Field Visit Report:

Climate Smart Irrigated Agriculture Project (CSIAP)
Uva Province

Prepared by
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Climate Smart Irrigated Agriculture Project (CSIAP)
Ministry of Agriculture, Irrigation and Livestock
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- **INTRODUCTION**

This report outlines the findings and observations from the field visit to Uva Province as part of the Climate Smart Irrigated Agriculture Project (CSIAP). The primary objective of the visit was to monitor ongoing activities related to climate resilience, assess the implementation challenges faced by the project, and engage with local stakeholders to improve project outcomes. Key observations and findings regarding the implementation of environmental and social safeguards for sub-projects in Uva Province, as identified by the Environment and Social Safeguard Specialist, are detailed in this document. The report serves as a guiding resource for the DPD Office staff, contractor, partner agencies, and provincial CSIAP staff, outlining necessary follow-up actions to address identified issues. The field visit took place on February 28 & 01 March and was attended by Mr. Saman Bandulasena, Project Director of CSIAP, along with other specialists in relevant subject areas. Deputy Project Director of the CSIAP in Uva Province and his team organized and facilitated the field observations.

- **OBJECTIVES OF THE FIELD VISIT**

ESMP Implementation Review

To assess environmental and social management practices and compliance with the Environmental, Social Management Plans (ESMP).

Contractor Accountability

To evaluate contractor performance regarding project execution, particularly the completion of tanks, anicuts and canal works and address issues of negligence related to construction activities.

Assessment of Current Conditions

To evaluate the current status of agricultural practices, infrastructure, and environmental conditions at each of the visited sites under the CSIAP.

Identification of Challenges

To identify specific challenges and issues impacting project implementation, such as elephant damage, construction delays, and environmental degradation caused by heavy machinery.

Evaluation of Agricultural Techniques

To review the effectiveness of climate-smart agricultural methods being utilized by farmers, particularly the adoption of advanced technologies such as drum seeders in paddy cultivation, Integrated Pest Management in agriculture sites under CSIAP.

Recommendation Development

To formulate actionable recommendations for project improvement, including the need for contractor fines in accordance with World Bank safeguard guidelines and strategies for restoring damaged sites to enhance future project sustainability.

Stakeholder Engagement

To engage with local farmers and provincial staff to gather insights and feedback on ongoing projects, ensuring community involvement and investment in project success.

- **SITES VISITED**

Ethiliwewa Cascade

1. **Area:** 39 acres of crops protected by a 2.8 km elephant fence.
2. **Findings:** Observed elephant damages in the cascade areas. A farmer reported a yield of 60 bushels of paddy per acre but was encouraged to increase this to 160 bushels per acre with climate-smart agricultural methods, including the use of drum seeders. Demonstrations from the Anuradhapura District served as examples to motivate the farmer to adopt advanced technologies.

Maha-Aragama Cascade

1. **Features:** A poly tunnel for chili cultivation.
2. **Observations:** Initially supported with advanced climate-smart technology to establish a 1000 m^2 poly tunnel, the farmer has expanded it to 2000 m^2 independently.

Dambakotu Ara Anicut

1. **Current Status:** 140 m length of the canal rehabilitation is incomplete.
2. **Additional Notes:** A canal bund needs to be constructed using soil, and one side of the anicut requires rehabilitation. Elephant damage was noted in the area.

Fig. No. 01: Incomplete Canal rehabilitation under Dambakotu Ara Anicut Rehabilitation

Karuwalakanda Wewa

1. **Required Work:** Removal and replacement of existing concrete from both sides of the canal with new concrete or geotextile lining.

Fig. No. 01: Need for Tree Planting for both sides of the canal & Fig. No. 02: Need for Removal and Replacement of Existing Concrete

1. **Status:** Observed as a terminated project.
2. **Issues Identified:**
    1. Upstream bund needs rehabilitation with spill planks incorporated.
    2. Damage caused by contractor's heavy vehicles has altered the tank environment, resulting in four access roads created for transporting soil, which destroyed habitats for aquatic plants and animals.

3. Soil filling in one area of the tank has reduced water holding capacity, leading to the need for silt removal as a separate contract.
4. The left bank canal is leaking due to contractor negligence.
5. Two access roads in the village are in poor condition because of heavy vehicle usage.

