupt transportation. Any temporary stockpiles at the construction sites of Duc Minh weirs and Thai Ba Long canal have the potential of causing traffic difficulties.

124. **Mitigation measures.** Contractors will be required to:

- Prepare a work plan and working method to be submitted to PPMU/CSS for approval before the start of civil works;
- Inform local people and authorities about the duration of work at each specific site;
- Collaborate with the local traffic agency in installing signboards to instruct local travelers to reduce speeds or advise them on traffic rerouting;
- Avoid stockpiling and storing construction materials and parking on community roads;
- Clean worksites and fill up all holes on sites after ending the day's work to ensure that local people can transport without any potential of an accident.
- Bear all responsibility for rehabilitating any damage to community roads due to subproject construction.

iv. Disruption of Existing Irrigation Service

125. **Impact.** The construction of Weirs 1, 2, 3, and 4 along Duc Minh Canal and the upgrading of Thai Ba Long canal have the potential to disrupt irrigation service to rice fields that are being irrigated by the canals.

126. **Mitigation measures.** The contractors will:

- Collaborate with local people and authorities to identify the cropping schedule of farmers to determine water demand of crops being irrigated by the water and identify a suitable work plan for starting construction. If the impact is unavoidable during the time of upgrading canals, PMU/contractors will discuss further with local authorities to find alternative irrigation sources;
- Comply strictly with the scheduled progress of construction to ensure that irrigation service is available for farmers to cultivate the next crop season in time;
- Be responsible for any losses to villagers due to the civil works regardless of the reason/s.

v. Dust and Noise

127. **Impact.** Noise and dust are likely to be generated mainly from: (i) earthworks concentrated within a 50-m radius of the work site; (ii) emissions from the operation of construction equipment and machinery; and (iii) fugitive emissions from vehicles plying the area and during the transport of construction materials.

128. **Mitigation measures.** The following measures will be implemented at the worksites:

- Excavated material and stockpiles will be kept moist.
- Watering activities along the community road will be conducted during cutting of concrete, excavation activities, and leveling after completion of pipe installation to suppress dust at all times and avoid complaints by villagers.
- Transport vehicles will be required to install tarpaulin covers or other suitable material to prevent spillage of the hauled materials.
- Construction equipment and vehicles will, at all times, be well maintained and in good working condition to reduce fugitive emissions.
- Speed limits will be imposed in construction sites to minimize dust emission.
- Work at the sites will be limited to daytime, from 0700H to 1800H.
- Stationary equipment, like diesel generators, will be installed, as far as practicable, from sensitive receptors. Buffers will also be established as further mitigation.

vi. Agricultural Land Impact

129. **Impact.** Ricefields located along Duc Minh and Thai Ba Long canal could be affected by runoff water carrying wastes (such as soil residue, sand, stone, garbage, nylon, and cement bags) from the construction site to the fields.

130. **Mitigation measures**. To address the impacts, contractors will:

- Manage construction materials (such as stones, sand, and cement) properly to prevent them from being scattered into the paddy fields along the proposed canal;
- Collect construction wastes for transport to the permitted disposal sites.

vii. Community Health and Safety

131. **Impact.** During the works, the community may be exposed to health and safety risks from increased vehicular movements in the area, open excavations, the operation of heavy equipment, and conflicts between locals and migrant workers.

132. **Mitigation measures.** Contractors will be required to:

- Install barricades/barriers and sturdy plate covers in open excavations during non-working time;
- Install warning signs in the area and fence the area to prevent any unauthorized entry of people to the construction sites;
- Provide priority hiring of qualified construction workers from the villages and consult with the local authorities to avoid conflicts if migrant workers are brought to the site.

viii. Occupational Health and Safety

133. **Impact.** The implementation of the works may result in hazards to the safety of workers, such as tripping, slippery surfaces, carrying heavy loads, and during operation of machines and equipment and electricity.

134. **Mitigation measures**. The contractor will be required to

- assess occupational health and safety as a part of site specific EMP prepared before construction commenced;
- provide specific OHS training/briefing to all workers
- provide appropriate Personal Protective Equipment (PPE) to all workers,
- provide first- aid kits at the construction work readily accessible by workers;
- ensure that vehicle and equipment operators are properly trained and licensed

c. Environmental Impacts during Operation

135. The potential long-term or permanent impacts of project development are most important and generally determine the level of impact assessment a water supply project requires. The potential long-term impacts include: (i) deterioration of water quality; (ii) occupational health and safety; and (iii) community health and safety.

i. Deterioration of Water Quality

136. **Impact.** The quality of the surface water of the West reservoir, which will provide raw water for the Dak Mil water treatment plant, may further deteriorate from the uncontrolled discharge of polluted water from the upstream reservoirs. This may affect the quality of drinking water and threaten public health.

137. **Mitigation measures.** The Dak Nong DARD will cooperate with local authorities to prohibit farmers from parking or repairing machines, using pesticides, raising animals, and discharging domestic wastes into the upstream reservoirs of West reservoir to prevent polluting the water with toxic substances. The independent environmental management consultant (IEMC) will continuously coordinate with the villages and district authorities regarding community activities in the catchment area to monitor watershed activities that may contribute to the contamination of raw water. The IEMC will also conduct regular monitoring of water quality in the reservoirs of Team 1, Team 2, 40, and 35 B, especially the West Reservoir.

ii. Occupational Health and Safety

138. **Impact.** The operation of the system will require operating equipment, which pose risks to the safety of workers and staff.

139. **Mitigation measure.** Proper guidance and adherence to occupational health and safety protocols need to be established in the said facilities in accordance with the World Bank's EHS Guidelines (http://www.ifc.org/ehsguidelines) as a minimum standard.

iii. Community Health and Safety

140. **Impact.** The risk of electricity-related accidents may occur if the pumping station is not properly fenced off and secured to restrict access and intrusion of unauthorized personnel.

141. **Mitigation measure.** Watchmen/security personnel will be hired to secure the facilities on a 24-hour basis. This would minimize the safety risks to the community.

VI. ANALYSIS OF ALTERNATIVES

A. Alternatives to the Subproject

142. The beneficiary villages in and around the Cu Jut and Dak Mil subprojects provided the basis for the selection of the subproject sites. The selection process adopted for WEIDAP involved screening and prioritization, following which candidate subprojects were selected for feasibility study (FS). The FS then confirmed the eligibility of the subproject for inclusion in the project. Prioritization was based on a set of criteria aimed primarily at ensuring alignment with Government priority, maximizing impact in terms of the number of population to be served and also maximizing the contribution to economic development and poverty alleviation.

B. Alternatives within the Subproject

143. Alternatives considered for the preliminary design included: (i) the configuration and location of the distribution system; (ii) alternative water sources/reservoirs; and (iii) village areas to be included. During the evaluation of possible service areas, the most populated and easily accessible villages were selected to be included in the irrigation improvement project.

144. Based on the principles of irrigation modernization, the project seeks to improve the level of service to enable farmers to receive reliable delivery of irrigation water, nearly on-demand, and at levels demanded by HVCs. Given this objective, the lower unit cost rehabilitation alternative is inconsistent with project objectives. As such, the unit (hectare) investment costs are higher. Proposed designs include piped distribution systems that not only reduce water losses but also reduce O&M requirements as distribution pipes are buried and less vulnerable to solar deterioration and physical damage. Given the extensive use of piped distribution, costs were minimized by limiting the offtake hydrants and ensuring that pipe diameters were appropriate to the system capacity. The project is not intended to rehabilitate (i.e., restore to the same level of service), but to enhance the level of service requiring a higher unit investment.

C. "No Project" Alternative

145. The "no project" alternative would mean that the opportunity to provide more cost-effective and high-technology irrigation systems, which are highly suitable for the production of HVCs towards meeting Government of Viet Nam goals and priorities, would not be realized.

VII. INFORMATION DISCLOSURE, CONSULTATION, AND PARTICIPATION

A. Public Consultations

1. Methodology

146. Formal disclosure to stakeholders about the proposed Cu Jut and Dak Mil subprojects occurred during the preparations for the IEE public consultation meetings. A stakeholder consultation strategy was developed to meet the requirements of conducting meaningful consultation with stakeholders, as stipulated in the ADB SPS (2009). The strategy embodied the principles of meaningful engagement, transparency, participation, and inclusiveness to ensure that affected and marginalized groups, such as women and the poor, are given equal opportunities to participate in the planning of the subproject.

2. Identification of Related Stakeholders

147. Stakeholders were identified and engaged in a participatory manner. Stakeholder consultations focused on institutional stakeholders, affected communities, and persons directly affected by the proposed subproject interventions. The identified subproject stakeholders include: (i) Institutional stakeholders such as People's Committee and Commission (PCC), District People's Committee (DPC), PPMB, commune leaders, and design consultants. (The PPMB and design consultant provided information for the design of the subprojects and in the implementation of measures and interventions). Other stakeholders include the mass organizations, such as Women's Union and Farmers' Union, and villagers living in subproject areas, including beneficiaries and potential APs.

148. Formal community consultation meetings were held to discuss the location and potential impacts of the Cu Jut and Dak Mil irrigation subprojects on the environment and people in the two subproject areas. The community consultation meeting was held on 8-10 August 2016 in seven communes in Dak Mil District, and on 11-13 August 2016 at six communes of Cu Jut district in Dak Nong Province. A total of 328 people participated in the two consultation meetings, of whom women account for 22% and EMs, 25% with six different EM groups who can speak the Kinh language fluently. The list of public participants is summarized in **Table 16**.

Table 16: Participants during the Community Consultation Meetings

Subprojects	Commune/ Township	Officials		Households		Total			Ethnic Minorities	
		M	F	M	F	M	F	Total	Minority	Ethnic Groups
Cu Jut District	TamThang	5	1	32	6	37	7	44	11	Ede, Ma Nong, Tay
	EA T'Linh township	5	1	15	7	20	8	28	4	Kinh, Mương, Ma Nong, Tay
	Truc Son	3	2	12	10	15	12	27	3	Kinh, Tay
	Cư Knia	4	2	13	5	17	7	23	5	Kinh, Tay, Nung
	Nam Dong	4	2	23	0	27	2	29	22	Tay, Nung, Kinh
	DakDrong	1	0	9	4	10	4	14	0	Kinh
	6									
Dak Mil District	Long Sơn	5	2	19	2	24	4	28	19	Tay Nung Giao, kinh
	Thuan An	3	1	15	0	18	1	19	2	Kinh, Mnong
	Duc Minh	4	0	12	3	16	3	19	0	Kinh
	Nam Xuan	4	2	16	0	20	2	22	15	Tay, Nung, Thai Kinh
	Đak Lao	3	3	12	10	15	13	28	1	Kinh, Muong
	DakSak	6	1	16	3	22	4	26	0	kinh
	DakMil	4	1	10	6	14	7	21	0	Kinh
	7									

Subprojects	Commune/ Township	Officials		Households		Total			Ethnic Minorities	
		M	F	M	F	M	F	Total	Minority	Ethnic Groups
Total	13	51	18	204	56	255	74	328	82	7

149. The public meeting was conducted at each subproject commune in the local language using a loudspeaker and following a number of procedures, as listed below.

- The engineering consultant introduced the subproject, including the basic designs of each subproject work located in the project commune area.
- The environmental consultant presented ADB's environmental policy, safety regulations in Viet Nam construction sector, anticipated environmental impacts and mitigation measures to be developed in the IEE, and the grievance redress mechanism (GRM) for environment and resettlement issues;
- The social/resettlement consultants presented ADB's resettlement policy, impacts due to the acquisition of land and properties, policies of the Government and local authorities, and subproject policies on compensation as required by the State;
- Open discussion of issues and concerns by the stakeholders.

3. Issues and Concerns Raised during the Public Consultations

150. During the meeting, the participants raised their questions and comments on the subprojects. The technical consultants and the national IEE consultant, as representatives of the EA/IA, answered all the questions raised by the participants. Following are the comments raised during the consultation meetings:

a. Cu Jut Subproject

151. Ten spillways will be constructed by the subproject along Ghenh stream (Dier River). The local authorities and people highly supported the subproject because the water in the stream will be stored by the planned spillways of weirs to provide water to crops and fruit trees that lack water in the dry season, as has been experienced in recent years. Upgrading of access roads will not only benefit the PPMB, but also the local people. The project will help expand land for cultivation, enable the shift from cashew to pepper and coffee, which are higher value crops.

152. The location and design of spillways should be carefully studied to prolong the life of the project, ensure that water is stored in summer and avoiding flooding during the rainy season. Landslides at both sides of the stream should also be prevented when the spillways are put into operation.

153. Environmental impacts due to the subproject construction are expected to be minimal because the construction sites are located far from residential areas, and only a few of houses are situated along the access roads. Most of the acquired land is public land. There are no sensitive and protected areas potentially affected by the subproject.

154. Although small private land will be acquired due to the subproject, compensation and supporting policies should satisfy the AHs. Access roads to the construction sites should be upgraded or restored to its previous status if they are damaged by the transportation of construction materials.

b. Dak Mil Subproject

155. Local authorities and people highly appreciated the project because it will support the local people's demand for water in the dry season for irrigation of both trees and paddy fields.

156. The project will not affect the environment much because most of the civil works are small and far from residential areas. No sensitive and protected areas are found near the project sites. However,

mitigation measures should be implemented at each specific site to address negative impacts as dust, transportation safety, wastes, community road damage, and local flooding, which may occur during the construction phase.

157. Although most land acquired for the project are public land, compensation and supporting policies should be developed to satisfy the AP.

158. It was suggested that the project should carefully study and design the spillways to bring more benefit to local people.

