Information and Technical Proposal

For

IAS-Sugar

(A Multiplatform Software Application)

Specifically Designed for

Sugar Factories

IEB Solutions

IEB Solutions offers a comprehensive array of IT Solutions and Services for medium to large companies in both the private and public sectors.

IEB Solutions is focused on delivering IT Services and IT Solutions to businesses across India. Our experienced team will be able to assist you in creating a practical, sustainable IT infrastructure for your business, from helping to develop your overall IT Strategy down to implementing a network device in your Data Centre.

We also provide Training Solutions on high-end Technologies, Induction Programs, Certifications, Learning Content and Learning Infrastructure with both online and in person delivery models. Our Corporate Learning Solutions are a suite of best-in-class training processes that enable customers to reduce costs, sharpen their business focus and obtain quantifiable results.

Sir, we have designed and developed an Application Software Solution specifically designed for sugar industry. This application is developed in such a way that, it can be run on any device (PC/Laptop/Tablet/Smart-Phone, etc.). As per our knowledge this is the only Application which is having all required modules for sugar factory integrated in it. This application is designed in such a way that, it can be integrated with any application software, which is available at your site with some minor changes. This application is completely customizable and can be molded as per your requirement.

We have complete solution and successfully integrated with regards to cost-centers (Sugar, Co-Generation, Distillery and any other if you have) and consolidated Balance Sheet, Profit, Loss Account and derived '**Cost of Production**' through our software. We have the facility to process the payments as per the requirement of the factory, i.e. payment process is also totally parameterized, and hence you can model the process for cane payments as per the suitability of funds.

We have fulfilled all the statutory tax compliances' in our application. We have also introduced Mobile Apps for Agriculture department, H&T Contractors and Farmers. Details for this are attached in separate document. (It is a separate module if you want to implement). We have also introduced Automation for Cane-Yard, Weigh-bridge and Sugar Bagging and also Godown & Sugar Bagging auto reconciliation using various methods.

Sir, we are willing to meet you in this regard, please let us know the suitable schedule so that we can arrange the detailed software demonstration. We are here attaching the product profile for your ready reference. We are waiting for your valuable feedback.

<p align="center">**IAS-Sugar** (**I**ntegrated **A**pplication **S**oftware for '**Sugar** Industry')</p>

Objective:

IAS-Sugar is the customized integrated software solution that helps:
- ✓ In implementing the modern edge concepts of ERP in Sugar industry,
- ✓ To obtain the maximum utilization of available resources like man, material, machine etc. through computerizing and integrating the day-to-day activities

Scope:

IAS-Sugar is the customized integrated software solution, which can designed and build to the customer requirements. This involves following Modules:

1. Cane Management System (CMS):

This Module includes the activities of Agriculture Department, Cane-Yard, Cane-Accounting, etc. like:

> **Registration of Farmers, H&T:**

Every farmer, Harvester and Contractor has to follow the enrollment procedure. Irrespective of the constitution of factory i.e. private or co-operative there are guidelines which are required to follow e.g. command area, circles, villages under command area etc. This module will help in carrying out all the necessary activities mentioned above in predetermined systematic fashion.

> **Plantation and Cane Diversion:**

Every sugar factory plans its crushing or season schedule based on the activities that are related to agriculture department. These activities sometimes referred as cane development program. This includes variety, type wise cane registration. Preparing reports for getting crushing license for the season, preparing and controlling the harvesting program based on cane registration for un-interrupted supply of cane throughout the season etc.

> **H&T Agreements, Harvesting and Transportation allocation, etc.:**

This is one of the most important activity on which the sugar industry or factory rely on. To run or operate the factory with minimum or zero interruption, there should be sufficient harvesting and transportation facility. Also the management or H&T department should be prompt enough to plan and implement harvesting program with Agriculture department.

This module will help to carry out these activities smoothly through:
- ✓ Preparing H & T registration based on Vehicle type, Registration type, Multiple registrations of same contractor, Joint Harvester, Guarantor allocation facility etc.
- ✓ By defining rout, Harvesting and Transportation performance in terms of Attendance & Tonnage.
- ✓ Harvesting and Transportation area allocation.
- ✓ Area wise harvesting and transportation runtime scheduling etc.

➢ **Cane – Yard and Weigh Bridge Activities:**

This is also important activity which is required to carry out systematically to ensure defect free weighing of cane arrived. Since there are a lot of variables which causes manual defects e.g. improper information supplied by farmer, or from 'field slip'. The information collected is important since the cane and H&T bill is processed on this weighing slip. Therefore **IAS-Sugar** provides facility of pre feeding of weigh bridge slip that ensure defect free information regarding 'Farmer', 'H&T' contractor, No. of ropes etc. Also, it facilitates the cane weight 'Automatically' and 'Manually' ensuring correct weighing information and to avoid malpractices if any.

