# Webel Technology Limited

## (An ISO 9001:2000 Company)

A Proposal for

Development & Implementation of

**Integrated Works Management System**

(3$^{rd}$ Phase)

**Annual Technical Support (ATS)**

And

**Connectivity between HQ with Zonal &**

**District Offices**

For

**Directorate of Textiles (Sericulture)**

**Govt. of West Bengal**

# Project Proposal

# Executive Summary

Department of Textiles (Sericulture) is an organization under government of West Bengal. The department implements and monitors different schemes introduce by the government for Seri culturists all around the state. The department has 17 district offices called as sub office. The new integrated software system developed for the organization has brought a new avenue towards the day-to-day functioning of the departmental activities. Presently the system is running smoothly in all the district offices and at the Head Quarter. The system helped administrative decision-making as it has brought readily available of data, quick response and transparency. The users are very keenly using the system as it has reduced lot of headache of data compilation, report generation, huge data maintenance, MIS generation and Work in progress tracking. The system is having a central database at the Directorate and different district level database for local transactions and data compilation. The relevant data for the districts are transferred to the district server from the central server through a data transfer process. The requisite data from the district to the central server is also transferred using a encrypted data transfer process.

The system is developed using **open source JAVA and My SQL**. The system is a multi user system. The client agent runs on Windows XP for the users to handle the system smoothly.

Webel Technology Limited developed the system taking into consideration of West Bengal Rules.

# Organizational Background

The Department of Textiles (Sericulture) a West Bengal Government Organization has its offices at different districts. The Directorate is situated at Kolkata. The Directorate regulates sericulture activities all around the state. The Directorate implements schemes for the Seri culturists. The directorate assists technical and financial aspects for the Seri culturists. State government and other sponsors provide funds to the directorate. State, central and beneficiary depending on the sharing patterns funds schemes. The Directorate has technical service providers at different districts for improving the sericulture activity in the state. The district office monitors the district level activities. The directorate has a number of grainage where DFL's are produced for seed cocoons. The seeds are then sold to different private Seri culturist for mass production. The cocoons are a source of revenue for the directorate.

# System Features

The system has following features depending upon different departmental activities

## 1. Development Module

The development cell generally develops different schemes on behalf of the government. The government sanctions the schemes funds. The Department also receives fund from the central government or other sponsors who provides funds for the implementation of a scheme on a sharing basis.  After the sanction from the government and other sponsors, this cell distributes the target to its sub office or district office for implementation of the scheme. The cell then monitors the target achievement on a daily basis and reports to the government or other sponsors after each monthly, quarter, yearly basis. The system was developed taking into note of the above-mentioned functionality. The system first gathers the information about the scheme and its annual target. The sponsors and its sharing pattern are recorded into the system. The scheme details are then recorded into the system. After imputing the details of the scheme, annual target is set. The system has a functionality to distribute the annual target of a particular scheme to its sub office (ANNUAL ACTION PLAN). The sub office receives the annual target and starts its implementation process. The sub office then distributes the target to its unit offices or Technical Service Centers (TSC). The TSC provides the achievement report to the district office and the system compiles the achievement data of each and every TSC of a particular district. The system then compiles the data for each district office and sends the data to the Head office. The system in the HEAD OFFICE then compiles the data of every district office for the Directorate.

- ❑ Annual Action Plan
- ❑ Target Allocation to different Technical Service Center (TSC)
- ❑ Monthly Achievement Report of TSC.
- ❑ Quarterly Achievement Report of the Department
- ❑ Beneficiary Database
- ❑ Diseased Free Laying Transactions
- ❑ Cocoon Pricing
- ❑ Revenue Analysis

## 2. Fund Mobilization Module

The key features of this module are given below

- ❑ Fund Creation for State Plan, Non Plan, Central Plan
- ❑ Budget and Estimation
- ❑ Requisition of Fund
- ❑ Government Allotment Receive by the Department