159. The summary of the comments and questions from the authorities and local people and the responses from the project owners are summarized in **Table 17.**

Table 17: Summary of Participants' Inquiries and Responses in the IEE

Location and Date	Comments/Questions from Participants[4]	Addressed in the IEE
Cu Jut District		
Nam Dong 13 August 2016	Compensation and supporting policies need to be clear and acceptable to AP, especially the EMs because the commune has 14 various minority groups.	Compensation and EM policies for limited land acquisition are included in the RP and EMDP reports.
	Water shortage has become a serious problem recently, prevention of disease outbreak for trees especially for pepper need concerning.	N/A
TamThang 11 August 2016	Access roads to the construction sites of spillways 9, 10, 7 are small and need to be upgraded.	N/A
EA T'linh township 11 August 2016	The vehicles carrying construction materials should be covered to avoid them from falling on the road. Any damages to the road due to the subproject should be covered by the subproject.	Mitigation measures are proposed to address the impacts and ensure that all vehicles transporting materials will be carefully covered, and damages to the access roads will be repaired.
	Location of spillways should be carefully considered to prolong the life of the facilities.	Design measures are proposed to address the impacts to ensure their sustainability.
Truc Son 12 August 2016	Construction will not affect the environment, but the selection of spillway location is very important to ensure water in the dry season and prevention of flooding on both sides of the stream during the wet season.	Design measures are proposed to address the impacts to ensure sustainability.
Cư Knia 12 August 2016	The spillway will be located in Village 12, mostly paddy fields. Thus, negative impacts on the environment will be insignificant.	Mitigation measures will be developed, focusing on agricultural land quality.
Dak Drong 13 August 2016	Trucks carrying construction materials should be covered, and damaged access roads should be repaired.	Mitigation measures are proposed to cope with negative impacts during the construction phase.
Dak Mil District		
Long Sơn 10 August 2016	The dam should be bigger so it can store more water for dry season use.	Design measures are proposed to address impacts and ensure sustainability.
	Technical measures should be carefully studied to prolong the work	

[4] Questions and issues raised during public consultation meetings are recorded in table as received.

Location and Date	Comments/Questions from Participants[4]	Addressed in the IEE
Duc Minh 9 August 2016	The commune has no dump site, and wastes may be discharged from workers' camps directly into the environment.	Garbage and construction wastes will be collected and treated following government regulations.
Nam Xuan 10 August 2016	Not much private land will be acquired for the subproject because most of works will be on public land. However, subproject compensation and supporting policies should be developed to satisfy affected people.	Policies for limited land acquisition and compensation are in a separate RP report.
	Transportation safety should be paid attention to by the subproject during the construction phase.	Mitigation measures were developed to cope with the situation during the construction phase.
Thuan An 9 August 2016	Trucks carrying construction materials should be covered, and damaged access roads should be repaired.	Mitigation measures at specific sites were developed to address impacts during the construction phase.
Dak Sak August 08, 2016	Transportation safety should be paid attention to during construction.	Mitigation measures at specific sites were developed to cope with the situation.
	The location and scale of works should be carefully studied to ensure the most beneficial project for locals.	Design measures were developed to address the concerned issues.
Dak Mil township 8 August 2016	Mitigation measures should be developed to address negative impacts, such as noise, dust, transportation safety, and damaged community roads.	The mitigation measures at specific sites are developed to address the negative impacts
Conclusion	The subproject will be responsible for providing further information to all communes concerned, and issues raised by the local people will be relayed to the PPTA experts for further study. The subproject will ensure that more benefits accrue to local people and negative impacts the environment and human beings due to the project will be managed down to acceptable levels.	

B. Information Disclosure

160. Prior to project implementation, a copy of the approved Updated IEE and EMP will be submitted by CPMU to the DONRE in Dak Nong Province. The updated IEE will also be posted on the ADB and MARD websites. During construction and operation, communities within the impact area of the subproject will be kept informed of construction activities through billboards or information boards. The contact details of the PMU, GRM focal persons, and construction managers will be prominently displayed in the respective construction areas for the reference of the affected communities/persons. Complaints and grievances can be directly filed, both written and verbal, with the concerned entities. This will be an alternative to the village complaint system. All suggestions, opinions, and responses from the community regarding the project will be taken into account, and feedback provided on how concerns and recommendations have been addressed.

VIII. GRIEVANCE REDRESS MECHANISM

A. Purpose of the Mechanism

161. During the deployment of the subproject, local people will be provided with information on environmental protection activities, such as EMP. Negative impacts on the environment may occur during the construction and operational phases. Any comments/suggestions of local people will be

solved quickly, transparently, and according to the law, particularly for AP. A complaint handling mechanism will be established, classified by level and including the responsibilities of involved parties.

B. Grievance Redress Mechanism

162. Affected persons will be informed of policies and procedures to ensure that their livelihood will not be severely affected by the subproject. AHs will also be informed that, if they have any questions or concerns regarding the subproject, PPMU will be responsible for providing assistance to resolve such concerns. The GRM consists of several steps, namely:

- **Step 1:** Complaint form will be sent by APs, AHs, or groups of HHs to the subproject CPC.
- **Step 2:** The Subproject CPC will investigate the complaint within 15 days. If it is judged to be valid, the Complaint Form will be forwarded to the PPMU.
- **Step 3:** Within 15 days from the date the complaint is received, the PPMU and Subproject CPC will organize meetings to discuss how to resolve the matter. All meetings will be recorded, and copies of the minutes of meetings will be provided to APs/AHs.
- **Step 4:** PPMU shall take such mitigation measures, as agreed in meetings, from Step 3 by PPMU and Subproject CPC within 15 days, or some other period acceptable to the parties referred to in Step 3.
- **Step 5:** When the complaint is resolved, the Complaint Form needs to be signed by Complainer/HH head, subproject CPC, PPMU, and annotated at each stage of the process by PPMU.
- **Step 6:** In case no understanding or amicable solution is reached, or if no response is received from the subproject CPC within 15 days after the registration of complaint, the APs/AHs can appeal to the DPC. The APs/AHs must lodge the complaint within 30 days of registering the original complaint and must produce documents with copies of appeal that support his/her claim. The DPC will provide a decision within one month of receiving the appeal.
- **Step 7:** If the APs/AHs are not satisfied with the decision, or in the absence of any response from DPC, the APs/AHs can appeal to the PPC, which will then review and issue a decision on the appeal within 30 days from the day it is received.
- **Step 8:** If the AP is still not satisfied with the decision of the PPC, or in the absence of any response within the stipulated time, the AP, as a last resort, may submit his/her case to the court, which will render the final decision.

C. Type of Grievances

163. Complainants are entitled to lodge complaints regarding any aspect of the project. Any affected person will be able to submit a grievance if he/she believes that a practice has a detrimental impact on the community, the environment, or their quality of life. Eligible grievances or complaints include:

- Negative impacts on a person or a community (e.g., financial loss, such as from loss of water or roadside trees, health and safety issues, nuisances, etc.).
- Dangers to health and safety or pollution of the environment;
- Hazards due to construction activities (e.g., noise, dust, disruption of access, etc.);
- Impacts on social infrastructure;
- Failure to comply with standards or legal obligations;
- Improper conduct or unethical behavior of contractor leading to the nuisance of affected person(s);

- Misuse of funds and other irregularities;
- Grievances due to land acquisition, resettlement, compensation, relocation, and unaddressed losses.
- Complaints related to gender issues.

D. Grievance Resolution Process

164. Complaints can be made verbally or in written form. It is recognized that, in many cases, complainants do not have the writing skills or ability to express their grievances verbally. However, complainants are encouraged to seek assistance from family members or village heads to have their grievances recorded in writing and to ensure that, where disputes occur, all the details have been recorded accurately to enable all parties to be treated fairly. In the case of verbal complaints, a written record of the complaint will be made during the first meeting with the complainant. Complainants, who present their complaints within the prescribed procedures, will be exempt from all administrative fees incurred. In addition, complainants who lodge complaints and appeals to district courts will be provided with free legal representation. If efforts to resolve complaints or disputes are still unresolved and unsatisfactory following the Government grievance redress mechanism, the AP/AHs have the right to send their concerns or problems directly to ADB's Operations Department (i.e., Natural Resources, Environment , and Agriculture Division (SEER), Southeast Asia Department (SERD) or through the ADB Vietnam Resident Mission (VRM). If the AP is still not satisfied with the responses of SERD, he/she can directly contact the ADB's Office of the Special Project Facilitator, as outlined in the *Information Guide to the Consultation Phase of the ADB Accountability Mechanism*. The Information Guide can be downloaded through this link: https://www.adb.org/documents/information-guide-consultation-phase-adb-accountability-mechanism

IX. ENVIRONMENTAL MANAGEMENT AND MONITORING

A. Institutional Arrangements for Implementation

165. The CPMU under MARD, Dak Nong PPMB, and DARD are the key institutions that will play crucial roles in the implementation of the subproject and in ensuring environment safeguards. CPMU/PPMU will recruit one Environment Safeguard Specialist (ESS) under the Project Implementation Consultant to support subproject implementation in Dak Nong. The ESS will support the PMU in updating the EMP and in monitoring the compliance of the contractors during the construction phase. The ESS will also be responsible for training and capacity building on the implementation of EMP. The PMUs will also engage a Construction Supervision Consultant (CSC) for the monitoring and supervision of the subproject, including environmental monitoring. The CSC will ensure that the contractors implement the provisions of the subproject EMP. The administrative and environmental management responsibilities of these institutions are summarized in **Table 18.**

Table 18: Environmental Management Responsibilities of Concerned Parties

No.	Organization	Environmental Management Responsibilities
1.	CPMU	• Exercise general responsibility for entire supervision, monitoring, and preparation of environmental monitoring reports (EMRs) submitted to ADB. • Provide training on environmental safeguard policy for subproject staff. • Prepare bidding documents, including the Scope of Work for adverse environmental impact mitigation, as contained in the EMP. • Recruit an independent environmental monitoring consultant during subproject civil works implementation to monitor the implementation of the contractor's Site EMP. • Prepare periodic EMRs for submission to ADB.

No.	Organization	Environmental Management Responsibilities
2.	PPMU	• Deploy for implementation of all environmental protection and mitigation activities included in the subproject EMP during pre-construction and construction phases. • Prepare bidding documents and integrate environmental mitigation measures in the EMP to ensure that contractors comply fully and correctly with the regulations. • Supervise and report on the implementation, by the contractor, of those mitigation measures according to approved detailed EMP for construction activities. • Support the contractor in the implementation of mitigation measures during construction. • Facilitate effective coordination among the contractor, local authorities, and local communities during construction, establish linkages among all relevant parties during project implementation and environmental management work of the subproject. • Coordinate with the local governments in dealing with complaints (if any). • Prepare periodic reports to CPMU on the implementation of the subproject and the EMP.
3.	Contractor	• Prepare Contractors' Site Environmental Management Plan (SEMP) for construction activities to meet environmental management requirements for the subproject. Such detailed plans shall be approved by the project owner before the commencement of construction activities. • Implement measures specified in the approved SEMP, especially effective mitigation measures during construction and other issues related to the EMP for the subproject and propose amendments or alternative mitigation measures if necessary. • Proactively contact local community representatives and deploy measures to avoid unnecessary disturbances during the construction activities, train workers on knowledge of environmental issues during construction, and be responsible for implementation of SEMP and labor safety measures in the construction sites. • Ensure that all construction activities have secured necessary permits from competent authorities. • Report to PPMU on any difficulties faced and propose solutions. • Immediately report to the local authorities and PPMU any environmental accidents and coordinate with relevant authorizes and parties to solve the problem. • Solve any complaints concerning construction activities and conduct issues of workers. • Submit weekly/monthly reports on the implementation of mitigation measures to construction supervision consultant and PMU.
4.	Construction Supervision Consultant (CSC)	• Support PPMU in supervising environmental safeguards in accordance with the daily EMP. • Prepare a rapid periodic report on EMP implementation at the construction sites together with proposed improvements to the Contractor for synthesis and submission to PPMU. • Maintain contacts with the local communities. • Support PPMU in resolving any construction-related complaints following the subproject's GRM.
5.	Project Implementation Consultant (PIC)	• Support CPO/PMU to procure environmental monitoring contract; • Work closely with CSC and independent environmental monitoring consultant (IEMC) to support the PPMU in monitoring and supervision of EMP implementation and ensure environmental compliance in each subproject.

No.	Organization	Environmental Management Responsibilities
		• During the construction phase, support the PPMB to prepare and submit semi-annual EMRs to CPO/PMU (on behalf of MARD) and ADB for review and uploading on ADB's website.
6.	Environment Safeguard Specialist (ESS)	• Assist CPO/PMU with the review of the IEEs and associated EMPs prepared for each subproject during the PPTA and assist with updating the EMPs in response to requirements of the detailed engineering design. • Brief the staff of the CPO/PMU and DARD/PPMUs on the environmental procedures and requirements for subproject implementation (construction and operations). • In cooperation with the M&E specialists, develop the indicators that need to be monitored for groundwater quality and levels that can be incorporated into routine project monitoring activities. • Support PPMU to establish an environmental management system that links with CPO/PMU environment management, including the procedures of construction inspection and monitoring, periodic reporting, and responsibilities of each party in the project's environment management system. • Support CPO/PMU to procure independent environmental monitoring contract and support the IEMC to prepare semi-annual EMRs to be submitted to CPO/PMU and ADB for review and uploading on ADB's website; • Visit each subproject during construction to ensure that environment safeguards are being properly conducted in accordance with the subproject EMP; • Develop environmental management procedures to be adopted by both the provincial IMCs in operating the system storage facilities to sustain environmental flows and the PPP irrigation operators drawing water from existing reservoirs to pump to beneficiary farmers within newly established command areas. • Assist in developing operational guidelines for water utilization by beneficiary farmers to maximize the efficient use of water from irrigated agriculture. • Assist in the preparation and implementation of training activities with regard to the environmental aspects of the project.
7.	Independent Environmental Monitoring Consultant (IEMC)	• Conduct periodic independent supervision of contractor's implementation of SEMP. • Perform quarterly environmental quality monitoring of key analytical parameters (i.e., air, water, soil, noise, etc.) in the subproject sites to assess the effectiveness of mitigation measures in addressing construction-related adverse environmental impacts during the construction and operations phases. • Collaborate with/support PPMU and the Contractor in the effective implementation of the EMP in the construction areas.
8.	Systems Operating Organization	• Be responsible for environmental management during the operation period of the subproject. • Implement mitigation measures during the O&M period.
9.	Local Resident Communities	• Local resident communities have the right and responsibility to conduct preliminary supervision of activities related to the environment during the construction phase to ensure their rights and safety is adequately protected, and that mitigation measures are effectively implemented by the contractor and PPMU. They shall report any unexpected environmental issues arising from the construction works to the CSC/PPMU/CPCs.
10.	Local Governments: PPC, DPC, and CPC of the Subproject Area	• Monitor the implementation of the subproject based on recommendations of the provincial DONRE and PPMU to ensure compliance with the regulations and policies of the Government.

