KKSys Help Documentation

Section 1: KKSys Database Definition Documentation

Full output documentation for the ITC
KKFU Project, September 2024

KKSys Database Definition Documentation

> **Items under this heading give a full explanation of the KKFU KKSys database structure, detailing all data-entities right down to field-level definitions. The final article in the set covers the "Cloud API", which details how external developers can access the KKSys database.**

This document gives a full listing of all the data-entities in the KKSys database. The purpose and use of all elements of the data schema is included, including descriptions of the purpose and use of fields, constraints and relationships between data-entities.

KKSys is a relational database with 25 main data-entities which are actually in-use. These include entities such as **Societies** and **Farmers**, which hold core data about the societies and farmers KKFU work with, and also "child-entities" such as **FarmerDeliveries** which list the quantities of cocoa produced by each farmer. A key starting point to understanding a relational database is to see that each entity can link to many other entities. For example one Society can link to many Farmers, one Farmer can link to many FarmerDeliveries. Each piece of data is a "record", an atom of data, which can have linkages to many other parts of the database. Through these linkages it is possible to find the total FarmerDeliveries for a Society, or the total FarmerDeliveries for a year, or any other period of time.

Staff can use the Orixa App, or any application which accesses the KKSys API to add, edit or view data in the database. Multiple users can access and edit data simultaneously.

Scripts can be written to view complex reports showing data in the database, using SQL, a global-standard programming language. Many reports have been added to KKSys, and KKFU staff are capable of extending and editing all these reports.

Data can be imported and exported into the database using orixa tools. Data needs to be well formatted in CSV standard prior to importation.

The use and purpose of sections of data-entities and child-entities are detailed in individual sections of this help document below, please go to the linked articles for detailed, step by step description of each data-entity

It is also important to understand the **built-in** data entities within Orixa, such as **Images, Comments, FileNotes, Addresses, EmailAddresses** and **Phones.** Also, Orixa's built in list and ordering entities: **Types** and **Status**.

Useful articles relating to these entities is linked here:

Orixa's built-in data-entities: Comments, FileNotes, Images, Addresses, Email Addresses and Phones

System Tables: Types and Status

The "Types" Edit Form

The "Status" Edit Form

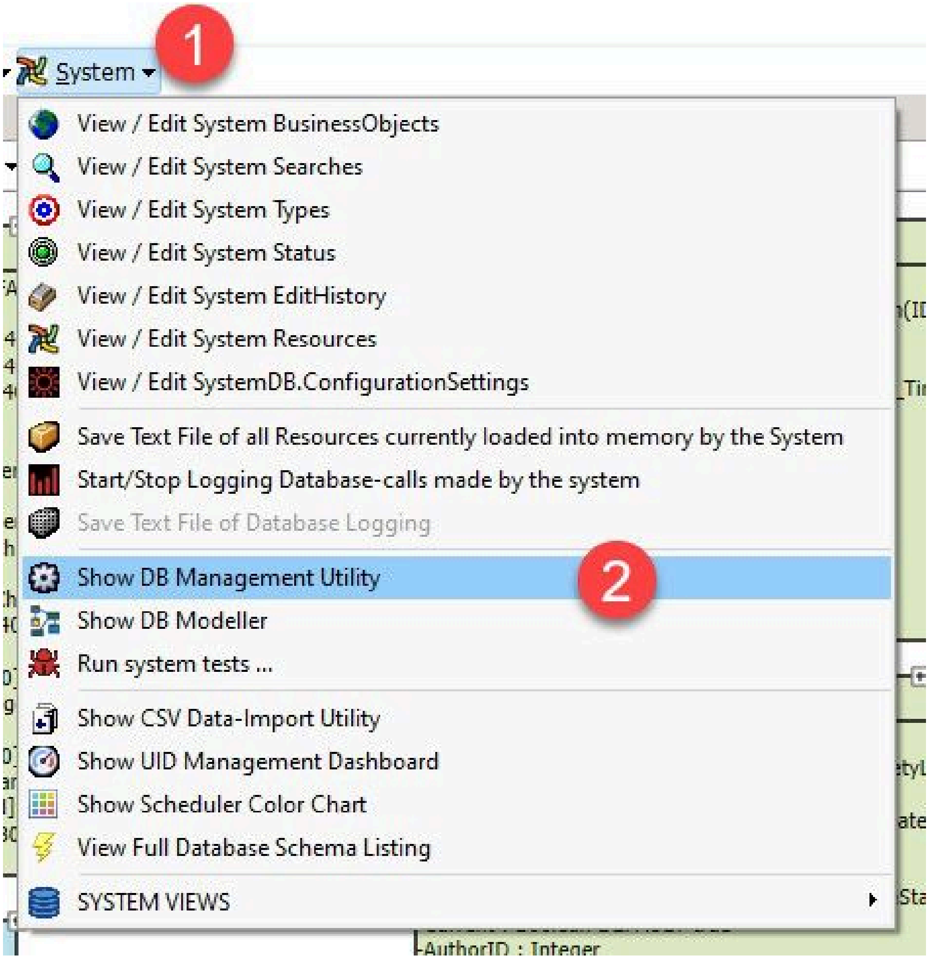
Reviewing these documents will give a good understanding of how multi-purpose data can be managed in Orixa.

If you do not understand how to use the database modeller tools present within Orixa Apps, please review the general introduction document here

System Database Modeller

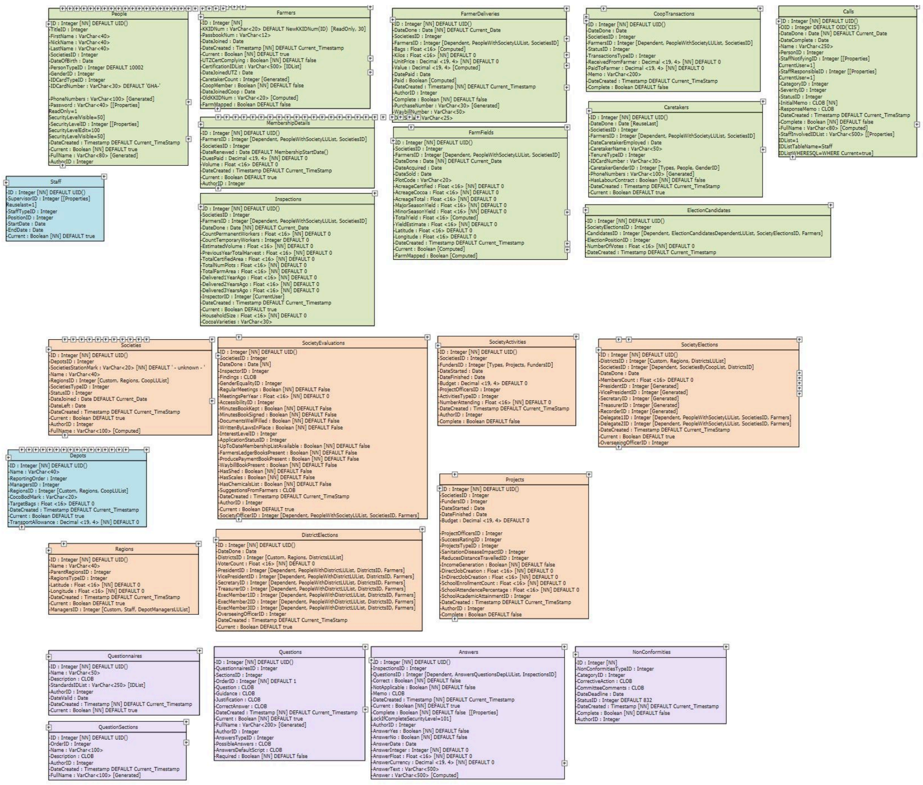
How to access the modeller and what it will show

The whole database definition can be reviewed and worked on within the KKSys via the "System" "Show DB Modeller" menu, as shown in the image below.


1
System
View / Edit System BusinessObjects
View / Edit System Searches
View / Edit System Types
View / Edit System Status
View / Edit System EditHistory
View / Edit System Resources
View / Edit SystemDB.ConfigurationSettings
Save Text File of all Resources currently loaded into memory by the System
Start/Stop Logging Database-calls made by the system
Save Text File of Database Logging
Show DB Management Utility
2
Show DB Modeller
Run system tests ...
Show CSV Data-Import Utility
Show UID Management Dashboard
Show Scheduler Color Chart
View Full Database Schema Listing
SYSTEM VIEWS
AuthorID : Integer

Accessing the System Modeller

From the "DB Modeller" the whole of the KKFU Database will be displayed, as shown below


People
ID : Integer [NN] DEFAULT UID()
TitleID : Integer
FirstName : VarChar<40>
NickName : VarChar<40>
LastName : VarChar<40>
SocietiesID : Integer
DateOfBirth : Date
PersonTypeID : Integer DEFAULT 10002
GenderID : Integer
IDCardTypeID : Integer
IDCardNumber : VarChar<30> DEFAULT 'GHA-'
PhoneNumbers : VarChar<100> [Generated]
Password : VarChar<40> [[Properties]
ReadOnly=1
SecurityLevelVisible=50]
SecurityLevelID : Integer [[Properties]
SecurityLevelEdit=100
SecurityLevelVisible=50]
DateCreated : Timestamp DEFAULT Current_TimeStamp
Current : Boolean [NN] DEFAULT true
FullName : VarChar<80> [Generated]
AuthorID : Integer
Farmers
ID : Integer [NN]
KKIDNum : VarChar<20> DEFAULT NewKKIDNum(ID) [ReadOnly, 30]
PassbookNum : VarChar<12>
DateJoined : Date
DateCreated : Timestamp [NN] DEFAULT Current_Timestamp
Current : Boolean [NN] DEFAULT true
UTZCertComplying : Boolean [NN] DEFAULT false
CertificationIDList : VarChar<500> [IDList]
DateJoinedUTZ : Date
CaretakerCount : Integer [Generated]
CoopMember : Boolean [NN] DEFAULT false
DateJoinedCoop : Date
OldKKIDNum : VarChar<20> [Computed]
FarmMapped : Boolean DEFAULT false
FarmerDeliveries
ID : Integer [NN] DEFAULT UID()
DateDone : Date [NN] DEFAULT Current_Date
SocietiesID : Integer
FarmersID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID]
Bags : Float <16> [Computed]
Kilos : Float <16> [NN] DEFAULT 0
UnitPrice : Decimal <19, 4> [NN] DEFAULT 0
Value : Decimal <19, 4> [Computed]
DatePaid : Date
Paid : Boolean [Computed]
DateCreated : Timestamp [NN] DEFAULT Current_Timestamp
AuthorID : Integer
Complete : Boolean [NN] DEFAULT false
PurchaseNumber : VarChar<30> [Generated]
WaybillNumber : VarChar<50>
[illegible] : VarChar<25>
CoopTransactions
ID : Integer [NN] DEFAULT UID()
DateDone : Date
SocietiesID : Integer
FarmersID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID]
StatusID : Integer
TransactionsTypeID : Integer
ReceivedFromFarmer : Decimal <19, 4> [NN] DEFAULT 0
PaidToFarmer : Decimal <19, 4> [NN] DEFAULT 0
Memo : VarChar<200>
DateCreated : Timestamp DEFAULT Current_TimeStamp
Complete : Boolean DEFAULT false
Calls
ID : Integer [NN] DEFAULT UID()
OID : Integer DEFAULT OID('CIS')
DateDone : Date [NN] DEFAULT Current_Date
DateComplete : Date
Name : VarChar<250>
PersonID : Integer
StaffNotifyingID : Integer [[Properties]
CurrentUser=1]
StaffResponsibleID : Integer [[Properties]
CurrentUser=1]
CategoryID : Integer
SeverityID : Integer
StatusID : Integer
InitialMemo : CLOB [NN]
ResponseMemo : CLOB
DateCreated : Timestamp DEFAULT Current_TimeStamp
Complete : Boolean [NN] DEFAULT false
FullName : VarChar<80> [Computed]
StaffInvolvedIDList : VarChar<500> [[Properties]
IDList=1
IDListTableName=Staff
IDListWHERESQL=WHERE Current=true]
Staff
ID : Integer [NN] DEFAULT UID()
SupervisorID : Integer [[Properties]
Reuselast=1]
StaffTypeID : Integer
PositionID : Integer
StartDate : Date
EndDate : Date
Current : Boolean [NN] DEFAULT true
MembershipDetails
ID : Integer [NN] DEFAULT UID()
FarmersID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID]
SocietiesID : Integer
DateRenewed : Date DEFAULT MembershipStartDate()
DuesPaid : Decimal <19, 4> [NN] DEFAULT 0
Volume : Float <16> DEFAULT 0
DateCreated : Timestamp DEFAULT Current_TimeStamp
Current : Boolean DEFAULT true
AuthorID : Integer
FarmFields
ID : Integer [NN] DEFAULT UID()
SocietiesID : Integer
FarmersID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID]
DateDone : Date [NN] DEFAULT Current_Date
DateAcquired : Date
DateSold : Date
PlotCode : VarChar<20>
AcreageCertified : Float <16> [NN] DEFAULT 0
AcreageCocoa : Float <16> [NN] DEFAULT 0
AcreageTotal : Float <16> [NN] DEFAULT 0
MajorSeasonYield : Float <16> [NN] DEFAULT 0
MinorSeasonYield : Float <16> [NN] DEFAULT 0
TotalYield : Float <16> [Computed]
YieldEstimate : Float <16> [NN] DEFAULT 0
Latitude : Float <16> DEFAULT 0
Longitude : Float <16> DEFAULT 0
DateCreated : Timestamp DEFAULT Current_Timestamp
Current : Boolean [Computed]
FarmMapped : Boolean [Computed]
Caretakers
ID : Integer [NN] DEFAULT UID()
DateDone : Date [ReuseLast]
SocietiesID : Integer
FarmersID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID]
DateCaretakerEmployed : Date
CaretakerName : VarChar<50>
TenureTypeID : Integer
IDCardNumber : VarChar<30>
CaretakerGenderID : Integer [Types, People, GenderID]
PhoneNumbers : VarChar<100> [Generated]
HasLabourContract : Boolean [NN] DEFAULT false
DateCreated : Timestamp DEFAULT Current_TimeStamp
Current : Boolean DEFAULT true
ElectionCandidates
ID : Integer [NN] DEFAULT UID()
SocietyElectionsID : Integer
CandidatesID : Integer [Dependent, ElectionCandidatesDependentLUList, SocietyElectionsID, Farmers]
ElectionPositionID : Integer
NumberOfVotes : Float <16> [NN] DEFAULT 0
DateCreated : Timestamp DEFAULT Current_Timestamp
Inspections
ID : Integer [NN] DEFAULT UID()
SocietiesID : Integer
FarmersID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID]
DateDone : Date [NN] DEFAULT Current_Date
CountPermanentWorkers : Float <16> [NN] DEFAULT 0
CountTemporaryWorkers : Integer DEFAULT 0
EstimatedVolume : Float <16> [NN] DEFAULT 0
PreviousYearTotalHarvest : Float <16> [NN] DEFAULT 0
TotalCertifiedArea : Float <16> [NN] DEFAULT 0
TotalNumPlots : Float <16> [NN] DEFAULT 0
TotalFarmArea : Float <16> [NN] DEFAULT 0
Delivered1YearAgo : Float <16> [NN] DEFAULT 0
Delivered2YearsAgo : Float <16> [NN] DEFAULT 0
Delivered3YearsAgo : Float <16> [NN] DEFAULT 0
InspectorID : Integer [CurrentUser]
DateCreated : Timestamp DEFAULT Current_Timestamp
Current : Boolean DEFAULT true
HouseholdSize : Float <16> [NN] DEFAULT 0
CocoaVarieties : VarChar<30>
Societies
ID : Integer [NN] DEFAULT UID()
DepotsID : Integer
SocietiesStationMark : VarChar<20> [NN] DEFAULT ' - unknown - '
Name : VarChar<40>
RegionsID : Integer [Custom, Regions, CoopLUList]
SocietiesTypeID : Integer
StatusID : Integer
DateJoined : Date DEFAULT Current_Date
DateLeft : Date
DateCreated : Timestamp DEFAULT Current_TimeStamp
Current : Boolean DEFAULT true
AuthorID : Integer
FullName : VarChar<100> [Computed]
SocietyEvaluations
ID : Integer [NN] DEFAULT UID()
SocietiesID : Integer
DateDone : Date [NN]
InspectorID : Integer
Findings : CLOB
GenderEqualityID : Integer
RegularMeetings : Boolean [NN] DEFAULT False
MeetingsPerYear : Float <16> [NN] DEFAULT 0
AccessibilityID : Integer
MinutesBookKept : Boolean [NN] DEFAULT False
MinutesBookSigned : Boolean [NN] DEFAULT False
DocumentsWellFilled : Boolean [NN] DEFAULT False
WrittenByLawsInPlace : Boolean [NN] DEFAULT False
InterestLevelID : Integer
ApplicationStatusID : Integer
UpToDateMembershipListAvailable : Boolean [NN] DEFAULT false
FarmersLedgerBooksPresent : Boolean [NN] DEFAULT False
ProducePaymentBookPresent : Boolean [NN] DEFAULT False
WaybillBookPresent : Boolean [NN] DEFAULT False
HasShed : Boolean [NN] DEFAULT False
HasScales : Boolean [NN] DEFAULT False
HasChemicalsList : Boolean [NN] DEFAULT False
SuggestionsFromFarmers : CLOB
DateCreated : Timestamp DEFAULT Current_TimeStamp
AuthorID : Integer
Current : Boolean DEFAULT true
SocietyOfficerID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID, Farmers]
SocietyActivities
ID : Integer [NN] DEFAULT UID()
SocietiesID : Integer
FundersID : Integer [Types, Projects, FundersID]
DateStarted : Date
DateFinished : Date
Budget : Decimal <19, 4> DEFAULT 0
ProjectOfficersID : Integer
ActivitiesTypeID : Integer
NumberAttending : Float <16> [NN] DEFAULT 0
DateCreated : Timestamp DEFAULT Current_TimeStamp
AuthorID : Integer
Complete : Boolean DEFAULT false
SocietyElections
ID : Integer [NN] DEFAULT UID()
DistrictsID : Integer [Custom, Regions, DistrictsLUList]
SocietiesID : Integer [Dependent, SocietiesByCoopList, DistrictsID]
DateDone : Date
MembersCount : Float <16> DEFAULT 0
PresidentID : Integer [Generated]
VicePresidentID : Integer [Generated]
SecretaryID : Integer [Generated]
TreasurerID : Integer [Generated]
RecorderID : Integer [Generated]
Delegate1ID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID, Farmers]
Delegate2ID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID, Farmers]
DateCreated : Timestamp DEFAULT Current_TimeStamp
Current : Boolean DEFAULT true
OverseeingOfficerID : Integer
Depots
ID : Integer [NN] DEFAULT UID()
Name : VarChar<40>
ReportingOrder : Integer
ManagersID : Integer
RegionsID : Integer [Custom, Regions, CoopLUList]
CocoBodMark : VarChar<20>
TargetBags : Float <16> DEFAULT 0
DateCreated : Timestamp DEFAULT Current_Timestamp
Current : Boolean DEFAULT true
TransportAllowance : Decimal <19, 4> [NN] DEFAULT 0
Projects
ID : Integer [NN] DEFAULT UID()
SocietiesID : Integer
FundersID : Integer
DateStarted : Date
DateFinished : Date
Budget : Decimal <19, 4> DEFAULT 0
ProjectOfficersID : Integer
SuccessRatingID : Integer
ProjectsTypeID : Integer
SanitationDiseaseImpactID : Integer
ReducesDistanceTravelledID : Integer
IncomeGeneration : Boolean [NN] DEFAULT false
DirectJobCreation : Float <16> [NN] DEFAULT 0
InDirectJobCreation : Float <16> [NN] DEFAULT 0
SchoolEnrollmentCount : Float <16> [NN] DEFAULT 0
SchoolAttendencePercentage : Float <16> [NN] DEFAULT 0
SchoolAcademicAttainmentID : Integer
DateCreated : Timestamp DEFAULT Current_TimeStamp
AuthorID : Integer
Complete : Boolean DEFAULT false
Regions
ID : Integer [NN] DEFAULT UID()
Name : VarChar<40>
ParentRegionsID : Integer
RegionsTypeID : Integer
Latitude : Float <16> [NN] DEFAULT 0
Longitude : Float <16> [NN] DEFAULT 0
DateCreated : Timestamp DEFAULT Current_TimeStamp
Current : Boolean DEFAULT true
ManagersID : Integer [Custom, Staff, DepotManagersLUList]
DistrictElections
ID : Integer [NN] DEFAULT UID()
DateDone : Date
DistrictsID : Integer [Custom, Regions, DistrictsLUList]
VoterCount : Float <16> [NN] DEFAULT 0
PresidentID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
VicePresidentID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
SecretaryID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
TreasurerID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
ExecMember1ID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
ExecMember2ID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
ExecMember3ID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
OverseeingOfficerID : Integer
DateCreated : Timestamp DEFAULT Current_TimeStamp
Current : Boolean DEFAULT true
Questionnaires
ID : Integer [NN] DEFAULT UID()
Name : VarChar<50>
Description : CLOB
StandardsIDList : VarChar<250> [IDList]
AuthorID : Integer
DateValid : Date
DateCreated : Timestamp [NN] DEFAULT Current_Timestamp
Current : Boolean [NN] DEFAULT true
QuestionSections
ID : Integer [NN] DEFAULT UID()
OrderID : Integer
Name : VarChar<100>
Description : CLOB
AuthorID : Integer
DateCreated : Timestamp DEFAULT Current_Timestamp
FullName : VarChar<100> [Generated]
Questions
ID : Integer [NN] DEFAULT UID()
QuestionnairesID : Integer
SectionsID : Integer
OrderID : Integer [NN] DEFAULT 1
Question : CLOB
Guidance : CLOB
Justification : CLOB
CorrectAnswer : CLOB
DateCreated : Timestamp [NN] DEFAULT Current_Timestamp
Current : Boolean [NN] DEFAULT true
FullName : VarChar<200> [Generated]
AuthorID : Integer
AnswersTypeID : Integer
PossibleAnswers : CLOB
AnswersDefaultScript : CLOB
Required : Boolean [NN] DEFAULT false
Answers
ID : Integer [NN] DEFAULT UID()
InspectionsID : Integer
QuestionsID : Integer [Dependent, AnswersQuestionsDepLUList, InspectionsID]
Correct : Boolean [NN] DEFAULT false
NotApplicable : Boolean [NN] DEFAULT false
Memo : CLOB
DateCreated : Timestamp [NN] DEFAULT Current_Timestamp
Current : Boolean [NN] DEFAULT true
Complete : Boolean [NN] DEFAULT false [[Properties]
LockIfCompleteSecurityLevel=101]
AuthorID : Integer
AnswerYes : Boolean [NN] DEFAULT false
AnswerNo : Boolean [NN] DEFAULT false
AnswerDate : Date
AnswerInteger : Integer [NN] DEFAULT 0
AnswerFloat : Float <16> [NN] DEFAULT 0
AnswerCurrency : Decimal <19, 4> [NN] DEFAULT 0
AnswerText : VarChar<500>
Answer : VarChar<500> [Computed]
NonConformities
ID : Integer [NN]
NonConformitiesTypeID : Integer
CategoryID : Integer
CorrectiveAction : CLOB
CommitteeComments : CLOB
DateDeadline : Date
StatusID : Integer DEFAULT 832
DateCreated : Timestamp [NN] DEFAULT Current_Timestamp
Complete : Boolean [NN] DEFAULT false
AuthorID : Integer

KKSys main entities, displayed in the DM Modeller, showing the main data-entities, with the entities relating to farmers shown in green, societies shown in orange and questionnaires shown in purple.

Society related database elements

Purpose

The data-schema elements in this part of the KKSys allow management of data relating to **Societies** and **Zones**. Each of these entities is linked to a set of child-entities: **Society Evaluations, District Elections, District Elections, Society Activites, Projects, Society Elections and Regions**. These child-entities enable the recording of many aspects of data that are required for the day-to-day operation of Kuapa Kokoo.

These entities exist to answer questions such as:

- How many Zones does KKFU work with?
- How many of these Zones are active, new or inactive?
- What Elections, Evalutations and Projects have been done with the Zones and Societies?
- For the most recent Elections, which Farmers were elected and are now Chair, treasurer, secretary etc.?

Through Links from these entities to other parts of the database it is possible to answer questions like:

- How many farmers are members of each Society or Zone?
- Have farmers in this Society or Zone paid their membership fees/dues and received their membership Bonus?
- How many bags of cocoa have been deliveried by each Society or Zone?

These are only example questions, and many other types of questions can be answered, including questions relating to issues such as how the data changes over time, whether Zones or Societies are growing or shrinking etc.

Examples which show how to generate the answers to the above questions are included in the individual sections of help listed below.

It is important to remember that some data-schema elements are used much more fully than others. For example, up to 2023 the "SocietyActivities" data-entity has not been used at all. Also, some of the data-entites are somewhat poorly designed due to the historical factors. For example the existance of separate entities for "Society Elections" and "District Elections", and the way the "Regions" entity is used could and should be changed and improved in the future. There is really no need for 2 "Elections" entities, and the "Regions" entity is confusing and poorly used. It is possible in the future that the "SocietyActivities" data-entity might start to be used, or be dropped altogether, and that the two Elections entities might be merged together. If changes are made to these entities in KKSys, the changes will be visible within the System Database Modeller .

Some data-entities (such as "Projects") had a period of use by KKFU staff, and have fallen into disuse. Staff at KKFU should review these entities and decide whether to use them or not in future. These under-used and unused entities all have the capacity to serve useful functions within KKFU.

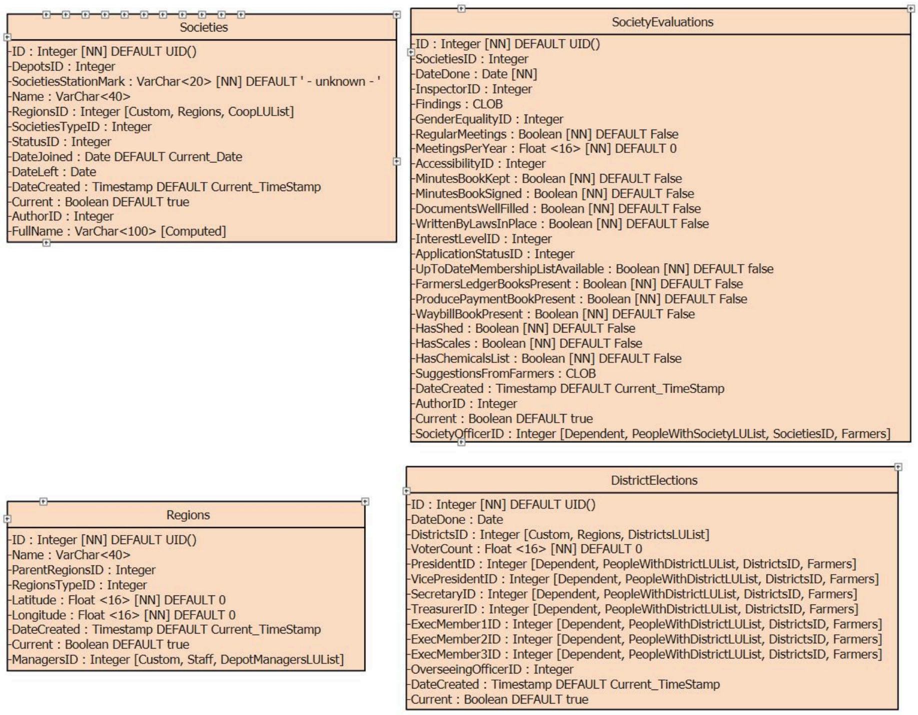
The use and purpose of each of these entities and the child-entities are detailed in individual sections of this help document below, please go to the linked articles for detailed, step by step description of each data-entity

Elements of the Society related sections of the database

The KKSys is a single, whole database. The Society related sections are not separate from the sections managing Farmer, Questionnare or Audit data. The sections have been separated in this help document to make it easier to understand them and get a sense of their inter-relationships and purpose, but the data exists as a whole and all parts of it can be accessed at any time.

Societies, Society Evaluations, District Elections and Regions

The image below shows each of these data-entities and lists all the **data-fields** present in each one, with it's **data-type**. These images give an overview of the data-entities which is fully detailed in the individual linked sections listed above.