- ❑ Sub Allocation of Fund to District Office
- ❑ Expenditure by District offices (Automated Monthly B statement)
- ❑ Surrender of fund by the District offices
- ❑ Withdrawal of Funds
- ❑ Automated Net grant statement for **Non Plan**
- ❑ Automated Utilization for **Plan Fund**

## 3. Accounts (DDO Function) Module

DDO function is basically the function performed in every Government Offices such as Bills Generation, Generation of Pay Order, Submission of Bills, Tokenization, Clearing of Bills after receiving of Cheque(s) from the Pay & Accounts/Treasury and Disbursement of Cheque(s) to Party. All these operation can be done with this Accounts Module.

The processing of Bills start up with creation of PA/Treasury prescribed bills. When the Bill is created, the Allotment for that Bill will be deducted from that Head of Account and the Allotment Register will be generated instantaneously. After creation of bills the Pay Order for that bill can be created and the Cheque Register will be generated automatically. When the Bills is submitted the Bill Transit Register will be generated and the Bill Register will also be generated. After Receiving of the cheque(s) from the PA/Treasury and the Disbursing of that Cheque(s) the Cash Book with the Receiving and Payments side will be generated automatically. The B-Statement of a particular month of the DDO office will also be generated automatically. The following PA/Treasury formatted Bills can be generated through this package.

- ❑ Bill Generation Process
  - Bill Creation
    - ➤ TR Form 26 (Contingency Bill)
    - ➤ TR Form 21 (TA Bill For Transfer)
    - ➤ TR Form 22 (Leave Travel Concession)
    - ➤ TR Form 23 (Bill For Tour)
    - ➤ TR Form 24 (Medical Reimbursement)
    - ➤ TR Form 25 (Reimbursement of Permanent Advance)
    - ➤ TR Form 27 (Bill For Drawing Advance. Without Supporting Voucher)
    - ➤ TR Form 28 (Detail Bill For Adjustment Of Advance.)
    - ➤ TR Form 31 (Grant In Aid)
    - ➤ TR Form 37 (Loans and Advance Other than GPF, Festival Advance)
    - ➤ TR Form 50 (GPF Final Payment, Refundable Advance, Non-Refundable Advance)
    - ➤ TR Form 51 (Receipted Bill Under C.G.I.S. 1980)
    - ➤ TR Form 52 (Receipted Bill Under G.I.S. 1981)
    - ➤ TR Form 60 (Withdrawal From WB GOVT. Employees GIS SCHEME, 1983/1987 - For Savings Fund)
    - ➤ TR Form 61 (Withdrawal From WB GOVT. Employees GIS SCHEME, 1983/1987 - For Insurance Fund)
    - ➤ TR Form 36 (Drawing Charges On Account Of Loans And Advance, Subsidies, Investment, etc)
    - ➤ Retirement Gratuity
    - ➤ Death Gratuity

- ➢ Normal Commuted Value of Pension
- ➢ Revised Commuted Value Of Pension
- ➢ Normal Leave Encashment
- ➢ Revised Leave Encashment
- ➢ State Plan Bill
- ➢ Acknowledgement
- ➢ Bill Extract
- ➢ Top Sheet
- ➢ TDS Calculation
- ➢ TDS/ VAT Schedule

- ❑ Allotment Booking
- ❑ Pay Order Generation
- ❑ Bill Checking and Posting
- ❑ Bill Submission
- ❑ Token Generation
- ❑ Bill Clearing
- ❑ Bill Disbursement (Salary and Other)
- ❑ Employee Salary Disbursement through bank
- ❑ Allotment Register
- ❑ Bill Register (Salary and Other than Salary)
- ❑ Bill Transit Register
- ❑ Cheque Register
- ❑ Token Register
- ❑ Cash Book Generation

## 4. Payroll Module

- ❑ Employee Information
- ❑ Employee Earning Head
- ❑ Employee Deduction Head
- ❑ Monthly Payroll Process
- ❑ Pay Bill Front Page
- ❑ Pay Bill Inner Sheet
- ❑ Pay Slip
- ❑ Different Deduction Head Schedules
- ❑ Automated Increment Generation
- ❑ D.A, HRA, M.A change updating
- ❑ Salary Transfer to Accounts
- ❑ History data Maintenance

**Loans and Advances**

This section handles loans and advances taken by every employee and also its recovery.