IAS-Sugar has unique facility of Weigh-Bridge integration in order to take automatic weighments. It has the facility for accepting cane with multiple layers in forms of ropes in single vehicle. Token Generation facility to ensure speedy and defect free weighments of cane received, etc.

IAS-Sugar can be integrated in such a way that you can implement automation in Cane-Yard and Weigh-bridge. You can generate n number of reports required by the management using this application.

➢ **Cane Billing – Farmers, Harvesters and Transporters:**

Cane billing with respect to Farmers and H&T is not only the multiplication of tonnage and rate or rout distance, tonnage and rate. But, there are other factors which should consider while processing cane billing.

In case of Farmer billing, the factors include advance, fertilizers & pesticides, seeds given to farmer which should be deducted from cane amount and remainder should be paid through bank.

In same fashion H&T bill processing includes advances, diesel, wire rope, security deposit etc, it should also consider and get deducted or recovered from bill.

IAS-Sugar allows you to allocate the various deductions and allows setting priorities for season or bill wise to recover the same. It is totally customized and facilitates user to operate with ease.

IAS-Sugar doesn't have restrictions for processing number of bills for a season. It allows you to define deduction priority and percentage while processing Cane billing. Chain deduction for ensuring 100% recoveries like advances, diesel is possible. It has the facility for Cane variety, late harvesting, Cane quality wise rates while processing bills, also it has facility of providing difference bills, (arrears).

IAS-Sugar has facility of recovering various deductions from Farmers and H&T Contractors. You can generate all reports required for your reference and which are mandatory for Government.

➢ **Management Information System related to Cane Section**

MIS is an important tool for Top-Level management. The reports generated in this module will focus on the minute activities in the Factory. And reports will interpret the exact scenario or status of the entire organization.

2. Stores and Inventory control

There is necessity of maintaining accountability of each and every item that is purchased and consumed. Store system is nothing but the activities that keeps recording of item main group, sub-group and items under the same, which management feels comfortable with its traceability. Inventory control includes various tools that help to keep minimum inventory level. **IAS-Sugar** allows user to create main, sub group of items and defining items in systematic fashion. Also, **IAS-Sugar** helps in controlling or regulated issue and receipt functions so as to keep inventory at minimum level. **IAS-Sugar** also facilitates traceability of each and every item at any time required.

This Module includes the activities of Stores Department like:
➢ Requests: Material Requests, Purchase Requests, etc.
➢ Receipts: Purchase, Departmental, Subcontractors, others, etc.
➢ Returns: Sales, Departmental, Subcontractors, Loan Based, etc.
➢ Issues: Departmental, Subcontractors, Sales, Loan based, others, etc.
➢ Warehouse/Stores Management.

➢ Analysis Reports: Inventory, Consumptions, Ageing and many more.
➢ Inventory Management.

3. Purchase and Sub-Contracting

Procurement stands for purchasing the items or material that are required. Scientific procurement requires the activities like purchase requisition, inquiry, and quotation. After scrutinizing quotations purchase order should be raised. Manually it is hardly possible to keep recording of the same. Procurement activities in **IAS-Sugar** have to follow the steps mentioned above therefore it is easy to exercise control over purchasing activities.

This Module includes the activities of Stores Department like:

➢ Suppliers Masters: Material, Services, Subcontractors, Other
➢ Request for Quotations (Enquiries).
➢ Quotation Entries and Comparative Statement Generation.
➢ Negotiations and amendments in Quotations as per negotiations and revised comparative statement.
➢ Purchase Orders: Normal PO, Rate Contract, Subcontracting Orders, Service Orders, Release Slips, etc.
➢ Purchase Orders Amendments.
➢ Short-close the Purchase Orders
➢ Purchase Analysis and Supplier analysis.

4. Sales and Shipping

There are various types of sales mainly 'Product' and 'Bi-product' sales. 'Product' sales consists of 'Sugar' and 'Bi-product' sales consists of 'Bug-gas', 'Molasses', 'Compost' etc. The various sales mentioned above are required to be carry out under government regulations e.g. release order, free / levy sale etc. Manually it is impossible to keep recording of various type of sales therefore there may be possibility of mistakes resulting in variation in stock difficult to maintain the recording of sale against the release order etc. **IAS-Sugar** will help in carrying out the entire sales activities under controlled environment since each and every activity from release order to delivery order is carried out in systematically and are interlinked.