Societies

- ID : Integer [NN] DEFAULT UID()
- DepotsID : Integer
- SocietiesStationMark : VarChar<20> [NN] DEFAULT ' - unknown - '
- Name : VarChar<40>
- RegionsID : Integer [Custom, Regions, CoopLUList]
- SocietiesTypeID : Integer
- StatusID : Integer
- DateJoined : Date DEFAULT Current_Date
- DateLeft : Date
- DateCreated : Timestamp DEFAULT Current_TimeStamp
- Current : Boolean DEFAULT true
- AuthorID : Integer
- FullName : VarChar<100> [Computed]

SocietyEvaluations

- ID : Integer [NN] DEFAULT UID()
- SocietiesID : Integer
- DateDone : Date [NN]
- InspectorID : Integer
- Findings : CLOB
- GenderEqualityID : Integer
- RegularMeetings : Boolean [NN] DEFAULT False
- MeetingsPerYear : Float <16> [NN] DEFAULT 0
- AccessibilityID : Integer
- MinutesBookKept : Boolean [NN] DEFAULT False
- MinutesBookSigned : Boolean [NN] DEFAULT False
- DocumentsWellFilled : Boolean [NN] DEFAULT False
- WrittenByLawsInPlace : Boolean [NN] DEFAULT False
- InterestLevelID : Integer
- ApplicationStatusID : Integer
- UpToDateMembershipListAvailable : Boolean [NN] DEFAULT false
- FarmersLedgerBooksPresent : Boolean [NN] DEFAULT False
- ProducePaymentBookPresent : Boolean [NN] DEFAULT False
- WaybillBookPresent : Boolean [NN] DEFAULT False
- HasShed : Boolean [NN] DEFAULT False
- HasScales : Boolean [NN] DEFAULT False
- HasChemicalsList : Boolean [NN] DEFAULT False
- SuggestionsFromFarmers : CLOB
- DateCreated : Timestamp DEFAULT Current_TimeStamp
- AuthorID : Integer
- Current : Boolean DEFAULT true
- SocietyOfficerID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID, Farmers]

Regions

- ID : Integer [NN] DEFAULT UID()
- Name : VarChar<40>
- ParentRegionsID : Integer
- RegionsTypeID : Integer
- Latitude : Float <16> [NN] DEFAULT 0
- Longitude : Float <16> [NN] DEFAULT 0
- DateCreated : Timestamp DEFAULT Current_TimeStamp
- Current : Boolean DEFAULT true
- ManagersID : Integer [Custom, Staff, DepotManagersLUList]

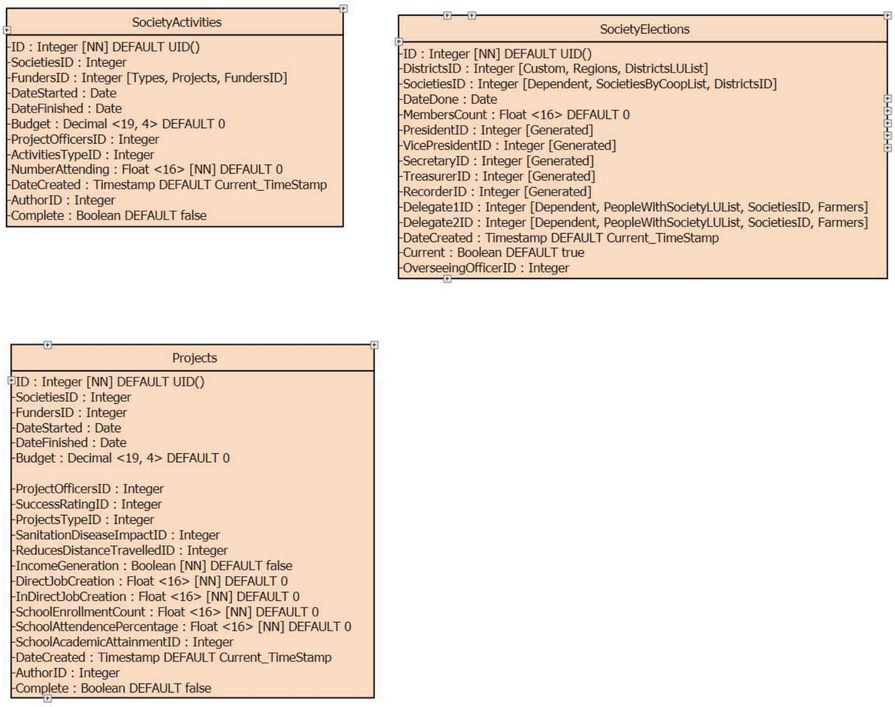
DistrictElections

- ID : Integer [NN] DEFAULT UID()
- DateDone : Date
- DistrictsID : Integer [Custom, Regions, DistrictsLUList]
- VoterCount : Float <16> [NN] DEFAULT 0
- PresidentID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
- VicePresidentID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
- SecretaryID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
- TreasurerID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
- ExecMember1ID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
- ExecMember2ID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
- ExecMember3ID : Integer [Dependent, PeopleWithDistrictLUList, DistrictsID, Farmers]
- OverseeingOfficerID : Integer
- DateCreated : Timestamp DEFAULT Current_TimeStamp
- Current : Boolean DEFAULT true

Societies, SocietyEvaluations, DistrictElections, Regions

Society Activites, Projects, Society Elections

The image below shows each of these data-entities and lists all the **data-fields** present in each one, with it's **data-type.** These images give an overview of the data-entities which is fully detailed in the individual linked sections listed above.



SocietyActivities

- ID : Integer [NN] DEFAULT UID()
- SocietiesID : Integer
- FundersID : Integer [Types, Projects, FundersID]
- DateStarted : Date
- DateFinished : Date
- Budget : Decimal <19, 4> DEFAULT 0
- ProjectOfficersID : Integer
- ActivitiesTypeID : Integer
- NumberAttending : Float <16> [NN] DEFAULT 0
- DateCreated : Timestamp DEFAULT Current_TimeStamp
- AuthorID : Integer
- Complete : Boolean DEFAULT false

SocietyElections

- ID : Integer [NN] DEFAULT UID()
- DistrictsID : Integer [Custom, Regions, DistrictsLUList]
- SocietiesID : Integer [Dependent, SocietiesByCoopList, DistrictsID]
- DateDone : Date
- MembersCount : Float <16> DEFAULT 0
- PresidentID : Integer [Generated]
- VicePresidentID : Integer [Generated]
- SecretaryID : Integer [Generated]
- TreasurerID : Integer [Generated]
- RecorderID : Integer [Generated]
- Delegate1ID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID, Farmers]
- Delegate2ID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID, Farmers]
- DateCreated : Timestamp DEFAULT Current_TimeStamp
- Current : Boolean DEFAULT true
- OverseeingOfficerID : Integer

Projects

- ID : Integer [NN] DEFAULT UID()
- SocietiesID : Integer
- FundersID : Integer
- DateStarted : Date
- DateFinished : Date
- Budget : Decimal <19, 4> DEFAULT 0

- ProjectOfficersID : Integer
- SuccessRatingID : Integer
- ProjectsTypeID : Integer
- SanitationDiseaseImpactID : Integer
- ReducesDistanceTravelledID : Integer
- IncomeGeneration : Boolean [NN] DEFAULT false
- DirectJobCreation : Float <16> [NN] DEFAULT 0
- InDirectJobCreation : Float <16> [NN] DEFAULT 0
- SchoolEnrollmentCount : Float <16> [NN] DEFAULT 0
- SchoolAttendencePercentage : Float <16> [NN] DEFAULT 0
- SchoolAcademicAttainmentID : Integer
- DateCreated : Timestamp DEFAULT Current_TimeStamp
- AuthorID : Integer
- Complete : Boolean DEFAULT false

SocietyActivities, Projects, SocietyElections

Societies and Zones

Purpose

The Societies data-table holds data for Societies and Zones KKFU work with. It is a **master data-table** which links to many other data-tables: such as Farmers and Staff, but also Inspections.

The Societies data-table includes fields such as the "SocietiesStationMark", and "DateJoined".

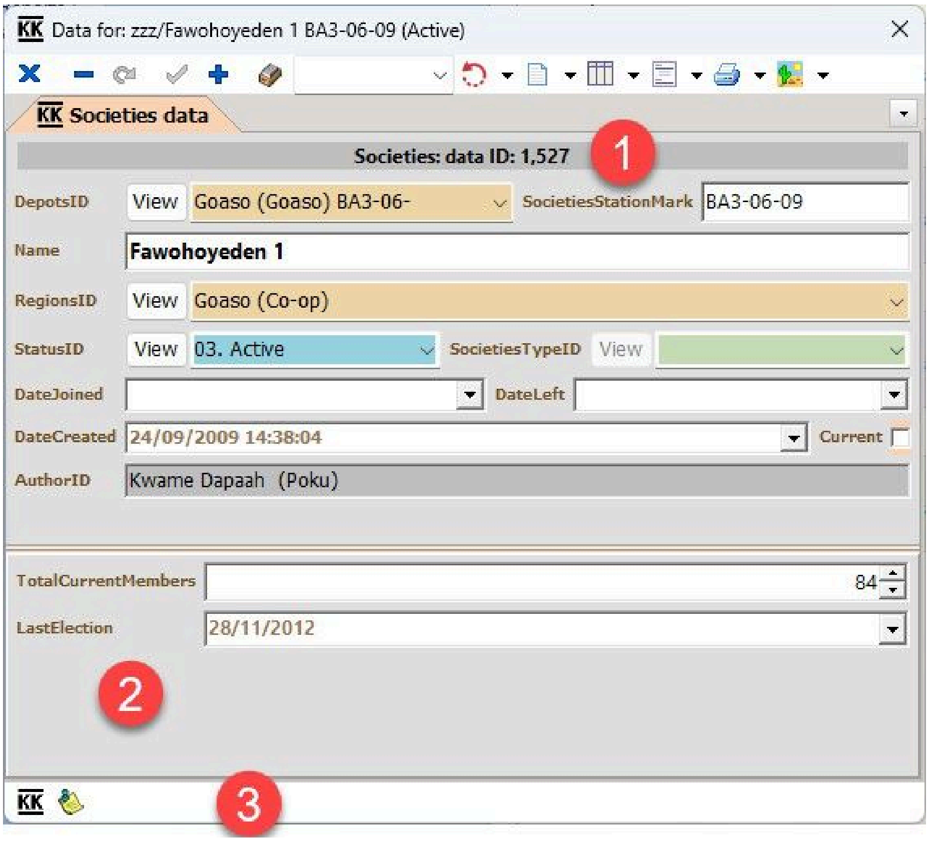
Societies and Zones are captured in a single data-entity called "Societies". There is no separate "Zones" data-entity. This is done because Societies and Zones share many, infact most of their features. Both have officers who are chosen by election, both have memberships, so it is sensible to marry the two entities together.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

Note that the separate data-entity called "Regions" is used to create a list of all geographical locations used by KKFU in their management processes such as the location of Depots, cocoa-regions, co-op's, clusters and so on.

How and where to access Societies and Zones data

The image below shows the "Societies" Edit Form. This is accessed via its own entry in the System Entities screen. Societies are a master entity. People are a **child** of **Societies**, and many other linkages to different parts of the database connect from this point.



Data for: zzz/Fawohoyeden 1 BA3-06-09 (Active)

Societies data

Societies: data ID: 1,527

DepotsID: Goaso (Goaso) BA3-06-

SocietiesStationMark: BA3-06-09

Name: Fawohoyeden 1

RegionsID: Goaso (Co-op)

StatusID: 03. Active

SocietiesTypeID:

DateJoined:

DateLeft:

DateCreated: 24/09/2009 14:38:04

Current: ☐

AuthorID: Kwame Dapaah (Poku)

TotalCurrentMembers: 84

LastElection: 28/11/2012

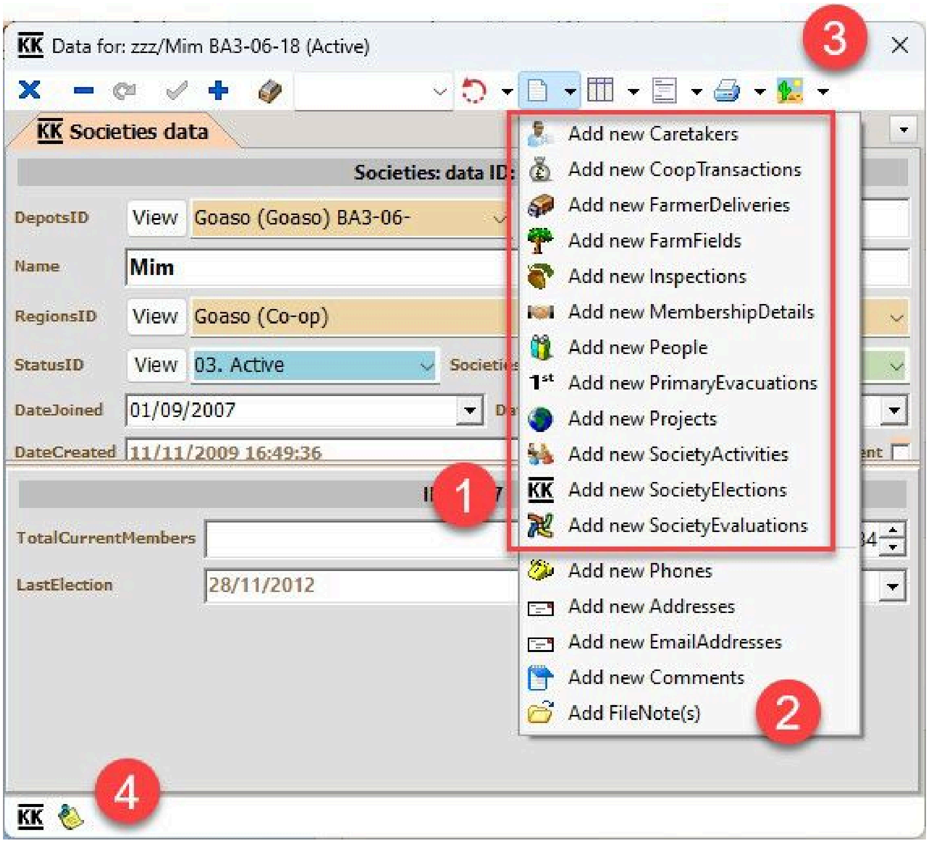
Societies Edit Form

1. Main data entry fields for the Society / Zone, including SocietiesStationMark and other data.
2. **Summary data** relating to the current Society, with the count of current members and details of the latest election date, this can be extended by KKFU if needed.
3. Links to SocietyElections records for this Society, and any Comments that have been written about this Society.

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Linkages to the Societies entity

From the Societies Entity it is possible to see lists of linked data, and add linked data. The image above shows the "New Items" menu open in the Societies Entity, with the linked data that can be added.



Data for: zzz/Mim BA3-06-18 (Active)

Societies data

Societies: data ID:

DepotsID View Goaso (Goaso) BA3-06-

Name Mim

RegionsID View Goaso (Co-op)

StatusID View 03. Active

DateJoined 01/09/2007

DateCreated 11/11/2009 16:49:36

TotalCurrentMembers

LastElection 28/11/2012

Linkages to the Societies entity

1. Societies can link to all the entities shown: Caretakers, Inspections, People and many more. In many cases these linkages are coupled with a Linkage to the **Farmers** entity, so individual records relate to the farmer as well.
2. The Societies entity is automatically linked to several "base entities" which are part of the Orixa framework, to allow storage of data such as Addresses, Phone-numbers and so on.
3. The Societies entity is linked to the **Images** system, so if needed photos of the society or its membership can be added to the database.
4. Where linked records are added to the Society, they will appear in the "List-List" at the bottom of the edit-form.

Data-schema: full details of the data-fields and their purpose in the Societies data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
DepotsID (Link-ID)	Links to the Depots table	Selected from list by User	Will default to the currently open Depots ID

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
SocietiesStationMark (Text)	Self explanitory	Entered by user	Default value: ' - unknown - '
Name (Text)	Self explanitory	Entered by user	
RegionsID (Link-ID)	Links to the Regions table, identifying the geographical place in Ghana where the Society is based.	Selected from list by User	The list is generated from entries in the "Regions" table, using a list based on the Resource "CoopLUList"
SocietiesTypeID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
StatusID (Link-ID)	Links to the Status table	Pick from list of possible Status values.	
DateJoined (Date)	Self explanitory	Entered by user	Default value: Current Date
DateLeft (Date)	Self explanitory	Entered by user	
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	Default value: true
AuthorID (Integer)	Self explanitory		Automatically set by Orixa, not under the control of users or developers.
FullName (Text)	Read-Only, computed by Orixa, based on values in the database.	Value generated by Orixa by combining the SocietiesStationMark and the Name columns.	

How to use

Newly formed Zones should be added to the database by Field Officers, with a status of "Newly Formed". The list of newly formed Zones can then be referred to so that these new Zones are included in necessary training and on-boarding. Once a Societies or Zones record exists, Farmers can be added one by one, or using any of the Rapid-Data-Entry grids which are built into the system.

District Elections

The District Elections data-table holds data for elections at the District level withinKKFU. It is a **linking data-table** which links any District in the KKFU database to series of Farmer records.

The District Elections data-table includes data-fields to record the people who have been elected in KKFU Society District Elections. It includes the Position to which they were elected (ie "President", "Treasurer" etc.). This data-table can be used to return reports of the current or past committee members for all of KKFU's Districts.

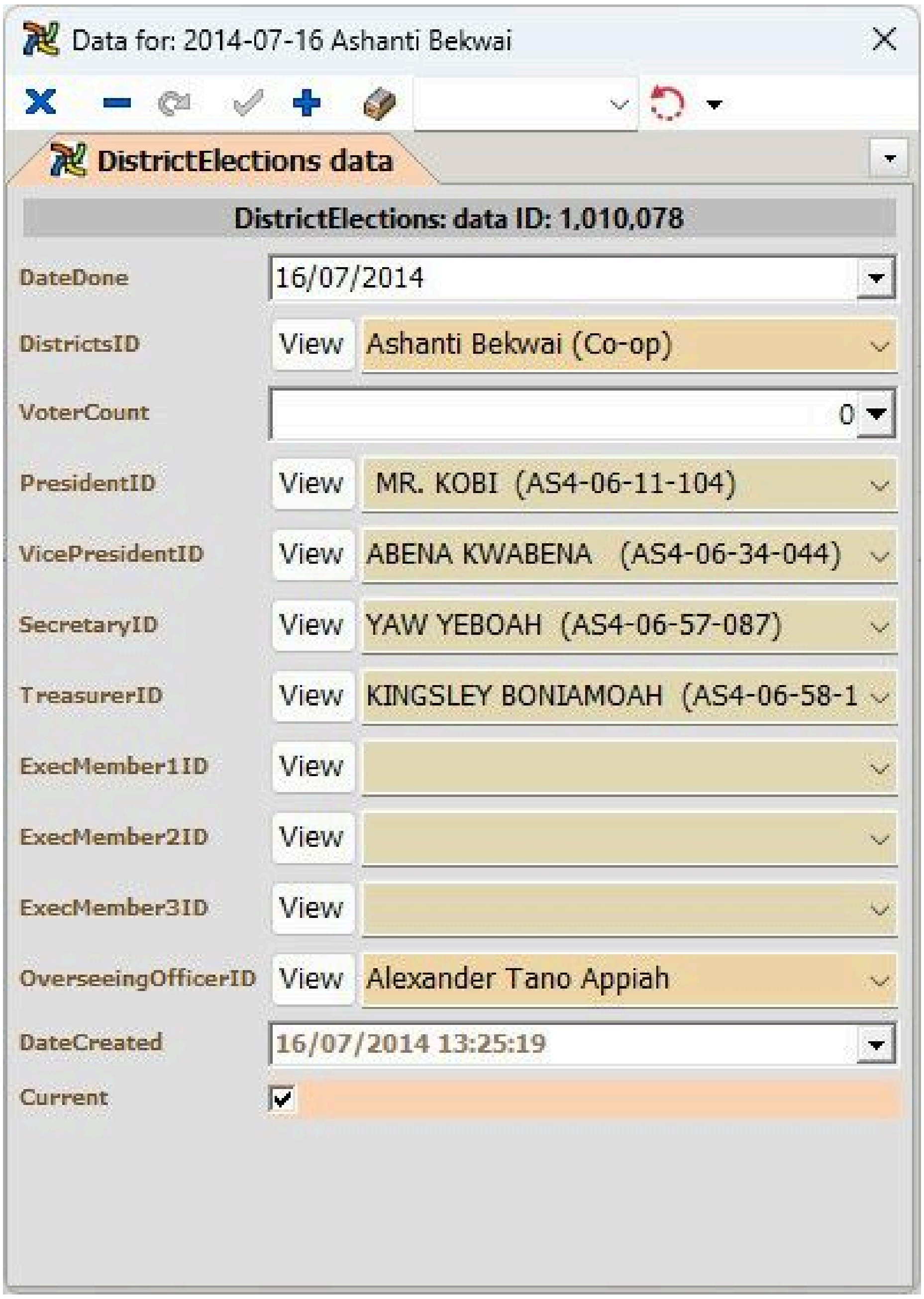
It can also be used to find things like the phone numbers and contact information for all the Presidents or Secretaries of at the District level provided that the data is kept up-to-date.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

NOTE: The DistrictElections entity was added to KKSys in around 2014, but because IT staff employed at the time left the company it has never been used. It is still available and can start to be used at any time.

How and where to access District Elections data

The image below shows the "DistrictElections" Edit Form. This is accessed via its own entry in the System Entities screen. Records in this tables are **children** of the **Regions** entity.



Data for: 2014-07-16 Ashanti Bekwai

DistrictElections data

DistrictElections: data ID: 1,010,078

DateDone		16/07/2014
DistrictsID	View	Ashanti Bekwai (Co-op)
VoterCount		0
PresidentID	View	MR. KOBI (AS4-06-11-104)
VicePresidentID	View	ABENA KWABENA (AS4-06-34-044)
SecretaryID	View	YAW YEBOAH (AS4-06-57-087)
TreasurerID	View	KINGSLEY BONIAMOAH (AS4-06-58-1
ExecMember1ID	View	
ExecMember2ID	View	
ExecMember3ID	View	
OverseeingOfficerID	View	Alexander Tano Appiah
DateCreated		16/07/2014 13:25:19
Current		☑

DistrictElections edit form

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Data-schema: full details of the data-fields and their purpose in the data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
DateDone (Date)	Self explanitory	Entered by user	

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
DistrictsID (Link-ID)	Links to the Regions table	Selected from list by User	Will default to the currently open Regions ID
VoterCount (Number)	Total number of votes cast in the election.	Any number value	Default value: 0
PresidentID (Link-ID)	Links to the Farmers table	Selected from list by User	Dependent lookup list, generated by finding Farmers for the selected District using the Resource: PeopleWithDistrictLUList
VicePresidentID (Link-ID)	Links to the Farmers table	Selected from list by User	Dependent lookup list, generated by finding Farmers for the selected District using the Resource: PeopleWithDistrictLUList
SecretaryID (Link-ID)	Links to the Farmers table	Selected from list by User	Dependent lookup list, generated by finding Farmers for the selected District using the Resource: PeopleWithDistrictLUList
TreasurerID (Link-ID)	Links to the Farmers table	Selected from list by User	Dependent lookup list, generated by finding Farmers for the selected District using the Resource: PeopleWithDistrictLUList
ExecMember1ID (Link-ID)	Links to the Farmers table	Selected from list by User	Dependent lookup list, generated by finding Farmers for the selected District using the Resource: PeopleWithDistrictLUList
ExecMember2ID (Link-ID)	Links to the Farmers table	Selected from list by User	Dependent lookup list, generated by finding Farmers for the selected District using the Resource: PeopleWithDistrictLUList
ExecMember3ID (Link-ID)	Links to the Farmers table	Selected from list by User	Dependent lookup list, generated by finding Farmers for the selected District using the Resource: PeopleWithDistrictLUList

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
OverseeingOfficerID (Link-ID)	Links to the Staff table	Selected from list by User	
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	Default value: true

Society Elections

The Society Elections data-table holds data for elections at the Society level within KKFU. It is a **linking data-table** which links any Society in the KKFU database to series of Farmer records, which are the elected officials for any year,=.

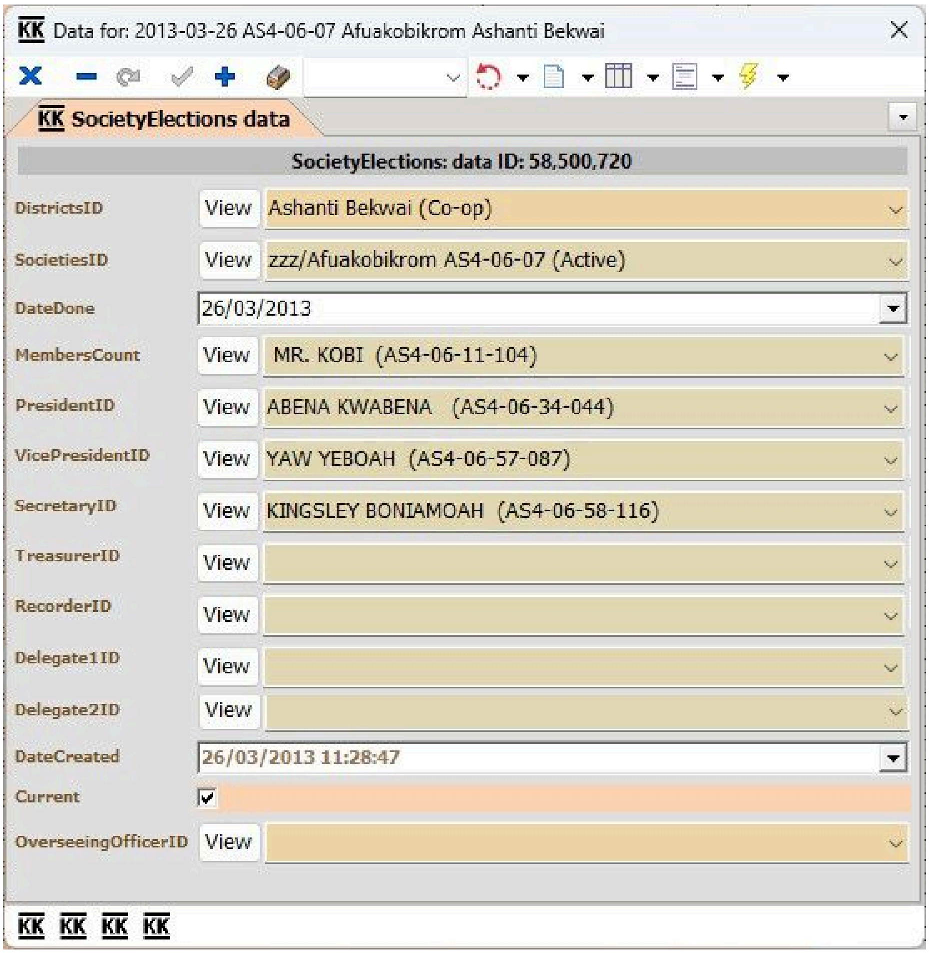
The Society Elections data-table includes data-fields to record the people who have been elected in KKFU Society District Elections. It includes the Position to which they were elected (ie "President", "Treasurer" etc.). This data-table can be used to return reports of the current or past committee members for all of KKFU's Districts. These values are all pulled through from the "ElectionCandidates" data-table.

It can also be used to find things like the phone numbers and contact information for all the Presidents or Secretaries of any series of Societies, provided that the data is kept up-to-date.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

How and where to access Society Elections data

The image below shows the "SocietyElections" Edit Form. This is accessed via its own entry in the System Entities screen. Records in this tables are **children** of the **Regions** and **Societies** entities.