**GPF for Group D and others calculation**

- ➢ Account Slip
- ➢ Broad Sheet

**Income Tax**

> ➢ Tax Calculation
> ➢ Form 16 generation

**Arrear Calculation**

**ROPA 2009 Arrear Calculation**

**Bonus and Festival Advance Calculation**

## 5. Establishment Module.

This module has been devised in order to keep in track of the employee related data eventually to get productive reports like Service Book, Leave Statements, and Statistical Reports etc. With increased level of complexity while recording personnel information, this system has been designed to provide flawless results at every level of abstraction. This further ensures the total integration of all modules running.

The module for Department of Textiles (sericulture), Establishment Cell, is devised keeping all W. B. Govt. rules and guidelines in mind. Henceforth the system produces results, which 100% comply with the Govt. reports.

The main factors tracked under this module are the employee related data and leave calculation system. The employee statistical data is recorded in a series of related forms. It starts from recording Employees general and pay related information. All minor details like date of birth, age, caste, sex, address and contact number are recorded along with his joining date, joining date in present department, date of next increment, PSU rank he had, pay scale, designation etc. are well saved here. Then come to which Cadre category he belongs. His cadre information is derived from which designation he belongs as a designation must fall under a cadre group. Thus the purpose is served. Then the system keeps track of the promotion one employee gets. A promotion may be functional or a non-functional post. All these are well booked here. All this information can be verified from well laid reports generated by the system.

Next comes the part of leave calculation. An employee can enjoy various types of leaves as per W.B. Govt. rules viz., EL, CL, HPL etc. All these leaves are already recorded in the system. Only the user requires providing the opening balance for an employee. Then that employee's leave is to be credited once/twice years, just with a single button click. It's the easiest way to credit leaves rather than calculating manually. There is a well-laid form to record one employee's daily leaves taken. This data is then compiled to provide dynamic reports like Absentee Statements and other valuable reports.

Both the above process paves the way for generating Employee Service book. It is essential for every employee under W. B. Govt.

**Leave Maintenance**

> Casual Leave
> Earn Leave
> Half Pay Leave
> Special Leave
> Extraordinary Leave
> Maternity
> Leave Without Pay
> Others
> Quarantine
> Disability
> Leave not due
> Study leave
> Special Sick Leave
> Hospital Leave
> Leave not due
> Leave Credit process
> Leave Yearly Closing Balance Calculation
> Annual Absentee Statement

**Cadre Information**

**Last Pay Certificate**

**Promotion**

> Promotion Order

**Gradation**

> Gradation List

**Service Book**

**Employee Training Management**

## 6. Letter and File Management

This is a module maintaining all files and letter in the organization. The Receiving Section receives the letters. The user in the receiving section inputs the letter or file details into the system. The system automatically generates a docket number and a receipt is printed at the receiving section for acknowledgement. The letters or files are then sent to the Director. The Director office then sorts the letters or files and sends to the head of the section. The Director can also set the priority of the letter or file. The section head on login into the system accepts the letters or files and distributes to the sectional users. The sectional users on performing the job send the letters back to the head of the section after giving proper note or move the letter into a file. The file is then moved to the concerned official for further verification and acknowledgement.

The system is so well designed that at any instant the officials can visualize the present status of the letter or file and take necessary action for its delay.

Different types of status reports can be generated and consequent monitoring is possible.
After proper execution if the letter requires a reply the file containing the letter is moved to the dispatch section. The dispatch section then generated a memo number and dispatches the letter to the concerned office.