This Module includes the activities of Sales Department like:

➢ Customer Masters: Material, Services, and Other
➢ Request for Quotations (Tenders).
➢ Quotation Entries and Comparative Statement Generation.

➢ Negotiations and amendments in Quotations as per negotiations and revised comparative statement.
➢ Orders: Sales Order, Stock Transfer Order, Rate Contract, Service Orders, Sales Release Slips, etc.
➢ Sales Orders Amendments.
➢ Pick-Sheet and Pack-Slip Generation.
➢ Invoice generations: Stock-Transfer, Sales, Others if any.
➢ Sales Analysis and Customer Analysis reports.

5. Financial Accounting

Financial accounting in traditional practice consists of activities like preparing cash, bank and journal vouchers manually. And to make each and every financial matters foolproof there is necessary to handle various ledgers those are also prepared manually. It takes lot of time and man hours also it may lead to manual mistakes. **IAS-Sugar** facilitates auto posting of **'Purchase', 'Sales', 'Cane bill', 'H&T bills' and 'Payroll'**. And this posting is carried out up to subsidiary accounts i.e. accounts of 'Farmer', 'Deduction' etc. **IAS-Sugar** consists of facility of releasing payment or bills on part bases also. This module will also keep accounting for administrative as well as other financial matters.

This Module includes the activities of Accounts Department as:

➢ Accounts Receivable
➢ Accounts Payable
➢ Taxation and Filing
➢ Banking
➢ General Accounts
➢ Cash Book – With Bill Settlement
➢ Bank Book – With Bill Settlement
➢ Journal Voucher
➢ Postings Like : Cane bill posting, H&T bill posting, Payroll posting, Net pay release through banks', Society / Other bank deduction payment release through banks'
➢ P&L Statements, Balance-Sheets.
➢ Financial and Accounting Analysis reports.

6. Human Resource and Payroll

This module will help in carrying out activities like payroll and maintaining various activities like joining, leaves management, slab wise increments, overtime calculation, retirement information etc.

The module includes following activities:
- Muster creation (through software and/or integration with bio-metric machine)
- Payment Calculation.
- Payment of shift allowance, overtime, retention period, contract labors, daily wages etc.
- Shift Scheduling.
- Leaves management.
- Bank Statement.
- Income tax statement.
- Pay slip etc.
- Transfers, Promotions and Increments.

7.   Chemical Laboratory (Manufacturing)

This module will help in carrying out following activities and reports;
- Plot wise Brix / Recovery recording for calculating recovery based Cane Price.
- Daily manufacturing report which includes
- Statutory reports.

Silent Features of IAS-Sugar

- Designed and developed by software professionals with domain expertise having over a decade of experience.
- Designed and Developed in such a way that single application software can be used for multiple sugar factories at different locations.
- The Application is developed in hybrid mode, hence if connectivity breaks between multiple locations, software can be run locally for all factories and as soon as the connectivity resume, it will synchronize the data with centralize server.
- You can have unlimited user accounts and roles get defined in this application.
- This application can be used using PC / Laptop / Tab / Phone.
- Unique software solution which provides 'Multilingual' operations through open source platform. We don't require any additional license software to run the application.
- Complete application software solution with all relative modules integrated with each other which help in avoiding replication or duplication of work.
- All types of entry level validations at appropriate stages to improve the reliability and performance.
- Data export facility.
- Auto-mailing facility for required reports to specific authorities.

➢ System Architecture: Open Source Platform Independent.
➢ Operating System Platform: Any Operating System.

Requirements from Client:

1. **Server for App Server:** Suitable server so that it can handle transactions from the number of locations and users you want to configure.

2. **Connectivity:** 4 Mbps Leased Line with backup line for emergencies.

3. **Software Licenses:** Strong Antivirus for Server to protect from Threat.

4. **Any Other Cost:** Hardware cost will be additional as per the requirement and specifications finalized.

5. **Separate Application:** This will be a separate application and which will be integrated with your existing server for data synchronization. Hence additional working is not required. We need technical support from your side about the Database for the integration with your existing system.

6. **Database:** No additional database license required.

7. **Implementation Period:** 4-6 Months depending on no. of users and size of data. Raw data has to be provided by your team in prescribed format in Excel / CSV format.

8. **Hardware:** We will not provide any Hardware, will just provide the specifications. As the service for Hardware supposed to be provided by the supplier (You will be free to purchase it from your registered vendor).

9. **Changes in Existing Database:** We will not make any change in your existing database; just will add some Tables, Triggers and SPs required for integration with our Database.

10. **Source Code:** We will not provide Source.