Data for: 2013-03-26 AS4-06-07 Afuakobikrom Ashanti Bekwai

SocietyElections data

SocietyElections: data ID: 58,500,720

DistrictsID	View	Ashanti Bekwai (Co-op)
SocietiesID	View	zzz/Afuakobikrom AS4-06-07 (Active)
DateDone		26/03/2013
MembersCount	View	MR. KOBI (AS4-06-11-104)
PresidentID	View	ABENA KWABENA (AS4-06-34-044)
VicePresidentID	View	YAW YEBOAH (AS4-06-57-087)
SecretaryID	View	KINGSLEY BONIAMOAH (AS4-06-58-116)
TreasurerID	View	
RecorderID	View	
Delegate1ID	View	
Delegate2ID	View	
DateCreated		26/03/2013 11:28:47
Current		☑
OverseeingOfficerID	View	

Societies Election edit form

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Data-schema: full details of the data-fields and their purpose in the data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
DistrictsID (Link-ID)	Links to the Regions table	Selected from list by User	Custom, Regions, DistrictsLUList
SocietiesID (Link-ID)	Links to the Societies table	Selected from list by User	Will default to the currently open Societies ID
DateDone (Date)	Self explanitory	Entered by user	
MembersCount (Number)	Count of members for voting process, entered by KKFU staff.	Any number value	Default value: 0
PresidentID (Integer)	ReadOnly, value generated by Orixa based on the successful candidate in the "ElectionCandidates" table.	Value generated by Orixa	
VicePresidentID (Integer)	ReadOnly, value generated by Orixa based on the successful candidate in the "ElectionCandidates" table.	Value generated by Orixa	
SecretaryID (Integer)	ReadOnly, value generated by Orixa based on the successful candidate in the "ElectionCandidates" table.	Value generated by Orixa	
TreasurerID (Integer)	ReadOnly, value generated by Orixa based on the successful candidate in the "ElectionCandidates" table.	Value generated by Orixa	
RecorderID (Integer)	ReadOnly, value generated by Orixa based on the successful candidate in the "ElectionCandidates" table.	Value generated by Orixa	
Delegate1ID (Link-ID)	Links to the Farmers table	Selected from list by User	Dependent, PeopleWithSocietyLUList, SocietiesID, Farmers
Delegate2ID (Link-ID)	Links to the Farmers table	Selected from list by User	Dependent, PeopleWithSocietyLUList, SocietiesID, Farmers
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	Default value: true
OverseeingOfficerID (Link-ID)	Links to the Staff table	Selected from list by	

		User	
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.

Society Evaluations

Purpose

The SocietyEvaluations data-table holds data for a range of data-points relating to evaluations of the Societies and Zones KKFU work with. It is a **child data-table** which links to Societies.

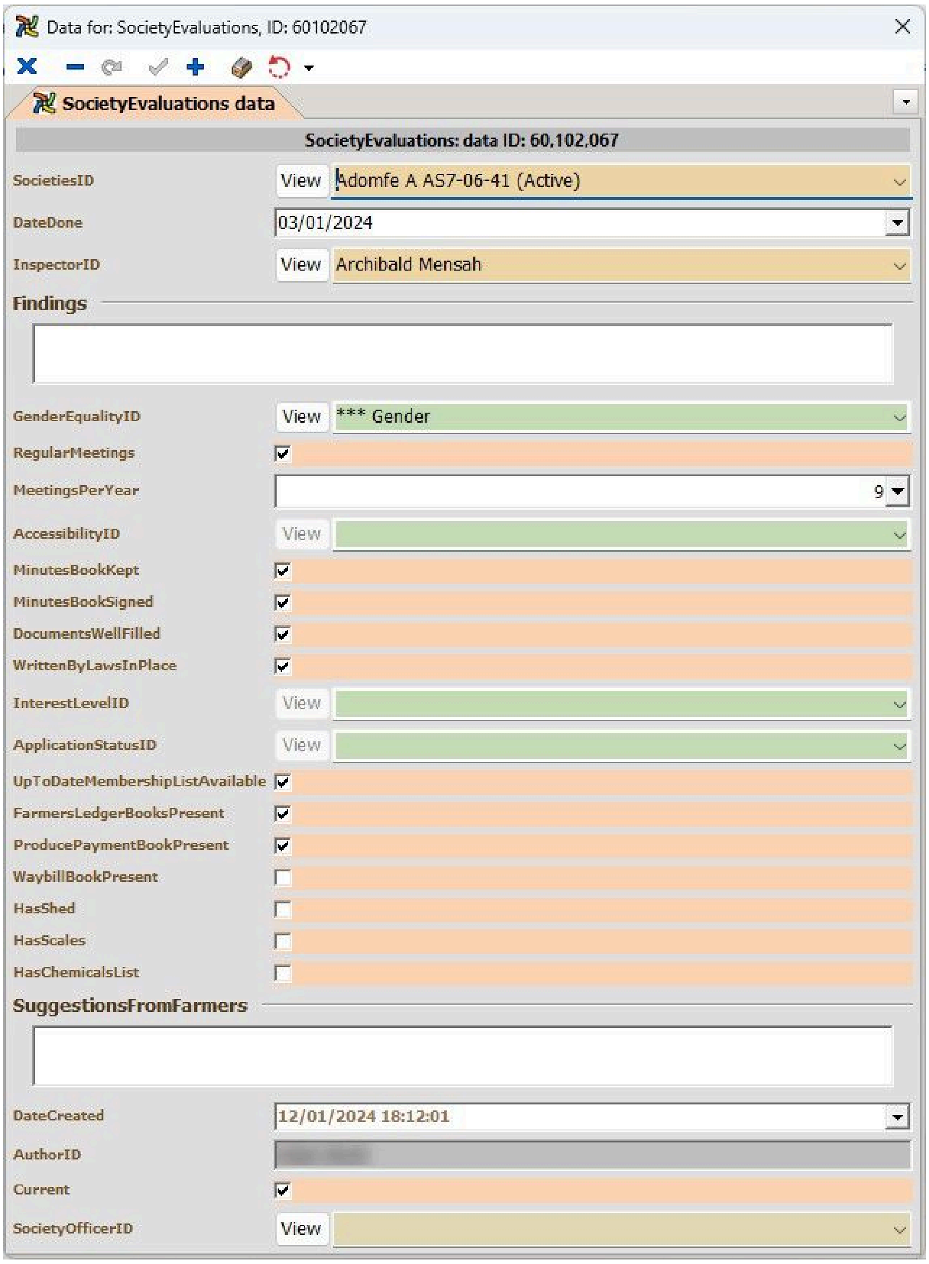
It includes data-fields such as "MeetingsPerYear", to list the number of times the society members meet. Several of the fields are **types** list-fields allowing a **rating** to be selected such as "good" / "fair" / "poor" etc.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

NOTE: The SocietyEvaluations entity was added to KKSys in around 2014, but because IT staff employed at the time left the company it has never been used. It is still available and can start to be used at any time. Prior to serious use the data-structure and data-fields should be reviewed, unnecessary fields can be removed, and more useful fields could be added.

How and when to access Society Evaluations

The edit form is accessible from the child data-entity on the KKSys System Entities scree, and is shown below.



SocietyEvaluations: data ID: 60,102,067

SocietiesID	View Adomfe A AS7-06-41 (Active)
DateDone	03/01/2024
InspectorID	View Archibald Mensah
Findings	
GenderEqualityID	View *** Gender
RegularMeetings	☑
MeetingsPerYear	9
AccessibilityID	View
MinutesBookKept	☑
MinutesBookSigned	☑
DocumentsWellFilled	☑
WrittenByLawsInPlace	☑
InterestLevelID	View
ApplicationStatusID	View
UpToDateMembershipListAvailable	☑
FarmersLedgerBooksPresent	☑
ProducePaymentBookPresent	☑
WaybillBookPresent	☐
HasShed	☐
HasScales	☐
HasChemicalsList	☐
SuggestionsFromFarmers	
DateCreated	12/01/2024 18:12:01
AuthorID	[redacted]
Current	☑
SocietyOfficerID	View

SocietyEvaluations

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Data-schema

Field- Name and Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
SocietiesID (Link-ID)	Links to the Societies table	Selected from list by User	Will default to the currently open Societies ID

Field- Name and Data-type	Description / Purpose	Possible Values	Coding / Automation
DateDone (Date)	Self explanitory	Entered by user	
InspectorID (Link-ID)	Links to the Staff table	Selected from list by User	
Findings (Long Text)	Self explanitory	Entered by user	
GenderEqualityID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
RegularMeetings (true/false)	Self explanitory	True / false	Default value: False
MeetingsPerYear (Number)	Self explanitory	Any number value	Default value: 0
AccessibilityID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
MinutesBookKept (true/false)	Self explanitory	True / false	Default value: False
MinutesBookSigned (true/false)	Self explanitory	True / false	Default value: False
DocumentsWellFilled (true/false)	Self explanitory	True / false	Default value: False
WrittenByLawsInPlace (true/false)	Self explanitory	True / false	Default value: False
InterestLevelID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
ApplicationStatusID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
UpToDateMembershipListAvailable (true/false)	Self explanitory	True / false	Default value: false
FarmersLedgerBooksPresent (true/false)	Self explanitory	True / false	Default value: False
ProducePaymentBookPresent (true/false)	Self explanitory	True / false	Default value: False
WaybillBookPresent (true/false)	Self explanitory	True / false	Default value: False
HasShed (true/false)	Self explanitory	True / false	Default value: False

Field- Name and Data-type	Description / Purpose	Possible Values	Coding / Automation
HasScales (true/false)	Self explanitory	True / false	Default value: False
HasChemicalsList (true/false)	Self explanitory	True / false	Default value: False
SuggestionsFromFarmers (Long Text)	Self explanitory	Entered by user	
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
AuthorID (Integer)	Self explanitory		Automatically set by Orixa, not under the control of users or developers.
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	Default value: true
SocietyOfficerID (Link-ID)	Links to the Farmers table	Selected from list by User	Dependent, PeopleWithSocietyLUList, SocietiesID, Farmers

Society Activities

Purpose

The SocietyActivities data-table holds data for a range of data-points relating to activities of the Societies and Zones KKFU work with. It is a **child data-table** which links to Societies.

It is a sister table to the "Projects" data-table, and is intended to be used to store data about actities such as gender training, literacy training and other work done by KKFU staff with Societies and Zones.

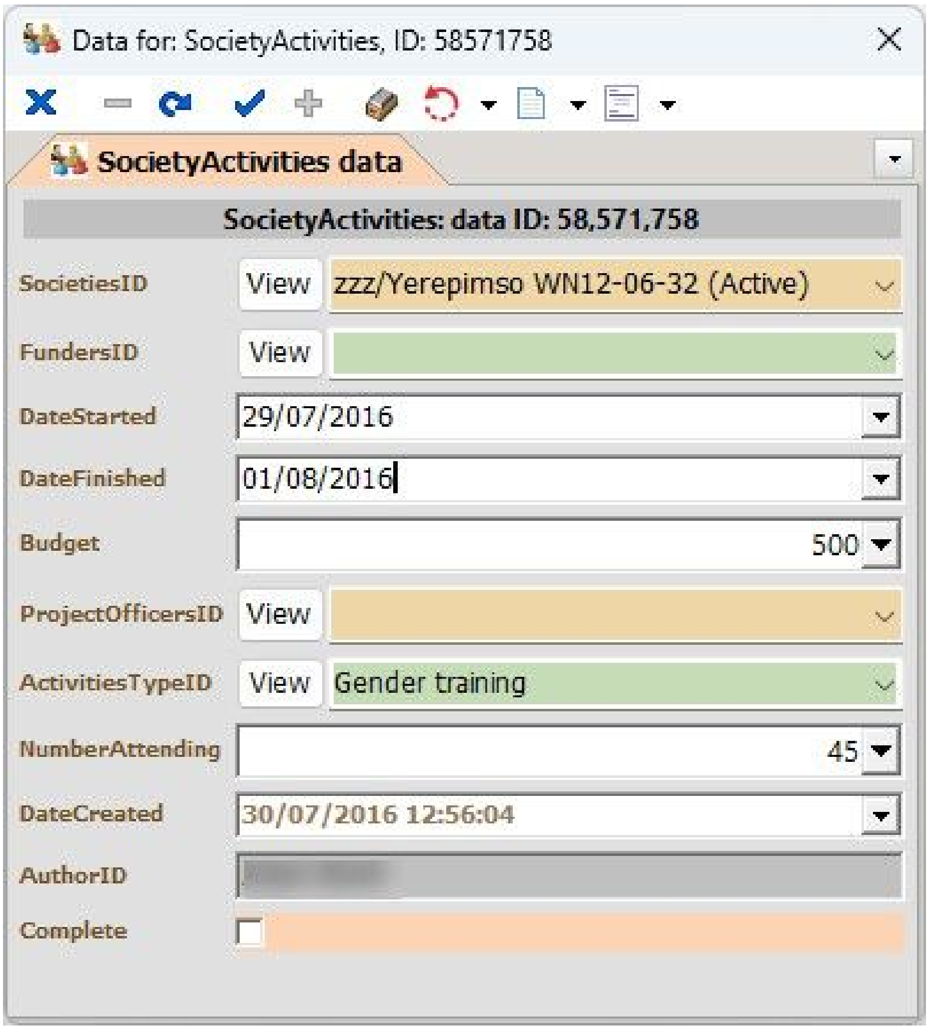
It includes data-fields such as "ActivityType", to list the type of activity which occurred, start and end dates.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

NOTE: The SocietyActivities entity was added to KKSys in the 2010's used for a period of time. As IT staff have left the company it has since stopped being used. It is still present in KKSys, and can be used again by KKFU staff at any point.

How and when to access SocietyActivities

The edit form is accessible from the child data-entity on the KKSys System Entities screen, and is shown below.



SocietyActivities: data ID: 58,571,758

SocietiesID	View zzz/Yerepimso WN12-06-32 (Active)
FundersID	View
DateStarted	29/07/2016
DateFinished	01/08/2016
Budget	500
ProjectOfficersID	View
ActivitiesTypeID	View Gender training
NumberAttending	45
DateCreated	30/07/2016 12:56:04
AuthorID	[redacted]
Complete	□

SocietyActivities

Data-schema

Field- Name and Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
SocietiesID (Link-ID)	Links to the Societies table	Selected from list by User	Will default to the currently open Societies ID
FundersID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	Types, Projects, FundersID
DateStarted (Date)	Self explanitory	Entered by user	
DateFinished (Date)	Self explanitory	Entered by user	
Budget (Currency Value)	The money allocated for this activity	Any number value	Default value: 0
ProjectOfficersID (Link-ID)	Links to the Staff table, select the person who is overseeing the project.	Selected from list by User	
ActivitiesTypeID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
NumberAttending (Number)	Self explanitory	Any number value	Default value: 0
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
AuthorID (Integer)	Self explanitory		Automatically set by Orixa, not under the control of users or developers.
Complete (true/false)	Tick this field to lock the record so further editing is restricted.	True / false	Default value: false

Projects

Purpose

The Projects data-table holds data for a range of data-points relating to evaluations of the Societies and Zones KKFU work with. It is a **child data-table** which links to Societies.

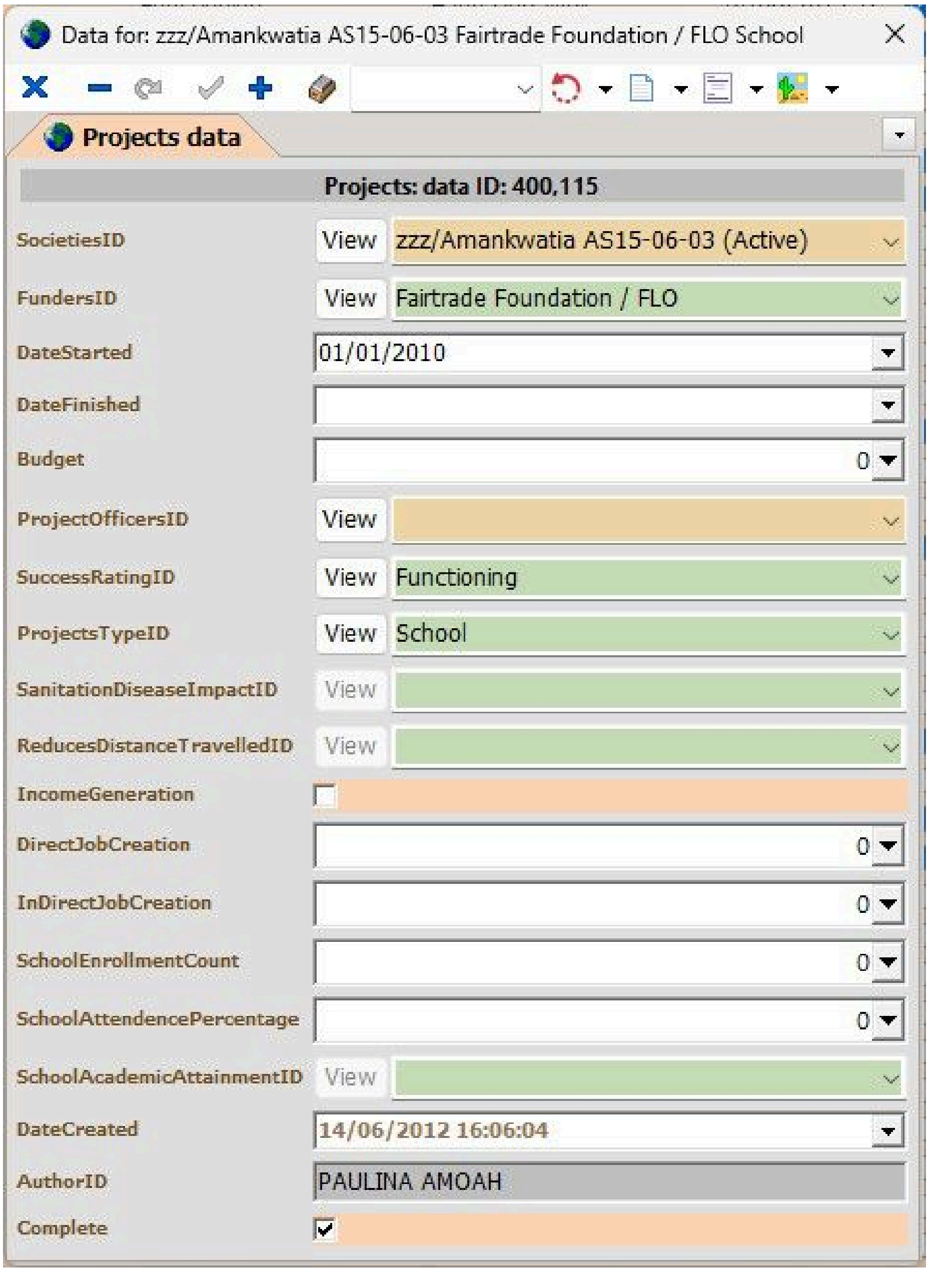
It includes data-fields such as "MeetingsPerYear", to list the number of times the society members meet. Several of the fields are **types** list-fields allowing a **rating** to be selected such as "good" / "fair" / "poor" etc.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

Note that this data-table was used for a period in the 2010's and has since stopped being used. It is still present in KKSys, and can be used again by KKFU staff at any point.

How and when to access Projects

The edit form is accessible from the child data-entity on the KKSys System Entities screen, and is shown below.



Data for: zzz/Amankwatia AS15-06-03 Fairtrade Foundation / FLO School

Projects: data ID: 400,115

SocietiesID	zzz/Amankwatia AS15-06-03 (Active)
FundersID	Fairtrade Foundation / FLO
DateStarted	01/01/2010
DateFinished	
Budget	0
ProjectOfficersID	
SuccessRatingID	Functioning
ProjectsTypeID	School
SanitationDiseaseImpactID	
ReducesDistanceTravelledID	
IncomeGeneration	☐
DirectJobCreation	0
InDirectJobCreation	0
SchoolEnrollmentCount	0
SchoolAttendencePercentage	0
SchoolAcademicAttainmentID	
DateCreated	14/06/2012 16:06:04
AuthorID	PAULINA AMOAH
Complete	☑

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Data-schema

Field- Name and Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
SocietiesID (Link-ID)	Links to the Societies table	Selected from list by User	Will default to the currently open Societies ID
FundersID (Link-ID)	Links to the Types table, which contains a list of funded-projects, allowing reporting on projects by funder.	Pick from list of possible Types values.	
DateStarted (Date)	Self explanitory	Entered by user	
DateFinished (Date)	Self explanitory	Entered by user	
Budget (Currency Value)	Self explanitory	Any number value	Default value: 0
ProjectOfficersID (Link-ID)	Links to the Staff table	Selected from list by User	
SuccessRatingID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
ProjectsTypeID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
SanitationDiseaseImpactID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	

Field- Name and Data-type	Description / Purpose	Possible Values	Coding / Automation
ReducesDistanceTravelledID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
IncomeGeneration (true/false)	Self explanitory	True / false	Default value: false
DirectJobCreation (Number)	Self explanitory	Any number value	Default value: 0
InDirectJobCreation (Number)	Self explanitory	Any number value	Default value: 0
SchoolEnrollmentCount (Number)	Self explanitory	Any number value	Default value: 0
SchoolAttendencePercentage (Number)	Self explanitory	Any number value	Default value: 0
SchoolAcademicAttainmentID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
AuthorID (Integer)	Self explanitory		Automatically set by Orixa, not under the control of users or developers.
Complete (true/false)	Tick this field to lock the record so further editing is restricted.	True / false	Default value: false

Farmer related database elements

Purpose

This section of the database exists to hold all data related to the **farmers** that KKFU works with. Each farmer record has a linked set of child-entities. This allows data such as the farmer's name, Ghana-card number, gender, physical address, phone number and details of their household to be stored.

Each **farmer** starts as a record in the **People** data-table, with a **farmer** record added to hold farmer-specific data elements. The **farmer** is linked to a set of child-entities: **Membership Details, Inspections, Farmer Deliveries, Farm Fields, Co-op Transactions, Caretakers, Election Candidates & Calls**.

These child-entities enable the recording of many aspects of data that are required for the day-to-day operation of Kuapa Kokoo.

These entities exist to answer questions such as:

- What is the total acreage of land farmed by any farmer, or any group of farmers, such as the farmers of one Zone, Society or Region?
- What is the average acreage of female farmers compared to male farmers?
- What is the average age of farmers?
- Which farmers have Caretakers?
- Which farmers have interacted with the KKFU Teleagric System, and what has resulted from these interactions?

Through Links from these entities to other parts of the database it is possible to answer questions like:

- When was this farmer last Audited, have they received a bonus this year?
- What other crops apart from cocoa to they farm?

These are only example questions, and many other types of questions can be answered, including questions relating to issues such as how the data changes over time, whether the number of farmers is growing or shrinking, whether new members are joining etc.

It is important to remember that some data-schema elements are used much more fully than others. For example in KKSys at present the **Inspections, Caretakers and Election Candidates** entities are not very well used. They were added to the database, but then IT Staff overseeing their use left KKFU before their use could be adopted fully.

Also, the **Inspections** entity has more-or-less been over-taken by the **Questionnaires** system (detailed in the next help-topic). The **Inspections** entity was used to record data such as TotalFarmArea and TotalCasualWorkers, together with a number of other data-points. However this form of inspection was never really implemented.

This section of the database contains many of the largest data-entities. Entities such as Membership Details, Farmer Deliveries and Farm Fields contain many hundreds of thousands and in some cases millions of data-records. This means that some care must be taken when running reports and asking questions of the data and fairly large data-sets can result, which can use a lot of system resources.

If changes are made to these entities in KKSys, the changes will be visible within the System Database Modeller .

Some data-entities (such as "Projects") had a period of use by KKFU staff, and have fallen into disuse. Staff at KKFU should review these entities and decide whether to use them or not in future. These under-used and unused entities all have the capacity to serve useful functions within KKFU.

The use and purpose of each of these entities and the child-entities are detailed in individual sections of this help document below, please go to the linked articles for detailed, step by step description of each data-entity

1. People

2. Farmers

3. Membership Details

4. Inspections

5. Farmer Deliveries

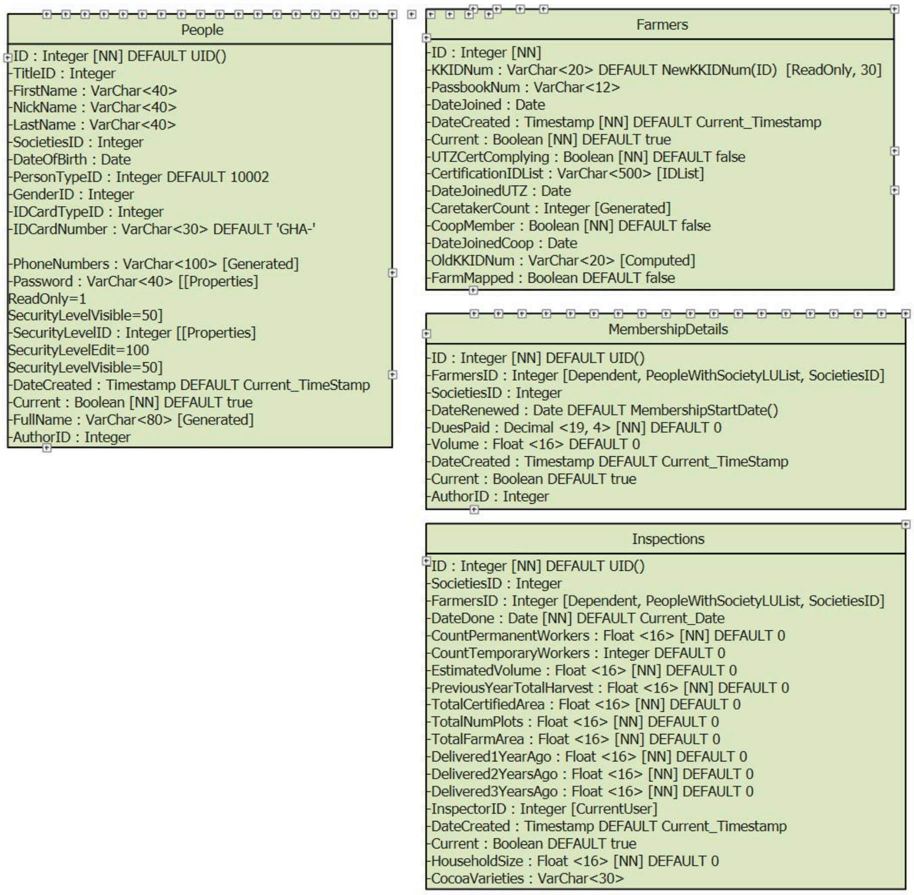
6. Farm Fields

Elements of the farmer-related sections of the database

The KKSys is a single, whole database. The farmer related sections of the database are not separate from the sections managing Society, Questionnare or Audit data. The sections have been separated in this help document to make it easier to understand them and get a sense of their inter-relationships and purpose, but the data exists as a whole and all parts of it can be accessed at any time.