The user can perform work with letters/files as specified below:

- Move letters/files to other employee.
- Move letters/files to dispatch section.
- Create new file or letter.
- Move a letter to a new or existing file.
- Get present status of the file or letter
- Get the delay time for the feedback of the letter.

## 7. Complain Management

This system of Complain Management has a very distinctive functionality depending upon the two type of users described in the scope topic. The common interface that both the users get is the login screen. It is the gateway to the system. It authenticates a users validity and genuineness. It has a generic User ID and a password entry field, which upon submitting redirects to the Welcome/Home screen.

A.     For Super/Admin Users -The super users get the privileges of viewing the employee/user complains and provide proper feedbacks to them. So, there are forms for feedback entries and reports for viewing complain. The system also keeps track of  the  previous  complains  to  provide  multiple feedbacks.

B.     For General Users - Normal/General users get the functionality of viewing his own previous complains along with the feedbacks received from the Super users. This is headed under     'My          Own Complains'. Furthermore he has a well-laid form for new complain entry. With most options and well-laid user interface a user will always find it convenient. A user may or may not feel free to disclose his identities while logging complain. This is also kept in mind while devising the system. There is an abstraction of hiding others complain for a user. One will only be able to view his own complain, not others.

# System Viability

The system is very viable in terms of its functionality and maintainability.

It is one of the user-friendliest modules throughout the integrated system. With very easy and graphics rich interface, user will always find it useful.

The system also remembers users past complain records with their feedbacks (if provided). Hence, it is very informative and highly maintained.

The system is also very secure and specific to user. It restricts user to view others information. This is achieved through an user level authentication.

# Current Challenges

The system has been implemented at Head Office and all its Seventeen Sub Offices. The system has different types of modules. Presently at every sub office the modules are not being used entirely.   The process of computerization can be successful if the offices perform their specific business using the application software. To increase the dependency on the system every users and administrators need to work hand in hand. The system viability depends on proper implementation at sub office level because basic data will be generated at the sub office level and the HQ will compile the data finally. The total process runs as a chain and if any link snaps the success of the system is at a stake.

The sub offices are facing different types of challenges for smooth running of the system. The user level know-how about the system is one of the issues and this requires continuous up gradation of users. Depending on the user requirement monitoring, demonstrating, upgrading, changing and training will help the user.

Under these circumstances, our challenge is to implement the system from HQ to all its Sub Offices. The situation demands more concentration at the Sub Offices to implement and run the system properly which will make this initiation a success.

## How the System Works

The diagram below specifies that all sub office will have separate application running. The most risk scenario of network failure will not hamper the transactions at different sub offices as each and every sub office is

running the application at a distributed architecture. All data from the sub office will not be sent to the HQ. and only incremental data will be transferred from the HQ to sub office and vice versa. So data transmission bandwidth size will not be huge looking into the present scenario.