No.	Organization	Environmental Management Responsibilities
11.	Provincial Environmental Management Agency	• DONRE is the provincial environmental management agency, representing MONRE in managing environmental issues in the province. • DONRE will be responsible for the supervision of compliance with environmental regulations of the Government during various implementation phases of the subproject.
12.	Other Concerned Parties	• Advise and inform of any aspects related to the environmental management and protection regulations of Vietnam. • Provide technical support during the construction of the subproject, as necessary. • Participate in the resolution of environment-related issues (if any).

B. Environmental Management Plan

166. The anticipated environmental impacts due to the Cu Jut and Dak Mil subprojects and corresponding mitigation measures are presented in the detailed EMPs in **Tables 19** and **20** for the Cu Jut and Dak Mil subprojects, respectively. The EMP also includes the responsibilities and timeframe/ schedule for implementation and monitoring of mitigation measures by the concerned stakeholders. Most of the mitigation activities during the design and pre-construction phase will be implemented by the PMU, while during construction, the mitigation measures will be primarily implemented by the contractors. During the operation phase, the provincial DARD will undertake the environmental mitigation and monitoring requirements specified in the EMP. To ensure the implementation of mitigation measures during construction, the EMP will be included in the tender and contract documents for civil works. Contractors' conformity with environmental contract procedures and specifications will be regularly monitored by PMUs, with assistance from the CSC, and the results will be reported semi-annually to ADB.

Table 19: Detailed Environmental Management Plan for the Cu Jut Subproject

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
I. Pre- Construction Phase						
Flooding control and water balance	To ensure no flooding in rainy season and water balance for users in the driest months.	• The basic design has proposed the proper location of the weirs by replacing the temporary ones constructed by villagers and the other design parameters have considered water balance in summertime and flooding in the rainy season.	PMU	Detailed design phase	N/A	Included in PMU preparation cost
Land acquisition and resettlement	To minimize the impacts of land acquisition and resettlement.	• Implement the updated land acquisition and compensation plan that was approved by the	PMU, ESS	Before construction	N/A	Included in the contract with ESP and PMU

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		ADB for the subproject. • Design access roads with the minimum necessary width and installation of pipelines within the ROW when feasible.				operation budget
Environmentally responsible procurement	To ensure that the EMP is properly implemented by selected contractors.	• Update EMP • Include the EMP in tender documents to ensure that mitigation measures are budgeted and prepare the contractors for environmental responsibilities. • Specify in bid document that contractors shall engage capable and trained staff to take responsibility for environmental management and safety issues at the working level and to monitor the effectiveness and review mitigation measures as the subproject proceeds. • Contractors shall recruit qualified staff to oversee implementation of environmental and safety measures specified in EMP.	ESP, PMU	Before bidding and before construction commences	N/A	Included in the contract with ESP and PMU operation budget
Environmental capacity development	To develop environmental	• PMU to commit and retain dedicated staff	PMU, ESS	Throughout the pre-	N/A	Included in the contract

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
	management capacity of PMU to ensure proper EMP implementation and promote environmental awareness among workers.	for subproject duration to oversee EMP implementation. • The ESS will train PMU to build their capacity in EMP implementation, monitoring and reporting using workshops and on-the-job training techniques and case studies. • Conduct workers' orientation on EMP provisions. Such orientation shall be periodically conducted by the ESS as every new contractor is engaged.		construction and construction phases		with ESP and PMU operation budget
UXO	To avoid any accident caused by mines.	• To clear UXO before construction starts	PMU, ESS	Throughout the pre-construction and construction phases	N/A	Included in the contract with ESP and PMU operation budget
II. Construction Phase						
Water pollution	To minimize the pollution of surface water of various reservoirs and canals.	• Prepare a side canal to keep normal water flows before starting weir construction; • Immediately transport excavated soil to regulated disposal sites. • Properly manage all construction and domestic wastes at sites and prohibit all	PMU, Contractor	During civil works	Dier river	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		wastes disposed into the river, especially for management of hazardous wastes. Contractors will strictly comply with regulations specified in *Circular 36/2016/BTNMT,* specifically: the storage area for all hazardous substances located away from the river. • Ensure that safe storage of fuel and other hazardous substances is agreed by PPMU/CSC and have necessary approval/permit from DONRE and local authorities; • Confine equipment/vehicle maintenance and refuelling to the area in a especially designed site to contain spilled lubricants and fuels; • Ensure that all storage containers are in good condition to avoid leaking into the environment. • Construct workers' camps, if needed, far from the river and provide them with				

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		adequate latrines and dustbins. Collect waste from latrines for proper treatment through an economic contract with local environmental cooperatives/co mpanies.				
Disturbance of cultivation activities	To minimize disturbance on cultivation activities of villagers when installing two pilot pumped pile system.	• Cooperate with local people and authorities to arrange a pipe installation plan through farmlands with specific working methods to ensure no disturbance of cultivation activities. • No temporarily stockpiling and gathering of construction materials in ways that may prevent farmers from cultivation activities. • Prepare a temporary access road for farmers before installing pipe line across their access roads. • Immediately rehabilitate the excavated areas and any damaged road and path sections to the access roads. • Select the best working method for installing pipes in the	PMU, Contractor	During civil works	N/A	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		sites, based on actual farming status to avoid any damage to trees standing nearby; compensate farmers whose trees are damaged or died due to subproject construction.				
Traffic accidents and damage to community roads	To minimize traffic accidents and damages to rural roads.	• Conduct transportation road study to assess the status of community road quality and identify any black spots in the roads with a high risk of traffic accidents before construction. • Collaborate with local transportation to install traffic signboards at the identified black spots. • Use appropriate vehicles, based on the road condition to avoid heavy damage to the community roads. • Bear all responsibility for the rehabilitation or compensation for any road damage caused by subproject construction.	PMU, Contractor	During civil works and transport-ation	N/A	Included in civil works cost
Clearing of vegetation	To minimize the cutting down of trees on both sides	• The clearing/removal of trees required for the works will only be	PMU, Contractor	During constructi on of weirs	N/A	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
	of Dak Dier River.	undertaken based on an inventory contained in the approved RAP for the subproject and upon securing the requisite permits for tree cutting from GOV. • Trees and improvements within private land that will be affected by the proposed subproject will be properly compensated in cash in a timely manner. • Upon completion of works, the exposed surfaces will be planted with the appropriate vegetation to prevent soil erosion.				
Dust and noise	To minimize dust and noise at the sites.	• Keep the excavated material and stockpiles moist. • Conduct watering activities along the community road when cutting concrete, excavating, and levelling after complete installation of the pipeline to suppress dust at all times to avoid complaints by villagers living nearby.	PMU, Contractor	During construction of weirs and access roads	N/A	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		• Require transport vehicles install tarpaulin covers or other suitable material to prevent spillage of the hauled materials. • Keep construction equipment and vehicles well maintained and in good working condition at all times to reduce fugitive emissions. • Impose speed limits in the subproject area to minimize dust emission. • Limit work at the sites only during daytime from 0700H to 1800H. • Install stationary equipment like diesel generators as far as practicable from sensitive receptors. • Establish buffers as further mitigation.				
Community health and safety	To minimize the risk of exposing the locals to the danger of open excavations and conflicts with migrant workers.	• Install barricades/barriers and sturdy plate covers in open excavations during non-working time. • Install warning signs in the area. • Require the contractor to provide priority hiring of qualified construction	PMU, Contractor	Throughout construction phase	N/A	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		workers from the villages and consult with local authorities to avoid conflicts if migrant workers will be brought to the site.				

Occupational health and safety	To minimize risks of workers working at the sites.	• Require the contractor to implement the construction health and safety plan in accordance with the World Bank EHS Guidelines (http://www.ifc.org/ehsguidelines) as a minimum standard.
		• Require the contractor to appoint an ESH officer to ensure implementation of the plan. The plan will, at the minimum, include the following:
		  • Provision of first-aid facilities readily accessible by workers.
		  • Provision of PPEs, such as hard hats, gloves, rubber boots, etc.
		  • Requiring workers to wear PPE while working onsite.
		  • Posting of safety signs/reminders in strategic areas within
			PMU, Contractor	Throughout construction phase	N/A	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		the construction area. • Ensuring that vehicle and equipment operators are properly licensed and trained. • Providing staff with communicable disease and HIV-related awareness training.				
III. Operation Phase						
Deterioration of water quality	To protect water quality of Dak Deir River from deteriorating.	• Monitor community activities in the catchment area to check activities at the upstream that may cause contamination of raw water quality in reservoir (Dak Dier river)	Irrigation Division/DARD	Throughout the operation phase	Dier River	Operation cost
Leaks of pipeline	To protect the pipeline from damages.	• Use durable standard pipes for the lines. • Require the Contractor to provide careful construction supervision to ensure that pipe laying and joining are done with the highest standards. • Conduct regular inspection of the network and promptly isolate and repair it when leaks occur. • Prevent locals from occupying	Irrigation Division/DARD	Throughout the operation phase	Along alignment of pilot pumping stations	Operation cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		the protected ROW for cultivation.				
Occupational health and safety	To prevent operational staff and workers from any occupational risks	• Establish proper guidance and adherence to occupational health and safety protocols in the said facilities in accordance with the World Bank EHS Guidelines as a minimum standard.	Irrigation Division/DARD	Throughout the operation phase	N/A	Operation cost
Community health and safety	To prevent locals from electric accidents due to exposure to domestic electric line.	• Provide a training course on techniques of effective application and safety for those who are planned to use subproject water.	Irrigation Division/DARD	Throughout the operation phase	N/A	Operation cost

Table 20: Detailed Environmental Management Plan for the Dak Mil Subproject

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
I. Pre- Construction Phase						
Flooding and conflict of water use	To ensure that no flooding occurs due to weirs and water balance for users.	• The subproject water balance has been calculated to ensure water supplies from the reservoirs meet the subproject irrigation demands. The basic design of spillways has proposed the proper locations of weirs along Dak Sor stream in Nam Xuan commune, and the other design	PMU	Detailed design phase	N/A	Included in PMU preparation cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		parameters have considered the water balance in summertime and preventing flooding in the rainy season.				
Land acquisition and resettlement	To minimize the impacts of land acquisition and resettlement.	• Implement the updated land acquisition and compensation plan that was approved by the ADB for the subproject. • Design access roads to the minimum necessary width and installation of pipelines within the ROW when feasible.	PMU, ESS	Before construction	N/A	Included in the contract with ESP and PMU operation budget
Environmentally responsible procurement	To ensure proper EMP implementation by selected contractors.	• Update the EMP. • Include the EMP in the tender documents to ensure that mitigation measures are budgeted and to prepare the contractors for environmental responsibilities. • Specify in bid documents that contractors shall engage capable and trained staff to take responsibility for the environmental management and safety issues at the working level	ESS, PMU	Before bidding and before construction commences	N/A	Included in the contract with ESS and PMU operation budget

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		and to monitor the effectiveness and review mitigation measures as the subproject proceeds. • Contractors must recruit qualified staff to oversee implementation of environmental and safety measures specified in EMP.				
Environmental capacity development	To develop environmental management capacity of PMU and ensure proper EMP implementation and promote environmental awareness among workers.	• PMU to commit and retain dedicated staff for subproject duration to oversee EMP implementation. • ESP to train PMU to build their capacity on EMP implementation, monitoring, and reporting using workshops and on-the-job training techniques and case studies. • Conduct workers' orientation on EMP provisions. Such orientation shall be periodically conducted by the ESS as every new contractor is engaged.	PMU, ESS	Throughout the pre-construction and construction phase	N/A	Included in the contract with ESP and PMU operation budget

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
UXO	To avoid any accident due to UXO still underground in the subproject working sites.	• Conduct a survey on UXO before construction.	PMU	Before construction	N/A	Included in the contract with ESP and PMU operation budget
II. Construction Phase						

Water pollution	To minimize pollution of surface water of various reservoirs and canals,	• Schedule excavation works during the dry season or stop works during heavy rainfall.
		• Properly manage all construction, including excavated soil and domestic wastes at sites and prohibit disposal of all wastes into the reservoirs canals and Dak Sor River.
		• Strictly comply with the regulations on management of hazardous wastes specified in Circular 36/2016/BTNMT, specifically:
		  • The storage area for all hazardous substances (oil, lubricant, petrol) must be located away from the reservoirs.
		  • Ensure that safe storage of fuel, other hazardous
			PMU, Contractor	During civil works at site	Reservoirs of Team 1, Team 2, 40, 35B, West reservoir, Jun Juh, Dak Sor Reservoir, Dak Sor Stream, Thai Ba Long and D1, 2, 3, 4 canals	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		substances is agreed by PPMU/CSC and has the necessary approval/permit from DONRE and local authorities; • Equipment/vehicle maintenance and refuelling areas will be confined to the area in an especially designed site to contain spilled lubricants and fuels; • Ensure all storage containers are in good condition to avoid leaking into environment. • Worker camps, if needed, will be constructed far from the reservoirs, canals, and river and provided with adequate latrines and dustbins. Waste from latrines will be collected and treated				