People, Farmers, Membership Details, Inspections

The image below shows each of these data-entities and lists all the **data-fields** present in each one, with it's **data-type**. These images give an overview of the data-entities which is fully detailed in the individual linked sections listed above.



```
People
ID : Integer [NN] DEFAULT UID()
TitleID : Integer
FirstName : VarChar<40>
NickName : VarChar<40>
LastName : VarChar<40>
SocietiesID : Integer
DateOfBirth : Date
PersonTypeID : Integer DEFAULT 10002
GenderID : Integer
IDCardTypeID : Integer
IDCardNumber : VarChar<30> DEFAULT 'GHA-'

PhoneNumbers : VarChar<100> [Generated]
Password : VarChar<40> [[Properties]
ReadOnly=1
SecurityLevelVisible=50]
SecurityLevelID : Integer [[Properties]
SecurityLevelEdit=100
SecurityLevelVisible=50]
DateCreated : Timestamp DEFAULT Current_TimeStamp
Current : Boolean [NN] DEFAULT true
FullName : VarChar<80> [Generated]
AuthorID : Integer
```

```
Farmers
ID : Integer [NN]
KKIDNum : VarChar<20> DEFAULT NewKKIDNum(ID)  [ReadOnly, 30]
PassbookNum : VarChar<12>
DateJoined : Date
DateCreated : Timestamp [NN] DEFAULT Current_Timestamp
Current : Boolean [NN] DEFAULT true
UTZCertComplying : Boolean [NN] DEFAULT false
CertificationIDList : VarChar<500> [IDList]
DateJoinedUTZ : Date
CaretakerCount : Integer [Generated]
CoopMember : Boolean [NN] DEFAULT false
DateJoinedCoop : Date
OldKKIDNum : VarChar<20> [Computed]
FarmMapped : Boolean DEFAULT false
```

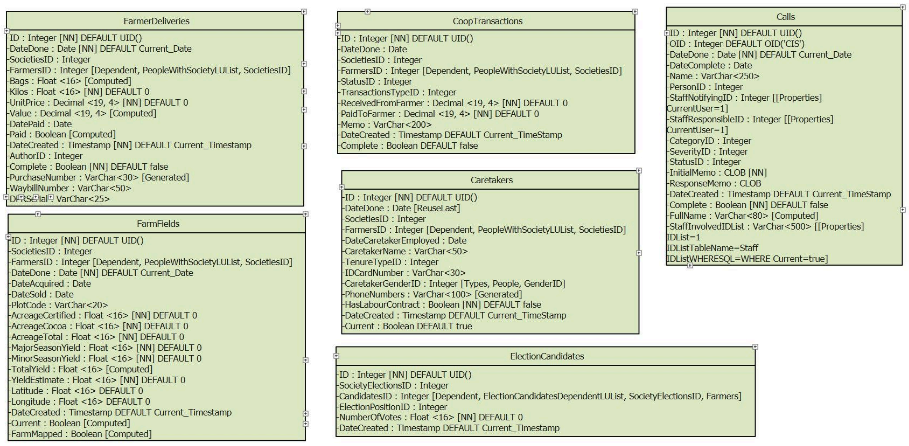
```
MembershipDetails
ID : Integer [NN] DEFAULT UID()
FarmersID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID]
SocietiesID : Integer
DateRenewed : Date DEFAULT MembershipStartDate()
DuesPaid : Decimal <19, 4> [NN] DEFAULT 0
Volume : Float <16> DEFAULT 0
DateCreated : Timestamp DEFAULT Current_TimeStamp
Current : Boolean DEFAULT true
AuthorID : Integer
```

```
Inspections
ID : Integer [NN] DEFAULT UID()
SocietiesID : Integer
FarmersID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID]
DateDone : Date [NN] DEFAULT Current_Date
CountPermanentWorkers : Float <16> [NN] DEFAULT 0
CountTemporaryWorkers : Integer DEFAULT 0
EstimatedVolume : Float <16> [NN] DEFAULT 0
PreviousYearTotalHarvest : Float <16> [NN] DEFAULT 0
TotalCertifiedArea : Float <16> [NN] DEFAULT 0
TotalNumPlots : Float <16> [NN] DEFAULT 0
TotalFarmArea : Float <16> [NN] DEFAULT 0
Delivered1YearAgo : Float <16> [NN] DEFAULT 0
Delivered2YearsAgo : Float <16> [NN] DEFAULT 0
Delivered3YearsAgo : Float <16> [NN] DEFAULT 0
InspectorID : Integer [CurrentUser]
DateCreated : Timestamp DEFAULT Current_Timestamp
Current : Boolean DEFAULT true
HouseholdSize : Float <16> [NN] DEFAULT 0
CocoaVarieties : VarChar<30>
```

People, Farmers, MembershipDetails, Inspections

Farmer Deliveries, Farm Fields, Co-op Transactions, Caretakers, Election Candidates, Calls

The image below shows each of these data-entities and lists all the **data-fields** present in each one, with it's **data-type**. These images give an overview of the data-entities which is fully detailed in the individual linked sections listed above.



FarmerDeliveries

```
-ID : Integer [NN] DEFAULT UID()
-DateDone : Date [NN] DEFAULT Current_Date
-SocietiesID : Integer
-FarmersID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID]
-Bags : Float <16> [Computed]
-Kilos : Float <16> [NN] DEFAULT 0
-UnitPrice : Decimal <19, 4> [NN] DEFAULT 0
-Value : Decimal <19, 4> [Computed]
-DatePaid : Date
-Paid : Boolean [Computed]
-DateCreated : Timestamp [NN] DEFAULT Current_Timestamp
-AuthorID : Integer
-Complete : Boolean [NN] DEFAULT false
-PurchaseNumber : VarChar<30> [Generated]
-WaybillNumber : VarChar<50>
-DFRSerial : VarChar<25>
```

FarmFields

```
-ID : Integer [NN] DEFAULT UID()
-SocietiesID : Integer
-FarmersID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID]
-DateDone : Date [NN] DEFAULT Current_Date
-DateAcquired : Date
-DateSold : Date
-PlotCode : VarChar<20>
-AcreageCertified : Float <16> [NN] DEFAULT 0
-AcreageCocoa : Float <16> [NN] DEFAULT 0
-AcreageTotal : Float <16> [NN] DEFAULT 0
-MajorSeasonYield : Float <16> [NN] DEFAULT 0
-MinorSeasonYield : Float <16> [NN] DEFAULT 0
-TotalYield : Float <16> [Computed]
-YieldEstimate : Float <16> [NN] DEFAULT 0
-Latitude : Float <16> DEFAULT 0
-Longitude : Float <16> DEFAULT 0
-DateCreated : Timestamp DEFAULT Current_Timestamp
-Current : Boolean [Computed]
-FarmMapped : Boolean [Computed]
```

CoopTransactions

```
-ID : Integer [NN] DEFAULT UID()
-DateDone : Date
-SocietiesID : Integer
-FarmersID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID]
-StatusID : Integer
-TransactionsTypeID : Integer
-ReceivedFromFarmer : Decimal <19, 4> [NN] DEFAULT 0
-PaidToFarmer : Decimal <19, 4> [NN] DEFAULT 0
-Memo : VarChar<200>
-DateCreated : Timestamp DEFAULT Current_TimeStamp
-Complete : Boolean DEFAULT false
```

Caretakers

```
-ID : Integer [NN] DEFAULT UID()
-DateDone : Date [ReuseLast]
-SocietiesID : Integer
-FarmersID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID]
-DateCaretakerEmployed : Date
-CaretakerName : VarChar<50>
-TenureTypeID : Integer
-IDCardNumber : VarChar<30>
-CaretakerGenderID : Integer [Types, People, GenderID]
-PhoneNumbers : VarChar<100> [Generated]
-HasLabourContract : Boolean [NN] DEFAULT false
-DateCreated : Timestamp DEFAULT Current_TimeStamp
-Current : Boolean DEFAULT true
```

ElectionCandidates

```
-ID : Integer [NN] DEFAULT UID()
-SocietyElectionsID : Integer
-CandidatesID : Integer [Dependent, ElectionCandidatesDependentLUList, SocietyElectionsID, Farmers]
-ElectionPositionID : Integer
-NumberOfVotes : Float <16> [NN] DEFAULT 0
-DateCreated : Timestamp DEFAULT Current_Timestamp
```

Calls

```
-ID : Integer [NN] DEFAULT UID()
-OID : Integer DEFAULT OID('CIS')
-DateDone : Date [NN] DEFAULT Current_Date
-DateComplete : Date
-Name : VarChar<250>
-PersonID : Integer
-StaffNotifyingID : Integer [[Properties]
CurrentUser=1]
-StaffResponsibleID : Integer [[Properties]
CurrentUser=1]
-CategoryID : Integer
-SeverityID : Integer
-StatusID : Integer
-InitialMemo : CLOB [NN]
-ResponseMemo : CLOB
-DateCreated : Timestamp DEFAULT Current_TimeStamp
-Complete : Boolean [NN] DEFAULT false
-FullName : VarChar<80> [Computed]
-StaffInvolvedIDList : VarChar<500> [[Properties]
IDList=1
IDListTableName=Staff
IDListWHERESQL=WHERE Current=true]
```

FarmerDeliveries, FarmFields, CoopTransactions, Caretakers, ElectionCandidates, Calls

People

Purpose

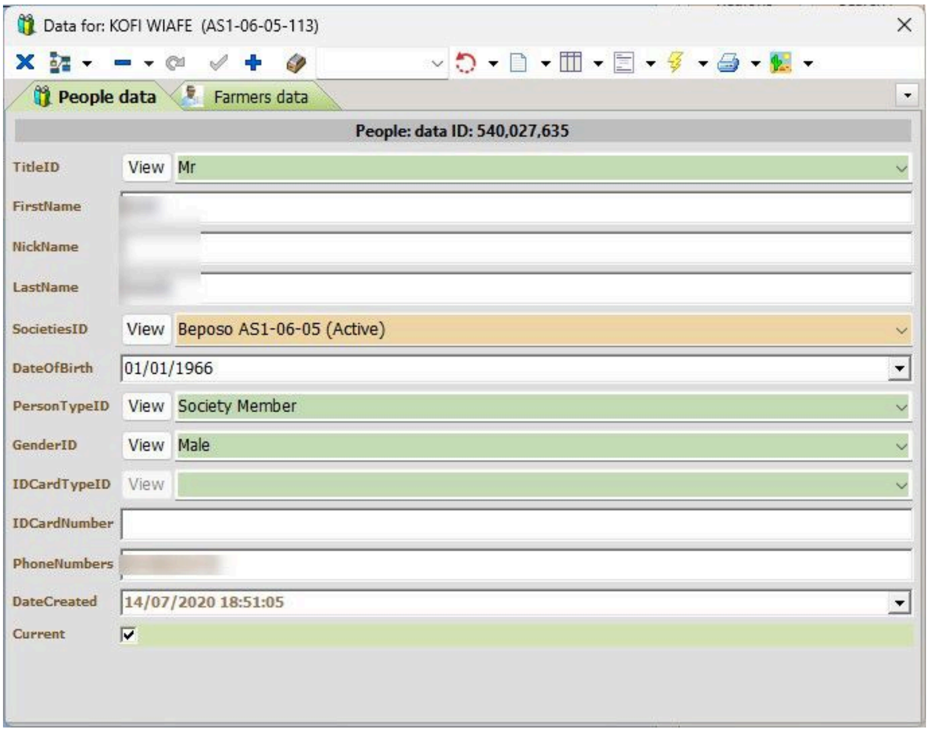
The People data-table holds data for people, farmers, and staff KKFU work with. It is a **master data-table** which links to other data-tables: Farmers and Staff. Each Person record includes a "SocietiesID" to link the record to the main data-entities of KKSys.

The People data-table includes data-fields for the basic descriptions of a person at the most simple level: data-fields such as "FirstName" and "DateOfBirth." More complex fields are generally added to the linked data-tables Farmers and Staff so avoid duplication.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

How and where to access People data

The image below shows the "People" Edit Form. This is accessed via its own entry in the System Entities screen. People are a **child** of the **Societies** entity.



Data for: KOFI WIAFE (AS1-06-05-113)

People: data ID: 540,027,635

TitleID	Mr
FirstName	[redacted]
NickName	[redacted]
LastName	[redacted]
SocietiesID	Beposo AS1-06-05 (Active)
DateOfBirth	01/01/1966
PersonTypeID	Society Member
GenderID	Male
IDCardTypeID	
IDCardNumber	
PhoneNumbers	[redacted]
DateCreated	14/07/2020 18:51:05
Current	☑

KKSys People Edit Form

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Data-schema: full details of the data-fields and their purpose in the FarmFields data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
			control of users or developers.
TitleID (Link-ID)	Links to the Types table	Pick from list of possible Types values such as Mr, Ms, Mrs, Dr.	
FirstName (Text)	Self explanitory	Entered by user	
NickName (Text)	Optional	Entered by user	
LastName (Text)	Self explanitory	Entered by user	
SocietiesID (Link-ID)	Links to the Societies table	Selected from list by User	Will default to the currently open Societies ID
DateOfBirth (Date)	Self explanitory	Entered by user	
PersonTypeID (Link-ID)	Links to the Types table	Pick from list of possible Types values such as Farmer, Committee Member.	
GenderID (Link-ID)	Links to the Types table	Pick from list of possible Types values such as Male, Female.	
IDCardTypeID (Link-ID)	Links to the Types table	Pick from list of possible Types values such as Ghana Card, Passport Number.	
IDCardNumber (Text)	Self explanitory	Entered by user	

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
PhoneNumbers (Text)	ReadOnly, value generated by Orixa based on data entered in the **Phones** data table.	Value generated by Orixa	
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	
FullName (Text)	Read-Only, computed by Orixa, based on values in the database.	Value generated by Orixa	
AuthorID (Integer)			Automatically set by Orixa, not under the control of users or developers.

Farmers

Purpose

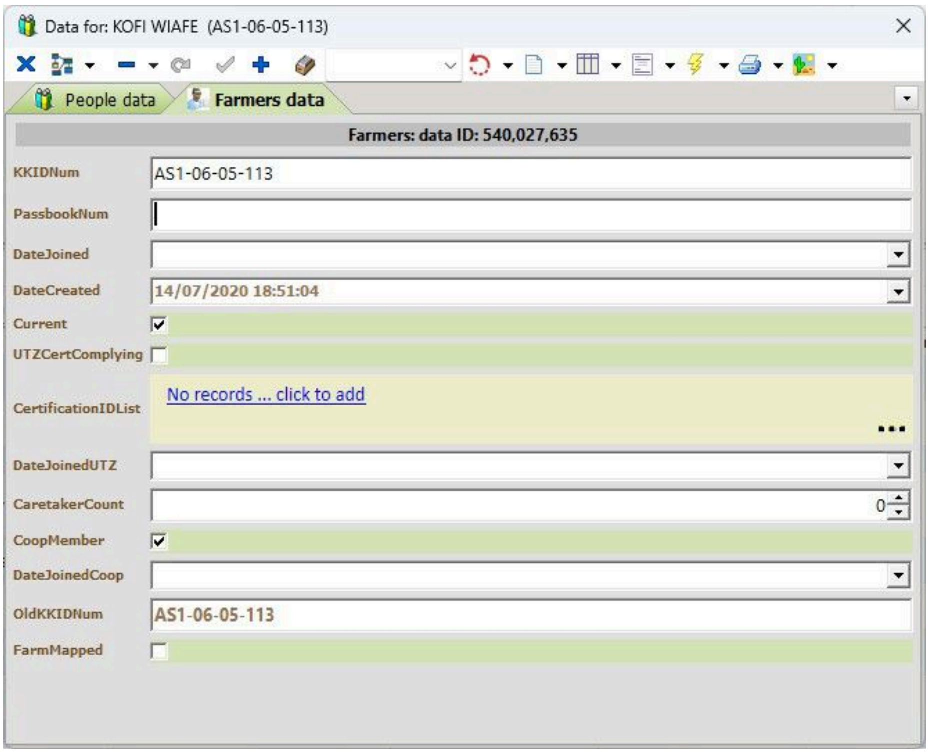
The Farmers data-table holds data for farmers KKFU work with. It is an **extension data-table** which links to other data-tables: Each Farmers record **shares the same "ID" value as the linked "Person" record.**

The Farmers data-table includes data-fields for the data unique to any farmer which KKFU needs to collect and store, such as their KKIDNum, Date of Joining the Co-op, whether they have paid membership dues, etc.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

How and where to access Farmer data

The image below shows the "People" Edit Form, with the "Farmers data" page visible. This is accessed via its own entry in the System Entities screen. People are **children** of the **Societies** entity.



Data for: KOFI WIAFE (AS1-06-05-113)

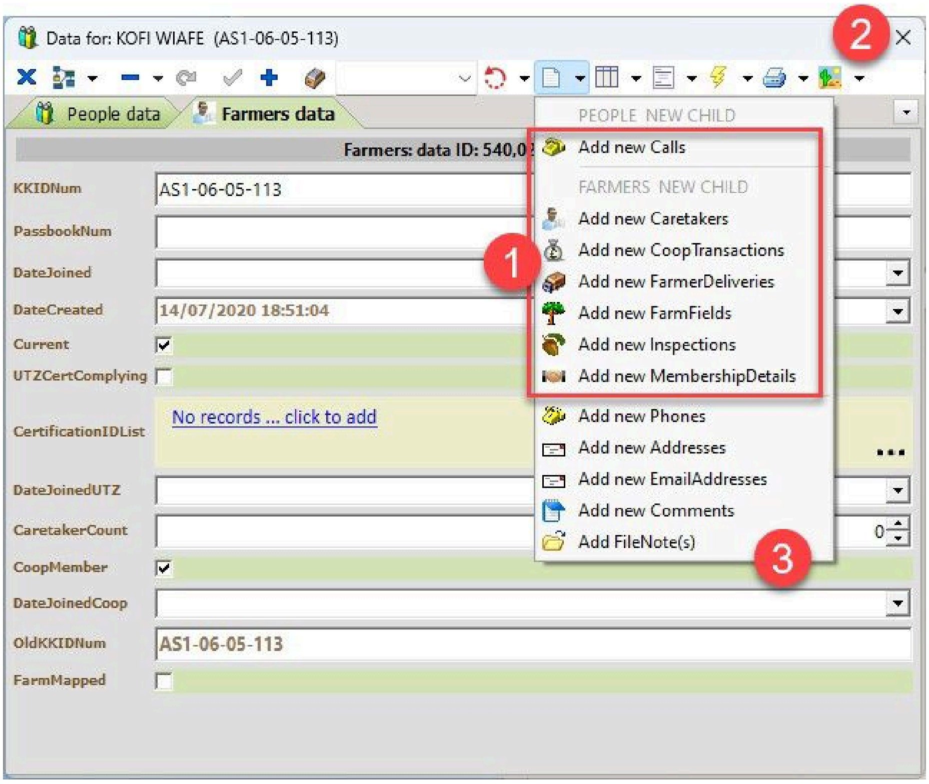
Farmers: data ID: 540,027,635

KKIDNum	AS1-06-05-113
PassbookNum	
DateJoined	
DateCreated	14/07/2020 18:51:04
Current	☑
UTZCertComplying	□
CertificationIDList	No records ... click to add
DateJoinedUTZ	
CaretakerCount	0
CoopMember	☑
DateJoinedCoop	
OldKKIDNum	AS1-06-05-113
FarmMapped	□

Farmers edit form

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Linkages to the Farmers Entity



Farmers: data ID: 540,0

KKIDNum	AS1-06-05-113
PassbookNum	
DateJoined	
DateCreated	14/07/2020 18:51:04
Current	☑
UTZCertComplying	☐
CertificationIDList	No records ... click to add
DateJoinedUTZ	
CaretakerCount	0
CoopMember	☑
DateJoinedCoop	
OldKKIDNum	AS1-06-05-113
FarmMapped	☐

Linkages to the Farmers Entity

From the Farmers Entity it is possible to see lists of linked data, and add linked data. The image above shows the "New Items" menu open in the Farmers edit-form, with the linked data that can be added.

> 1. Farmers can link to all the entities shown: Caretakers, Inspections, CoopTransations and many more. In many cases these linkages are coupled with a Linkage to the **Societies** entity, so individual records relate to the farmer as well.
> 2. The Societies entity is automatically linked to several "base entities" which are part of the Orixa framework, to allow storage of data such as **Addresses, Phone-numbers** and so on.
> 3. The Societies entity is linked to the **Images** system, so if needed photos of the society or its membership can be added to the database.

Data-schema: full details of the data-fields and their purpose in the Farmer data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
KKIDNum (Text)	Self explanitory	Computed by Orixa, but can be updated by user.	ReadOnly, 30 Default value: NewKKIDNum(ID)
PassbookNum (Text)	Self explanitory	Entered by user	

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
DateJoined (Date)	Self explanitory	Entered by user	
UTZCertComplying (true/false)	Self explanitory	True / false	Default value: false
CertificationIDList (Text)	List of certifications such as UTZ, Organic, Fairtrade to which the farmer complies.	Entered by user	ID-List: Allows users to select one or more items from a list stored in the Types data-table.
DateJoinedUTZ (Date)	Self explanitory	Entered by user	
CaretakerCount (Integer)	ReadOnly, value generated by Orixa from the number of Caretaker records added for this farmer.	Value generated by Orixa	
CoopMember (true/false)	Self explanitory	True / false	Default value: false
DateJoinedCoop (Date)	Self explanitory	Entered by user	
OldKKIDNum (Text)	ReadOnly, value generated by Orixa	Value generated by Orixa	
FarmMapped (true/false)	Self explanitory	True / false	Default value: false
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	Default value: true

MembershipDetails

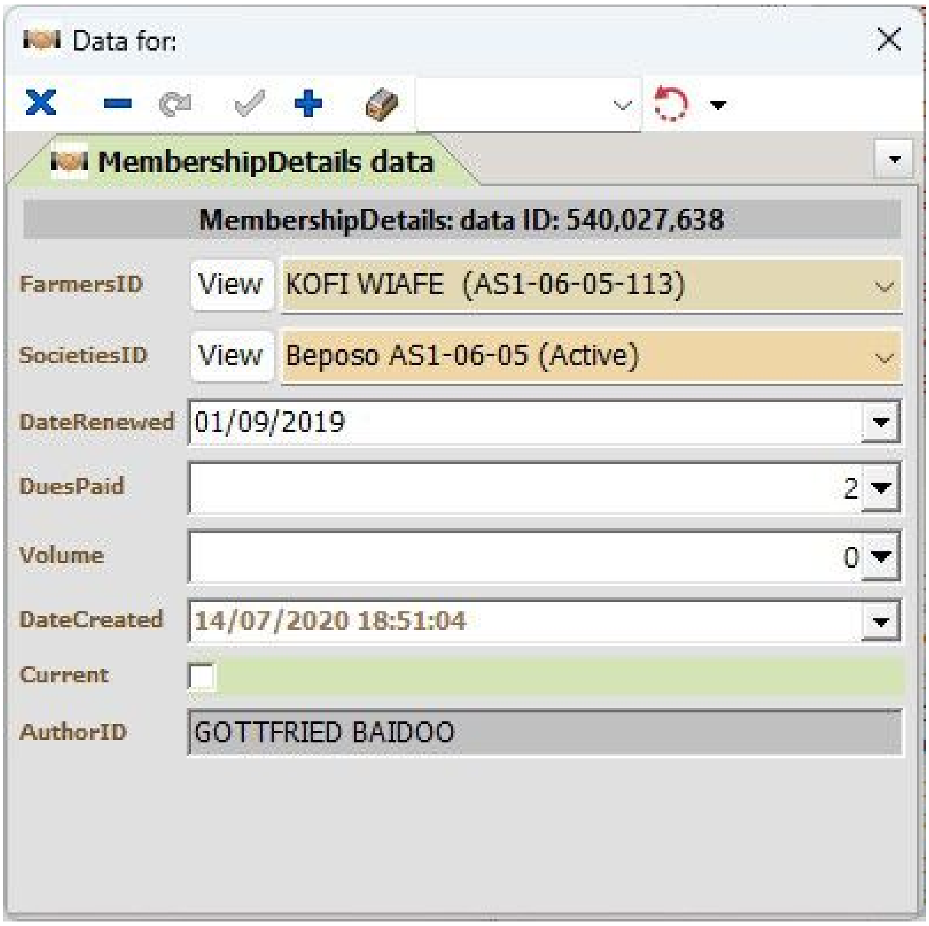
Purpose

The MembershipDetails data-table holds data for dates on which farmers who KKFU work with have paid for or renewed their memberships. It is a **child data-table** which links to Farmers and Societies. It allows KKSys to record when farmer-members join or renew their membership to the co-op and the dues they have paid.

The MembershipDetails data-table includes data-fields for the basic values of Dues paid and the farmers cococa volume. A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

How and where to access Membership Details data

The image below shows the "MembershipDetails" Edit Form. This is accessed via its own entry in the System Entities screen, or via the People or Societies it is linked to. MembershipDetails are a **child** of the People entity.



Data for:

MembershipDetails data

MembershipDetails: data ID: 540,027,638

FarmersID	View KOFI WIAFE (AS1-06-05-113)
SocietiesID	View Beposo AS1-06-05 (Active)
DateRenewed	01/09/2019
DuesPaid	2
Volume	0
DateCreated	14/07/2020 18:51:04
Current	☐
AuthorID	GOTTFRIED BAIDOO

Membership Details edit form

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

How access to MembershipDetails works in practice in KKSys

Because large numbers of membership records must be added, together with other data relating to things like the Fields a Farmer owns, Dues they have paid to KKFU etc., automated systems have been built to enable staff to enter data into multiple entities simulataneously using **Rapid-data-entry-grids**.

To understand thes more fully please consult the following links:

Farmer Deliveries Rapid Entry Grid

Dynamic Pascal-Scripting in Orixa: Adding a Resource to create Rapid-Entry-Grids in your App

The existance of these Rapid data-entry grids does not remove any of the usual functionality of edit-forms within KKSys. All records that hae been inserted automatically using a rapid-entry process can also be reviewed and updated in their edit-forms, and added to any reporting that management require.

Data-schema: full details of the data-fields and their purpose in the data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
FarmersID (Link-ID)	Links to the Farmers table	Selected from list by User	Will default to the currently open Farmers ID
SocietiesID (Link-ID)	Links to the Societies table	Selected from list by User	Will default to the currently open Societies ID
DateRenewed (Date)	Self explanitory	Set by Orixa, but can be overriden by user.	Default value: MembershipStartDate()
DuesPaid (Currency Value)	Self explanitory	Any number value	Default value: 0
Volume (Number)	The weight in kilos of cocoa the farmer has deliveried in the year.	Any number value	Default value: 0
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued. KKSys is programmed to untick this field for older records when a new one is added for the same farmer. This means there should only be **one** "Current" MembershipDetails record for each farmer.	True / false	Default value: true
AuthorID (Integer)	Self explanitory		Automatically set by Orixa, not under the control of users or developers.

Inspections

Purpose

The Inspections data-table holds data for inspections of farmers, carried out by KKFU Field Officers. It is a **data-table** which links to other data-tables: Societies, Farmers and Staff. Each Person record includes a "SocietiesID" to link the record to the main data-entities of KKSys.

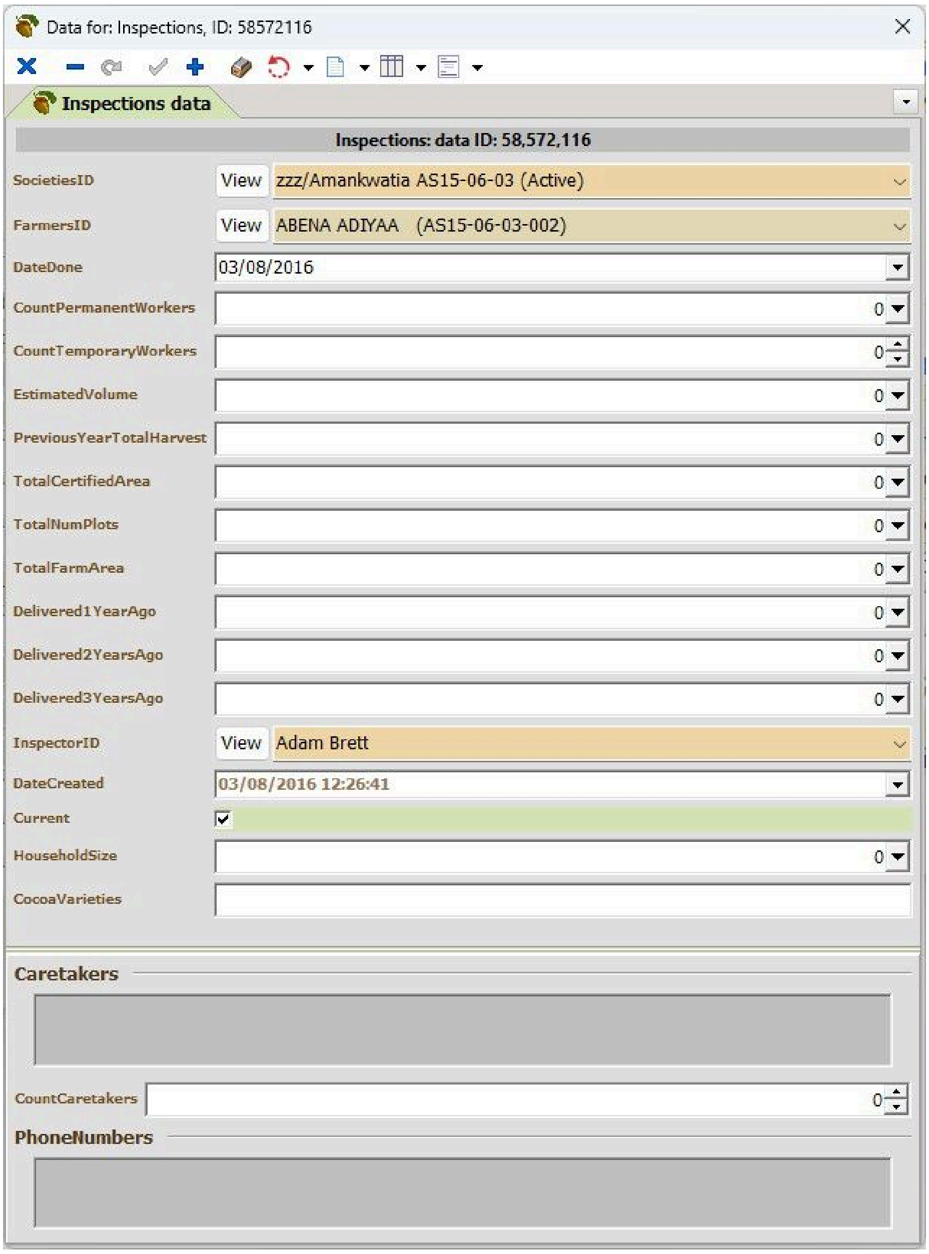
The Inspections data-table includes data-fields gathered during inspections of farmers such as "CountPermanentWorkers", "TotalNumPlots" etc.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

Note: The Inspections data-table is not in use at present in KKSys. It was added during an earlier development process, and then never used. The fields present in the entity may not be those that KKFU really need. The data structure of this table may need to be extended and changed to meet KKFU's current needs.