**External Users**
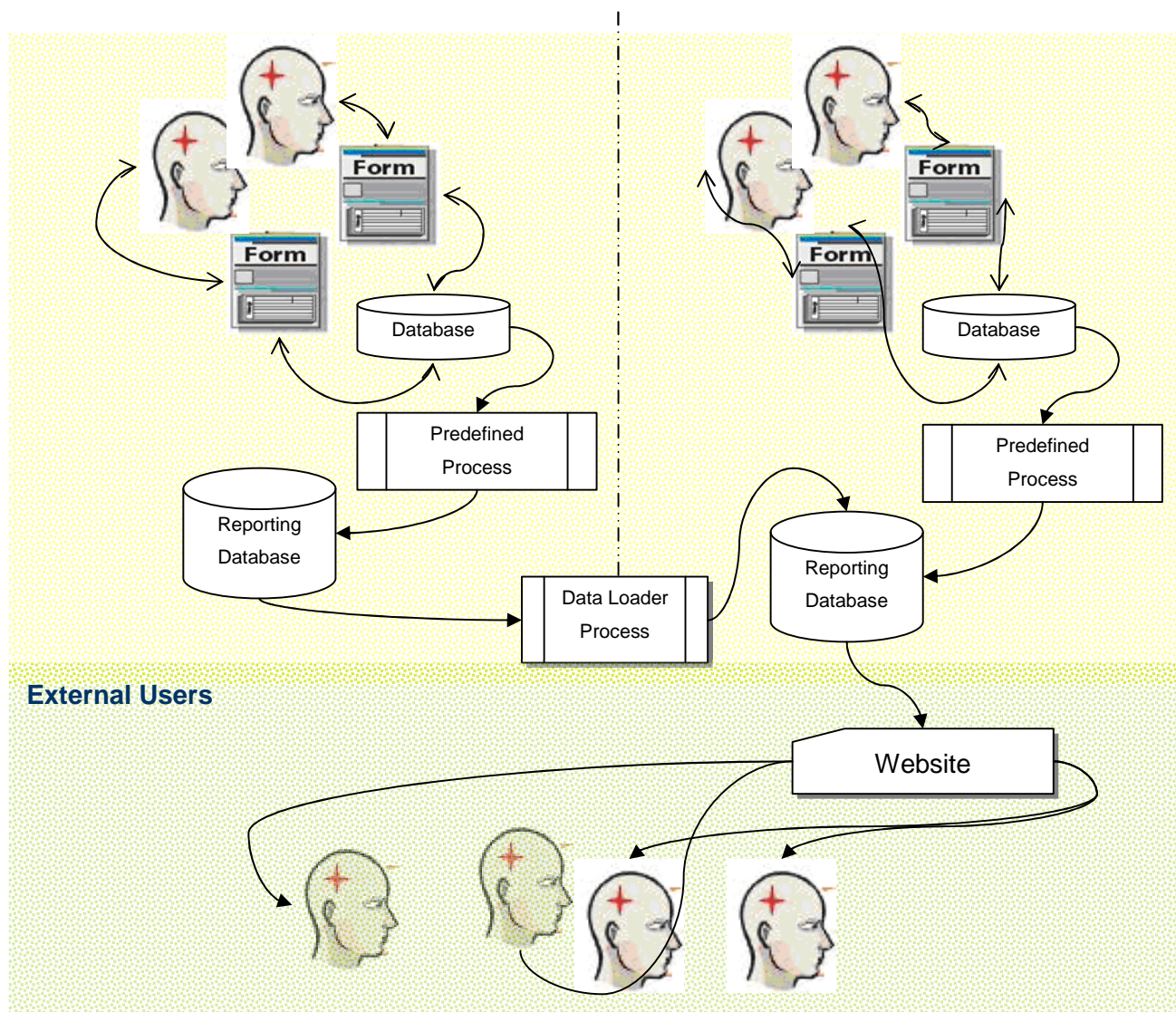
# Network Architecture

The diagram below shows the network architecture proposed to fulfil the above mentioned requirement. Each and every client PC will be connected to main database through a switch. The Server of different sub offices and the Head quarter will be connected so that smooth data transfer can be achieved.
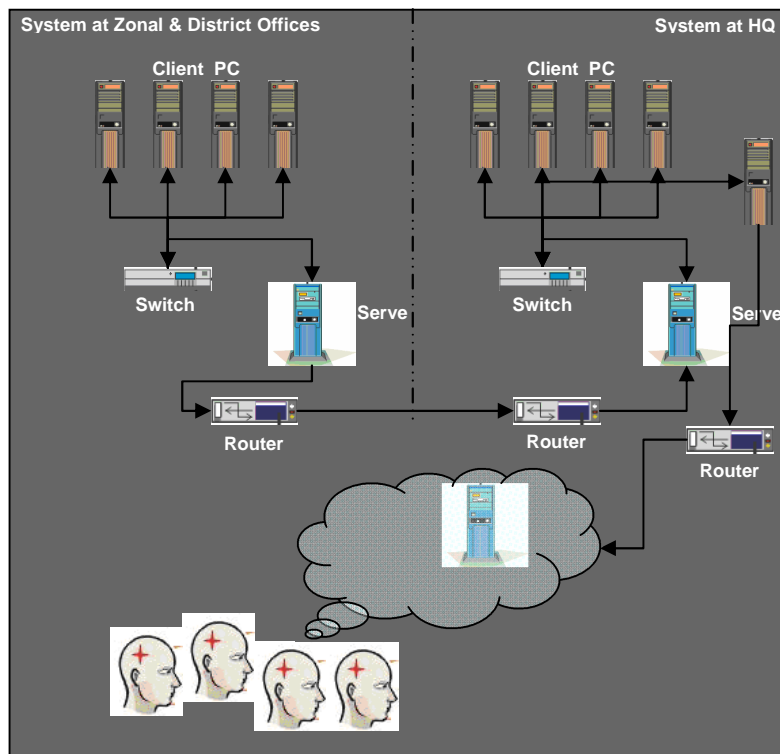


The Server present at the head quarter will also be available at the internet so that external user having predefined roles can fetch data from the server through the internet.

➢ **The connectivity plan and arrangement will be decided by the Department itself.**

# WEB SITE

The Directorate of Textiles (Sericulture) West Bengal will host a website related to the departmental and extra ordinary work performed every year.

The web site will have static and dynamic pages. Few of the pages are

1. Home Page consisting of department logo and description of new avenues achieved. The page will also have a short message from higher officials.
2. About Sericulture- This page will show details of the historical and biological background of the sericulture.
3. Organisation- The page will show the organogram, activities.
4. Activities- The news and events, calendar.
5. Training Facilities – How to avail training facilities, Who can avail this facility, Minimum requirement of Criteria
6. Different schemes details and different reports regarding number of beneficiaries coverage, new job generation on the basis of different types like, women, caste and many more
7. Different governmental reports can also be uploaded
8. Research level documents and discussion forums can be uploaded
9. Complain and Feedback modules can be incorporated

