1. Background

On 8 August, 2011, VSL Associates released an updated version of its Management Information System – Version 4.02. Version 4.01 was released on July 19th but withdrawn to fix minor issues that arose in field testing and replaced with this current version. This document is intended for users of the VSL Associates MIS and provides a detailed description of all changes made from the previous version (version 3.02/3).

2. System Requirements

The new MIS is designed to run on Excel 2003, 2007 and 2010. It will not run on earlier versions. It is not recommended to run the programme on a Mac computer, even if enabled for Office: most Mac versions of Office do not run Excel Macros and have very limited functionality.

3. Importing, Exporting and Aggregating Data

Data may be imported to Version 4.02 from any VSL Associates MIS from Version 1.0 forward.

- The TRACKED GROUPS ARCHIVE can now be imported from previous versions of the MIS
- All USER-DEFINED content – including user-defined variables, data, total and average formulae, user-defined sheets and all links – is now imported from previous versions, from 2.0 forward. Nevertheless users should review all imported formulae and content on the user-defined sheets as:
  - Excel cannot import merged cells; merged cells will be unmerged and some content may be lost
  - Some cell references have changed from previous versions of the MIS and will have to be updated
- If importation is being made from any variant of Version 1, the user will need to complete the SETUP sheet.
- The time required to import data from another file has roughly doubled due to the data validation tool (see below)
- The importation of user-defined content also requires more time as the system updates all formulae and links
  - While importing user-defined content, the system appears to freeze on the user-defined sheet and the entire process can take from 30 seconds to 5 minutes depending on the amount of user-defined content to be imported. Do not close the file during this process.

- The file size of Version 4.02 is roughly double compared to the previous version (Version 3.02/3)
  - However, advanced compression technology is embedded in the programme which enables the file to be compressed by about 80% using WinZip
• Version 4.02 creates an export datafile that is entirely compatible with the Savings Groups Information Exchange (www.thesavix.org)

• A revised AGGREGATOR TOOL (4.01) is available for use with MIS version 4.02. The AGGREGATOR TOOL 4.01 will consolidate the data from up to 150 MIS files and produce consolidated programme reports in similar formats to the MIS

4. Set-Up

• LANGUAGE
  o The translation of the entire MIS was revised in French, Spanish and Portuguese by native speakers with VSL project management experience
    ▪ Users in these languages will find that technical terms and grammar have been improved significantly
    ▪ Terms have only been truncated and abbreviated where required by space constraints
  o The language setting is no longer fixed
    ▪ The language of the MIS may be changed by the ADMINISTRATOR on the SET-UP sheet at any time

• USER-DEFINED VARIABLES
  o Increase in the number of user-defined variables to 17 variables

• Unhide GRADUATED GROUPS columns for data input
  o From the SET-UP sheet, the ADMINISTRATOR can, at any time, unhide/hide columns for data input in the GRADUATED GROUPS ARCHIVE; allowing the revision/correction to group data in the archive

5. Field Officer Portfolio Analysis – Inputs

• DATA ITEM name changes
  o (10) ACTIVE MEMBERS AT TIME OF VISIT changed to REGISTERED MEMBERS AT PRESENT
  o (11) ACTIVE MEN AT TIME OF VISIT changed to REGISTERED MEN AT PRESENT
  o (12) ACTIVE WOMEN AT TIME OF VISIT changed to REGISTERED WOMEN AT PRESENT

• New DATA ITEMS
  o Version 4.02 has introduced three new data items on the FO sheet: Data items 24, 25 and 26.
• These three data items are OPTIONAL and are located after the USER-DEFINED VARIABLES
• The user may wish to leave these columns blank; the system will not generate an error message nor will it impede the upload of the file to the Savings Groups Information Exchange (SAVIX)
  o (24) Name of group chairperson
  o GPS coordinates
    • Data items (25) LATITUDE and (26) LONGITUDE refer to the GPS coordinates of the group’s meeting place
    • By double-clicking the data entry cell, the system prompts the user to enter the LATITUDE and LONGITUDE coordinates in one of two possible formats:
      o Decimal degrees (ex. 42.697626)
      o Minutes, degrees, seconds (ex. N 42° 41’ 51.453”)
    • The system converts the entry into the DECIMAL DEGREE format for GPS coordinates
  o TOTAL and AVERAGE cells for items 24, 25 and 26 are locked and cannot be formatted

• DATA VALIDATION
  o Version 4.02 has introduced a DATA VALIDATION TOOL that is expected to significantly improve data quality and reliability
  o The DATA VALIDATION TOOL consists of two components:

1. ERROR MESSAGES
   • Through a system of 9 logical constraints, the system identifies group-level data that is MATHEMATICALLY IMPOSSIBLE and reports an ERROR MESSAGE in the ERROR-CHECKING COLUMN
   • ERROR MESSAGES cannot be hidden or deleted by the user; and remain visible until the error is resolved
   • The total number of ERRORS is reported at the level of the FO and the overall project
   • Files containing one or more ERRORS cannot be uploaded to the Savings Groups Information Exchange (SAVIX)

2. WARNING MESSAGES
   • Through a system of 3 logical constraints, the system identifies group-level data that is outside the RANGE OF TYPICAL RESULTS and reports a WARNING MESSAGE (and FLAG) in the ERROR-CHECKING COLUMN
   • WARNING MESSAGES can be hidden by the user, using the HIDE WARINGS check-box at the bottom of the FO worksheet
   • WARNING MESSAGES are not included in the total number of errors
• WARNING MESSAGES do not impede the upload of the file to the Savings Groups Information Exchange (SAVIX)