How and where to access Inspections data

The image below shows the "Inspections" Edit Form. This is accessed via its own entry in the System Entities screen. Inspections are a **child** of the **Farmers** and **Societies** entities.



Data for: Inspections, ID: 58572116

Inspections: data ID: 58,572,116

SocietiesID	View zzz/Amankwatia AS15-06-03 (Active)
FarmersID	View ABENA ADIYAA (AS15-06-03-002)
DateDone	03/08/2016
CountPermanentWorkers	0
CountTemporaryWorkers	0
EstimatedVolume	0
PreviousYearTotalHarvest	0
TotalCertifiedArea	0
TotalNumPlots	0
TotalFarmArea	0
Delivered1YearAgo	0
Delivered2YearsAgo	0
Delivered3YearsAgo	0
InspectorID	View Adam Brett
DateCreated	03/08/2016 12:26:41
Current	☑
HouseholdSize	0
CocoaVarieties	

Caretakers

CountCaretakers 0

PhoneNumbers

Inspections edit form

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Data-schema: full details of the data-fields and their purpose in the data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
SocietiesID (Link-ID)	Links to the Societies table	Selected from list by User	Will default to the currently open Societies ID
FarmersID (Link-ID)	Links to the Farmers table	Selected from list by User	Will default to the currently open Farmers ID
DateDone (Date)	Self explanitory	User can edit default value if necessary	Default value: Current_Date
CountPermanentWorkers (Number)	Self explanitory	Any number value	Default value: 0
CountTemporaryWorkers (Integer)	Self explanitory	Entered by user	Default value: 0
EstimatedVolume (Number)	Self explanitory	Any number value	Default value: 0
PreviousYearTotalHarvest (Number)	Self explanitory	Any number value	Default value: 0
TotalCertifiedArea (Number)	Self explanitory	Any number value	Default value: 0
TotalNumPlots (Number)	Self explanitory	Any number value	Default value: 0
TotalFarmArea (Number)	Self explanitory	Any number value	Default value: 0
Delivered1YearAgo (Number)	Self explanitory	Any number value	Default value: 0
Delivered2YearsAgo (Number)	Self explanitory	Any number value	Default value: 0
Delivered3YearsAgo (Number)	Self explanitory	Any number value	Default value: 0
InspectorID (Link-ID)	Links to the Staff table	Set by Orixa to the current-user, but can be edited.	CurrentUser
HouseholdSize (Number)	Self explanitory	Any number value	Default value: 0

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
CocoaVarieties (Text)	Field-field for officer to enter cocoa varieties.	Entered by user	
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	Default value: true

Farmer Deliveries

Purpose

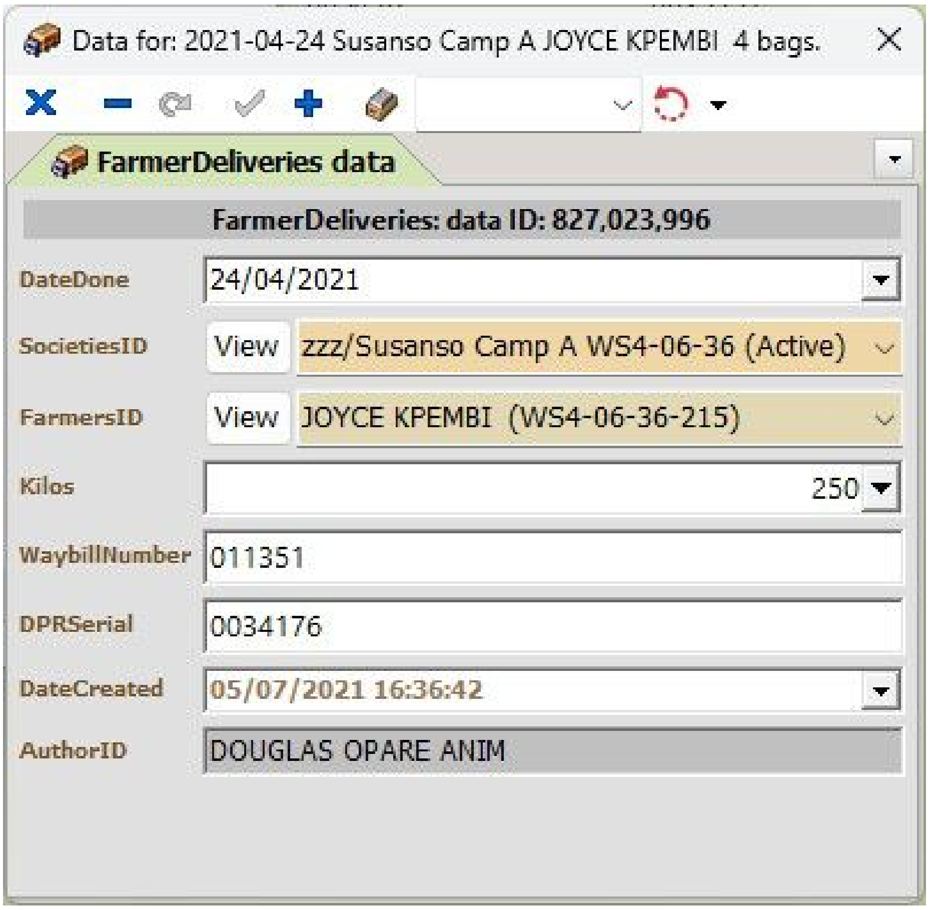
The Farmer Deliveries data-table holds data for the quantities of cocoa received from KKFU farmers. It is a **child data-table** which links to other data-tables: Farmers and Societies. Each record includes a "SocietiesID" and "FarmersID" to link the record to the main data-entities of KKSys.

The Farmer Deliveries data-table includes data-fields for Date the cocoa was purchased, the quantity purchased in kilos, and 2 reference codes used by KKFU: The "Waybill Number" and "DPR Serial Number." The data-table also records the date and time it was created, and the author of the record.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

How and where to access Farmer Deliveries data

The image below shows the "Farmer Deliveries" Edit Form. This is accessed via a **child-entity**, grouped with the People / Farmers / Staff entity on the System Entities screen.



Data for: 2021-04-24 Susanso Camp A JOYCE KPEMBI 4 bags.

FarmerDeliveries data

FarmerDeliveries: data ID: 827,023,996

DateDone	24/04/2021
SocietiesID	View zzz/Susanso Camp A WS4-06-36 (Active)
FarmersID	View JOYCE KPEMBI (WS4-06-36-215)
Kilos	250
WaybillNumber	011351
DPRSerial	0034176
DateCreated	05/07/2021 16:36:42
AuthorID	DOUGLAS OPARE ANIM

Farmer Deliveries edit form

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

How access to FarmerDeliveries works in practice in KKSys

Because very large numbers of delivery records must be added, together with other data relating to things like the Fields a Farmer owns, Dues they have paid to KKFU etc., automated systems have been built to enable staff to enter data into multiple entities simulataneously using **Rapid-data-entry-grids**.

To understand thes more fully please consult the following links:

Farmer Deliveries Rapid Entry Grid

Dynamic Pascal-Scripting in Orixa: Adding a Resource to create Rapid-Entry-Grids in your App

The existance of these Rapid data-entry grids does not remove any of the usual functionality of edit-forms within KKSys. All records that hae been inserted automatically using a rapid-entry process can also be reviewed and updated in their edit-forms, and added to any reporting that management require.

Data-schema: full details of the data-fields and their purpose in the FarmFields data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
DateDone (Date)	Self explanitory	Entered by user	Default value: Current_Date
SocietiesID (Link-ID)	Links to the Societies table	Selected from list by User	Will default to the currently open Societies ID
FarmersID (Link-ID)	Links to the Farmers table	Selected from list by User	Will default to the currently open Farmers ID
Bags (Number)	ReadOnly, value generated by Orixa, currently hidden from view in the Edit Form		
Kilos (Number)	Self explanitory	Any number value	Default value: 0
UnitPrice (Currency Value)	Self explanitory	Any number value	Default value: 0
Value (Currency Value)	ReadOnly, value generated by Orixa, using the current "cocoa price" in the system		
DatePaid (Date)	Not currently in use, hidden from view in the edit form.		
Paid (true/false)	ReadOnly, value generated by Orixa, sets to true when a "DatePaid" is entered.	True / false	
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
AuthorID (Integer)	Self explanitory		Automatically set by Orixa, not under the

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
			control of users or developers.
Complete (true/false)	Tick this field to lock the record so further editing is restricted.	True / false	Default value: false
PurchaseNumber (Text)	ReadOnly, value generated by Orixa, currently hidden from view in the Edit Form.	Value generated by Orixa using the function "PurchaseNumber". This computes a unique value combining the SocietyStationMark, current date and a unique number.	
WaybillNumber (Text)	Self explanitory	Entered by user	
DPRSerial (Text)	Self explanitory	Entered by user	

Farm Fields

Purpose

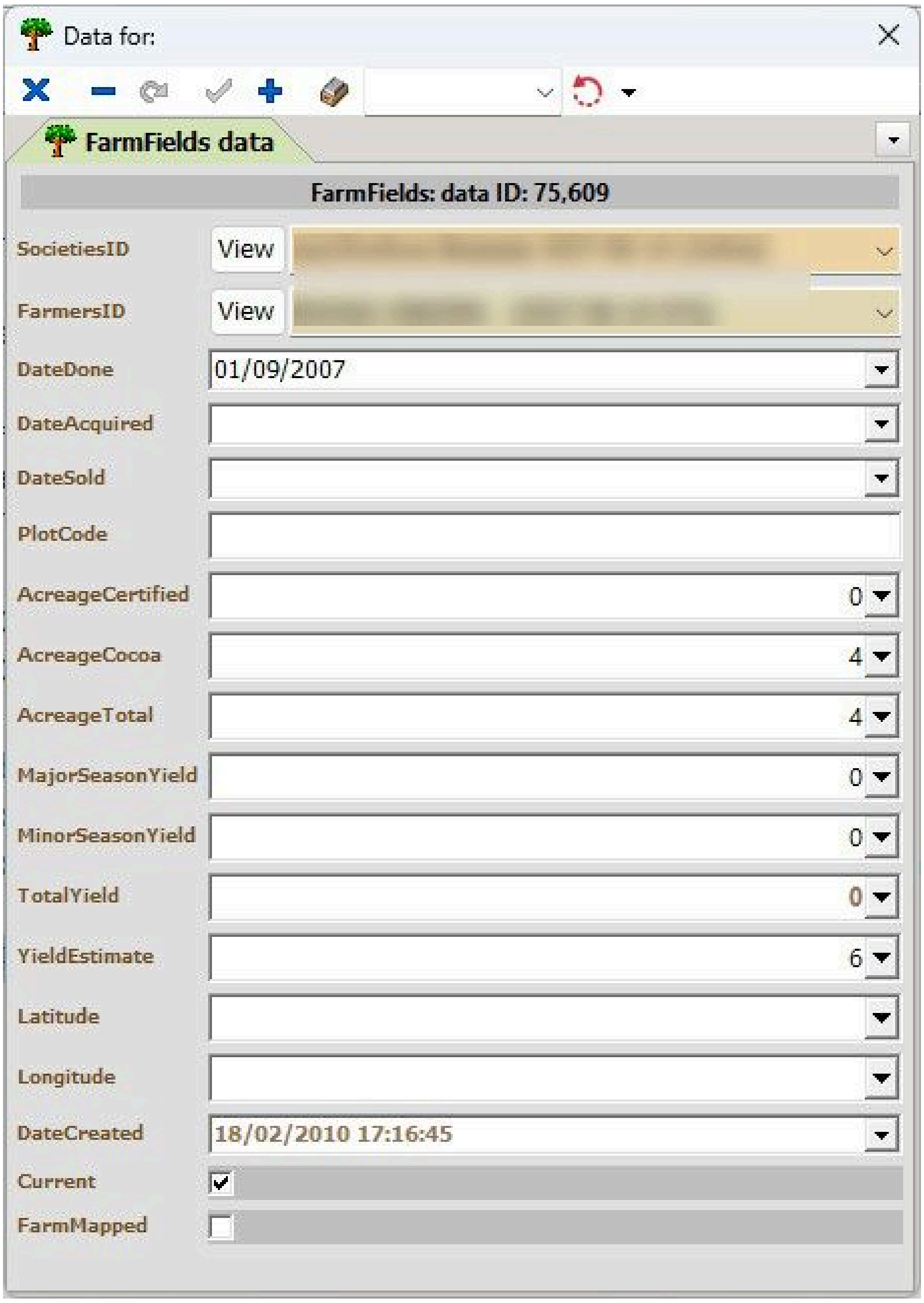
The FarmFields data-table holds data for the physical plots of land owned by farmers. Each FarmField record includes a "SocietiesID" and a "FarmersID" to link the record to the main data-entities of KKSys.

The FarmFields data-table includes data-fields for the size of the plot and its geo-location (latitude and longitude). It also includes several other data-fields, such as DateAcquired, MajorSeasonYield, MinorSeasonYield etc., which are used by KKFU staff in some circumstances.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

How and where to access Farm Fields data

The image below shows the "FarmFields" Edit Form. This is accessed as a **child** of the **Inspections** entity.



FarmFields: data ID: 75,609

SocietiesID	[redacted]
FarmersID	[redacted]
DateDone	01/09/2007
DateAcquired	
DateSold	
PlotCode	
AcreageCertified	0
AcreageCocoa	4
AcreageTotal	4
MajorSeasonYield	0
MinorSeasonYield	0
TotalYield	0
YieldEstimate	6
Latitude	
Longitude	
DateCreated	18/02/2010 17:16:45
Current	☑
FarmMapped	☐

FarmFields Edit Form

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

How access to FarmFields works in practice in KKSys

Because large numbers of Farm-fields records must be added, together with other data relating to things like the cocoa a Farmer has delivered, Dues they have paid to KKFU etc., automated systems have been built to enable staff to enter data into multiple entities simulataneously using **Rapid-data-entry-grids**.

To understand thes more fully please consult the following links:

Farmer Deliveries Rapid Entry Grid

Dynamic Pascal-Scripting in Orixa: Adding a Resource to create Rapid-Entry-Grids in your App

The existance of these Rapid data-entry grids does not remove any of the usual functionality of edit-forms within KKSys. All records that hae been inserted automatically using a rapid-entry process can also be reviewed and updated in their edit-forms, and added to any reporting that management require.

Data-schema: full details of the data-fields and their purpose in the FarmFields data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
SocietiesID (Link-ID)	Links to the Societies table	Selected from list by User	Will default to the currently open Societies ID
FarmersID (Link-ID)	Links to the Farmers table	Selected from list by User	Will default to the currently open Farmers ID
DateDone (Date)	Date of data-gathering	Entered by user	Defaults to the current date
DateAcquired (Date)	Date the farmer purchased / acquired the land	Entered by user	
DateSold (Date)	Date the farmer sold the land	Entered by user	
PlotCode (Text)	If the farmer has any code, name or number used to describe the plot, enter that	Entered by user	
AcreageCertified (Number)	Self Explanitory	Any number value	
AcreageCocoa (Number)	Self Explanitory	Any number value	

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
AcreageTotal (Number)	Self Explanitory	Any number value	
MajorSeasonYield (Number)	Self Explanitory	Any number value	
MinorSeasonYield (Number)	Self Explanitory	Any number value	
TotalYield (Number)	Self Explanitory	Any number value	
YieldEstimate (Number)	Self Explanitory	Any number value	
Latitude (Number)	Geo-location point	Any number value	
Longitude (Number)	Geo-location point	Any number value	
FarmMapped (true/false)	Self Explanitory	True / false	
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	

Co-op Transactions

Purpose

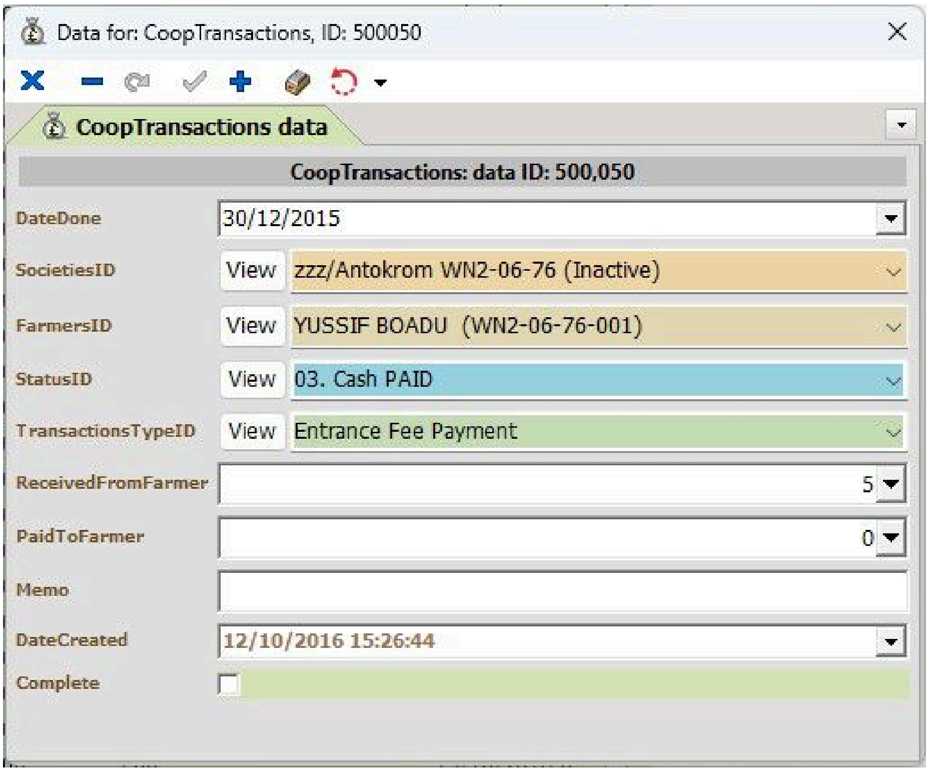
The CoopTransactions data-table holds data for people, farmers, and staff KKFU work with. It is a **child data-table** which links to other data-tables: Farmers and Societies. Each Person record includes a "SocietiesID" to link the record to the main data-entities of KKSys.

The CoopTransaction data-table includes data-fields for recording money received from and paid to farmers, such as payments of dues or entrance fees, or reciepts of dividends. The table includes a field for "TransactionsTypeID", which is set to the type of transaction such as "Bonus Payment" or "Entrace fee payment", and includes currency fields for the value Received from Farmer or Paid to Farmer.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

How and where to access CoopTransactions data

The image below shows the "CoopTransactions" Edit Form. This is accessed via its own entry in the System Entities, visible in the same group as the People / Farmers entity.


Data for: CoopTransactions, ID: 500050

CoopTransactions: data ID: 500,050

DateDone		30/12/2015
SocietiesID	View	zzz/Antokrom WN2-06-76 (Inactive)
FarmersID	View	YUSSIF BOADU (WN2-06-76-001)
StatusID	View	03. Cash PAID
TransactionsTypeID	View	Entrance Fee Payment
ReceivedFromFarmer		5
PaidToFarmer		0
Memo		
DateCreated		12/10/2016 15:26:44
Complete		□

Co-op Transactions edit form

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

How access to Co-opTransactions works in practice in KKSys

Because large numbers of Co-opTransations records must be added, together with other data relating to things like the Fields a Farmer owns, cocoa delivered to KKFU etc., automated systems have been built to enable staff to enter data into multiple entities simulataneously using **Rapid-data-entry-grids**.

To understand thes more fully please consult the following links:

[Farmer Deliveries Rapid Entry Grid]

[Dynamic Pascal-Scripting in Orixa: Adding a Resource to create Rapid-Entry-Grids in your App]

The existance of these Rapid data-entry grids does not remove any of the usual functionality of edit-forms within KKSys. All records that hae been inserted automatically using a rapid-entry process can also be reviewed and updated in their edit-forms, and added to any reporting that management require.

Data-schema: full details of the data-fields and their purpose in the FarmFields data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
DateDone (Date)	Self explanitory	Entered by user	
SocietiesID (Link-ID)	Links to the Societies table	Selected from list by User	Will default to the currently open Societies ID
FarmersID (Link-ID)	Links to the Farmers table	Selected from list by User	Will default to the currently open Farmers ID
StatusID (Link-ID)	Links to the Status table	Pick from list of possible Status values.	
TransactionsTypeID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
ReceivedFromFarmer (Currency Value)	Details the value in Cedis of any money received from the farmer in this transaction.	Any number value	Default value: 0
PaidToFarmer (Currency Value)	Details the value in Cedis of any money paid to the farmer in this transaction.	Any number value	Default value: 0
Memo (Text)	Self explanitory, used to add any extra note or text about the transactions.	Entered by user	
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Complete (true/false)	Tick this field to lock the record so further editing is restricted.	True / false	Default value: false

Caretakers

Purpose

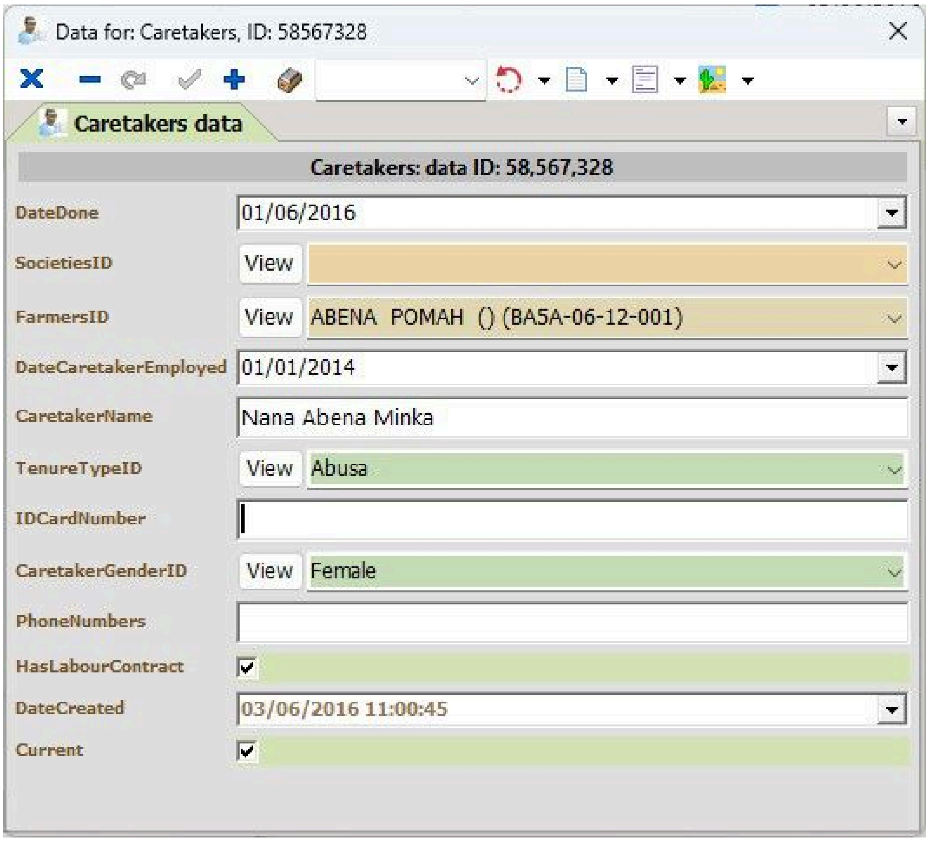
The Caretakers data-table holds data for farmers who are subcontracted to work for "master farmers" who are KKFU members. It is a **child data-table** which links to Farmers.

The Caretakers data-table includes data-fields for data KKFU needs to record such as the date the caretaker started working, the caretaker's gender and the type of tenure they have with the master farmer.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

How and where to access Caretakers data

The image below shows the "Caretakers" Edit Form. This is accessed via its own entry in the System Entities screen. Caretakers records are used to **link a "Farmers" record together with their caretaker.** First add the Farmers record, then add Caretaker records including the Caretaker's name, and the start-date for their employment.



Data for: Caretakers, ID: 58567328

Caretakers data

Caretakers: data ID: 58,567,328

DateDone	01/06/2016	
SocietiesID	View	
FarmersID	View	ABENA POMAH () (BA5A-06-12-001)
DateCaretakerEmployed	01/01/2014	
CaretakerName	Nana Abena Minka	
TenureTypeID	View	Abusa
IDCardNumber		
CaretakerGenderID	View	Female
PhoneNumbers		
HasLabourContract	☑	
DateCreated	03/06/2016 11:00:45	
Current	☑	

Caretakers edit form

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Data-schema: full details of the data-fields and their purpose in the data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
DateDone (Date)	Self explanitory	Entered by user	ReuseLast
SocietiesID (Link-ID)	Links to the Societies table	Selected from list by User	Will default to the currently open Societies ID
FarmersID (Link-ID)	Links to the Farmers table	Selected from list by User	Will default to the currently open Farmers ID
DateCaretakerEmployed (Date)	Date when the caretaker started working for the farmer.	Entered by user	
CaretakerName (Text)	Self explanitory	Entered by user	
TenureTypeID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
IDCardNumber (Text)	ID Card number for the caretaker.	Entered by user	
CaretakerGenderID (Link-ID)	Links to the Types table	Pick from list of possible Types values such as Male, Female, unknown.	
PhoneNumbers (Text)	ReadOnly, value generated by Orixa based on entries in the Phones data-table.	Value generated by Orixa	
HasLabourContract (true/false)	Self explanitory, all caretakers should have a contract.	True / false	Default value: false
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	Default value: true

Election Candidates

Purpose

The ElectionCandidates data-table holds data for people who have stood for election to KKFU Societies. It is a **linking data-table** which links any Person in the KKFU database to a **SocietiesElections** record.

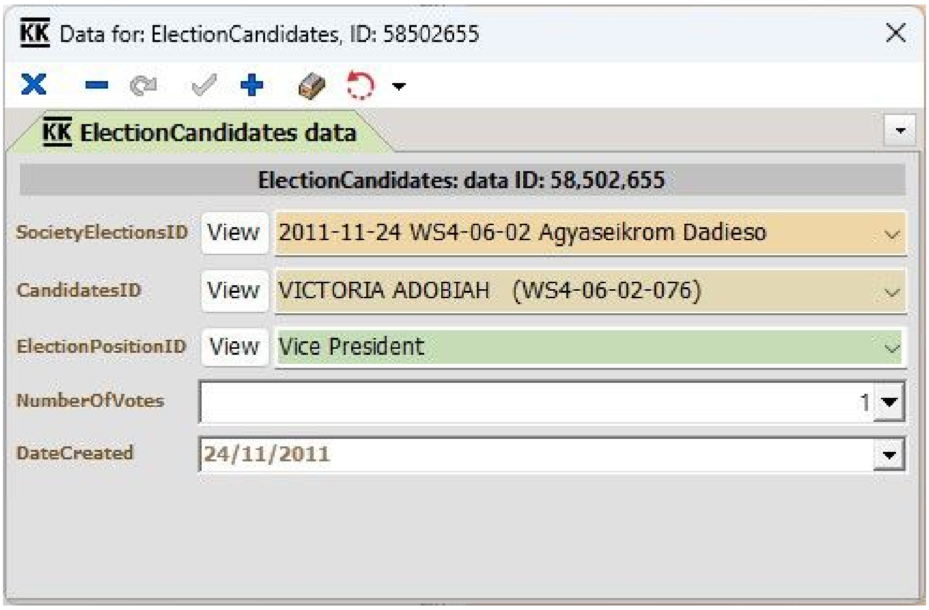
The ElectionCandidates data-table includes data-fields to record the people who have stood for election in KKFU Society Elections. It includes the Position to which they were elected (ie "Chair", "Treasurer" etc.) and the number of votes they received. This data-table can be used to return reports of the current or past committee members for all of KKFU's Societies.

