

**GOVERNMENT OF TAMILNADU
WATER RESOURCES DEPARTMENT**

From
Er.K.Asokan, M.Tech.,
Chief Engineer & Director (FAC), WRD,
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Tharamani, Chennai 600113
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To
The Additional Chief Secretary to Govt./
Project Director,
TNIAMP, MDPU
Chepauk,
Chennai 600005

Lr. No 255/IWSH&QC/TNIAMP/ DSS/2022/dt.13-06-2024

Sir,

Sub:- Development of Decision Support System for TNIAM Project area -Selection of 1000 tanks for DSS -Reg.

Ref:- 1) G.O (D) No.23, Water Resources (WR1) Dept., Dt 27-01-22
2) Agreement No 01/RSC/IWSH&QC/2023-24 Dated 27-11-2023
3) EE (M&E), MDPU Lr. No.M DPU /F 1 85 (B)/ TNIAMP-DSS/ 2024/
Dt13.05.2024
4) Lr. No. M DP U /F26 (IWS)/ TNIAMP-DSS-MoM/ 2024/Dt.16.05.2024
5) M/s FarmwiseAI Pvt. Ltd. Lr. Dated 22-05-2024.

I wish to inform that the work of developing a Decision Support System to improve water management, enhance agricultural productivity, profitability, and resilience to climate variability in selected sub basins of Tamil Nadu and to track the work progress in TNIAM Project Area, sanctioned vide the Govt. order 1st cited is under progress.

A meeting was organized at MDPU vide reference 3rd cited at MDPU on 15-05-2024 and discussed selection of 1000 tanks for Decision Support System (DSS) and requested the developer M/s FarmwiseAI Pvt. Ltd. to consider all 2629 tanks for developing DSS so as to cover all interventions in the sub basins with all line departments.

Now the developer M/s FarmwiseAI Pvt. Ltd. is requesting additional cost of Rs.1,47,99,300/- (Rupees one core forty seven lakh ninety nine thousand and three hundred only) to increase the project scope from 1000 tanks to 2,629 tanks mentioning a 162.9 % of the increase in tanks and hence a 25% proportional increase in development and cloud infrastructure costs. The above requested amount could not be met in the budget provisions of

Administrative Sanctioned amount for the development of DSS for TNIAMP vide reference 1st cited.

I also wish to inform that in the Terms of Reference of the Request for Proposal, it was mentioned as “the work Consultancy Services for Development of Decision Support System to improve water management, enhance agricultural productivity, profitability, and resilience to climate variability in selected sub basins of Tamil Nadu and track work progress and impact assessment in TNIAMP Project Area consisting of 4778 Tanks. Initially under the scope of this RFP as Phase-1 system should be developed for 1000 Tanks. Subsequently customization and configuration of the System for remaining tanks will be taken up in Phase-2”.

Hence, I request the Additional Chief Secretary to Govt./ Project Director, TNIAMP to kindly issue necessary instructions for sorting out the selection of tanks for developing DSS.


Sd/-K.Asokan/13-06-2024

Chief Engineer & Director(FAC), WRD,
Institute for Water Studies, Hydrology
and Quality Control,
Tharamani, Chennai – 600 113.

Encl: 1. Copy of M/s FarmwiseAI Pvt. Ltd. Lr. Dated 22-05-2024.

Copy presented to the Additional Chief Secretary to Government, WRD, Secretariat, Chennai-9 for information

Copy to the Engineer-in-Chief & Chief Engineer (General), WRD, Chennai -5 for information.


13/06/2024
For Chief Engineer & Director, WRD,
Institute for Water Studies, Hydrology
and Quality Control,
Tharamani, Chennai – 600 113.


13-6-24

Date: 22-May-2024

To
The Chief Engineer,
Institute for Water Studies,
Hydrology & Quality Control,
Taramani,
Chennai - 600113.

Dear Sir,

Subject: Response to Request for Including 2,629 Tanks in Scope – Reference No.
MDPUI/F26(IWS)/TNIAMP-DSS MoM/2024, Dated 15 May 2024

This letter responds to your request (Ref. No. MDPUI/F26(IWS)/TNIAMP-DSS MoM/2024, dated 15 May 2024) to include an additional 1,629 tanks in our scope, in addition to the initially planned 1000 tanks.

