

**NATURAL SUGAR AND ALLIED INDUSTRIES LTD, SAINAGAR**

**Tal Kallam District Osmanabad**

**SOFTWARE DIVISION**

**MODULE WISE INFORMATION – BRIEF NOTE**

Natural Sugar entered in Software Development Area with the motto to provide quality software solution to sugar industry with proper service support. Natural Sugar established dedicated **Software Division** to develop the software. We have provided all the required resources like Manpower, Hardware and software to this division.

The software is developed under following environment.

Front end : C#, Back end SQL server 2005 and Crystal for reports under Dot net frame work.

Integrated software development is our prime objective so we tried for it and we could integrate all modules with Accounts.

We put Accounts Department in center of this system, because most of the transactions are related to Accounts itself. With such integration we could avoid duplication in work, we got accuracy and efficiency in work.

We are providing here with Module wise information with its integration aspect.

**AGRICULTURE MODULE**

Basically this module deals with Cane development, Cane plantation, Cane Supply and Cane weighing system.

**Cane Development module**

Cane development aspect is very important for sugar factory to get the proper raw material to run the plant efficiently. We have incorporated this activity in our software system. This module is directly related to Accounts to pay cash, to issue fertilizers and equipments Loan. Such loans are to be recovered at cane bill payments. Here we have made proper arrangement to deduct the due loan amount from to such grower's cane bills amount.

In most of the software systems such automatic recovery is not possible and factory has to re-enter the recovery data in Accounts. We avoided such duplication.

Detail of the module is as follows.

Scheme Masters and Scheme Input master (linked with Main ledgers of Accounts)

Application form and Authorization of application form

Payment order against application form

Material Delivery order against application form

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### **Cane plantation and harvesting program module**

Cane plantation and proper cane harvesting is also a very important task while it is very tedious to get well matured cane. In our system we have provided a very suitable plantation form to feed all the required information about cane plantation. The information includes Area of Plantation, date of plantation, Planted cane variety, cane type, Irrigation source and Irrigation method and so on. **The unique method to define cane maturity** on the basis of Plantation date, Cane type and cane variety is provided in this system. Same way here is arrangement to enter the cane quality in terms of brix and pol in cane. This enables us to prepare **Harvesting Program** on the basis of maturity date as well as cane quality. Same way diversion of planted cane is also taken in to consideration in this system.

This module enables us to classify the available cane in various ways like Circle wise, Gut wise, Village wise, variety wise and cane type wise. Various reports like monthly cane availability is also provided.

### **Cane Yard – Cane Weighment Module**

This module deals with cane receipt and cane weighment and this activity starts with proper Number taking of vehicle means registration of trip. We have made proper arrangement to enter Number taking details using field slip, like Number taker No, Date, shift and Time with plantation form number and **Transportation Route information**.

Further there is arrangement to get the automatic Gross weight and Tare weight from Electronic Digitizer. We can print weigh slip on weighbridge itself. At the same time **Diesel coupon** is also printed with diesel quantity.

Various reports about cane receipts are provided like Shift wise cane receipt, Circle wise cane receipt (Today and to date), Vehicle wise to day and To date reports and so on. **Cane Waitage report is also printed**. Day pan report is available for recording purpose.

### **Cane Account – Cane Billing Module**

The data generated in cane yard is used further to prepare Grower cane bills, Cane harvesting Bills and Cane transportation bills. Such billing can be prepared for given period.

For Grower Cane bill, It aggregates grower wise tonnage and it is multiplied by the decided cane purchase rate and we get Gross cane bill amount. Facility is provided to transfer tonnage from grower to grower. Further deduction amounts are taken from Account module

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automatically and deducted from the Gross amount and we get Net payable amount. We can print Grower cane bill, payment register, deduction reports and Net Bill Bank transfer list

Provision is made to prepare installment bills for cane growers. Same way Commission deposit bills for Harvester, Transporters and Bullock cart contractors can be prepared using this system.

Provision to prepare Cane Grower Deposit Interest bills is available in this software.

Same activity is followed for **Cane harvesting bills** and **Cane transportation bills**.

Further after end of season there is provision to prepare installment bills for cane growers. Same way Commission deposit bills are prepared for Cane harvesters and Cane transporters.

**Finance accounts Module**

This department is linked with each of the department for various transactions like cash receipts, payments and recording account transactions.

Account transactions like Cash receipts, Bank receipts, Cash payments, Bank payments and journal vouchers are maintained using this system.

On the basis of above transactions reports are generated as follows.

Daily cash book, Bank book and Journal book.

Periodical reports can be generated as follows

Sub Ledger and its debit, credit balance list

Main Ledger, Receipt payment report

Trial balance, Profit and loss A/c

Balance sheet with annexure ( Vertical and Horizontal)

Note : Some of the integration points with accounts and other modules are given on Next page.