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		properly through an economic contract with local environmental cooperatives /companies.				
Waste management	To avoid or minimize negative impacts on environment due to improper management of wastes at sites	• **Excavated soil** Any surplus material will be disposed properly and given for free to interested villagers as backfill materials in coordination with the village authority. • **Construction wastes** These wastes are collected and classified for re-use or recycling, otherwise, disposed in Dac Ken landfill of Dac Mil District to ensure no danger to people. • **Domestic wastes** Contractor will provide dustbin for worker camps to ensure that all domestic wastes will be collected and properly disposed in Dac ken landfill of Dac Mil District.	PMU, Contractor	During civil works, transportation	N/A	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	**Responsibility**	**Timing**	**Location**	**Mitigation Cost**
		• **Hazardous wastes** Secure and control storage of all hazardous materials, including fuels, lubricants following *Circular 36/2015/BTNMT.*				
Disruption of local transportation and damage of community road		• Prepare work plan and working method to be submitted to PPMU/CSC for approval before the start of civil works. • Inform local people and authorities about the duration of work at each specific site. • Collaborate with local traffic agency to install signboards to instruct local travellers to reduce speed or change direction of transport vehicles to other roads during construction works. • Do not allow stockpiling and gathering of construction materials and parking on community roads. • Clean worksites and fill up all	PMU, Contractor	Throughout construction phase	Reservoirs of Team 1, Team 2, 40, 35B, West reservoir, Jun Juh, Dak Sor Reservoir; community road and provincial road at section where the pipeline crosses.	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		holes on sites after ending day work to ensure local people can transport without any risk of an accident. • Bear all responsibility for rehabilitating any damage of the community roads due to subproject construction.				
Disruption of existing irrigation service	To prevent disruption of paddy field cultivation.	• Contractors will collaborate with local people and authorities to prepare cropping schedules, determine crop water demand, and identify a suitable work plan for starting construction. If the impact is unavoidable during the time of upgrading canals, PMU/ contractors will discuss further with local authorities to find alternative irrigation sources. • Contractors will comply strictly with the scheduled progress of construction to ensure the irrigation service is available for farmers to	PMU, Contractor	Throughout construction phase	Paddy fields being irrigated by Duc Minh stream and Thai Ba Long canal	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		cultivate next crop season in time. • For any delay, regardless of the reason/s, affecting the cultivation of villagers, contractors will be responsible for any losses due to the civil works.				
Dust and noise		• Excavated material and stockpiles will be kept moist. • Watering activities will be conducted along the community road when cutting concrete, excavating, and levelling after complete installation of the pipeline, to suppress dust at all times and prevent complaints from villagers living nearby. • Transport vehicles will be required to install tarpaulin covers or other suitable material to prevent spillage of the hauled materials. • Construction equipment and vehicles will, at all times, be well maintained and in good	PMU, contractor	During civil works, transport-ation	Reservoirs of Team1, Team 2, 40, 35B, Dak Sor, Road where the pipeline from Reservoir 40 to Thuan Bac Reservoir will be installed.	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		working condition to reduce fugitive emissions. • Speed limits on areas will be imposed to minimize dust emission. • Work at the sites will be limited to daytime from 0700H to 1800H. • Stationary equipment like the diesel generators will be installed as far as practicable from sensitive receptors. • Buffers will also be established as further mitigation.				
Agricultural land impacts	To minimize deterioration of agricultural land	• Properly manage construction materials, such as stones, sand, and cement, to prevent them from being scattered into the paddy fields along the proposed canal. • Construction wastes should be collected and transported to the permitted disposal sites.	PMU, Contractor	Throughout the construction phase	Fields located along Thai Ba Long canal and Duc Minh stream	Included in civil works cost
Community health and safety	To minimize the risk of locals being exposed to the danger of	• Install barricades/barriers and sturdy plate covers in open	PMU, Contractor	Throughout construction phase	N/A	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
	open excavations and conflicts with migrant workers.	excavations during non-working time. • Install warning signs in the area. • The contractor will be required to provide priority hiring of qualified construction workers from the villages and to consult with the local authorities to avoid conflict if migrant workers will be brought to the site.				
Occupational health and safety	To minimize risks of workers when working at sites.	• Require the contractor to implement the construction health and safety plan in accordance with World Bank EHS Guidelines (http://www.ifc.org/ehsguidelines) as a minimum standard. The contractor will appoint an environment, health and safety officer to ensure implementation of the plan. The plan will at minimum include: • Provision of PPEs, such as hard hats, gloves,	PMU, Contractor	Throughout construction phase	N/A	Included in civil works cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	**Responsibility**	**Timing**	**Location**	**Mitigation Cost**
		rubber boots, etc. • Wearing of PPE while working onsite will be a mandatory requirement for workers. • Posting of safety signs/ reminders in strategic areas within the construction area. • Ensure that vehicle and equipment operators are properly licensed and trained. • Provide staff with communicable disease and HIV-related awareness training.				
III. Operation Phase						
Deterioration of water quality	To protect the water quality of West Reservoir from deterioration.	• Daknong DARD should cooperate with local authorities to prohibit farmers to park or repair machines, using pesticides, raising animals, and discharging domestic wastes into the upstream areas of the West reservoir to prevent water	Irrigation Division/DARD	Throughout the operation phase	Reservoirs of Team1, Team 2, 40, 35 B, especially the West Reservoir	Operation cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
		pollution due to toxic substances. • The IEMC will continuously coordinate with the villages and district authorities regarding community activities in the catchment area to monitor watershed activities that may contribute to the contamination of raw water. The IEMC will conduct regular monitoring of the water quality parameters of the reservoirs of Team1, Team 2, 40, and 35 B, especially the West Reservoir.				
Occupational health and safety	To prevent operations staff and workers from any occupational risks.	• Proper guidance and adherence to occupational health and safety protocols need to be established in the said facilities in accordance with the World Bank EHS Guidelines as a minimum standard.	Irrigation Division/DARD	Throughout the operation phase	N/A	Operation cost
Community health and safety	To prevent locals from electric accidents	• The subproject should provide a training course on	Irrigation Division/DARD	Throughout the operation phase	N/A	Operation cost

Environmental Concern	Objective	Impact Mitigation				
		Mitigation Measures	Responsibility	Timing	Location	Mitigation Cost
	due to exposure to domestic electric lines.	techniques of effective application and safety for those who are planned to use the subproject water.				

C. Reporting

167. PMU will submit environmental monitoring reports to ADB. The reports will cover the status of EMP implementation in terms of required mitigation measures for different phases of the subproject, necessary remedial actions to effectively address negative environmental impacts due to subproject implementation, status of environmental capacity building activities, documentation of complaints received, and corresponding action/resolution. The EMRs will be submitted to ADB semi-annually during the construction phase and annually for two years after completion of construction (**Table 21**).

Table 21: Reporting Procedures

Project Phase	Type of Report	Frequency	Responsibility	Submitted to Whom
Construction	**Environmental Performance Report** indicating compliance with EMP and monitoring results at the contractor site	Monthly	Construction contractor	CSC
	Subproject EMP Compliance Report indicating compliance with subproject EMP and monitoring results	Quarterly	CSC	PMU
	EMP Compliance Report indicating compliance with subproject EMP and monitoring results	Semi-annually during construction phase	ESP/PMU	ADB
Operation	**EMP Compliance Report: Operation** indicating compliance with subproject EMP commitments during operation	Annually in the first two years of operation; ongoing frequency to be determined based on review after two years.	Dak Nong DARD	Dak Nong DONRE

D. Environmental Management Plan Implementation (EMP) Implementation Costs

168. The cost of EMP implementation during construction phase will be included (i) the cost for implementation of mittigation measures which will be intergrated in the civil contract package and; (ii) the cost for environment management and monitoring including the cost for 06 man-months of environment saguard specialist and the cost for Independent Environment Monitoring Consultant, estimated about $90,000.

169. The cost of EMP during the operational phase will be borne by the Irrigation Management Company (IMC) as part of O&M activities.

X. CONCLUSION AND RECOMMENDATIONS

170. This IEE for the DakNong Province subproject was undertaken to identity the environmental issues and concerns associated with the proposed irrigation subproject, following modifications of the initial plans that were presented during project preparation. The modifications made are considered more suitable in terms of ensuring better irrigation water quality and quantity. The assessment confirms that the subproject remains classified as **Category B for environment** based on ADB's SPS (2009).

171. Beneficial impacts are expected in terms of the health and well-being of people because of the proposed irrigation subprojects in Dak Nong Province. Principal benefits will be derived from the improved accessibility to reliable irrigation water supply as well as economic benefits in the form of better returns from planting high-value crops and more cost-effective utilization of irrigation water by the farmers from the introduction of, and improved access to, high-technology irrigation systems.

172. **Most of the environmental impacts are expected to occur during the construction phase. The environmental impacts are not expected to cause irreversible and significant adverse environmental impacts,** and are easily controllable through the application of appropriate and conventional mitigation measures. Based on the assessment of environmental impacts, the anticipated adverse impacts during project implementation are related to nuisances which may happen during the construction of the subproject components, such as temporary alienation of access, temporary disruption of community facilities, noise, and sediment runoff, and release of dust and engine gas emissions. **Recommendations formulated in the EMP, its inclusion in the contractual framework, and an effective inspection of construction sites will reduce these risks to an acceptable level.**

173. Environmental mitigation measures have been designed, as outlined in the subproject EMP, to address any adverse impacts during the various phases of project implementation. The EMP also presents the institutional responsibilities for implementing the mitigation measures. All subproject activities prior to construction, during construction, and during operation will be managed as provided in the EMP, and the Contractor's compliance and implementation of the mitigation measures shall be monitored. An environmental monitoring plan has been provided to ensure compliance with prevailing GOV standards.

174. The IEE concludes that the subproject information on the affected environment is sufficient to identify the scope of environmental impacts of the subproject, and **no further environmental assessment is, therefore, required.**

Appendix 1

PICTURES AND MINUTES OF FIELD SURVEYS AND PUBLIC CONSULTATIONS

PICTURE OF PUBLIC CONSULTATIONS	
	
Public consultation in Duc Minh Commune	Public consultation in Thuan An Commune
	
Public consultation in Tam Thang Commune	Public consultation in Ea T'Ling town
	
Public consultation in Truc Son Commune	Public consultation in Đăk Đrông Commune
	
Public consultation in Cư Kinia Commune	

MINUTES OF PUBLIC CONSULTATIONS, DAK NONG PROVINCE

Nam Xuân Commune

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán tỉnh Đắk Nông

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Hôm nay là ngày 10 tháng 8 năm 2016

Cuộc họp được tiến hành tại: xã Nam Xuân, huyện Đắk Mil, tỉnh Đắk Nông

Tổ chức họp dân về vấn đề: Các đánh giá môi trường bản thảo

Tiểu dự án: WEIDAP – Đắk Nông

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên: Lương Văn Tích Chức vụ: Chủ tịch
2. Họ và tên..... Chức vụ: .....

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên: Lương Thị Thắng Chức vụ: Chủ tịch

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: Hà Thị Thu Chức vụ: Chủ tịch

3. Đại diện Hội nông dân xã :

Họ và tên: Lang Hồng Hưng Chức vụ: Chủ tịch

4. Đại diện hội cựu chiến binh xã :

Họ và tên: Vi Thanh Tuyền Chức vụ: Chủ tịch

5. Đại diện Đoàn thanh niên xã :

Họ và tên: Vi Văn Vinh Chức vụ: Bí thư

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên:..... Chức vụ:.....
2. Họ và tên:..... Chức vụ:.....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên:..... Chức vụ:.....
2. Họ và tên:..... Chức vụ:.....

Đại diện đơn vị tư vấn:

Họ và tên:..... Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 16. /..... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:...15.....người, chiếm.....%

Nữ:...01.....người, chiếm.....%

Dân tộc thiểu số:....15.....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án: Nâng cao hiệu quả sử dụng nước cấp cho thôn Đức bản huyện Đắk Mil

Chủ toạ cuộc họp:...Lương Văn Tích.....

Chức vụ:.....Chủ tịch.....

Nơi công tác:.....UBND xã Nam Xuân.....

Nội dung làm việc:

- Nội dung tham vấn

+ Các tác động môi trường và biện pháp quản thuần

+ Sự đồng thuận ủng hộ dự án

- Nội dung thảo luận

+ Đời sống kinh tế của người dân trong xã còn gặp nhiều khó khăn. Người dân trong xã chủ yếu làm nông nghiệp

+ Tại xã hiện tại chưa có công trình thủy lợi

+ Việc thi công dự án ảnh hưởng tới môi trường không lớn vì khu vực dự án cách xa khu dân cư sinh sống, không gần các khu bảo tồn thuần nhiên và các khu vực nhạy cảm

+ Ảnh hưởng bởi việc thu hồi đất không lớn, tuy nhiên cần đền bù cho người dân khi thu hồi

+ Người dân và chính quyền địa phương ủng hộ dự án, mong muốn dự án sớm triển khai để mang lợi ích cho vùng dân

+ Vị trí của tuyến ống dự kiến xây dựng tại xã là phù hợp với nhu cầu và nguyện vọng đồng thuận của người dân

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Cuộc họp kết thúc vào lúc:.....giờ.... ngày 12 tháng 8 năm 2016.

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã Xuân

CHỦ TỊCH

Lương Văn Tích

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

---***---

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: ....WEIDAP - Đắk Nông.....

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Địa điểm: ...Ủy ban nhân dân xã Nam Xuân.....

Thời gian: ..... giờ....., ngày ..10.tháng ...8..năm .2016.

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
01	Lường Văn Kíu	1974	Thái	x		
02	Lường Văn Tiết	1974	Thái	x		
03	Hà Điệu Tuyên	1967	Thái	x		
04	Vi Thanh Huyền	1960	thái	x		
05	Lê Quốc Liên	1955	kinh	x		
06	Hoàng văn Tiến	1972	Tày	x		
07	Lường Hồng Quang	1969	Thái	x		
08	Lường Xuân Hội	1956	thái	x		
09	Lang Văn Chuyện	1964	thái	x		
10	Vi Hồng Phi	1971	Thái	x		
11	Lò Văn Phò	1968	Thái	x		
12	Ngân Văn Xoa	1965	Thái	x		
13	Hà Được	1945	Thái	x		
14	Ngân Văn Khâm	1965	Thái	x		
15	Vi Quốc Hưng	1963	Thái	x		
16	Hứa Văn Linh	1964	NÙNG	x		

Long Sơn Commune

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cao hiệu quả sử dụng nước cấp SHTT thôn Đạo Kiên huyện Đắk Mil

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Hôm nay là ngày 10 tháng 8 năm 2016.

Cuộc họp được tiến hành tại: xã Long Sơn, huyện Đắk Mil, tỉnh Đắk Nông

Tổ chức họp dân về vấn đề: Nước sạch cho người Mô Nông làm thôn

Tiểu dự án: ....WEIDAP - Đắk Nông.....

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã: Long Sơn

1. Họ và tên: Trần Xuân Hoà ..... Chức vụ: Chủ tịch xã

2. Họ và tên ..... Chức vụ: .....

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên: Triệu Tiến Quý ..... Chức vụ: Chủ tịch .....

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: Hứa Thị Hà ..... Chức vụ: Chủ tịch .....

3. Đại diện Hội nông dân xã :

Họ và tên: Đinh Đăn Mông ..... Chức vụ: Chủ tịch .....