During the meeting on 15 May 2024 with representatives from all line departments and MDPUI officials, we discussed the feasibility of including these additional tanks within the current scope. It was suggested that certain features could be compromised without affecting the original functionality or objective of the decision support system.

However, given that most of the development for the initial modules is completed and the remaining ones are in various stages of advancement, it may not be ideal to reduce the scope as our team has already begun work on all planned components. Consequently, integrating the additional tanks would necessitate adjustments without sacrificing essential features and functionalities.

Proposal Summary:

In response to your request to increase the project scope from 1,000 to 2,629 tanks - a 162.9% increase - we have meticulously revised our proposal to integrate the additional 1,629 tanks. The financial ramifications of this substantial scope expansion are summarized in the table below, detailing a 25% proportional increase in development costs and a specific calculation for additional cloud infrastructure costs due to the higher number of tanks. A more thorough explanation follows in subsequent sections of this document.



Additional Development and Maintenance Costs:

We fully recognize and acknowledge the department's request to integrate an additional 1,629 tanks, expanding our original scope of 1,000 tanks. To accommodate this significant increase, our team is equipped and ready to undertake the necessary additional development, onboarding, rework, redesign, and maintenance. This expansion will involve the following specific efforts:

- **Additional Development:** We will modify existing modules and develop new features to effectively manage and monitor the additional tanks, ensuring that they are fully integrated into our system's capabilities.
- **Onboarding:** Our process will ensure the seamless integration of the additional tanks into the existing system, maintaining continuity and functionality.
- **Rework and Redesign:** We will update the system architecture to handle the increased load, ensuring that the expanded system maintains optimal performance and reliability.
- **Maintenance:** We are committed to providing ongoing support and updates to ensure that the system remains functional, efficient, and up-to-date with technological advancements and operational requirements.
- These efforts underscore our commitment to scaling the project efficiently while ensuring that we meet the enhanced demands of the expanded scope without compromising on the quality and reliability of the system.

Infrastructure Costs Justification:

As detailed in our proposal, while we are requesting the department to cover the development and rework costs associated with the expanded scope of an additional 1,629 tanks, it is also imperative to address the infrastructure costs that accompany this expansion. The inclusion of these additional tanks will significantly increase the demands on our system's resources, which includes:

- **Compute Resources:** Additional processing power will be required to effectively manage and analyze the data from the expanded number of tanks.
- **Storage Resources:** Each tank's data capture process involves storing numerous images and videos. With the inclusion of 1,629 additional tanks, the storage requirements will substantially increase.
- **Data Transfer:** The volume of data being transferred and processed will greatly increase, necessitating significant upgrades to our data handling capabilities.

These expanded requirements will result in a significant rise in infrastructure costs, impacting storage, processing, and data transfer capabilities. This necessitates substantial investments in robust storage solutions, enhanced processing power for data analysis, and an upgraded network infrastructure to ensure seamless data transfer and access.



Component	Cost for 1,000 tanks as per original quote (INR)	Cost for Additional 1,569 tanks (INR)	Remarks
Development	36,603,600	9,150,900	25% of the cost for 1,000 tanks
Cloud Infrastructure cost	3,600,000	5,648,400	Actual cost for additional 1,569 tanks calculated from the base cost of 1,000 tanks.
Total		14,799,300	

This table highlights the additional costs associated with the development and cloud infrastructure needed to support the increased scope. A comprehensive breakdown of these expenses is provided to ensure transparency and to facilitate informed decision-making.

Request for Department Support:

Given the substantial increase in development efforts, infrastructure demands, and the associated costs detailed above, we kindly request the department to consider covering these expenses. Your support is crucial for enabling the project to scale effectively and efficiently, without compromising operational efficiency or data integrity. This funding will also ensure that the expanded scope can be integrated seamlessly into the current system, enhancing our capabilities to manage and monitor the increased number of tanks.

We appreciate your understanding and cooperation in this matter and are committed to maintaining open lines of communication. Please let us know if you have any further questions, require additional information, or wish to discuss any aspect of the proposal in more detail.

Regards,

FarmwiseAI Private Limited




Authorized Signatory