# Annual Technical Support (ATS)

## Support Plan

Excluding HQ, there are 17 District and Zonal Offices, where the application software are installed and implemented.

We would like to organize these 17 offices in 3 regions.

- **North Region** (Darjeeling, Kalimpong, Siliguri, Jalpaiguri, Coochbehar, Balurghat, Raigaung)
- **North-East Region** (Malda, Baharampur, Krishnanagar, Lake Town)
- **South Region** (Purulia, Bankura, Paschim Medinipur, Burdwan, Bolpur, Suri)

There will be **2 (two) Support Engineers** dedicated for 7 (seven) sub offices of North Region (Darjeeling, Kalimpong, Siliguri, Jalpaiguri, Coochbehar, Balurghat, Raigaung).
A small **office setup** will be provided for smooth opearation.

For **North-East Region** (Malda, Baharampur, Krishnanagar, Lake Town), **1 (One) Support Engineer** will be dedicated. Another **2 (two) Support Engineers** will be dedicated to provide technical support to the sub offices of **South region** (Purulia, Bankura, Paschim Medinipur, Burdwan, Bolpur, Suri). These 3 engineers will operate from our **City (Kolkata) office**.

In the HQ, on-site support will be provided for all working days. There will be 1 (one) Support Engineer and 1 (one) Software Developer at the HQ, who will look after the whole system and provide necessary support and also make required changes in the application software.

Besides all these support arrangements, 1 (one) DBA and 1 (one) System Analyst will be assigned for database and system maintenance as and when required.

### Mode of Support

- Support Engineers will attend each and every office as and when required but one routine visit will be mandatory.
- Telephonic Support will be provided in all working days.
- On line Support through internet will also be provided in all working days.
- Changes made in different modules will be incorporated in every offices and required training will be provided through out the year.