It can also be used to find things like the phone numbers and contact information for all the Chair's or Secretaries of a Society or Zone, provided that the data is kept up-to-date.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

How and where to access ElectionCandidates data

The image below shows the "ElectionCandidates" Edit Form. This is accessed via its own entry in the System Entities screen. ElectionCandidates are a **child** of the **SocietyElections** and **People** entities.



Data for: ElectionCandidates, ID: 58502655

ElectionCandidates: data ID: 58,502,655

SocietyElectionsID	View	2011-11-24 WS4-06-02 Agyaseikrom Dadieso
CandidatesID	View	VICTORIA ADOBIAH (WS4-06-02-076)
ElectionPositionID	View	Vice President
NumberOfVotes		1
DateCreated		24/11/2011

Election Candidates edit form

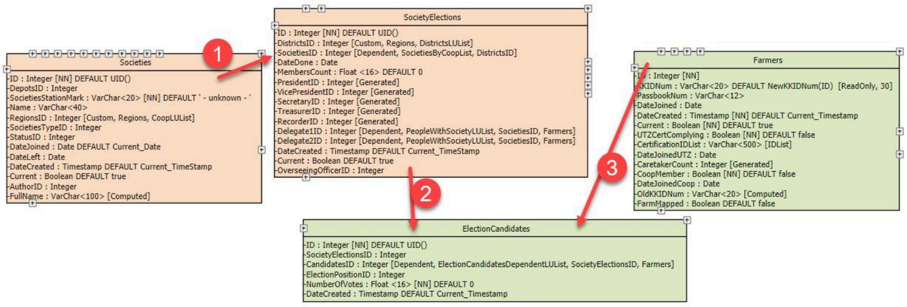
Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Data-schema: full details of the data-fields and their purpose in the data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
SocietyElectionsID (Link-ID)	Links to the SocietyElections table	Selected from list by User	Will default to the currently open SocietyElections ID
CandidatesID (Link-ID)	Links to the People table	Selected from list by User	Dependent, ElectionCandidatesDependentLUList, SocietyElectionsID, Farmers
ElectionPositionID (Link-ID)	Links to the Types table	Pick from list of possible Types values such as President, Vice President, Treasuer etc.	
NumberOfVotes (Number)	Self explanitory	Any number value	Default value: 0
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.

Data relationships of the ElectionCandidates BusinessObject



Societies

```
ID : Integer [NN] DEFAULT UID()
DepotsID : Integer
SocietiesStationMark : VarChar<20> [NN] DEFAULT ' - unknown - '
Name : VarChar<40>
RegionsID : Integer [Custom, Regions, CoopLUList]
SocietiesTypeID : Integer
StatusID : Integer
DateJoined : Date DEFAULT Current_Date
DateLeft : Date
DateCreated : Timestamp DEFAULT Current_TimeStamp
Current : Boolean DEFAULT true
AuthorID : Integer
FullName : VarChar<100> [Computed]
```

SocietyElections

```
ID : Integer [NN] DEFAULT UID()
DistrictsID : Integer [Custom, Regions, DistrictsLUList]
SocietiesID : Integer [Dependent, SocietiesByCoopList, DistrictsID]
DateDone : Date
MembersCount : Float <16> DEFAULT 0
PresidentID : Integer [Generated]
VicePresidentID : Integer [Generated]
SecretaryID : Integer [Generated]
TreasurerID : Integer [Generated]
RecorderID : Integer [Generated]
Delegate1ID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID, Farmers]
Delegate2ID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID, Farmers]
DateCreated : Timestamp DEFAULT Current_TimeStamp
Current : Boolean DEFAULT true
OverseeingOfficerID : Integer
```

Farmers

```
ID : Integer [NN]
KKIDNum : VarChar<20> DEFAULT NewKKIDNum(ID)  [ReadOnly, 30]
PassbookNum : VarChar<12>
DateJoined : Date
DateCreated : Timestamp [NN] DEFAULT Current_Timestamp
Current : Boolean [NN] DEFAULT true
UTZCertComplying : Boolean [NN] DEFAULT false
CertificationIDList : VarChar<500> [IDList]
DateJoinedUTZ : Date
CaretakerCount : Integer [Generated]
CoopMember : Boolean [NN] DEFAULT false
DateJoinedCoop : Date
OldKKIDNum : VarChar<20> [Computed]
FarmMapped : Boolean DEFAULT false
```

ElectionCandidates

```
ID : Integer [NN] DEFAULT UID()
SocietyElectionsID : Integer
CandidatesID : Integer [Dependent, ElectionCandidatesDependentLUList, SocietyElectionsID, Farmers]
ElectionPositionID : Integer
NumberOfVotes : Float <16> [NN] DEFAULT 0
DateCreated : Timestamp DEFAULT Current_Timestamp
```

ElectionCandidates entity relationships

1. Societies links to SocietyElections, allowing all elections which occur in KKFU societies to be recorded. The table is automatically populated with values for the Secretary, Treasurer and Recorder, based on the results recorded in the ElectionCandidates data-table.
2. SocietyElections link to ElectionCandidates, allowing the results of all elections (including the number of votes cast) to be recorded for all elections.
3. Farmers link to ElectionCandidates, so **only** farmers who are registered with KKFU are able to stand for elections. This helps to ensure that farmers are current members, have paid their dues, and so on, prior to standing for election.

Calls

Purpose

The Calls data-table holds data for phone-calls and other conversations made by KKFU staff with farmers. It is a **child data-table** which links to other data-tables: Farmers and Staff. Each Person record includes a "SocietiesID" to link the record to the main data-entities of KKSys.

The Calls data-table includes data-fields to help manage the process of calling and working with farmers. A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

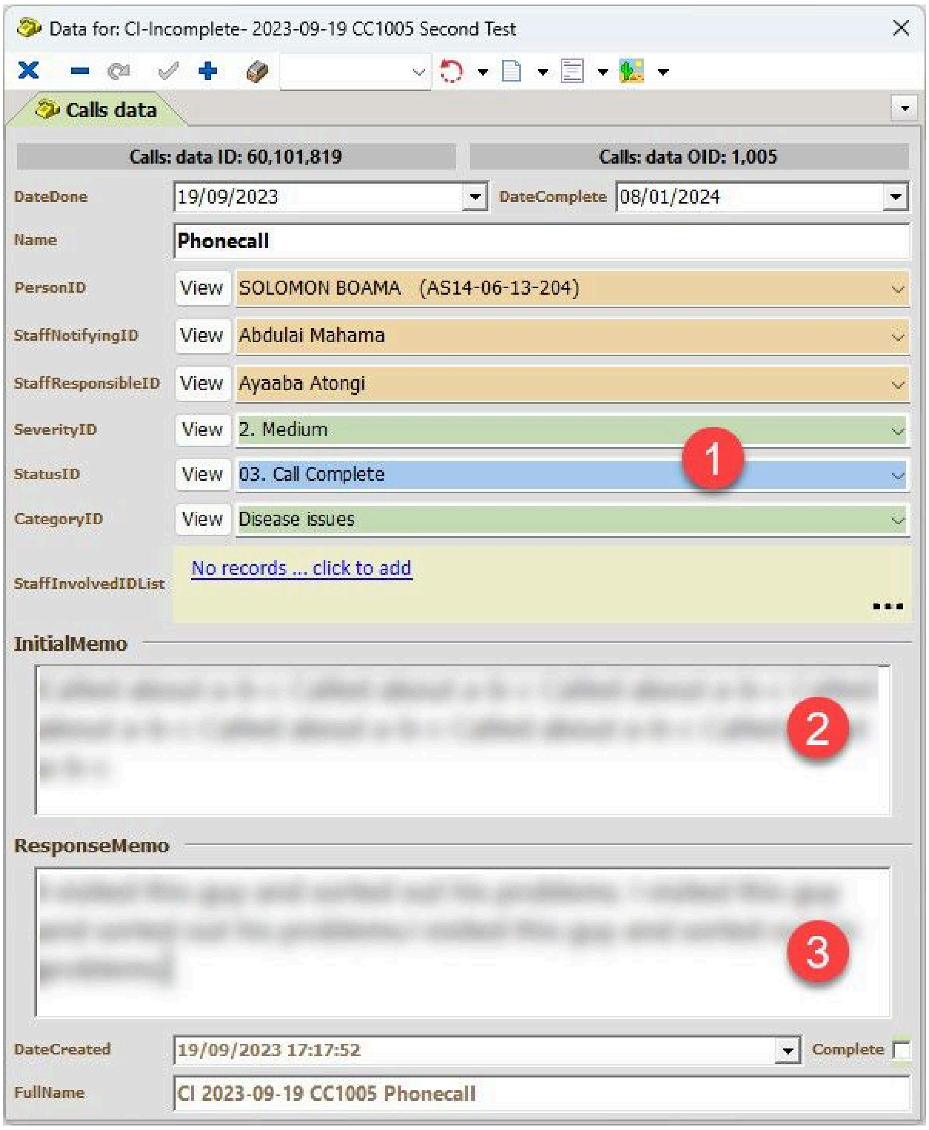
Note that the Calls data-table is used in the Teleagric Dashboard, for more information see this link:

The TeleAgric Dashboard

How and where to access Calls data

The image below shows the "Calls" Edit Form. This is accessed via its own entry in the System Entities screen. Calls are a **child** of the People entity, so any number of calls can be linked to any "Person" record in the KKSys.

Call calls entity is generally used within the TeleAgric Dashboard, users of KKSys would mainly access the Calls entity to review any communications with individual farmers, and to generate reports detailing the work-done by ICO staff to follow-up calls made to the TeleAgric team.



Data for: CI-Incomplete- 2023-09-19 CC1005 Second Test

Calls data

Calls: data ID: 60,101,819	Calls: data OID: 1,005

DateDone	19/09/2023
DateComplete	08/01/2024
Name	Phonecall
PersonID	View SOLOMON BOAMA (AS14-06-13-204)
StaffNotifyingID	View Abdulai Mahama
StaffResponsibleID	View Ayaaba Atongi
SeverityID	View 2. Medium
StatusID	View 03. Call Complete
CategoryID	View Disease issues
StaffInvolvedIDList	No records ... click to add
InitialMemo	
ResponseMemo	
DateCreated	19/09/2023 17:17:52
Complete	□
FullName	CI 2023-09-19 CC1005 Phonecall

KKSys Calls Edit Form

1. Severity, Status and Category fields, which are used to differentiate different types of call
2. Initial Memo field, used by the TeleAgric staff member to enter details of the farmer's problem or issue.
3. Response Memo field, used by field-officers or TeleAgric staff members to detail work done to resolve the farmer's problem or issue.

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Data-schema: full details of the data-fields and their purpose in the FarmFields data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
OID (Integer)	Used to add an "OID" to the Calls data-table. See an explanation of OID fields here: [Structuring Your Database - Orixa Standards]()	Entered by user	Default value: OID('CIS')
DateDone (Date)	Self explanitory	Entered by user	Default value: Current_Date
DateComplete (Date)	Self explanitory	Entered by user	
Name (Text)	Self explanitory	Entered by user	
PersonID (Link-ID)	Links to the People table	Selected from list by User	Will default to the currently open People ID
StaffNotifyingID (Link-ID)	Links to the Staff table	Selected from list by User	[Properties] CurrentUser=1
StaffResponsibleID (Link-ID)	Links to the Staff table	Selected from list by User	[Properties] CurrentUser=1
CategoryID (Link-ID)	Links to the Types table	Pick from list of possible	

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
		Types values.	
SeverityID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
StatusID (Link-ID)	Links to the Status table	Pick from list of possible Status values.	
InitialMemo (Long Text)	Used to add information gathered from the farmer about their issue.	Entered by user	
ResponseMemo (Long Text)	Used to add information about the issue as it was fixed / completed.	Entered by user	
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Complete (true/false)	Tick this field to lock the record so further editing is restricted.	True / false	Default value: false
FullName (Text)	Read-Only, computed by Orixa, based on values in the database.	Value generated by Orixa, to create a unique value which can be used in reporting.	

StaffInvolvedIDList (Text)	Self explanitory	Entered by user	[Properties] IDList=1
			IDListTableName=Staff
			IDListWHERESQL=WHERE Current=true

Questionnaire related database elements

Purpose

The data-schema elements in this part of the KKSys allow management of data relating to **Questionnares** used to gather data about farmers. This part of the database is slightly different from other sections as it is intended to enable complex data-gathering exercises such as visits to farmers in which questions are asked in any possible questionnaire or survey.

enable the recording of many aspects of data that are required for the day-to-day operation of Kuapa Kokoo.

Examples of the types of questionnaires which can be created:

- Questionnaires relating to Organic cultivation or Fairtrade Practices.
- Questionnaires gathering household data related to the income levels, educational levels or other socio-economic data of farmers.
- Questionnaires related to gender issues.
- Questionnaires related to child-labour.

These are only example questionniares, and many other types of questionniare can be created, including questionnaires relating to other groups KKFU is involved with such as **Staff Questionnaires**, or **Societies.**

Basic inter-relationships within this part of the database

The Questionnaires system consists of a number of **Questionnaires**, each with a set of **Questions**. As an example, a Questonnaire might relate to Child Labour, and one of the questions might be Give the Ages of Children Working on this Farm.

Once a Questionnaire has been created, with its related Questions, KKFU staff can use the ICO Orixa App to visit farmers and add a series of **Answers.** When these answers are added together for all the farmers the full data from the questionnaire can be extracted.

The **Questionnaires System** has two additional data-entities. **Question Sections** a small entity, which simply allows **Questionnaires** to be divided into parts, and **Non-conformities**, an entity which is used to add special notes and additional data when the answer a farmer has given to a question has raised an issue which needs to be resolved.

Not all **Questionnaires** need to have **Non-conformities**. For example when a Questionnaire is created for household data such as the types of housing of farmers, there would not be any possibility for non-conformity. On the other hand if pesticides were found on a farm when the Questionnaire related to Organic farming, then a non-conformity record could be added.

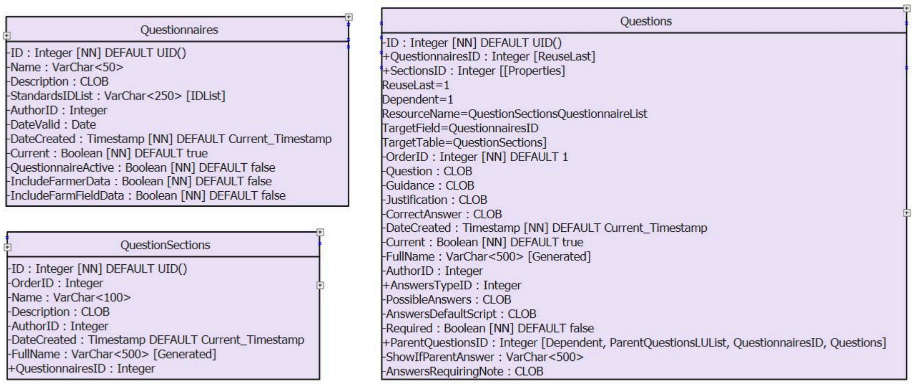
The use and purpose of each of these entities and the child-entities are detailed in individual sections of this help document below, please go to the linked articles for detailed, step by step description of each data-entity

Elements of the questionnaires-related sections of the database

TThe KKSys is a single, whole database. The questionnaire related sections of the database are not separate from the sections managing Society, Farmer or Audit data. The sections have been separated in this help document to make it easier to understand them and get a sense of their inter-relationships and purpose, but the data exists as a whole and all parts of it can be accessed at any time.

Questionnaires, Question Sections and Questions

The image below shows each of these data-entities and lists all the **data-fields** present in each one, with it's **data-type**. These images give an overview of the data-entities which is fully detailed in the individual linked sections listed above.



```
Questionnaires
-ID : Integer [NN] DEFAULT UID()
-Name : VarChar<50>
-Description : CLOB
-StandardsIDList : VarChar<250> [IDList]
-AuthorID : Integer
-DateValid : Date
-DateCreated : Timestamp [NN] DEFAULT Current_Timestamp
-Current : Boolean [NN] DEFAULT true
-QuestionnaireActive : Boolean [NN] DEFAULT false
-IncludeFarmerData : Boolean [NN] DEFAULT false
-IncludeFarmFieldData : Boolean [NN] DEFAULT false
```

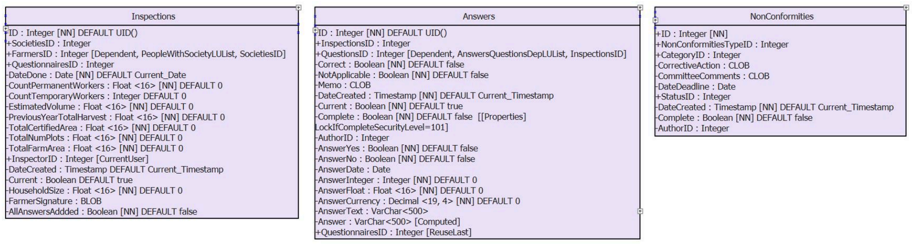
```
QuestionSections
-ID : Integer [NN] DEFAULT UID()
-OrderID : Integer
-Name : VarChar<100>
-Description : CLOB
-AuthorID : Integer
-DateCreated : Timestamp DEFAULT Current_Timestamp
-FullName : VarChar<500> [Generated]
+QuestionnairesID : Integer
```

```
Questions
-ID : Integer [NN] DEFAULT UID()
+QuestionnairesID : Integer [ReuseLast]
+SectionsID : Integer [[Properties]
ReuseLast=1
Dependent=1
ResourceName=QuestionSectionsQuestionnaireList
TargetField=QuestionnairesID
TargetTable=QuestionSections]
-OrderID : Integer [NN] DEFAULT 1
-Question : CLOB
-Guidance : CLOB
-Justification : CLOB
-CorrectAnswer : CLOB
-DateCreated : Timestamp [NN] DEFAULT Current_Timestamp
-Current : Boolean [NN] DEFAULT true
-FullName : VarChar<500> [Generated]
-AuthorID : Integer
+AnswersTypeID : Integer
-PossibleAnswers : CLOB
-AnswersDefaultScript : CLOB
-Required : Boolean [NN] DEFAULT false
+ParentQuestionsID : Integer [Dependent, ParentQuestionsLUList, QuestionnairesID, Questions]
-ShowIfParentAnswer : VarChar<500>
-AnswersRequiringNote : CLOB
```

Questionnaires, QuestionSections, Questions

Inspections, Answers and Nonconformities

The image below shows each of these data-entities and lists all the **data-fields** present in each one, with it's **data-type**. These images give an overview of the data-entities which is fully detailed in the individual linked sections listed above.



```
Inspections
-ID : Integer [NN] DEFAULT UID()
+SocietiesID : Integer
+FarmersID : Integer [Dependent, PeopleWithSocietyLUList, SocietiesID]
+QuestionnairesID : Integer
-DateDone : Date [NN] DEFAULT Current_Date
-CountPermanentWorkers : Float <16> [NN] DEFAULT 0
-CountTemporaryWorkers : Integer DEFAULT 0
-EstimatedVolume : Float <16> [NN] DEFAULT 0
-PreviousYearTotalHarvest : Float <16> [NN] DEFAULT 0
-TotalCertifiedArea : Float <16> [NN] DEFAULT 0
-TotalNumPlots : Float <16> [NN] DEFAULT 0
-TotalFarmArea : Float <16> [NN] DEFAULT 0
+InspectorID : Integer [CurrentUser]
-DateCreated : Timestamp DEFAULT Current_Timestamp
-Current : Boolean DEFAULT true
-HouseholdSize : Float <16> [NN] DEFAULT 0
-FarmerSignature : BLOB
-AllAnswersAddded : Boolean [NN] DEFAULT false
```

```
Answers
-ID : Integer [NN] DEFAULT UID()
+InspectionsID : Integer
+QuestionsID : Integer [Dependent, AnswersQuestionsDepLUList, InspectionsID]
-Correct : Boolean [NN] DEFAULT false
-NotApplicable : Boolean [NN] DEFAULT false
-Memo : CLOB
-DateCreated : Timestamp [NN] DEFAULT Current_Timestamp
-Current : Boolean [NN] DEFAULT true
-Complete : Boolean [NN] DEFAULT false  [[Properties]
LockIfCompleteSecurityLevel=101]
-AuthorID : Integer
-AnswerYes : Boolean [NN] DEFAULT false
-AnswerNo : Boolean [NN] DEFAULT false
-AnswerDate : Date
-AnswerInteger : Integer [NN] DEFAULT 0
-AnswerFloat : Float <16> [NN] DEFAULT 0
-AnswerCurrency : Decimal <19, 4> [NN] DEFAULT 0
-AnswerText : VarChar<500>
-Answer : VarChar<500> [Computed]
+QuestionnairesID : Integer [ReuseLast]
```

```
NonConformities
+ID : Integer [NN]
+NonConformitiesTypeID : Integer
+CategoryID : Integer
-CorrectiveAction : CLOB
-CommitteeComments : CLOB
-DateDeadline : Date
+StatusID : Integer
-DateCreated : Timestamp [NN] DEFAULT Current_Timestamp
-Complete : Boolean [NN] DEFAULT false
-AuthorID : Integer
```

Inspections, Answers & NoConformities

A detailed "how to" document on using the Questionnaires system is here:

Creating a new Questionnaire

The main implementation of the Questionnaire system is in the ICO-System. This is detailed here:

The KKFU ICO System

Questionnaires

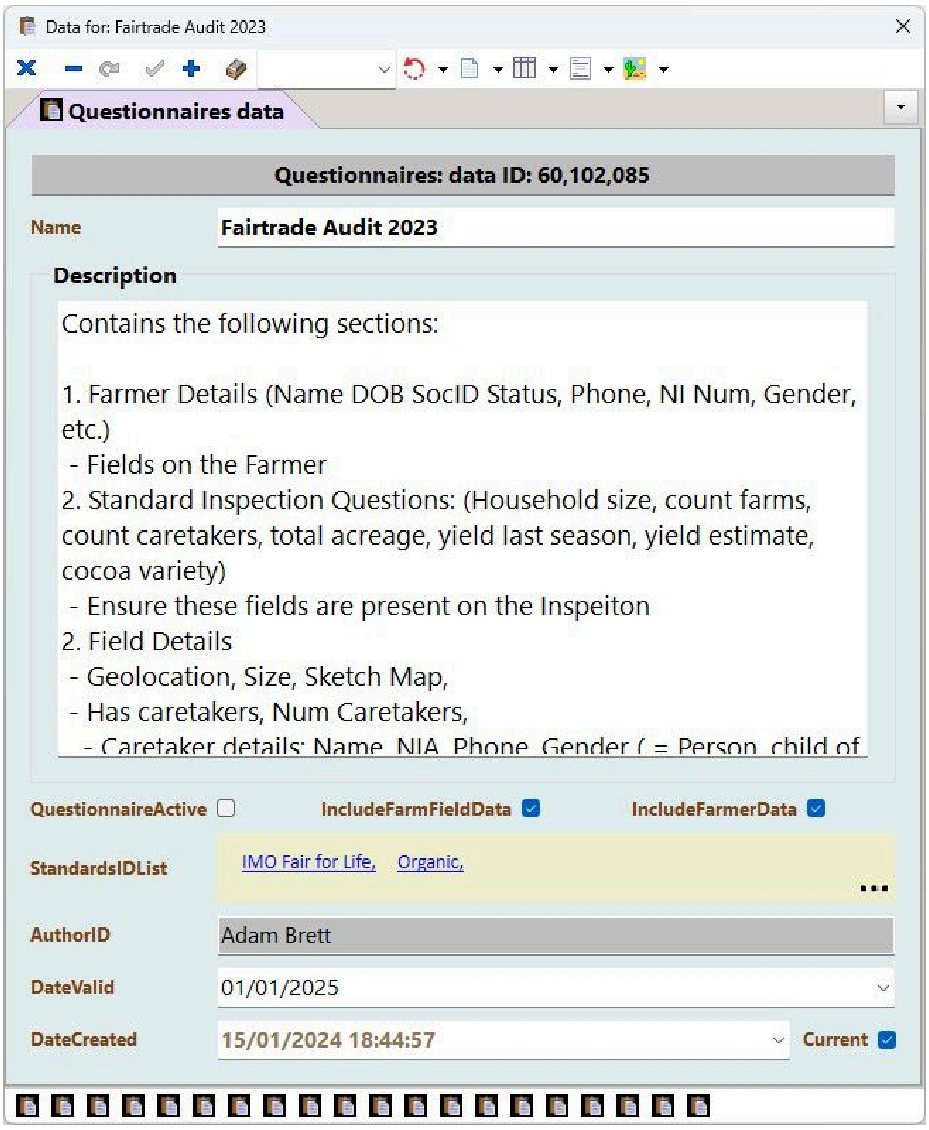
Purpose

The Questionnaires data-table holdsthe names of all the Questionnaires KKFU works with. The data-table exists mainly to hold links to **Questions**. The "DateValid" field is useful for management purposes to set dates when a questionnaire should be reviewed and updated.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

How and where to access Questionnaires data

The image below shows the "Questionnaires" Edit Form. This is accessed via its own entry in the System Entities screen.



Data for: Fairtrade Audit 2023

Questionnaires data

Questionnaires: data ID: 60,102,085

Name	Fairtrade Audit 2023

Description

Contains the following sections:

1. Farmer Details (Name DOB SocID Status, Phone, NI Num, Gender, etc.)
 - Fields on the Farmer
2. Standard Inspection Questions: (Household size, count farms, count caretakers, total acreage, yield last season, yield estimate, cocoa variety)
 - Ensure these fields are present on the Inspeiton
2. Field Details
 - Geolocation, Size, Sketch Map,
 - Has caretakers, Num Caretakers,
 - Caretaker details: Name, NIA, Phone, Gender (= Person, child of

QuestionnaireActive ☐ IncludeFarmFieldData ☑ IncludeFarmerData ☑

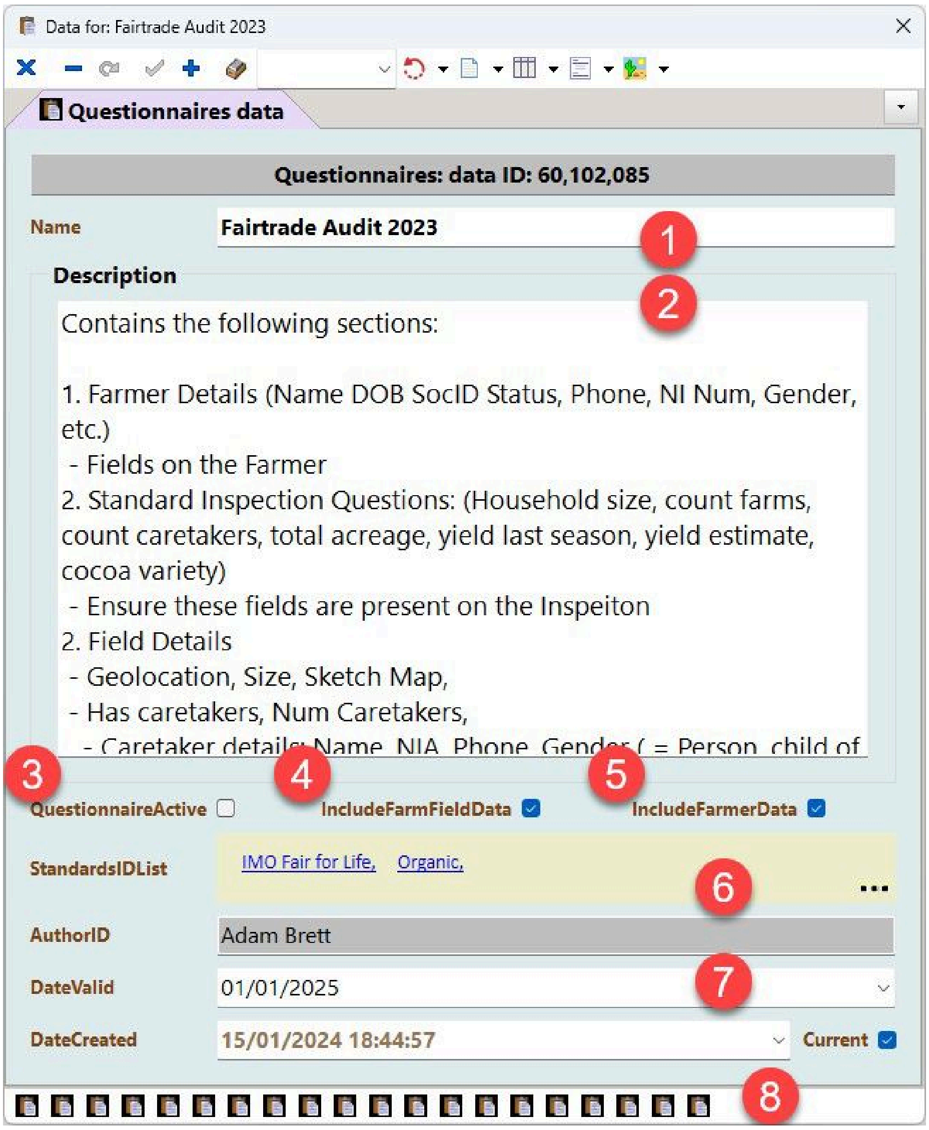
StandardsIDList	IMO Fair for Life, Organic,
AuthorID	Adam Brett
DateValid	01/01/2025
DateCreated	15/01/2024 18:44:57

Current ☑

Questionnaires edit form

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Purpose of the different parts of the Questionnaires System Screen



Questionnaires: data ID: 60,102,085

Name: Fairtrade Audit 2023

Description

Contains the following sections:

1. Farmer Details (Name DOB SocID Status, Phone, NI Num, Gender, etc.)
 - Fields on the Farmer
2. Standard Inspection Questions: (Household size, count farms, count caretakers, total acreage, yield last season, yield estimate, cocoa variety)
 - Ensure these fields are present on the Inspeiton
2. Field Details
 - Geolocation, Size, Sketch Map,
 - Has caretakers, Num Caretakers,
  - Caretaker details: Name, NIA, Phone, Gender (= Person, child of

QuestionnaireActive □ IncludeFarmFieldData ☑ IncludeFarmerData ☑

StandardsIDList: IMO Fair for Life, Organic, ...