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**Some of the integration points with Accounts and other modules.**

Name of department	Integration details with Accounts
Cane Developments	Gives Debit amounts from various cane development activities like Cane seed advance, issue of fertilizers and equipments on loan
Cane Account	Receives Debit balance lists for growers, harvesters and transporters
Inventory	Gives deducted amounts as credit amounts of growers, harvesters and transporters
	Gives supplier credit amounts against purchase
	Gives Item group and Item wise Debit and Credit transactions.
	Gives expenses details
	Receives Debit balance lists for employees.
Human resource - Payroll	Gives deducted amounts as credit amounts of employees.
Sugar Sales & Godown	Receives credit balances of sugar merchants
	Gives debit transactions through sugar sales invoices
Distillery	Receives credit balances of alcohol merchants and Gives debit transactions through alcohol sales invoices
	Receives WDV, SLM values
Plant Maintenance and Asset Management	Gives Debit, Credit transactions of asset items and Receives Credit balances of Shares holders
	Receives Credit balances from Accounts
Shares account	

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**Sugar Sales and Godown Module**

This module deals with Sugar production, storage and deliveries. It is also integrated with accounts for getting credit balances of sugar merchants.

Main features of this module are as follows.

Sugar Production : Daily, Shift wise sugar production details with Sugar Grade, Sugar packing are maintained. Sugar stock transfer to Godown section is also maintained.

Sugar Godown : Receives sugar stock from sugar house and distributes it to various godown and its lots. Delivers sugar quantity as per Delivery order from Sugar sales accounts.

Sugar Sales : As per release order tenders are floated and quantity of sugar is allotted to brokers. Brokers designates quantity to merchants. Merchants deposits money against their allotted quantity. On the basis of credit balance of the merchant Delivery order is prepared and sent to Sugar Godown for delivery.

**Shares Accounts Module**

This module accepts application for shares. Allot shares as per sanction. Distinct numbers to each share certificate is maintained. Shares certificates can be printed. Various reports as per ROC are generated. Transfer of shares is possible. History of such transferred is maintained.

This module is also integrated with accounts and Agriculture department to get grower types as member and non-members.

**Diesel Pump Module**

This module deals with purchase of Diesel, Petrol and oil. It also maintains delivery transactions of factory transporters and factory vehicles. It generates debit list for deduction from cane transportation bills.

Purchase register, issue register and stock list can be prepared using this module.

**Other Sales Module**

Using this module we can handle transactions of sales of various items like Baggase sale, Molasses sale, press mud sale and scrap sale.

It also prepares Sales invoices and sales registers. It integrates itself to Accounts to get credit balances of the concerned parties.

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**Distillery Module**

Transactions of productions of various types of alcohols are maintained. Tender information of alcohol sales is maintained. Cash, Cheque, DD, bank receipt transactions are maintained. According the tenders Sales transactions are maintained.

Product wise production register is generated. Sales registers are prepared. Party wise delivery invoices and reports are prepared. Stock statements of various products are prepared.

**Human resource and Time office**

This module is concerned with employees and their attendance, monthly pay sheet, bonus and on duty tours and their travelling bills.

Details are as follows.

Department master

Employee type and Employee category

Employee personal information

Payment details information

Daily attendance and monthly attendance

Leave and on duty tour with travelling bills

Deduction maintenance

Monthly pay sheet report and Pay slips

Monthly PF and PT reports

Monthly overtime calculation with single/double rates

Yearly 3A & 6A PF reports

Yearly Bonus calculation

Yearly gratuity information

This module is integrated to Accounts to get debit list from accounts and give deducted amount list to Accounts.

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**INVENTORY MODULE**

This module deals with material requirement, enquiry, purchase, inward and issue. Same way the same data is further used for Cost Account purpose.

Details are as follows

**Master maintenance**

Item groups (Related to main ledger of Accounts) and Items masters

Departments and sub departments

House and sub houses and

Expenses master (related to main ledger of Accounts)

Supplier masters

**Transactions**

**Department level**

Material requirements

Quality control

Material indents

Material outward for repairs

Material inward after repairs

Material outward on loan

Material inward on loan

**Purchase Department**

Prepare Enquiry/Tender for approved material requirements

Feed received quotations and make comparative

Purchase order preparation as per sanction

Follow up for material procurement

Prepare Local requirement against local purchase

Rate contract purchase order

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**Stores department**

Material inward as per purchase order  
Material inward against requirement for local material  
Material inward invoice feeding  
Purchase Bill passing Note  
Material issue on Indent  
Material issue and receipt on loan  
Debit note and Credit Note  
Damaged/Rejected material return

**Costing department**

Bill confirmation  
Indent confirmation with expense heads  
Debit Note and Credit Note confirmation

**PLANT MAINTENANCE AND ASSET MANAGEMENT MODULE**

This module is related to various machinery in plant and various types of assets. It records additions and disposals of machinery or assets. It prepares depreciation statement by WDV and SLM method. Plant maintenance schedules for preventive maintenance, running maintenance can be prepared. Actual work attended against schedule is maintained.

**SYSTEM ADMINISTRATION MODULE**

This module is related to backup and restore of database. Using this module various types of users can be created and its security policy can be set. We can decide which form to be shown to which user. This is useful to avoid unwanted access to system.

**(B.B. Thombare)**  
**Chairman and Managing Director**