4. Đại diện hội cựu chiến binh xã :

Họ và tên: Đàm Đình Hân ..... Chức vụ: Chủ tịch .....

5. Đại diện Đoàn thanh niên xã :

Họ và tên: Hoàng Thị Thiệp ..... Chức vụ: Bí thư .....

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên: ..... Chức vụ: .....

2. Họ và tên: ..... Chức vụ: .....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên: ..... Chức vụ: .....

2. Họ và tên: ..... Chức vụ: .....

Đại diện đơn vị tư vấn:

Họ và tên: ..... Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 21 /..... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:...19....người, chiếm.....%

Nữ:....2.....người, chiếm.....%

Dân tộc thiểu số:...19.....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án: Nâng cao hiệu quả sử dụng nước sạch ...
...của thôn thị trấn huyện Đắk Mil.....

Chủ toạ cuộc họp:....Trần Xuân Hoà.....

Chức vụ:.....Chủ tịch.....

Nơi công tác:.....Ủy ban xã Long Sơn.....

Nội dung làm việc:

.....Nội dung tham vấn công đồng.....
.....- Vấn đề mà người dân quan tâm khi triển khai dự án có ảnh hưởng ...
...pháp giải phóng.....
.....- Bị động đất, ý kiến của người dân.....
.....
.....Nội dung trao đổi, thảo luận.....
.....- Thời gian gần đây thiên tai hạn hán xảy ra thường xuyên ...
...tại địa phương, do vậy người dân mong mỏi dự án.....
.....
.....- Người dân mong muốn xây dựng hệ thống lớn hơn để ...
...có thể trữ thêm nhiều nước hơn.....
.....
.....- Vấn đề ô nhiễm môi trường không đáng ngại trong quá ...
...trình thi công.....
.....
.....- Người dân tham khảo kiến để đơn vị tư vấn thực hiện ...
...khai mong lại lợi ích thiết thực cho người dân.....
.....
.....- Cần thực hiện nghiêm các các giải pháp bảo vệ môi trường
.....
.....- Xem xét các giải pháp kỹ thuật cần thiết để công trình ...
...thực xây dựng thêm bền,.....
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Cuộc họp kết thúc vào lúc:.....giờ.... ngày.10.tháng..8..năm.2016.

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã ....Long Sơn..... **Đ/D: Cơ quan tư vấn**

CHỦ TỊCH

Trần Xuân Hà

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: ....WEIDAP - Đắk Nông.....

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Địa điểm: ....Xã Long Sơn.....

Thời gian: ..... giờ....., ngày 10 tháng ..8...năm .2016..

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Hà Văn Vân	45	Nùng	x		
2	Phu Dinh Hân	51	Kinh	x		
3	Hoàng Quốc Tiến	58	Dao	x		
4	Bàn Đình Tâm	57	Kinh	x		
5	Hứa Thị Hà	32	Tày		x	
6	Tô Văn Cảnh	46	Tày	x		
7	Phùng Văn Léo	35	Nùng	x		
8	Hứa Văn Duệt	45	Nùng	x		
9	Hà Văn Cờ	70	Nùng	x		
10	Võng Thị Hường	38	Tày	x	x	Hường
11	Vi Văn Sơn	31	Tày	x		
12	Vy Văn Yêu	32	Tày	x		
13	Em Văn Thảo	34	Tày	x		Thảo
14	Phu Văn Bảng	45	Nùng	x		Bảng
15	Chu Văn Minh	35	Nùng	x		Minh
16	Lường Văn Tạc	59	Tày	x		
17	Dương Văn Mỹ	48	Nùng	x		Mỹ
18	Hoàng Văn Tình	52	Nùng	x		Tình
19	Hà Văn Nhớt	28	Nùng	x		Nhớt
20	Chu Văn Phiên	41	Nùng	x		Phiên
21	Võng Văn Lực	42	Nùng	x		Lực

Đức Minh Commune

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cao hiệu quả sử dụng nước cấp cho thị trấn huyện Đắk Mil

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Hôm nay là ngày 09 tháng 8 năm 2016.

Cuộc họp được tiến hành tại: xã Đức Minh, huyện Đắk Mil, tỉnh Đắk Nông

Tổ chức họp dân về vấn đề: Bảo vệ môi trường và an toàn

Tiểu dự án: WEIDAP - Đắk Nông

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã: Đức Minh

1. Họ và tên:.....Chức vụ: .....
2. Họ và tên.....Nguyễn Trọng Định.....Chức vụ: Phó chủ tịch

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên.....Chức vụ: .....

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên:.....Chức vụ: .....

3. Đại diện Hội nông dân xã :

Họ và tên:.....Trần Văn Long.....Chức vụ: P.chủ tịch Hội nông dân

4. Đại diện hội cựu chiến binh xã :

Họ và tên:.....Hồ Quang Tùng.....Chức vụ: Hội cựu chiến binh

5. Đại diện Đoàn thanh niên xã :

Họ và tên:.....Nguyễn Hồng Thắng.....Chức vụ: .....

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện đơn vị tư vấn:

Họ và tên:.....Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 15/..... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:...V.....người, chiếm.....%

Nữ:...03.....người, chiếm.....%

Dân tộc thiểu số:.....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án:.....

.....

Chủ toạ cuộc họp:...Nguyễn Trọng Đức.....

Chức vụ:.....Phó Chủ tịch.....

Nơi công tác:.....UBND xã Đá Mài.....

Nội dung làm việc:

.....

.....Tham vấn xã về nội dung môi trường và xã hội:.....

1 ...Nguyễn Trọng Định.....

.....Tiểu dự án liên quan đến 3 địa bàn, thôn Thanh Sơn.

.Thôn Thanh Hà.....

.....Hay mọi của hà con là được đầu tư làm đường giao thông nông thôn, công trình thủy lợi.....

.....khi dự án triển khai người dân sẽ hưởng lợi từ dự án.....

2 ...Phạm Đình Cam - Thôn trưởng thôn Thanh Hà.....

.....Nước hay tập trung sau mỗi trận mưa tại thửa, ruộng xảy nghiêm cấm đổ thải ô nhiễm, xác lá.....

.....Nước ngập trũng mỗi khi mưa lớn: gây ô nhiễm và cho phân đi lại.....

.....

.....

2 ...Nguyễn Hồng Diệp - Thôn phó thôn Thanh sơn.....

.....vào mùa tưới thì nước đầy tưới chạt yêu cầu.....

vào mùa khô thì thường chưa bơi bờ thủy lợi hệ thống mương.....

.....Nước dùng sinh hoạt chủ yếu là nước giếng tự đào.....

.....

.....Trong xã Đá Mài có 16 thôn trong đó có 15 dân tộc.....

Kinh và 1 dân tộc khác.....

.....

*) vấn đề về Môi Trường.....

....các thôn Thanh Sơn và Thanh Hà đi qua đường quốc lộ 1A qua ..nên khi trâu Thái Thái cày chị Ái sẽ hỉ cành lưỡng lối thả.. bừa xa chở vật liệu chạy qua.....
.....→ tổ tư vấn yên tâm chúng tôi sẽ vận động, tuyên truyền cho nhân dân.....
-...xã chưa có hướ xử lý chất thải đạu nên cuộc cánh... chuồng của các thái thái nhân dân cuộc là chăn dắng mới.....

Cuộc họp kết thúc vào lúc:.....giờ.... ngày 23 tháng 8 năm 2016.

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã ...Đức Minh..... **Đ/D: Cơ quan tư vấn**

KT / CHỦ TỊCH
PHÓ CHỦ TỊCH

Nguyễn Trọng Dinh

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

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DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: ..WEIDAP ~~Đắk~~ Nông.....

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: Xã..Quí..Minh.....

Thời gian: ..... giờ....., ngày 09 tháng 8 ...năm 2016..

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Nguyễn Hồng Thắng	35	Kinh	Nam		
2	Hà Quang Trung	61	Kinh	Nam		
3	Nguyễn Hồng Điệp	51	Kinh	Nam		
4	Phạm Đình Cam	T Hải	Kinh	Nam		
5	Bùi Đăng Cường	34	Kinh	Nam		
6	Trần Văn Long	52	Kinh	Nam		
7	Trương Hoàng Sơn	49	Kinh	Nam		
8	Đặng Hồng Khanh	40	Kinh	Nam		
9	Đặng Thị Quyết		Kinh	~~Nam~~	Nữ	
10	Trương Thị Lới		Kinh		Nữ	
11	Huỳnh Văn Quốc		Kinh	Nam		
12	Nguyễn Văn Hồng		Kinh	Nam		
13	Trần Văn Thuỷ		Kinh	Nam		
14	Hồ Minh Hùng		Kinh	Nam		
15	Hồ Thị Tứ		Kinh		Nữ	

Đăk Lao Commune

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cao hiệu quả sử dụng nước các CTTL thôn 8 thị trấn huyện Đăk Mil

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Hôm nay là ngày....tháng. 08 ..năm 2016..

Cuộc họp được tiến hành tại: xã. Đăk Lao.., huyện Đăk Mil..., tỉnh. Đăk Nông.....

Tổ chức họp dân về vấn đề: ..Bloấ đánh giá môi trường ban đầu.....

Tiểu dự án: ...WEIDAP... tỉnh Đăk Nông.....

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên:...Trần Nguyên Long.....Chức vụ: P.C.T xã.....
2. Họ và tên.....Chức vụ: .....

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên...Trịnh Thị Hường.....Chức vụ: ...Chủ tịch.....

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên:...Đinh Thị Hợp.....Chức vụ: ...Chủ tịch.....

3. Đại diện Hội nông dân xã :

Họ và tên:...Trương Thị Phúc.....Chức vụ: ...Chủ tịch.....

4. Đại diện hội cựu chiến binh xã :

Họ và tên:...Nguyễn Hữu Phước.....Chức vụ: ...Chủ tịch.....

5. Đại diện Đoàn thanh niên xã :

Họ và tên:...Phan Xuân Vinh.....Chức vụ: ...Bí thư.....

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện đơn vị tư vấn:

Họ và tên:.....Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 22/..... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:...15.....người, chiếm.....%

Nữ:.....7.....người, chiếm.....%

Dân tộc thiểu số:.....01.....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án:...Nâng cao hiệu quả sử dụng nước tưới cho cây trồng tỉnh Đắk Nông.....

Chủ toạ cuộc họp:.....Trần Nguyên Long.....

Chức vụ:.....Chủ tịch xã.....

Nơi công tác:.....UBND xã Đắk Lao.....

Nội dung làm việc:

Tham vấn công khai trước người dân về các nội dung

+ Tạo điều kiện thuận lợi cho người dân tham

+ Bảo đảm quyền tự

+ Bảo đảm thực hiện quyền của người dân về chính quyền

+ Các vấn đề khác có liên quan

Nội dung thảo luận

- Việc xây dựng dự án gây ra bụi, ồn là không tránh khỏi, tuy nhiên đây là không lớn, không cần đề cập với người dân quan

+ Khi tiến chuyển lưu ý đến vấn đề an toàn giao thông, đi lại của người dân

+ Cần khắc phục lại các tuyến đường hư hỏng (nếu có)

- Khu vực đi cần không đi qua các điểm nhạy cảm, các khu bảo tồn thiên nhiên

- Nước thải hiện tại chỉ tập trung khoảng 50% nhà dân thải

- Khu vực xung quanh dự án hiện đang có nhà ở, có cao tốc một số loại cây ngắn ngày khác

- Người dân có hiến kiến về quản lý an toàn giao thông, bảo vệ thực vật và chất thải rắn

- Dự án khi thu hồi cần phải đền bù thỏa đáng cho người dân

Chính quyền địa phương đã người dân ủng hộ việc triển khai dự án

Cuộc họp kết thúc vào lúc:.....giờ.... ngày....tháng.08.năm.2018

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã Đắk Lao

KT/CHỦ TỊCH
PHÓ CHỦ TỊCH

Trần Nguyên Long

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

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DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: ....WEIDAP - tỉnh Đắk Nông.....

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: ....xã.....Đăk.....Lao.....

Thời gian: ..... giờ....., ngày ....tháng 08.năm 2016.

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1)	Trần Nguyên Long	44	Kinh	x		
2)	Đặng Trung Nghĩa	34	Kinh	x		
3)	Võng Xuân Quý					
4)	Phan Ngọc Tín	40	Kinh	Nam		
5)	Trần Đăng Khoa	40	Kinh	Nam		
6	Ba Duy Huấn	53	Kinh	nam		
7	Trần Văn Long					
8)	Nguyễn Bá Hiền	37	Kinh	Nam		
9)	Ta Thị Tiên	64	Kinh	Nữ		
10	Đàm Thị Đông	49	Kinh	Nữ	x	
11	Trương Thị Chương	55	Kinh	Nữ		
12	Trần Thị Lan	29	Kinh	nữ		
13.	Phan Thị Ngân	36.	Kinh	Nữ		
14	Nguyễn Việt Kiều	43	Kinh	Nam		
15	nguyễn văn Kim	75	Kinh	nam		
16	Nguyễn Thị hiền	27	Kinh	nữ		
17	nguyễn thị mai	68	Kinh	nữ		
18	Lê xuân Xoa	43	Kinh	Nam		
19	Nguyễn viết Nam	25	Kinh	Nam		
20	Đinh Thị Hợp	50	Mường	Nữ		
21	Phan thị Loan.	39 T.				

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
22	Nguyễn Thị Duyên	40t	Kinh		x	

Thuận An Commune

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cao hiệu quả sử dụng nước cấp SHTT trên địa bàn huyện Đắk R'Lấp

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Hôm nay là ngày 09 tháng 8 năm 2016

Cuộc họp được tiến hành tại: xã Thuận An, huyện Đắk Mil, tỉnh Đắk Nông

Tổ chức họp dân về vấn đề: Báo cáo đánh giá môi trường ban đầu

Tiểu dự án: WEIDAP - Tỉnh Đắk Nông

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên: Trần Khắc Dũng ..... Chức vụ: PCT xã

2. Họ và tên..... Chức vụ: .....

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên..... Chức vụ: .....

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: Nguyễn Thị Mến ..... Chức vụ: .....

3. Đại diện Hội nông dân xã :

Họ và tên:..... Chức vụ: .....