AuthorID: Adam Brett

DateValid: 01/01/2025

DateCreated: 15/01/2024 18:44:57 Current ☑

Purpose of parts of the Questionnaires screen

1. Name of Questionniare. This will be shown when the user selects a Questionnaire on the main screen of the ICO System Application
2. Description: Self explanitory
3. Questionnaire Active: If this tick-box is ticked the Questionnaire is marked as "active" in the database. It is not possible to **edit** the questions in an active Questionniare. This is done to ensure that all Questionnaires are undertaken using the same questions. Staff should tick this field once a Questionnaire is in-use, as this will make it impossible for users to change Question records in ways which might compromise the Questionnaire.
4. Include Farm Field Data: If this tick-box is ticked, when a Questionnaire is run a screen will be included in the Questionnaire to gather and confirm basic data about the farmer's fields to gather data such as field-size, location, and the map of the field.
5. Include Farmer Data: If this tick-box is ticked, when a Questionnaire is run a screen will be included in the Questionnaire to gather and confirm basic data about the farmer such as their gender, names, KK-ID-Num, Phone Numbers etc. Do not tick this field if the Questionnaire is of a general nature and may be used to ask questions of people who are not farmers.
6. StandardsIDList: If a Questionnaire is used to assist in the management of a particular international standard such as Organic or Rainforest Alliance these can be added here.
7. Other fields: The system contains standard Orixa fields to record **who** created the Questionnaire and **when** it was edited.
8. Along the bottom of the screen icons are added representing links Questions. Click on any icon to open the related record.

Data-schema: full details of the data-fields and their purpose in the Questionnaires data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
Name (Text)	Self explanitory	Entered by user	
Description (Long Text)	Self explanitory	Entered by user	
StandardsIDList (Text)	Contains a list of international standards, such as "Organic" "Fairtrade" etc.	Entered by user	IDList
AuthorID (Integer)	Self explanitory		Automatically set by Orixa, not under the control of users or developers.
DateValid (Date)	Self explanitory	Entered by user	
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	Default value: true

Question Sections

Purpose

The Question Sections data-table is a child entity which holds data to separate Questionnaires into separate sections. It links to Questionnaires and Questions. It is a very simple data-table, intended just to assist with ordering and grouping of questions within a questionnaire.

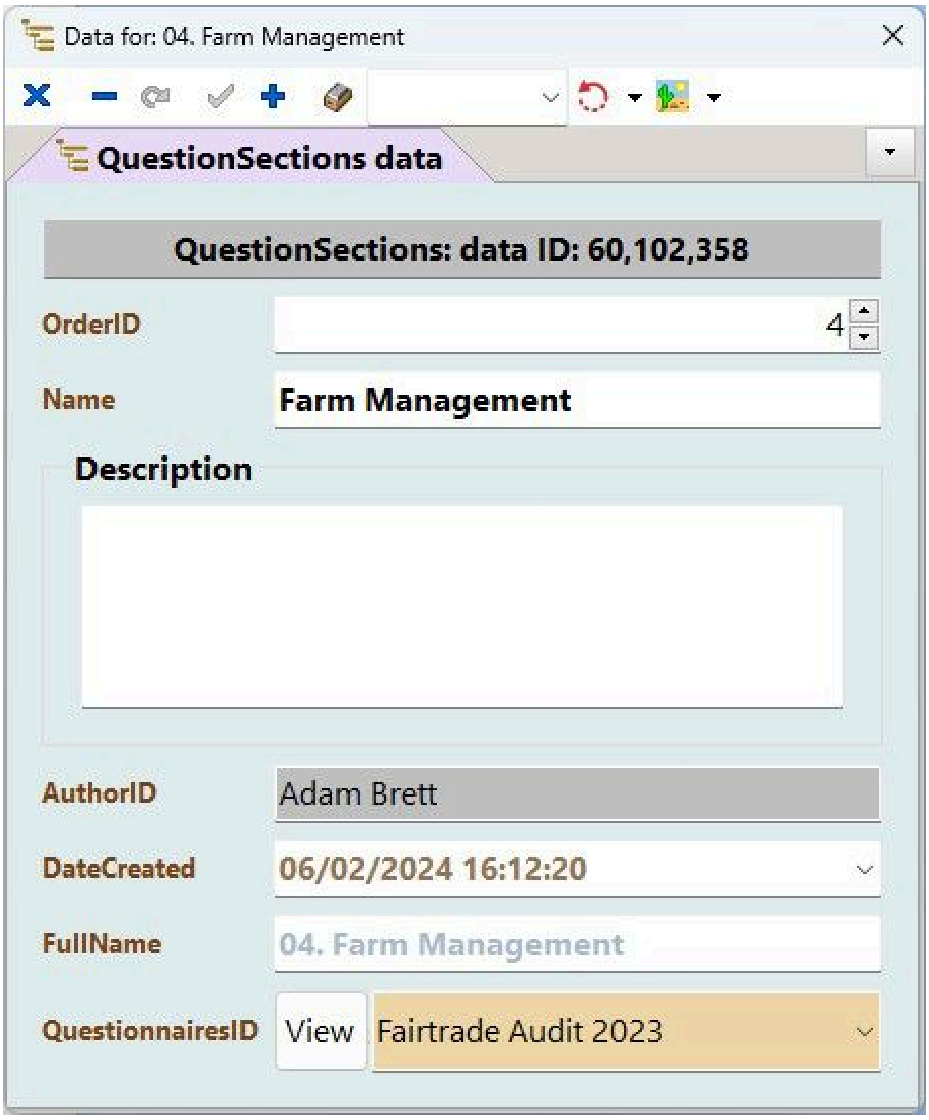
Note: If Images are added to a QuestionSection, these images can be used within the Questionnaire to provided visual assistance to users of the system.

The QuestionSections data-table includes data-fields for things like the "OrderID" and "Name" of the Section, allowing people to design Questionnaires with sections that make logical sense to the participants.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please read further in this topic.

How and where to access QuestionSections data

The image below shows the "QuestionSections" Edit Form. This is accessed via its own entry in the System Entities screen.



Data for: 04. Farm Management

QuestionSections data

QuestionSections: data ID: 60,102,358

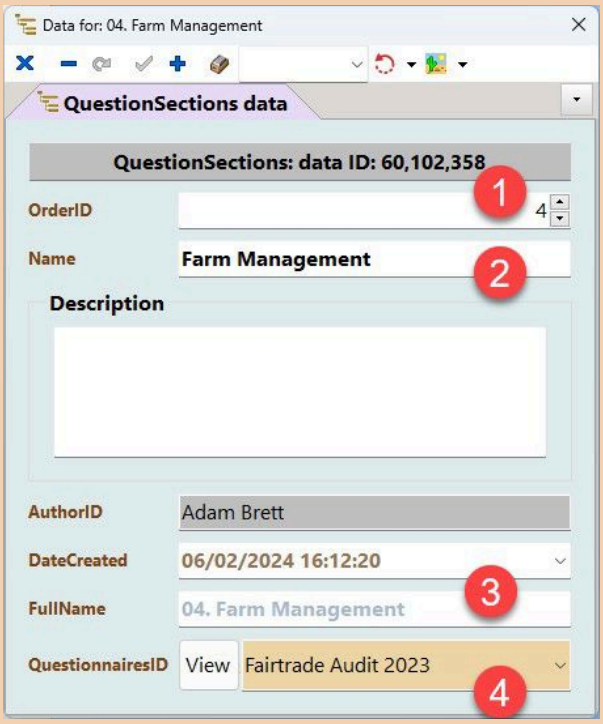
OrderID	4
Name	Farm Management
Description	
AuthorID	Adam Brett
DateCreated	06/02/2024 16:12:20
FullName	04. Farm Management
QuestionnairesID	View Fairtrade Audit 2023

QuestionSections edit form

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Details of the QuestionSections edit form

<



Data for: 04. Farm Management

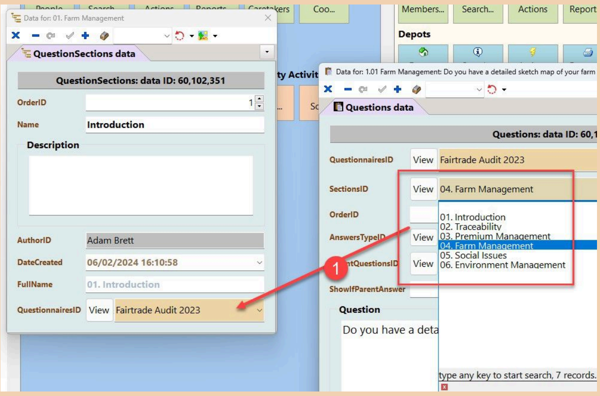
QuestionSections data

QuestionSections: data ID: 60,102,358

OrderID	4
Name	Farm Management
Description	
AuthorID	Adam Brett
DateCreated	06/02/2024 16:12:20
FullName	04. Farm Management
QuestionnairesID	View Fairtrade Audit 2023

QuestionSections edit form details

1. OrderID: Determines the position of the Section within the Questionnaire.
2. Name of the section.
3. FullName: This is used in the Questionnaire Form.
4. Each QuestionSection record is linked to a particular Questionnaire. This means that only the QuestionSections for the specific Questionnaire will show in the List of possible "Sections" on the Questions form.



Data for: 01. Farm Management

QuestionSections data

QuestionSections: data ID: 60,102,351

OrderID	1
Name	Introduction
Description	
AuthorID	Adam Brett
DateCreated	06/02/2024 16:10:58
FullName	01. Introduction
QuestionnairesID	View Fairtrade Audit 2023

Data for: 1.01 Farm Management: Do you have a detailed sketch map of your farm

Questions data

Questions: data ID: 60,1

QuestionnairesID	View Fairtrade Audit 2023
SectionsID	View 04. Farm Management
OrderID	
AnswersTypeID	View
ntQuestionsID	View
ShowIfParentAnswer	

01. Introduction
02. Traceability
03. Premium Management
04. Farm Management
05. Social Issues
06. Environment Management

type any key to start search, 7 records.

Question

Do you have a deta

Linking from Questionnaires to QuestionSections

The image shows that the "Sections" for each Question must match the set of Sections linked to a particular Questionnaire.

Data-schema: full details of the data-fields and their purpose in the QuestionSections data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
OrderID (Integer)	Used to set the order in which the section of questions will appear in the questionnaire.	Entered by user	
Name (Text)	Self explanitory	Entered by user	
Description (Long Text)	Self explanitory	Entered by user	
AuthorID (Integer)	Self explanitory		Automatically set by Orixa, not under the control of users or developers.
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
FullName (Text)	Read-Only, computed by Orixa, based on values in the database.	Value generated by Orixa	

Questions

Purpose

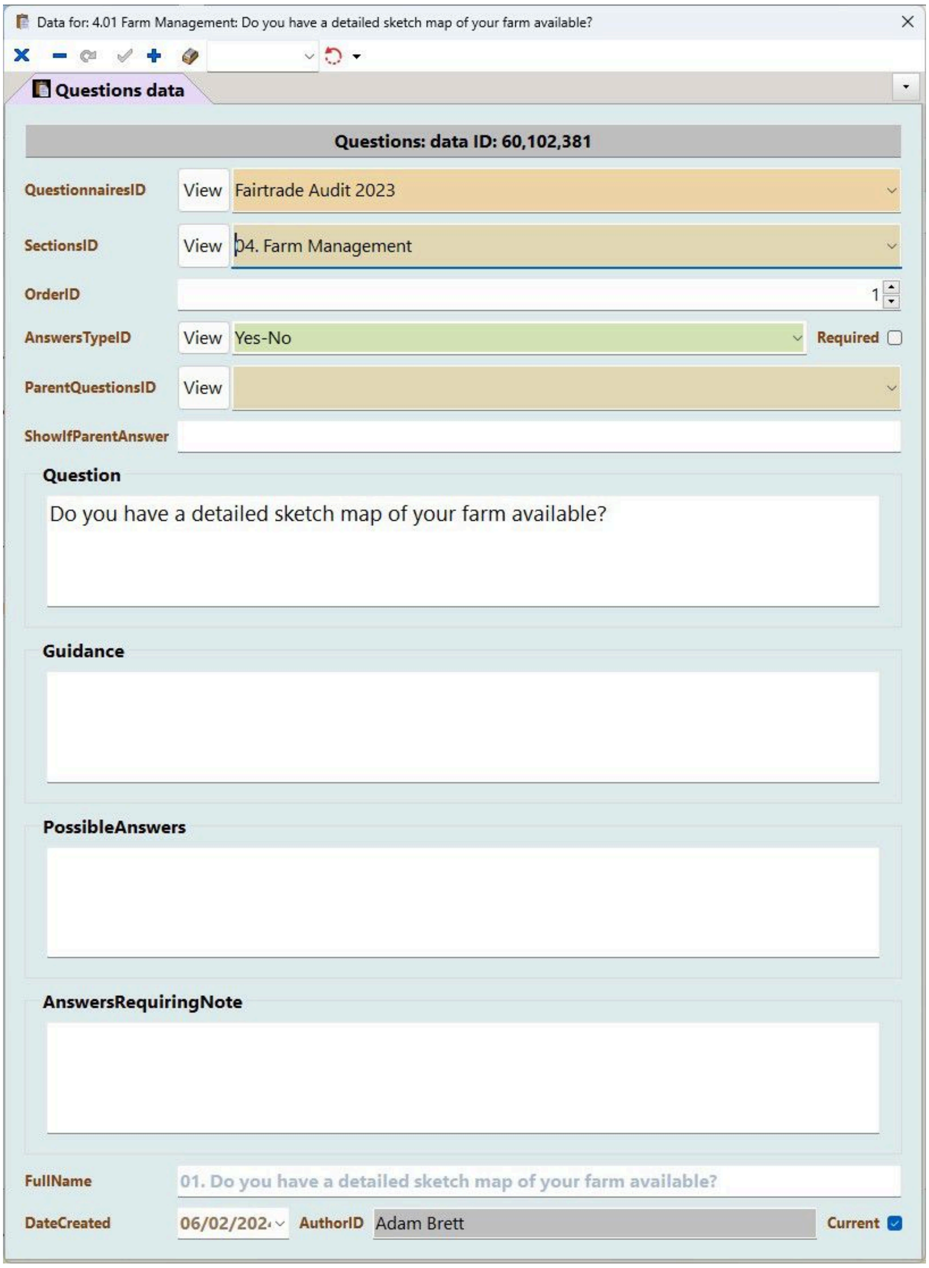
The Questions data-table is a child entity which holds data for the actual questions that are asked by staff as part of a Questionnaire. It links to Questionnaires.

The Questions data-table includes data-fields for the actual question and also fields for guidance that can be useful to help staff in how they should ask the question.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please read further in this topic.

How and where to access Questions data

The image below shows the "Questions" Edit Form. This is accessed via the Questionnaires entry in the System Entities screen.



Data for: 4.01 Farm Management: Do you have a detailed sketch map of your farm available?

Questions data

Questions: data ID: 60,102,381

QuestionnairesID View Fairtrade Audit 2023

SectionsID View 04. Farm Management

OrderID 1

AnswersTypeID View Yes-No Required ☐

ParentQuestionsID View

ShowIfParentAnswer

Question

Do you have a detailed sketch map of your farm available?

Guidance

PossibleAnswers

AnswersRequiringNote

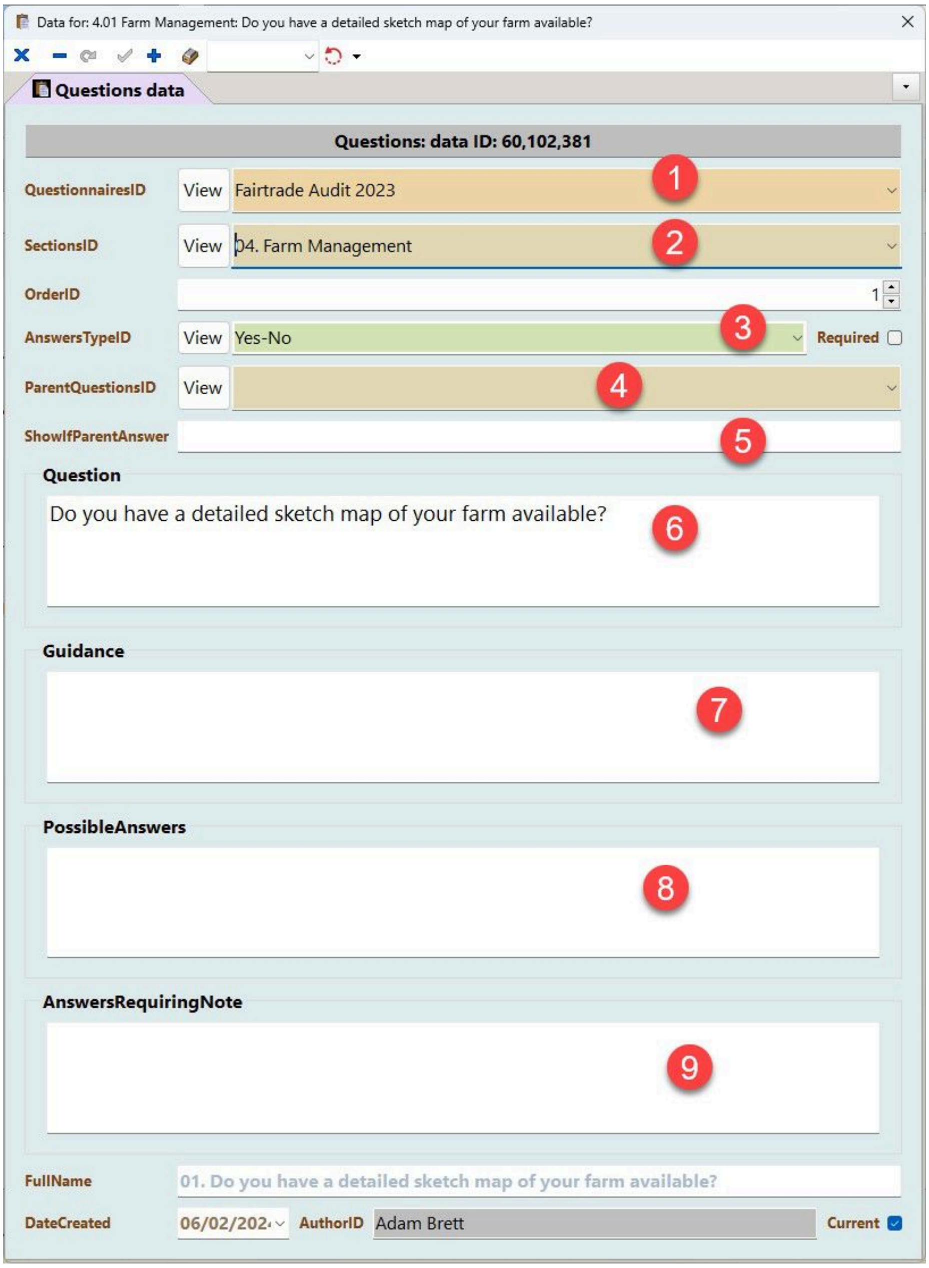
FullName 01. Do you have a detailed sketch map of your farm available?

DateCreated 06/02/202 AuthorID Adam Brett Current ☑

Questions edit form

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Details of the Questions edit form



Data for: 4.01 Farm Management: Do you have a detailed sketch map of your farm available?

Questions data

Questions: data ID: 60,102,381

QuestionnairesID: View Fairtrade Audit 2023

SectionsID: View 04. Farm Management

OrderID: 1

AnswersTypeID: View Yes-No Required ☐

ParentQuestionsID: View

ShowIfParentAnswer:

Question: Do you have a detailed sketch map of your farm available?

Guidance:

PossibleAnswers:

AnswersRequiringNote:

FullName: 01. Do you have a detailed sketch map of your farm available?

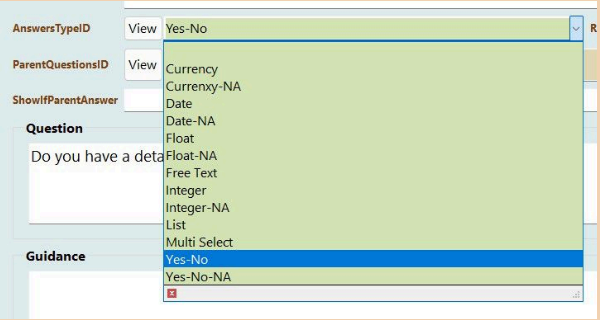
DateCreated: 06/02/202 AuthorID: Adam Brett Current ☑

Questions edit form: Details

1. **QuestionnairesID:** The current question will be included in the Questionnaire selected Questionnaire.
2. **SectionsID:** The current question will be displayed together with other questions with this "SectionID"
3. **OrderID:** The current question will be placed in the Questionnaire based on this field.
4. **ParentQuestionsID:** The Questionnaire system includes **conditional display of questions.** This field is used to enable this functionality. The operation of this is explained below.
5. **ShowIfParentAnswer:** The Questionnaire system includes **conditional display of questions.** This field is used to enable this functionality. The operation of this is explained below.
6. **Question:** The actual text of the question is entered here.
7. **Guidance:** Any additional helpful guidance for either the ICO Officer or the person being questioned can be added here. **Note that this field includes HTML Formatting**, which is explained below.
8. **PossibleAnswers:** If the "AnswersTypeID" is either "List" or "Multi-Select" the text in this field is used to provide a list of possible answers that the user can select.

9. **AnswersRequiringNote:** Some answers may result in the need for an additional note. Answers selected from PossibleAnswers may match the text entered in this field. If they do, the user will be asked to add a note to the question.

Examples of operation of the Questionnaire system



AnswersTypeID View Yes-No

ParentQuestionsID View

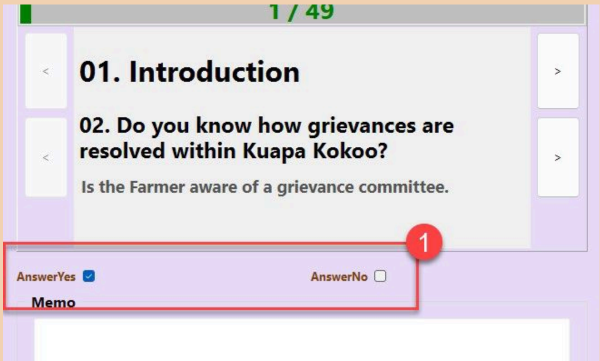
ShowIfParentAnswer

Question

Do you have a deta

Guidance

AnswersTypeID



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01. Introduction

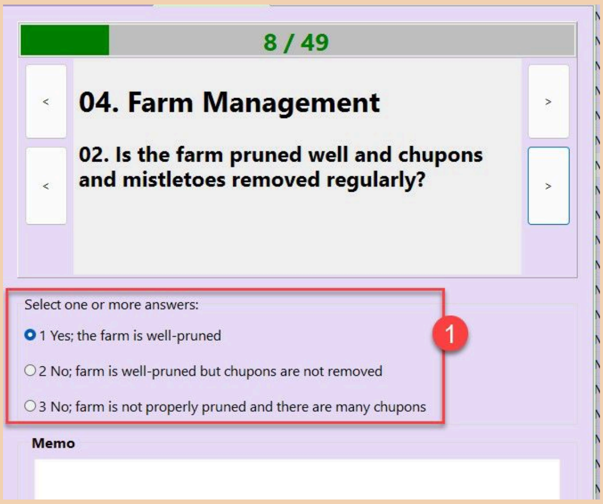
02. Do you know how grievances are resolved within Kuapa Kokoo?

Is the Farmer aware of a grievance committee.

AnswerYes ☑ AnswerNo □

Memo

Example of a "Yes-No" Question with the answer-options displayed at !.



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04. Farm Management

02. Is the farm pruned well and chupons and mistletoes removed regularly?

Select one or more answers:

● 1 Yes; the farm is well-pruned

○ 2 No; farm is well-pruned but chupons are not removed

○ 3 No; farm is not properly pruned and there are many chupons

Memo

Example of a "Multi-Select" Question, with answer-options showing

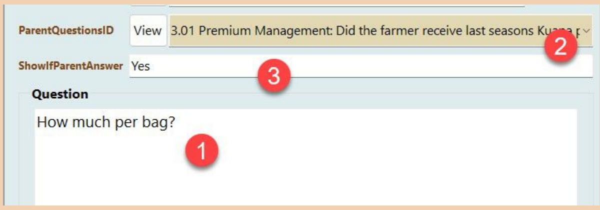
Answer Types

To make data-gathering easier, questions can be given **AnswerTypeIDs**, corresponding to different type of answer. The choice of Answer Type will determine the choices the user can make when answering the question.

The Questionnaire system includes the following Answer types:

1. Currency: For recording money-values.
2. Date: For recording the date or time an event occurred.
3. Float: For recording "flaoting point numbers", these are numbers such as 12.34 or 5.666, which have a fractional part.
4. Free Text: For recording text of any length and content.
5. Integer: For recording whole numbers.
6. List: Pick this choice to use the "Possible Answers" field (explained below). If "List" is used, the user will be able to pick **one** item from the list of possible answers.
7. Multi-Select. Pick this choice to use the "Possible Answers" field (explained below). If "Multi-Select" is used the user will be able to pick **one or more** of the possible answers.
8. Yes - No: For recording Yes/No, True/False anwers.
9. N/A: Not Applicable: Note that this Answer-Type is present as an **extra option** to combine with other answer types.

ParentQuestion / ShowIfParentQuestion



ParentQuestionsID: View 3.01 Premium Management: Did the farmer receive last seasons Kuapa p

ShowIfParentAnswer: Yes

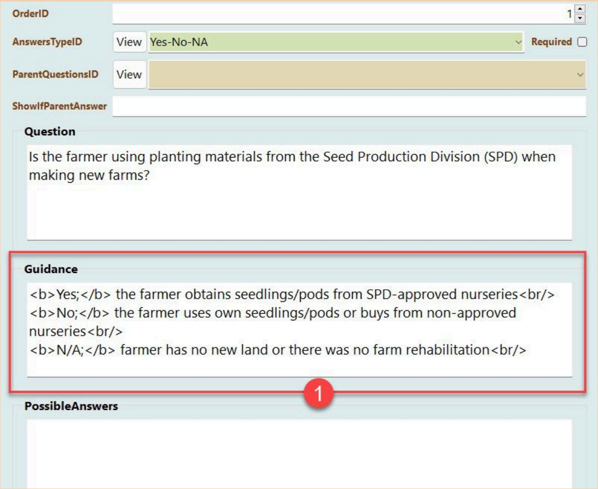
Question: How much per bag?