- **RECOMMENDATIONS**

For Galapitagala Ara Tank
• **Soil fillling and silt removal -** Initiate a separate contract for the prompt removal of excess soil and silt from the affected area of the tank to restore its original water holding capacity. Collaborate with environmental specialists to ensure that the removal process does not harm the remaining ecosystem and consider using the removed silt for beneficial land applications. • **Poor condition of the access roads -** Require the contractor to restore the two access roads to their original state, repairing any damage caused by heavy vehicle usage. Explore the possibility of using lightweight vehicles in future village tank construction to minimize road damage. • **Upstream Bund Rehabilitation with Spill Planks-** Ensure that the design incorporates strategically placed spill planks to enhance water management and reduce erosion risk. Regular monitoring and maintenance schedules should also be established to prevent future deterioration. • **Environmental Damage within the Tank Environment by heavy contractor vehicles-** Implement mitigation measures, such as restoring habitats by replanting native aquatic vegetation. Additionally, develop guidelines for contractors to follow to minimize environmental disruption in the future. • **Leaking Left Bank Canal-** Immediately assess the cause of the leakage in the left bank canal and engage a contractor to execute the necessary repairs. Implement a regular inspection schedule to monitor the integrity of the canal post-repair, and ensure that the contractor is held accountable for any negligence that contributed to the leakage. • If construction is restarted, light vehicles should be utilized for soil removal to prevent further damage.

- **The Need for Fining the Contractor-** Given the contractor's failure to adhere to the ESMP mitigation measures as evidenced above, he has demonstrated poor performance and set a negative example for others in the field. Therefore, it is recommended that this contractor be fined and blacklisted in accordance with World Bank safeguard guidelines, as this project is funded by the World Bank. Additionally, the 0.001% of the total construction cost that was deposited as a safeguard guarantee should be recovered and allocated to cover the expenses related to soil removal from the tank bed.

For Karuwala Kanda Wewa

- As part of ESMP implementation for Karuwala Kanda Wewa, the concrete disposal sites need to be identified. It was suggested to plant arecanut trees along both sides of the canal to enhance vegetation, prevent soil erosion, and reduce soil collapses into the canal.
- The sluice needs to be raised to ensure proper operation and maintenance, thereby preventing wild animals from falling into the canal.

For Damba Kotu Ara Anicut

Completion of Canal Rehabilitation (balance 140 m Length)-Prioritize the completion of the 140 m length of canal rehabilitation by engaging a qualified contractor with experience in similar projects. Develop a detailed project timeline and ensure that regular progress assessments are conducted to keep the project on track. Allocate necessary resources and funding to expedite completion.

Construction of Canal Bund- Design and construct a canal bund using appropriate soil materials to enhance water retention and prevent erosion. The design should include considerations for local topography and hydrology to ensure effectiveness. Involve local stakeholders in the planning process to address any community concerns and ensure the bund meets agricultural and environmental needs.

Mitigation of elephant damage- Implement measures to mitigate elephant damage in the area, such as constructing additional CSIAP sponsored solar-powered electric fences which act as barriers where necessary to protect vulnerable cropping fields. Collaborate with wildlife experts to develop strategies that promote coexistence between local communities and wildlife.

For Ethiliwewa Cascade

Recommendations for improvement of crop protection and yield enhancement

Implementation of climate smart agriculture techniques- Provide hands-on training and resources to the farmers to effectively implement climate-smart agricultural methods. This includes training in the use of drum seeders and other technologies that can improve efficiency and yield. Farmers should have access to demonstrations, field days, and mentorship from experienced practitioners from the CSIAP or relevant government organizations.

CSIAP support for climate smart agriculture resources- This support could include provision of equipment (like drum seeders), access to quality seeds, and training programs tailored to local needs.

Regular yield monitoring and farmers' assessments- Implement a systematic yield monitoring program to regularly assess crop outputs and the effectiveness of the new CSIAP practices being adopted. This should involve setting up a feedback mechanism where farmers can share their experiences and challenges with climate-smart methods, enabling continuous improvement and adaptation.

Soil health management initiatives- Promote practices that improve soil health, such as composting, cover cropping, and reduced tillage. Healthy soils can enhance crop resilience and productivity, contributing to the goal of increasing yield to 160 bushels per acre.

CONCLUSION

The field visit provided significant insights into the current status and challenges facing various sites under the CSIAP. Addressing the issues identified and implementing the recommendations is critical for the success of these projects and the sustainability of the surrounding ecosystems. Further follow-up actions and consultations with the relevant stakeholders, including the contractors, farmer community and the regulatory institutions such as Forest Department and Department of Wildlife Conservation will be necessary to implement the recommendations outlined in this report.

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