4. Đại diện hội cựu chiến binh xã :

Họ và tên: Nguyễn Văn Quyến ..... Chức vụ: .....

5. Đại diện Đoàn thanh niên xã :

Họ và tên: Lê Xuân Lý ..... Chức vụ: .....

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên:..... Chức vụ:.....

2. Họ và tên:..... Chức vụ:.....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên:..... Chức vụ:.....

2. Họ và tên:..... Chức vụ:.....

Đại diện đơn vị tư vấn:

Họ và tên:..... Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 15 /..... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:...14.....người, chiếm.....%

Nữ:...01.....người, chiếm.....%

Dân tộc thiểu số:...02.....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án:...Nông cao hiện quả đi dung nước sạch CTN trên địa bàn huyện Đắk Mil.....

Chủ toạ cuộc họp:.....Trần Khắc Dũng.....

Chức vụ:.....Chủ tịch xã.....

Nơi công tác:.....UBND Xã Thuận An.....

Nội dung làm việc:

- Tham vấn về các vấn đề

+ Môi trường

+ Các biện pháp giảm thiểu

+ Sự ủng hộ của địa phương

- Nội dung thảo luận

+ Đơn vị thiết kế và chủ đầu tư cần xem xét lại kỹ thuật để dự án mang lại hiệu quả cao nhất cho người dân địa phương

+ Việc thi công xây dựng ồn, bụi phát sinh là không tránh khỏi tuy nhiên

Che phủ nguyên vật liệu khi vận chuyển

Hạn chế công trường gây gông sạch sẽ

Khắc phục đường xá hư hỏng

+ Cần thiết kế hệ thống thu và thải thì cần biện pháp giảm thiểu như thế nào

+ Đề nghị tạm thời cho xây nhiễm và công khai kế hoạch của dự án

+ Người dân trong vùng xuất cần nước để phục vụ sản xuất nông nghiệp

+ Đền bù thỏa đáng khi chiếm dụng đất của người dân

+ Dự án không thể qua khu vực nhạy cảm
+ Các quyền sử dụng đất ảnh hưởng bởi việc thực hiện dự án khi dự án mang lại hiệu quả cho người dân thực phẩm

Cuộc họp kết thúc vào lúc:.....giờ.... ngày 09 tháng 8 năm 2016

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã Thuận An

KT. CHỦ TỊCH
PHÓ CHỦ TỊCH

Trần Khắc Dũng

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

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DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: ...WEIDAP - Đắk Nông.....

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: ..Xã Thuận An.....

Thời gian: ..... giờ....., ngày 09 tháng ..8..năm 2016..

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Y Bizôm		Mường	Nam		
2	P Ham Văn Tê		Kinh	Nam		
3	Y - Bling - Dinh	35	Mường	Nam		
4	Nguyễn Bá Cầu	50	Kinh	Nam		
5	Lê Xuân Lý	29	Kinh	Nam		
6	Phạm Thanh Minh	43	Kinh	Nam		
8	Nguyễn Thị Mến	32	Kinh	Nữ		
8	Đặng Khắc Chương	40	Kinh	Nam		
9	Nguyễn Minh Toán	60	Kinh	Nam		
10	Nguyễn Văn Xuyên	43	Kinh	Nam		
11	Võ - Lý	63	Kinh	Nam		
12	Lê Văn Thanh	57	Kinh	Nam		
13	Đỗ Văn Lông	48	Kinh	Nam		
14	Trương Xuân Chè	56	Kinh	Nam		
15	Trần Khắc Dũng					

Đăk Săk Commune

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cao hiệu quả sử dụng nước cấp cho dân cư huyện Đắk Mil

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Hôm nay là ngày 01 tháng 8 năm 2018.

Cuộc họp được tiến hành tại: xã Đắk Sắk, huyện Đắk Mil, tỉnh Đắk Nông

Tổ chức họp dân về vấn đề: Báo cáo đánh giá môi trường bản thảo

Tiểu dự án: WSSP Đắk Nông

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên: Trần Thanh Hải Chức vụ: Phó chủ tịch xã
2. Họ và tên: Hoàng Thị Loãng Chức vụ: Phó chủ tịch HĐND

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên: Nguyễn Văn Lích Chức vụ: chủ tịch

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: Nguyễn Thị Hà Chức vụ: chủ tịch

3. Đại diện Hội nông dân xã :

Họ và tên: Hoàng Văn Sỹ Chức vụ: chủ tịch

4. Đại diện hội cựu chiến binh xã :

Họ và tên: Lê Văn Phương Chức vụ: chủ tịch

5. Đại diện Đoàn thanh niên xã :

Họ và tên: Trần Khắc Hợp Chức vụ: bí thư

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện đơn vị tư vấn:

Họ và tên:.....Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 12/..... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:...16.....người, chiếm.....%

Nữ:...03.....người, chiếm.....%

Dân tộc thiểu số:.....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án: Nâng cao hiệu quả sử dụng nước sạch ở thôn thị trấn huyện Đắk Mil

Chủ toạ cuộc họp: Trần Thanh Hải

Chức vụ: P. Chủ tịch

Nơi công tác: UBND xã Đắk Sắk

Nội dung làm việc:

- Nội dung tham vấn

+ Cần tuân thủ Nhà nước

+ Cần hiểu pháp quản chuẩn

+ Sự đồng thuận ủng hộ dự án

- Nội dung thảo luận

+ Tôn trọng do lợi ích của người dân khi thực hiện công trình là vấn đề lớn với người dân

+ Cần chú ý nguyên vật liệu tăng giá thành vận chuyển nguyên vật liệu

+ Đảm bảo an toàn giao thông

+ Thông báo đến bà con thời gian cho người dân bị ảnh hưởng

+ Cần nghiên cứu chi tiết hơn về vị trí, quy mô mới cống thoát, đảm bảo công trình phục vụ tốt lợi ích của người dân

+ Không gây khó dễ với người dân và đảm bảo an toàn giao thông cho phương tiện và người đi

+ Đồng thuận ủng hộ dự án

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Cuộc họp kết thúc vào lúc:.....giờ.... ngày 08 tháng 8 năm 2016

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã ..... **Đ/D: Cơ quan tư vấn**

Trần Thanh Hải

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

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DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: WEIDAP - Đắk Nông

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: Uỷ ban nhân dân xã Đắk Sak

Thời gian: ..... giờ....., ngày 08 tháng 8 năm 2016

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Trần Thanh Hải	44	Kinh	Nam		
2	Nguyễn Văn Lịch	57	Kinh	Nam		
3	Hoàng Thị Lông	41	Kinh	Nữ	Nữ	
4	Nguyễn Thị Hà	32	Kinh		Nữ	
5	Ngô Xuân Hợp	45	Kinh	Nam		
6	Trần Hữu Hinh	56	Kinh	Nam		
7	Lê Văn Hồng	51	Kinh	Nam		
8	Nguyễn Văn Dũng	53	Kinh	Nam		
9	Thường Thanh Đường	49	Kinh	Nam		
10	Nguyễn Tiến Thanh	56	Kinh	Nam		
11	Lê Xuân Khánh	50	Kinh	Nam		
12	Lê Văn Phủng	56	Kinh	Nam		
13	Hoàng ngọc Khánh	53	Kinh	Nam		
14	Hoàng Duế Quý	41	Kinh	Nam		
15	Nguyễn Việt Chiến	53	Kinh	Nam		
16	Nguyễn Thị Liên	52	Kinh	Nữ	Nữ	
17	Nguyễn Văn Liết	64	Kinh	Nam		
18	Lê Trọng Khởi	47	Kinh	Nam		
19	Hoàng Văn Sự	48	Kinh	Nam		

Đăk Mil

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cao hiệu quả sử dụng nước cho cây CNL thôn Đạ Sơn huyện Đăk Mil

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Hôm nay là ngày 08 tháng 8 năm 2016

Cuộc họp được tiến hành tại: xã Đăk Mil, huyện Đăk Mil, tỉnh Đăk Nông

Tổ chức họp dân về vấn đề: báo cáo đánh giá môi trường sơ bộ

Tiểu dự án: WEIDAP - Đăk Nông

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã: Đak Mil

1. Họ và tên: Bùi Thế Thọ Chức vụ: Chủ tịch UBND thị trấn

2. Họ và tên……Chức vụ: ……

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên: Nguyễn Công Thắng Chức vụ: ……

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: Ngô Thị Hường Chức vụ: ……

3. Đại diện Hội nông dân xã :

Họ và tên: Lê Quang Thuế Chức vụ: ……

4. Đại diện hội cựu chiến binh xã :

Họ và tên: Nguyễn Quang Khoa Chức vụ: ……

5. Đại diện Đoàn thanh niên xã :

Họ và tên:……Chức vụ: ……

Đại diện hỗ trợ kỹ thuật huyện……

1. Họ và tên:……Chức vụ:……

2. Họ và tên:……Chức vụ:……

Đại diện Ban quản lý dự án tỉnh: ……

1. Họ và tên:……Chức vụ:……

2. Họ và tên:……Chức vụ:……

Đại diện đơn vị tư vấn:

Họ và tên:……Chức vụ: ……

Chức vụ: ……

Người dân trong xã tham gia:

Tổng số người tham gia: 16/..... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:...10.....người, chiếm.....%

Nữ:..06.....người, chiếm.....%

Dân tộc thiểu số:.....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án: Nâng cao hiệu quả sử dụng nước cấp cho dân địa bàn huyện Đắk Mil

Chủ toạ cuộc họp: Bùi Thế Thao

Chức vụ: Chủ tịch

Nơi công tác: Thị trấn Đắk Mil

Nội dung làm việc:

Nội dung tham vấn cộng đồng

- Tên dự án
- Loại hình
- Quy mô
- Thời gian thực hiện dự án và địa điểm thực hiện dự án

Nội dung thảo luận

- Các tác động tiêu cực đến môi trường, kinh tế, xã hội khi thực hiện dự án và các biện pháp giảm thiểu tác động tiêu cực đó.

- Các kiến nghị đến việc đề xuất giải pháp khi xảy ra sự cố môi trường

- Đề xuất khuyến nghị đối với các khu vực nhạy cảm các khu bảo tồn thiên nhiên

- Trách nhiệm người đứng đầu cấp huyện trong việc bảo vệ môi trường, phê duyệt nguyên vật liệu khi vận chuyển qua các đường xá khi gây hư hỏng

- Cần đền bù cho người dân theo đúng chính sách của nhà nước khi thu hồi đất của người dân

- Dự án mang lại lợi ích rất lớn đối với cộng đồng địa phương

chế độ quyền và nghĩa vụ thủ tục xử lý vi phạm

Cuộc họp kết thúc vào lúc:.....giờ.... ngày 08 tháng 8 năm 2016.

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã ...Thị trấn...

Đ/D: Cơ quan tư vấn

CHỦ TỊCH

Bùi Đức Thọ

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

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DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: ..WREDAP.. Đắk Nông.....

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: .....Hội..trường..thôn..dân..Thị..trấn..Đắk..Mil.....

Thời gian: ..... giờ....., ngày 08 tháng ..8..năm .2016..

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
01	Ngô Thị Hường	48	Kinh		nữ	
2	Bùi Đức Dũng	62	Kinh	Nam		
3	Lê Quý Thức	52	Kinh	Nam		
4	Nguyễn Văn Thọ	45	Kinh	Nam		
5	Nguyễn Công Thắng	40	Kinh	Nam		
6	Nguyễn Quang Khoát	56	Kinh	Nam		
7	Bùi Đức Thọ	46	"	"		
8	Lê Tiến Chuyết	47	Kinh	Nam		
9	Nguyễn Thị Hồng	56	Kinh	Nữ	x	
10	Chuẩy Đình Thức	67	Kinh	Nam		
11	Ngô Thị Lan	34	Kinh	nữ		
12	Nguyễn Thị Nga	54	Kinh	nữ		
13	Nguyễn Thị Phương	34	Kinh	Nữ		
14	Trần Thị Cách	49	Kinh	Nữ		
15	Phạm Quỳnh Nga	31	Kinh	Nữ		
16	Nguyễn Tất Tấn	38	Kinh	Nam		

Nam Dong Commune

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cao hiệu quả sử dụng nước tưới cho cây trồng tại xã Quảng Sơn huyện Cư Jút

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Hôm nay là ngày 8 tháng 8 năm 2016.

Cuộc họp được tiến hành tại: xã Nam dong huyện Cư Jút, tỉnh Đắk Nông

Tổ chức họp dân về vấn đề: Bảo vệ môi trường bản thân

Tiểu dự án: WEIDAP Đắk Nông

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên: Bùi Trọng Tuấn Chức vụ: Chủ tịch xã
2. Họ và tên..... Chức vụ: .....

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên: Sầu Văn Cường Chức vụ: .....

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: Lê Thị Khuyên Chức vụ: .....

3. Đại diện Hội nông dân xã :

Họ và tên: Lương Bế Dương Chức vụ: .....

4. Đại diện hội cựu chiến binh xã :

Họ và tên: Đàng Xuân Tâm Chức vụ: .....

5. Đại diện Đoàn thanh niên xã :

Họ và tên: Đặng Thị Hiền Chức vụ: .....

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên:..... Chức vụ:.....
2. Họ và tên:..... Chức vụ:.....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên:..... Chức vụ:.....
2. Họ và tên:..... Chức vụ:.....

Đại diện đơn vị tư vấn:

Họ và tên:..... Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 23/..... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:...23....người, chiếm.....%

Nữ:....0.....người, chiếm.....%

Dân tộc thiểu số:..22.....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án: Nâng cao hiệu quả sử dụng nước cấp ...CTTL tiền đến huyện Cư Jút.....

Chủ toạ cuộc họp:.....Trần Trọng Tuấn.....

Chức vụ:.....Chủ tịch.....

Nơi công tác:.....UBND xã Nam Dong.....

Nội dung làm việc:

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.....Địa phương đang thực hiện chương trình mục tiêu

.....nông thôn mới năm rất ưng hộ chủ đầu tư dự án xử dịa

.....phương, mong muốn tỉnh mạnh dạn hỗ trợ thêm

.....công.....

.....Để nghị chủ đầu tư và đơn vị thi công có

.....giám thiết tác động môi trường trong quá

.....trình thi công.....