• ERROR MESSAGES: Violation of logical constraint
  o (2) GROUP NUMBER must be unique on the FO worksheet
  o All dates (5), (6) and (9) <= CURRENT DATE
  o (6) DATE SAVINGS STARTED THIS CYCLE => (5) DATE OF FIRST TRAINING MEETING
  o (10) REGISTERED MEMBERS AT PRESENT = (11) REGISTERED MEN AT PRESENT + (12) REGISTERED WOMEN AT PRESENT
  o (13) NUMBER OF MEMBERS ATTENDING MEETING <= (10) REGISTERED MEMBERS AT PRESENT
  o (14) DROPOUTS THIS CYCLE >= (8) MEMBERS AT START OF CYCLE – (10) REGISTERED MEMBERS AT PRESENT
  o (16) No. OF LOANS OUTSTANDING <= (10) REGISTERED MEMBERS AT PRESENT
  o (18*) UNPAID BALANCE OF LATE LOANS <= (17) VALUE OF LOANS OUTSTANDING
    • For institutions that record PAR data
  o (18) WRITE-OFFS THIS CYCLE <= (15) VALUE OF SAVINGS THIS CYCLE

• WARNING MESSAGES: Results outside the typical range (unlikely results)
  o (9) DATE OF DATA COLLECTION should be within 12 months of CURRENT DATE
  o For groups more than three months old, (17) VALUE OF LOANS OUTSTANDING > 10%
    * (15) VALUE OF SAVINGS THIS CYCLE
  o All measures of returns (RETURN ON SAVINGS, RETURN ON ASSETS and ANNUALISED RETURN ON ASSETS) should be between -5% and 100%

• USER-DEFINED VARIABLES
  o TOTAL and AVERAGE CELLS formulae are set up on the first FO worksheet only and automatically copied to all other FO worksheets and both ARCHIVES, regardless of the number of rows on each sheet

6. Field Officer Portfolio Analysis – Outputs

• RETURN ON ASSETS
  o Correction to the calculation that resulted in distortions of up to 2% in RETURN ON ASSETS and subsequent distortions to:
    ▪ ANNUALISED RETURN ON ASSETS (group level)
    ▪ AVERAGE RETURN ON ASSETS (FO level)
    ▪ AVERAGE ANNUALISED RETURN ON ASSETS (FO level)

• ANNUALISED RETURN ON ASSETS
  o ANNUALISED RETURN ON ASSETS is no longer computed for groups that are less than 3 months old
• Experience demonstrates that, in some cases, certain transactions in the first few weeks of the cycle generate misleading results when annualised
• Instead, the result for ANNUALISED RETURN ON ASSETS displays “N/A”

• ANNUALISED RETURN ON ASSETS
  o Similarly, at the level of the Field Officer, ANNUALISED RETURN ON ASSETS filters out groups that are less than three months old
  o Users should note that while groups less than 3 months old are filtered out of the ANNUALISED RETURN ON ASSETS calculation at the level of the Field Officer, they are included in the overall project performance sheet for ANNUALISED RETURN ON ASSETS

• PRINTING default settings and override
  o The print settings for all FO worksheets are selected on the first FO worksheet
    ▪ In the PRINT default/override table at the bottom of the first FO worksheet, columns can be added/removed from the printout format and changes are automatically applied across all FO worksheets and both ARCHIVES
    ▪ Ensures that all FO reports and ARCHIVE reports are printed in a consistent format and contain the same information

7. Portfolio Performance Comparison

• No changes
  o However, users should note that ANNUALISED RETURN ON ASSETS will be different (from version 3.02/3) as a result of the filter which excludes groups less than 3 months old

8. Overall Project Performance

• Consistent number formatting

• Correction to the financial logic of the balance sheet
  o In version 3.02/3, WRITE-OFFS are deducted from TOTAL ASSETS
    ▪ Since write-offs have already reduced the VALUE OF LOANS OUTSTANDING measured at the level of the group, WRITE-OFFS are double-counted
      • TOTAL ASSETS are therefore mistakenly reduced by the amount of write-offs in Version 3.02/3
  o This accounting error is corrected in Version 4.02 and WRITE-OFFS are removed from the BALANCE SHEET, and noted under portfolio reporting
• Users should note that groups very rarely write-off loans during the cycle, the vast majority of projects have a reported value of total write-offs of zero and, therefore, distortions to overall project TOTAL ASSETS have been extremely rare

• VALUE OF LOANS OUTSTANDING
  o In Version 3.02/3, the row is duplicated unnecessarily in the LOAN PORTFOLIO section
    ▪ The duplicate row has been eliminated in version 4.02

9. Performance Ratios

• No changes

10. Archive 1 – Graduated Groups

• By un-hiding columns for data input from the SET-UP sheet, data can be entered/modified for graduated groups in ARCHIVE 1
• ARCHIVE 1 contains the new DATA VALIDATION TOOL described above
  o To hide warning messages, the HIDE WARNINGS box on the first FO worksheet must be checked
• Archive 1 now incorporates into user defined columns all totals and averages formulae that are set up on the first Field Officer sheet

11. Performance Ratios – Archive 1

• No changes

12. Archive 2 – Tracked Groups

• ARCHIVE 2 contains the new DATA VALIDATION TOOL described above
  o To hide warning messages, the HIDE WARNINGS box on the first FO worksheet must be checked
• Archive 2 now incorporates into user defined columns all totals and averages formulae that are set up on the first Field Officer sheet

13. Performance Ratios – Archive 2

• No changes