.....Thời gian khuy hỗ trợ diện bù giải phóng

.....mặt bằng phải rõ ràng minh bạch và thoả

.....đáng, kết hợp chặt chẽ giữa các huyện chính

.....quyền trong vùng và địa phương.....

.....14 đơn thể thuộc có gần 17.000 dân, 4.170 hộ

.....1 khu vực chủ dự án cách xa khu dân cư 2-3 km,

.....chủ yếu là đất nương rẫy xung quanh.....

.....Tình trạng khai thác liên miên ngày càng trầm trọng

.....Chính quyền địa phương đã quan tâm phòng chống

.....dịch bệnh (đặc biệt là trên cây tiêu).....

.....Nguồn vật liệu chưa có sẵn tại xã nhưng có

.....thể lấy tại tỉnh (khoảng 12 đến 15 km) đã có

.....sẵn, đất có sẵn, bãi tập trung vật liệu có

.....sẵn quanh khu vực dự án.....

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Cuộc họp kết thúc vào lúc:.....giờ.... ngày.13.tháng...6..năm..2016

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã Nam Đồng.....

Đ/D: Cơ quan tư vấn

CHỦ TỊCH

Bùi Trọng Tuấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

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DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: WEIDAP – ĐĂK NÔNG

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: NAM DONG

Thời gian: ..... giờ....., ngày 15 tháng 8 năm 2016

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Hà Hải Bằng	59	Tày	1		
2	Hoàng Thọ Đại	59	"	"		
3	Bế phạm Công	45	"	"		
4	Nông quang Beial	72	Nùng	"		
5	Hoàng văn Lanh	63	"			
6	Bế Văn Huyên	38	Tày	"		
7	Phương văn Luyến	37	Nùng	"		
8	Triệu văn Hân	44	Nữ			
9	Lồng Văn Thoong		Mèo	"		
10	Hà văn Lộc	52	Nùng			
11	Triệu Văn Tư	42	Nùng			
12	Hoàng xuân Diện	36	Nùng			
13	Nông Văn Kiên	38	Nùng			
14	Triệu Thanh Hùng		Nùng			
15	Trương Văn Ông		Nùng			
16	Triệu Văn Đông		Nùng			
17	Lương Văn Ân		Nùng			
18	Trần Đức Toàn		Kinh			
19	Long Văn Khê		Nùng			
20	Nông Hải Chí	33	Tày			
21	Vương Quốc Tiến		Nùng			
22	Vương Văn Công		Nùng			

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
23	Vũ Đức Quân		Nùng			Quân.

Trúc Sơn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cao hiệu quả sử dụng nước cho cây CN lâu năm cho bản huyện Cư Jut

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Hôm nay là ngày 12 tháng 8 năm 2016

Cuộc họp được tiến hành tại: xã Trúc Sơn, huyện Cư Jut, tỉnh Đắk Nông

Tổ chức họp dân về vấn đề: họp cho mô hình xen canh

Tiểu dự án: WEIDAP – Đắk Nông

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã: Trúc Sơn

1. Họ và tên:.....Chức vụ: .....
2. Họ và tên: Hồ Sỹ Liên Chức vụ: Văn phòng

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên.....Chức vụ: .....

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: Phạm Thị Hằng Chức vụ: .....

3. Đại diện Hội nông dân xã :

Họ và tên: Lương Thị Thanh Thuỷ Chức vụ: .....

4. Đại diện hội cựu chiến binh xã :

Họ và tên: Đỗ Công Minh Chức vụ: .....

5. Đại diện Đoàn thanh niên xã :

Họ và tên: Nguyễn Duy Anh Chức vụ: .....

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện đơn vị tư vấn:

Họ và tên:.....Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 221..... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:...82.....người, chiếm.....%

Nữ:...139.....người, chiếm.....%

Dân tộc thiểu số:...03.....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án:...Nâng cao hiệu quả sử dụng nước tưới cho cây trồng thông qua hỗ trợ kiên cố kênh mương.....

Chủ toạ cuộc họp:...Hồ Sỹ Linh.....

Chức vụ:...Chủ tịch xã Phong.....

Nơi công tác:...UBND xã Thái Sơn.....

Nội dung làm việc:

...Nội dung tham vấn cộng đồng.....

...+ Vấn đề Mã thuỷ.....

...+ Các hoạt động sản xuất.....

...+ Sự ủng hộ của địa phương.....

.....

...Nội dung thảo luận.....

...Đập dâng dùng nước của bản xã Thái Sơn thường xuyên... một số người dân tại Ea Tling bị ảnh hưởng do cải phần đất canh tác.....

.....

...Mạch nguồn nước ngầm tại địa phương dồi dào vẫn... vùng dùng để cấp thiết. Trong thời gian qua dự án... cần nghiên cứu sâu rộng để khảo sát phù hợp hơn.....

.....

...Nguồn nước sạch người dân đề khoan giếng nên sông... thấp thì nước hạ cấp thiết.....

.....

...Công trình tại thôn 5, có người dân tộc thiểu số sinh sống.....

...Chủ đầu tư và đơn vị thi công cần khảo sát cụ thể, có cấp nước đảm bảo để phù hợp hơn với địa phương.....

...Việc thi công không ảnh hưởng đến đất mà trồng tại địa phương, không ảnh hưởng đến cây trồng của người dân.....

.....

Địa phương ủng hộ việc triển khai dự án

Cuộc họp kết thúc vào lúc:…..giờ…. ngày 12 tháng 8 năm 2016

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã Trấu Hạ

Phó Chủ tịch UBND xã

Hồ Sỹ Liễn

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

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DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: ....WEIDAP – ĐẮK NÔNG.....

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: ...XÃ TRÚC SƠN.....

Thời gian: ..... giờ....., ngày 12 tháng 8 năm 2016.

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	HỒ SỸ LINH	1972	KINH	x		
2	NGUYỄN THỊ HẰNG	1975	KINH		x	
3	NGUYỄN THỊ ÁNH TUYẾT	1975	KINH		x	
4	LƯƠNG THỊ THANH THỦY	1973	KINH		x	
5	LÊ THỊ HOA	1989	KINH		x	
6	NGUYỄN TIẾN LỢI	1958	KINH	x		
7	PHẠM BÁ TRIỀU	1962	KINH	x		
8	PHẠM THỊ HỒNG	1969	KINH		x	
9	NGUYỄN DUY ANH	1985	KINH		x	
10	NGUYỄN VĂN HƯỜNG	1975	KINH	x		
11	NGÔ ĐÌNH SƠN	1959	KINH	x		
12	NGUYỄN ĐÌNH THUẦN	1965	KINH	x		
13	NGUYỄN HỒNG ĐỨC	1973	KINH	x		
14	ĐẬU KINH NGHIỆM	1971	KINH	x		
15	TRIỆU LÂM THUẦN	1967	TÀY	x		
16	ĐỖ CÔNG MINH	1965	KINH	x		
17	KHẤU THỊ HỒNG LAN	1985	TÀY	x	x	
18	PHẠM THỊ THU LOAN	1983	KINH		x	
19	NGUYỄN NGỌC THUẬT	1977	KINH	x		
20	NGUYỄN HỒNG HẢI	1983	KINH	x		
21	TRƯƠNG THỊ LOAN	1962	KINH		x	
22	BẾ THỊ NỘI	1965	TÀY		x	

Đăk Đrông

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cao hiệu quả sử dụng nước các CTL thôn Đạo bầu huyện Cư Jút

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Hôm nay là ngày....tháng.....năm 2016.

Cuộc họp được tiến hành tại: xã Đắk Đrông, huyện Cư Jút, tỉnh Đăk Nông.....

Tổ chức họp dân về vấn đề: ...Xã cần Mở Đường bơm Điện.....

Tiểu dự án: .....WEIDAP - Đắk Nông.....

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã: Đắk Đrông

1. Họ và tên:...Trần Văn Thanh.....Chức vụ: .....CT xã.....
2. Họ và tên.....Chức vụ: .....

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên.....Chức vụ: .....

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên:.....Chức vụ: .....

3. Đại diện Hội nông dân xã :

Họ và tên:.....Chức vụ: .....

4. Đại diện hội cựu chiến binh xã :

Họ và tên:.....Chức vụ: .....

5. Đại diện Đoàn thanh niên xã :

Họ và tên:.....Chức vụ: .....

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện đơn vị tư vấn:

Họ và tên:.....Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 13/..... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:.....9.....người, chiếm.....%

Nữ:.....4.....người, chiếm.....%

Dân tộc thiểu số:.....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án: Nâng cao hiệu quả sử dụng nước cấp SHTT thôn Đoạ bản Luyện xã Jut

Chủ toạ cuộc họp: Trần Văn Thanh

Chức vụ: Chủ tịch

Nơi công tác: UBND xã Đắk Drông

Nội dung làm việc:

- Nội dung thảo luận

+ Vấn đề môi trường

+ Các biện pháp giảm thiểu

+ Sự ủng hộ đối với dự án

1) Vấn đề môi trường không ảnh hưởng nghiêm trọng đến người dân

- Dự án chỉ khai thác các khu vực đã không ảnh hưởng tới khu vực nhạy cảm, ít có nguồn chất thải, chủ yếu là chất nổ công nghiệp

- Che phủ nguyên vật liệu khi vận chuyển

- Bến chứa thường gặp không khí dự án hoạt hóng

- Bến bù thoả đáng cho người dân khi thu hồi đất

2) Đồng ý các biện pháp giảm thiểu đó nêu, tuy nhiên trong quá trình thực hiện phải nghiêm chỉnh và đúng đắn

3) Chính quyền và người dân ủng hộ việc thực hiện dự án

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Cuộc họp kết thúc vào lúc:.....giờ.... ngày....tháng.....năm. 2016

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã ...Ấ.T.....P.Lộc.....

CHỦ TỊCH

Trần Văn Thành

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

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DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: ...WEIDAP... Đắk Nông.....

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: ...Xã Đắk Nông.....

Thời gian: ..... giờ....., ngày ....tháng .....năm .2016.

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	[illegible]	48	Kinh	V		
2	Hoàng Long	26	kinh	"		
3	Phạm Hồng Dương	34	Kinh	V		
4	Lương Thị Minh		Kinh		V	
5	Nguyễn Đức Khánh		Kinh	"		
6	Hoàng Văn Thao		Kinh	"		
7	Trương Văn Đức		Kinh	"		
8	Nguyễn Văn Hiếu		Kinh	"		
9	Hoàng Đình Khánh		Kinh	"		
10	Hoàng Trung Thắng		Kinh	"	"	
11	Trần Thị Thu		Kinh		"	
12	Nguyễn Thị Sa		Kinh		"	
13	Bùi Thị Thanh		Kinh		"	

Cư Knia

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cao hiệu quả sử dụng nước cho cây CTN trên địa bàn huyện Cư Jút...

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Hôm nay là ngày 12 tháng 8 năm 2016.

Cuộc họp được tiến hành tại: xã Cư Knia..., huyện Cư Jút..., tỉnh Đắk Nông.....

Tổ chức họp dân về vấn đề: ...Dự án WEIDAP.....

Tiểu dự án: ...WEIDAP – Đắk Nông.....

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên:...Hoàng Đình Tạo.....Chức vụ: ...Chủ tịch.....
2. Họ và tên.....Chức vụ: .....

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên...Lục Văn Hiếu.....Chức vụ: ...Chủ tịch.....

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên:...Bùi Thị Phan.....Chức vụ: ...CT.....

3. Đại diện Hội nông dân xã :

Họ và tên:...Vũ Xuân Đáp.....Chức vụ: ...CT.....

4. Đại diện hội cựu chiến binh xã :

Họ và tên:...Nguyễn Tuấn Hội.....Chức vụ: ...CT.....

5. Đại diện Đoàn thanh niên xã :

Họ và tên:...Bùi Tuấn Sơn.....Chức vụ: ...Bí thư.....

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện đơn vị tư vấn:

Họ và tên:.....Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 18/..... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:..13.....người, chiếm.....%

Nữ:...05.....người, chiếm.....%

Dân tộc thiểu số:..05.....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án: Nâng cao hiệu quả sử dụng nước cấp CTTL trên địa bàn huyện Lục Nút

Chủ toạ cuộc họp:.....Hoàng Đình Tạo.....

Chức vụ:.....Chủ tịch.....

Nơi công tác:.....UBND xã Cốc Khia.....

Nội dung làm việc:

.....Nội dung tham vấn.....

.....+ Các vấn đề môi trường.....

.....+ Các biện pháp quản thiểu.....

.....+ Bị thấy tình, ủng hộ dự án.....

.....

.....Nội dung trao đổi, thảo luận.....

- Các tuyến đập chủ yếu dùng thân đá, khu vực chủ yếu là đất lúa

.....

- Vấn đề môi trường không ảnh hưởng lớn đến người dân vì dự án ở xa khu vực dân cư, tuyến đường dẫn vào công trình ít một số dân cư thôi

.....

- Người dân đang sử dụng nước giếng khoan, việc tạo bể chứa nước nhằm nâng cao mực nước ngầm lên hút dùng sinh hoạt

.....

- Đề xuất dự án ADB tận trợ năm 2011 cho vùng dự án này cần tuân thủ các chính sách về môi trường của ADB và các quy định của Việt Nam

.....

- Nếu tham hỏi đất của người dân thì phải đền bù theo đúng chính sách của tỉnh và Nhà nước

.....

- Địa phương và người dân ủng hộ việc triển khai dự án

.....

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Cuộc họp kết thúc vào lúc:.....giờ.... ngày 12 tháng 8 năm 2016.

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã ..... **Đ/D: Cơ quan tư vấn**

CHỦ TỊCH

HOÀNG ĐÌNH TẠO

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

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DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: WEIDAP – Đắk Nông

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: CỤ K NIA

Thời gian: ..... giờ....., ngày 12 tháng 8 năm 2016.

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Lục Văn Hiền	1974	Tày	x		
2	Đinh Nguyễn Việt	1985	Kinh	x		
3	Nguyễn Ngọc Dân	1992	Tày	x		
4	Vũ Xuân Tập	1957	Kinh	x		
5	Vương Văn Cương	1954	Nùng	x		
6	Vương Văn Giáp	1984	Nùng	x		
7	Trần Văn Hưng	1959	Kinh	x		
8	Ngân Thị Hường	1984	Tày		x	
9	Bùi Thị Dần	1980	Kinh		x	
10	Bùi Khắc Sơn	1985	Kinh	x		
11	Nguyễn Thị	1979	Kinh	x		
12	Trần Thị Thanh Thủy	1982	Kinh		x	
13	Hà Thị Lai	1988	Kinh		x	
14	Nguyễn Văn Phong	1963	Kinh	x		
15	Nguyễn Xuân Cảnh	1967	Kinh	x		
16	Nguyễn Thị Tùng	1982	Kinh		x	
17	Võ Văn Thanh Sang	1971	Kinh	x		
18	Nguyễn Hữu Bằng	1977	Kinh	x		

Tâm Thắng

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cao hiệu quả sử dụng nước cho cây trồng cạn cho bản huyện Cư Jút

Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"

Hôm nay là ngày 11 tháng 8 năm 2016.

Cuộc họp được tiến hành tại: xã Tâm Thắng., huyện Cư Jút..., tỉnh Đắk Nông...

Tổ chức họp dân về vấn đề: Bộ đội quá mã thấy bon thắng

Tiểu dự án: ....WEIDAP - tỉnh Đắk Nông.....

thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".

Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:

Đại diện UBND xã:

1. Họ và tên: Nguyễn Tự Bình.....Chức vụ: PCT UBND.....
2. Họ và tên.....Chức vụ: .....

Đại diện các tổ chức chính trị xã hội

1.Mặt trận tổ quốc xã:

Họ và tên: Trần Minh Hiếu.....Chức vụ: .....

2. Đại diện Hội liên hiệp phụ nữ xã :

Họ và tên: Bùi Thị Hằng.....Chức vụ: .....

3. Đại diện Hội nông dân xã :

Họ và tên: Lê Lâm.....Chức vụ: .....

4. Đại diện hội cựu chiến binh xã :

Họ và tên: Trần Xuân Bình.....Chức vụ: .....

5. Đại diện Đoàn thanh niên xã :

Họ và tên: Nguyễn Văn Thắng.....Chức vụ: .....

Đại diện hỗ trợ kỹ thuật huyện.....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện Ban quản lý dự án tỉnh: .....

1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....

Đại diện đơn vị tư vấn:

Họ và tên:.....Chức vụ: .....

Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 28 /..... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam:...32.....người, chiếm.....%

Nữ:...06.....người, chiếm.....%

Dân tộc thiểu số:...11.....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án: Nông cao hiệu quả sử dụng nước cải ...CTL... trên địa bàn huyện Cái Bè

Chủ toạ cuộc họp:...Nguyễn Sỹ Anh.....

Chức vụ:.....Phó Chủ tịch.....

Nơi công tác:.....UBND xã Tân Thắng.....

Nội dung làm việc:

.....Nội dung tham vấn.....

.....+ Các tác động môi trường.....

.....+ Các biện pháp giảm thiểu.....

.....+ Ý kiến của người dân khi triển khai dự án.....

.....

.....Nội dung thảo luận.....

.....- Trên thanh thuế (thôn 7) : năm nay cũng mất 2 nước.....

.....rất sau hết, trong đó 02 năm vừa qua mất nước trầm trọng.....

.....Do vậy việc thi công dự án là vô cùng cần thiết.....

.....

.....- Khi thắp đèn lớn cần chú thích rõ thời gian chạy nguồn điện.....

.....cho dân hưởng.....

.....

.....- Tuyến đường vận chuyển nguyên vật liệu không đi lướt.....

.....đến người dân do mật độ tuyến thưa người. Tuy nhiên.....

.....cần thi thoảng với thời nước các tuyến đường khi vận chuyển.....

.....

.....- Đặp 9, 10 có người dân đến đây để sinh sống.....

.....

.....- Đường vận chuyển qua thôn 10 tuyến mới có vận động 8.....

.....để đề cập phải, gạo năng bồn cấp lên không phải đến bãi.....

.....nhiều.....

.....- Đặp 10 đi vào cũng để dàng, không phải đến bãi nhiều.....

.....đặp 7 thường hẹp, qua cầu của người dân.....

.....

.....- Khi công trình thi công bảo chất lượng công trình.....

Người dân thống nhất với việc xây dựng công trình Trạm mới
đến huyện để công trình sớm đi vào hoạt động và đạt hiệu
quả góp công sức để bảo vệ công trình

Cuộc họp kết thúc vào lúc:…..giờ…. ngày 11 tháng 12 năm 2016

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã Lê Thắng

PHÓ CHỦ TỊCH

Nguyễn Sỹ Ánh

Đ/D: Cơ quan tư vấn

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

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DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: ..Nâng cao hiệu quả sử dụng nước cho cây công nghiệp lâu năm của tỉnh Đắk Nông..

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán Cà Phê (WEIDAP)"*

Địa điểm: ..Xã Đắk Nang, Thắng.....

Thời gian: ..... giờ ....., ngày 11 tháng ..8..năm .2016..

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
1	Nguyễn Hồng Thuế	54	Kinh	Nam		
2	Ngô Văn Kim	66	Kinh	Nam		
3	Hà Văn Thiều	52	Kinh	Nam		
4	Tống Duy Quý	55	Kinh	Nam		
5	Nguyễn Thị Xuyến	49	Kinh		nữ	
6	Phan Thế Tuấn	43	Kinh	Nam		
7	Hà Minh Giang	63	Kinh	Nam		
8	Nguyễn Văn Thu	51	Kinh	Nam		
9	Y PUR H'Đốk	45	Ê đê	Nam		Y PUR
10	Nguyễn Văn Thiều	40	Kinh	Nam		
11	phạm văn ngân	46	Kinh	Nam		
12	Trần Văn Hưng	35	Kinh	Nam		
13	nguyễn thị Tích	53	Kinh		nữ	
14	Nguyễn Xuân Đức	76	Kinh	Nam		
15	Hà văn Tâm	57	tày	Nam		
16	Cù Duy Đoàn	42	Kinh	Nam		
17	Lê Đăng Thoát	50	Kinh	Nam		
18	nguyễn văn Vy	49	Kinh	nam		
19	Lê văn Thịnh	54	Kinh	nam		
20	Nguyễn Thị Nhung	41	Kinh		nữ	
21	Lại Thị Hiền	41	Kinh		Nữ	
22	nguyễn văn Sy	64	Kinh	nam		

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
23	Phạm Văn Tú	61	Kinh			
24	Nguyễn Thị Hà	59	K		x	
25	Phạm Việt Thắng	76	K			
26	Lê Văn Đức	32	K	x		
27	Y Kim Blin	85	Ê Đê	x		
28	Y Thường	27	Mạ Rông			
29	Ay Jet Byă	47	Ê đê			
30	Y Soori Byă	80	Ê đê			
31	Byă Ebah	72	Ê đê			
32	Riah Ebah	49	Ê đê			
33	Ay Nuk Ebah	53	Ê đê			
34	Ay Khu Rya	65	Ê đê			
35	Ay Saak Rya	66	Ê đê			
36	Trần Thanh Hiếu	15	Kinh	/		
37	Vũ Mạnh Hùng	18				
38	Nguyễn Thị Thuận				x	

Ea T'ling Township

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập – Tự do – Hạnh phúc

BIÊN BẢN THAM VẤN CỘNG ĐỒNG

Tiểu dự án: Nâng cao hiệu quả sử dụng nước các công trình thủy lợi trên địa bàn huyện
Thuộc dự án: "*Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)*"
Hôm nay là ngày 11 tháng 8 năm 2016
Cuộc họp được tiến hành tại: xã Ea T'ling, huyện Cư Jút, tỉnh Đắk Nông
Tổ chức họp dân về vấn đề: Bảo vệ sản xuất mô trường bền vững
Tiểu dự án: WEIDAP - tỉnh Đắk Nông
thuộc dự án "Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)".
Nội dung làm việc:

- Phổ biến thông tin của dự án;
- Các vấn đề về môi trường và biện pháp giảm thiểu tác động môi trường;

Thành phần tham dự:
Đại diện UBND xã:
1. Họ và tên: Nguyễn Hữu Ánh Chức vụ: Chủ tịch
2. Họ và tên Phan Quốc Thắng Chức vụ: P.C.T.

Đại diện các tổ chức chính trị xã hội
1.Mặt trận tổ quốc xã:
Họ và tên: Mai Văn Thanh Chức vụ: Chủ tịch
2. Đại diện Hội liên hiệp phụ nữ xã :
Họ và tên: Phan Thị Kế Chức vụ: Chủ tịch
3. Đại diện Hội nông dân xã :
Họ và tên: Cao Xuân Giản Chức vụ: Chủ tịch
4. Đại diện hội cựu chiến binh xã :
Họ và tên: Hồ Xuân Tiếp Chức vụ: Chủ tịch
5. Đại diện Đoàn thanh niên xã :
Họ và tên: H. Oanh Buôn Kêp Chức vụ:
Đại diện hỗ trợ kỹ thuật huyện.....
1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....
Đại diện Ban quản lý dự án tỉnh: .....
1. Họ và tên:.....Chức vụ:.....
2. Họ và tên:.....Chức vụ:.....
Đại diện đơn vị tư vấn:
Họ và tên: Nguyễn Hằng Nga Chức vụ: Chuyên gia
Chức vụ: .....

Người dân trong xã tham gia:

Tổng số người tham gia: 22/..... chiếm ..... % trong tổng số người ảnh hưởng của xã

Trong đó: Nam: 15.....người, chiếm.....%

Nữ:....07.....người, chiếm.....%

Dân tộc thiểu số:.....09.....% (nếu có)

Đã tiến hành tham vấn về tiểu dự án: Nâng cao hiệu quả sử dụng nước cấp công trình thủy lợi thôn Eta buôn huyện Cư Jút

Chủ toạ cuộc họp: Ông Phan Quốc Thắng

Chức vụ: Phó Chủ tịch

Nơi công tác: UBND Thị trấn Ea T'Ling

Nội dung làm việc:

Tham vấn cộng đồng tha phương về các vấn đề môi trường trong quá trình thực hiện dự án; Các đề xuất và biện pháp giảm thiểu; Sự đồng thuận ủng hộ của người dân với các vấn đề khác.

- Việc triển khai xây dựng công trình không tránh khỏi các vấn đề bụi, ồn và rác thải. Tuy nhiên đây không phải là vấn đề lớn đối với người dân và chính quyền địa phương.

- Dự án triển khai xây lắp vài năm và chỉ yêu cầu lắp vài tháng là xong nên / không ảnh hưởng đến người dân.

- Thu hồi diện tích đất không lớn và chỉ của một vài hộ dân lân cận, không gây xáo trộn cộng đồng địa phương. Tuy nhiên dự án cần đền bù thoả đáng cho người dân theo đúng chính sách của nhà nước.

- Người dân và chính quyền địa phương ủng hộ việc thực hiện dự án. Tuy nhiên chủ đầu tư và nhà thầu cần lưu ý đến các vấn đề sau:

+ Cần thực hiện nghiêm túc và đầy đủ các biện pháp giảm thiểu đã đưa ra trong báo cáo.

+ Cần che phủ phương tiện vận chuyển nguyên vật liệu, tránh rơi vãi ra các tuyến đường xung quanh.

+ Nếu gây hư hỏng các công trình công cộng và đường xá cần phải khắc phục hậu quả.

+ Ngoài ra, chủ dự án cần nghiên cứu lại vị trí, quy mô, vấn đề đường lối của dự án nhằm mang lại lợi ích tối đa cho người dân. Tránh gây hao phí và không mang lại hiệu quả.

- Tình hình khó khăn diễn ra rất phức tạp. Tuy nhiên đây, vì vậy địa phương ủng hộ việc xây dựng dự án.

...Chính quyền và người dân sẽ tạo điều kiện để dự án... triển khai

Cuộc họp kết thúc vào lúc:.....giờ.... ngày 11 tháng 08 năm 2016

CÁC BÊN THỐNG NHẤT KÝ TÊN

Đ/D: UBND xã ...Ea T.Linh.....

Đ/D: Cơ quan tư vấn

KT/CHỦ TỊCH
PHÓ CHỦ TỊCH
Phan Quốc Thắng

CỘNG HOÀ XÃ HỘI CHỦ NGHĨA VIỆT NAM

Độc lập - Tự do - Hạnh phúc

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DANH SÁCH ĐẠI BIỂU THAM DỰ CUỘC HỌP THAM VẤN CỘNG ĐỒNG

Tiểu dự án: WEIDAP - Tỉnh Đắk Nông

Thuộc dự án: *"Nâng cao hiệu quả sử dụng nước cho các tỉnh bị ảnh hưởng bởi hạn hán (WEIDAP)"*

Địa điểm: Thị trấn Đa T'Ling, huyện Cư Jút, tỉnh Đắk Nông

Thời gian: ..... giờ....., ngày 11 tháng 08 năm 2016.

TT	Họ và tên	Tuổi	Dân tộc	Giới tính		Chữ ký
				Nam	Nữ	
01	Phan Quốc Thắng	54	Kinh	x		
02	Lê Thị Tuyết Nhung	26	Kinh		x	
03	Đinh Luận Hiền	60	Nùng	x		
04	Phan Văn Chương	50	Kinh	x		
05	Y- BHĂN - KBUÔR	58	Ê Đê	x		
06	Nguyễn Đức Thành	63	Kinh	x		
07	Đinh Cao Hồng	55	Kinh	x		
08	Đỗ quốc phong	56	Kinh	x		
09	Nguyễn Thanh Tuấn	65	Kinh	x		
10	Phạm Thị Khải	50	Kinh		x	
11	Lê Xuân Giá	56	Kinh	x		
12	Đinh Văn Vũ	62				
13	Vũ thế Cường	63	Kinh	x		
14	Y Quet B. Krông	50	Mnông	x		
15	Phạm thị Niên	42	Kinh		x	
16	Đỗ Thị Ngoãn	41	Kinh		x	
17	Vũ Thị Thu Thủy	53	Kinh		x	
18	Nguyễn Văn Giới	59	Kinh	x		
19	Vũ thanh Tùng	56	Kinh	x		
20	Lê Thị Mai	34	Kinh		x	
21	H'Oanh K'Krông	29	M'Nông		x	
22	Mai Văn Thanh	48	Kinh	x		