ParentQuestion / ShowIfParentQuestion

In some cases a question should only be answered depending on the answer of an earlier question. This shows an example of this working in an actual questionnaire.

1. In this case the "Conditional Question" asks How much a farmer was paid per bag.
2. This question references an earlier question "was the farmer paid a premium"
3. The **current** question will be shown if the **parent-question** is answered "Yes".

Guidance: Entry in the Questions table



OrderID: 1

AnswersTypeID: Yes-No-NA Required □

ParentQuestionsID:

ShowIfParentAnswer:

Question: Is the farmer using planting materials from the Seed Production Division (SPD) when making new farms?

Guidance:
<b>Yes;</b> the farmer obtains seedlings/pods from SPD-approved nurseries<br/>
<b>No;</b> the farmer uses own seedlings/pods or buys from non-approved nurseries<br/>
<b>N/A;</b> farmer has no new land or there was no farm rehabilitation<br/>

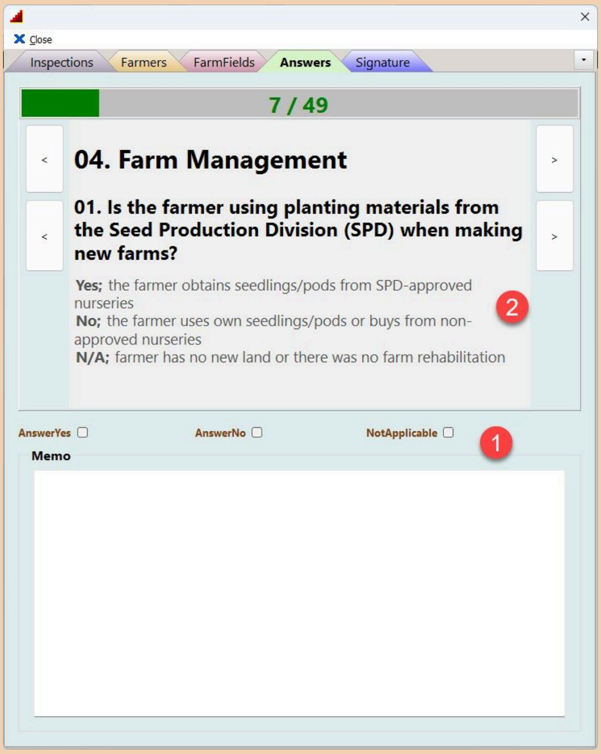
PossibleAnswers:

Example using text in the "Guidance" field of the question record

Note: Within the guidance field basic HTML Tags including "B", "UL", "I" etc. can be used to format the appearance of the text.

This can be seen in practice on the right with the formatting of the entered text.

Resulting display in the system



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04. Farm Management

01. Is the farmer using planting materials from the Seed Production Division (SPD) when making new farms?

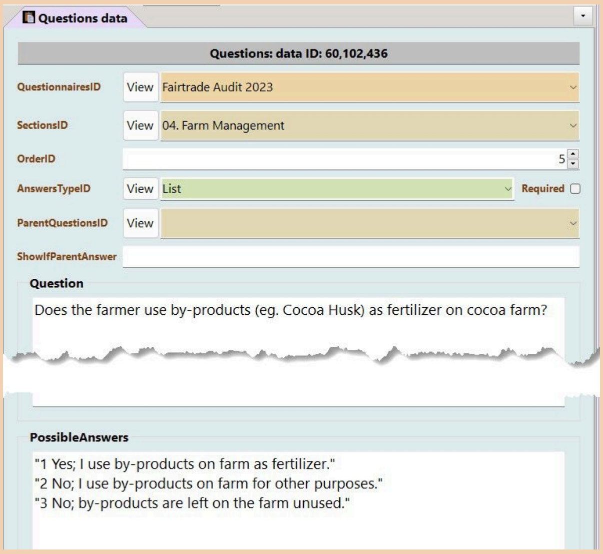
Yes; the farmer obtains seedlings/pods from SPD-approved nurseries
No; the farmer uses own seedlings/pods or buys from non-approved nurseries
N/A; farmer has no new land or there was no farm rehabilitation

AnswerYes □ AnswerNo □ NotApplicable □

Memo

Image above at 2., shows how the "Guidance" field will be displayed in use. Note how the HTML Formatting works.

Possible Answers



Questions: data ID: 60,102,436

QuestionnairesID: Fairtrade Audit 2023

SectionsID: 04. Farm Management

OrderID: 5

AnswersTypeID: List Required □

ParentQuestionsID:

ShowIfParentAnswer:

Question: Does the farmer use by-products (eg. Cocoa Husk) as fertilizer on cocoa farm?

PossibleAnswers:
"1 Yes; I use by-products on farm as fertilizer."
"2 No; I use by-products on farm for other purposes."
"3 No; by-products are left on the farm unused."

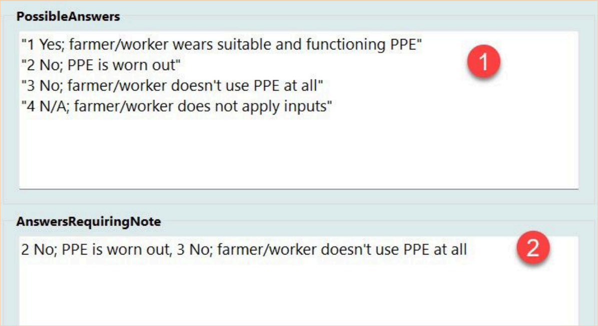
Note that possible answers are formatted with each possible answer on a separate line, and the whole answer enclosed in **double quotes**.

Note that this means double quotes should not be used within the main text of any possible answers, as this will confuse the programming of the system.

"PossibleAnswers" are used with "AnswerTypeIDs" of either "List" or "Multi-Select"

Possible Answers

Answers Requiring Note



PossibleAnswers

"1 Yes; farmer/worker wears suitable and functioning PPE"
"2 No; PPE is worn out"
"3 No; farmer/worker doesn't use PPE at all"
"4 N/A; farmer/worker does not apply inputs"

AnswersRequiringNote

2 No; PPE is worn out, 3 No; farmer/worker doesn't use PPE at all

Answers Requiring Note

The Questionnaire system includes some special additional logic creating a mechanism where **some** answers must be accompanied by a note.

"AnswersRequiringNote" can contain **any** text, but to work reliably it should only be used where the value of the answer can be carefully predicted, for example with values like "Yes", "No" or an answer that exactly matches one or more lines of text from the "PossibleAnswers" column.

Note that "AnswersRequiringNote" can contain more than 1 value. Care should be taken to ensure that values which do not require a note are different from those which do.

For example if two answers are "Five" and "More than Five" and the answer "Five" requires a note **both** answers would trigger the system to ask for a note, since both answers contain the text "Five". To fix this the two answers should be "Five" and "Six or More".

Data-schema: full details of the data-fields and their purpose in the FarmFields data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
QuestionnairesID (Link-ID)	Links to the Questionnaires table	Selected from list by User	Will default to the currently open Questionnaires ID
SectionsID (Link-ID)	Links to the QuestionSections table.	Selected from list by User, list generated by the "QuestionSectionsQuestionnaireList" Resource.	Will default to the currently open QuestionSections ID
OrderID (Integer)	Self explanitory	Entered by user	Default value: 1
Question (Long Text)	Self explanitory	Entered by user	
Guidance (Long Text)	Self explanitory	Entered by user	
Justification (Long Text)	Self explanitory	Entered by user	
CorrectAnswer (Long Text)	Self explanitory	Entered by user	

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	Default value: true
FullName (Text)	Read-Only, computed by Orixa, based on values in the database.	Value generated by Orixa	
AuthorID (Integer)	Self explanitory		Automatically set by Orixa, not under the control of users or developers.
AnswersTypeID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
PossibleAnswers (Long Text)	Self explanitory	Entered by user	
AnswersDefaultScript (Long Text)	Self explanitory	Entered by user	
Required (true/false)	Self explanitory	True / false	Default value: false
ParentQuestionsID (Link-ID)	Links to the Questions table	Selected from list by User, list created with the ParentQuestionsLUList resource.	
ShowIfParentAnswer (Text)	Programmatic field	Set a text value. The current question will only be shown if the Parent-Question's Answer is identical to the value in this field.	
AnswersRequiringNote (Free-Text)	Programmatic field	Set a text value. When the user provides an Answer they will be prompted to add a note if it is is identical to the value in this field.	

Answers

Purpose

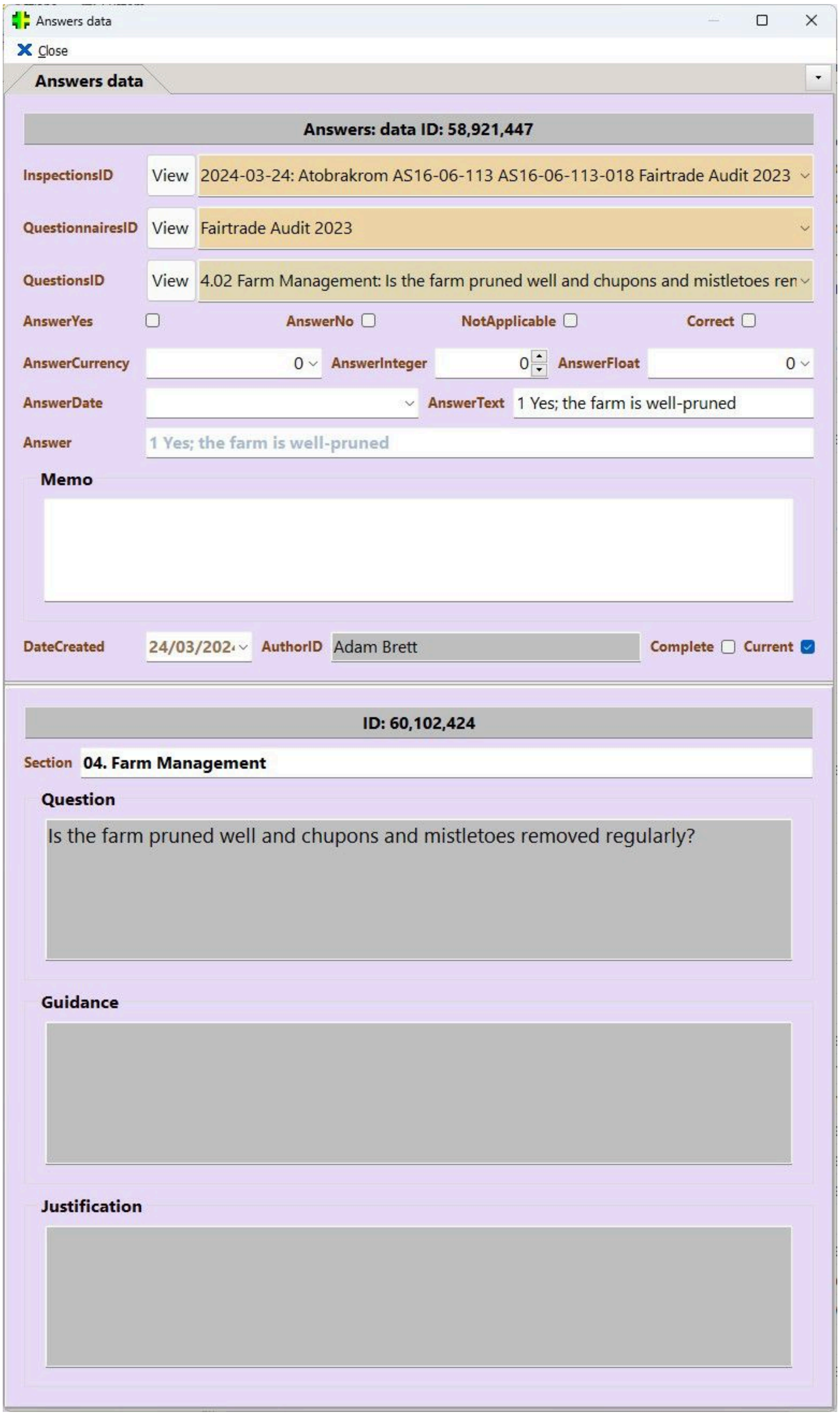
The Answers data-table is a child entity which holds data for the actual answers given by farmers to questions that are asked by staff as part of a Questionnaire. It links to Questions, and Inspections. Each Inspections record includes a "FarmersID" and "SocietiesID" to link the record to the main data-entities of KKSys.

The Answers data-table includes data-fields for Answers given to the question, these are segmented by data-type to allow different types of answer to be presented differently in the KKSys user-interface.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please read further in this topic.

How and where to access Answers data

The image below shows the "Answers" Edit Form. This is accessed via the Questionnaires entry in the System Entities screen.



Answers data

Close

Answers data

Answers: data ID: 58,921,447

InspectionsID View 2024-03-24: Atobrakrom AS16-06-113 AS16-06-113-018 Fairtrade Audit 2023

QuestionnairesID View Fairtrade Audit 2023

QuestionsID View 4.02 Farm Management: Is the farm pruned well and chupons and mistletoes ren

AnswerYes □ AnswerNo □ NotApplicable □ Correct □

AnswerCurrency 0 AnswerInteger 0 AnswerFloat 0

AnswerDate AnswerText 1 Yes; the farm is well-pruned

Answer 1 Yes; the farm is well-pruned

Memo

DateCreated 24/03/202 AuthorID Adam Brett Complete □ Current ☑

ID: 60,102,424

Section 04. Farm Management

Question

Is the farm pruned well and chupons and mistletoes removed regularly?

Guidance

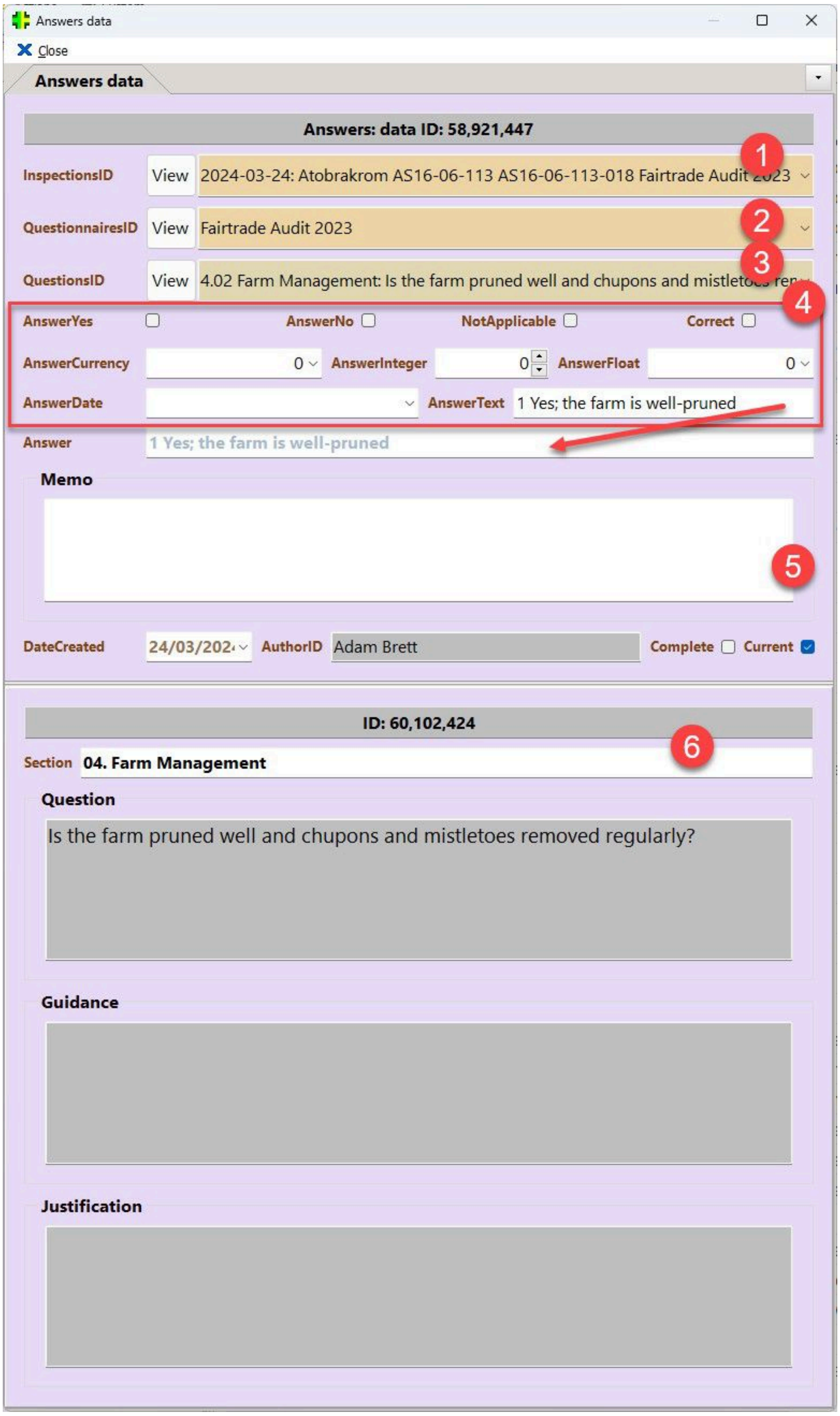
Justification

Answers edit form

The Answers edit-form is used with-in the KKSys back-office system of KKFU. It is not intended for day-to-day data-entry. Data-entry of "Answers" data will be done within the KKICO System or the phone-app.

The Answers edit-form allows back-office users to view and review Answers records. It is provided with a "Summary View" (at the bottom) showing the **Questions** record to which it is linked.

Details of the Answers edit-form



Answers data

Answers: data ID: 58,921,447

InspectionsID	View	2024-03-24: Atobrakrom AS16-06-113 AS16-06-113-018 Fairtrade Audit 2023
QuestionnairesID	View	Fairtrade Audit 2023
QuestionsID	View	4.02 Farm Management: Is the farm pruned well and chupons and mistletoes rem

AnswerYes □ AnswerNo □ NotApplicable □ Correct □

AnswerCurrency 0 AnswerInteger 0 AnswerFloat 0

AnswerDate AnswerText 1 Yes; the farm is well-pruned

Answer 1 Yes; the farm is well-pruned

Memo

DateCreated 24/03/202 AuthorID Adam Brett Complete □ Current ☑

ID: 60,102,424

Section 04. Farm Management

Question

Is the farm pruned well and chupons and mistletoes removed regularly?

Guidance

Justification

Details of the Answers edit form

1. InspectionsID: Link field to the Inspection during which this answer was provided by a user.
2. QuestionnairesID: Link to the Questionniare this answer is part of.
3. QuestionsID: Link to the Question this record gives an answer for.
4. Data-fields holding all possible answers: Because Answers can have different **data-types** (currency, text, date etc.) the Answers data-table contains separate fields for each data type. This is done to make reporting easier at later stages of the data-processing. **Note:** the "Answer" column (shown with the arrow) always contains a computed version of the answer, making it easier to return the data without it's data-type when this is required.
5. Memo: A long-text field used to hold any additional notes made while the answer was being recorded.

> 6. Summary "Questions" data: This part of the form just returns data relating to the Question linked via the "QuestionsID".

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added.

Data-schema: full details of the data-fields and their purpose in the FarmFields data-table

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
InspectionsID (Link-ID)	Links to the Inspections table	Selected from list by User	Will default to the currently open Inspections ID
QuestionnairesID (Link-ID)	Links to the Questionnaires table	Selected from list by User	Will default to the currently open Questionnares ID
QuestionsID (Link-ID)	Links to the Questions table	Selected from list by User	Dependent, AnswersQuestionsDepLUList, InspectionsID
Correct (true/false)	Self explanitory	True / false	Default value: false
NotApplicable (true/false)	Self explanitory	True / false	Default value: false
Memo (Long Text)	Self explanitory	Entered by user	
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	Default value: true
Complete (true/false)	Tick this field to lock the record so further editing is restricted.	True / false	LockIfCompleteSecurityLevel=101 once this field is ticked users will not be able to edit this record unless they have a Security Level greater than 100. Default value: false

Field- Name / Data-type	Description / Purpose	Possible Values	Coding / Automation
AuthorID (Integer)	Self explanitory		Automatically set by Orixa, not under the control of users or developers.
AnswerYes (true/false)	Self explanitory	True / false	Default value: false
AnswerNo (true/false)	Self explanitory	True / false	Default value: false
AnswerDate (Date)	Self explanitory	Entered by user	
AnswerInteger (Integer)	Self explanitory	Entered by user	Default value: 0
AnswerFloat (Number)	Self explanitory	Any number value	Default value: 0
AnswerCurrency (Currency Value)	Self explanitory	Any number value	Default value: 0
AnswerText (Text)	Self explanitory	Entered by user	
Answer (Text)	ReadOnly, value generated by Orixa	Value generated by Orixa	

Non-Conformities

Purpose

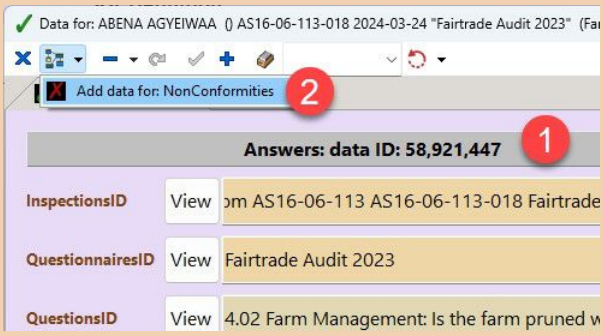
When an Answer leads to a serious concern by an Inspecting officer, a NonConformities record must to be added. This enables KKSys to keep a concise, well managed data-entity which holds details of common less common problems faced by Farmers.

When an Answer record is added to KKSys which does not comply to the correct values the user will be prompted to enter a NonConformity record.

The entity includes fields such as "CategoryID" and "TypeID" which allow the different NonConformities to be categorized. It also contains data-fields to allow monitoring of the Farmer after the NonConformity.

How and when to access

NonConformities records are **extension** records of the **Answers** data-table. Most Answers will **not** include NonConformities. This data-table is added to allow ICO Officers to input data relating to real infringements by Farmers during inspections which require follow-up. The NonConformities data-table includes fields "DateDeadline" and "StatusID" which allow the system to track when a NonConformity should have been dealt with, and whether it has been dealt with.


Data for: ABENA AGYEIWAA () AS16-06-113-018 2024-03-24 "Fairtrade Audit 2023" (Fa

Answers: data ID: 58,921,447

InspectionsID View om AS16-06-113 AS16-06-113-018 Fairtrade

QuestionnairesID View Fairtrade Audit 2023

QuestionsID View 4.02 Farm Management: Is the farm pruned w

Adding a Non-Conformity Record

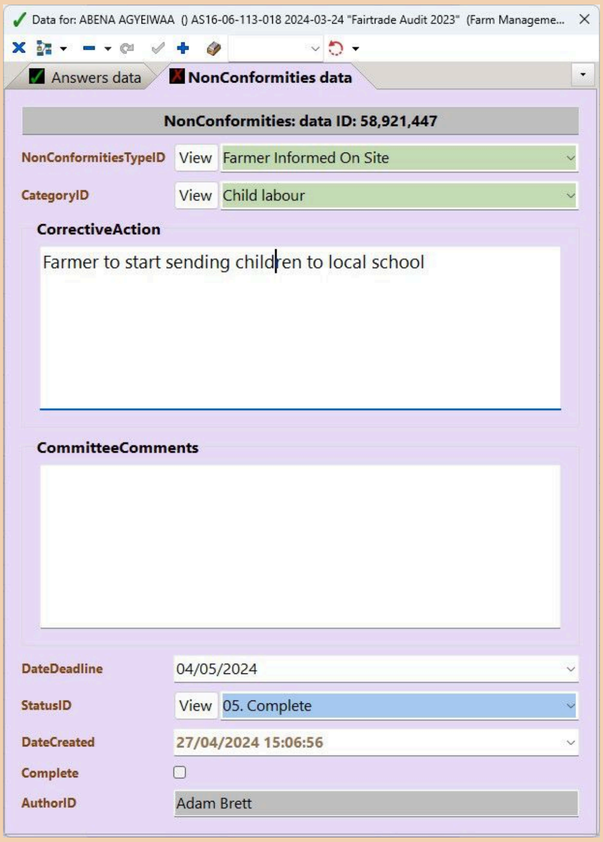
To Add a non-conformity record:

1. Open the Answer record to which you want to add a "NonConformity" extension record.
2. Click on "Add data for: NonConformities" from the "add extension record" button.

The NonFornformities edit-form

The NonConformities edit form includes fields to set the "Type" and "Category" of the NonConformity, allows the ICO Officer to detail a "CorrectiveAction" and has space for a follow-up "Comments" field if it is necessary for the farmer to be revisited.

Note that the layout of this edit form may have changed if it has been updated by your administrator, and additional actions, reports or resources may have been added


Data for: ABENA AGYEIWAA () AS16-06-113-018 2024-03-24 "Fairtrade Audit 2023" (Farm Manageme...

NonConformities: data ID: 58,921,447

NonConformitiesTypeID View Farmer Informed On Site

CategoryID View Child labour

CorrectiveAction

Farmer to start sending children to local school

CommitteeComments

DateDeadline 04/05/2024

StatusID View 05. Complete

DateCreated 27/04/2024 15:06:56

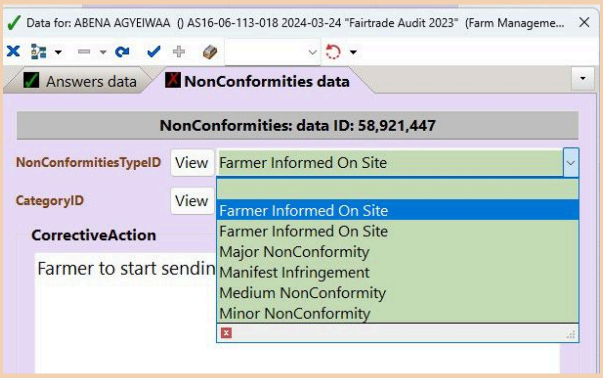
Complete ☐

AuthorID Adam Brett

NonConformities edit-form

The NonConformityTypeID field can be used to set the severity and level of infringment represented by the answer.

For example if the non-conformity is minor the farmer might simply be "Informed On Site" as shown in the image, but more serious infringments can result in higher levels of non-conformity being registered, which can lead to more response by farmer and KKFU team-members.


Data for: ABENA AGYEIWAA () AS16-06-113-018 2024-03-24 "Fairtrade Audit 2023" (Farm Manageme...

NonConformities: data ID: 58,921,447

NonConformitiesTypeID View Farmer Informed On Site

CategoryID View

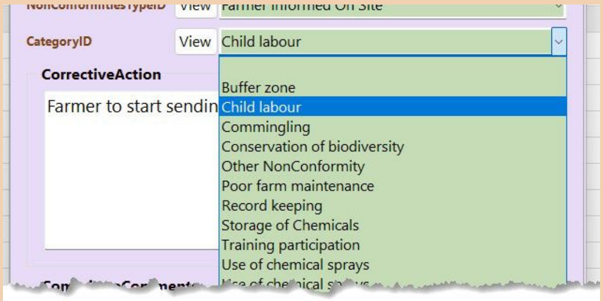
CorrectiveAction

Farmer to start sendin

- Farmer Informed On Site
- Farmer Informed On Site
- Major NonConformity
- Manifest Infringement
- Medium NonConformity
- Minor NonConformity

NonConformityTypeID

The CategoryID field serves to group any non-conformity into a category for reporting and auditing purposes.

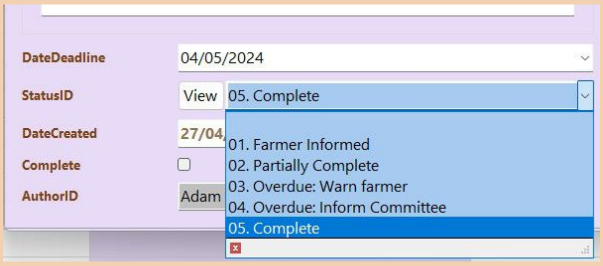

CategoryID View Child labour

CorrectiveAction

Farmer to start sendin

- Buffer zone
- Child labour
- Commingling
- Conservation of biodiversity
- Other NonConformity
- Poor farm maintenance
- Record keeping
- Storage of Chemicals
- Training participation
- Use of chemical sprays

NonConformity Categories



DateDeadline 04/05/2024

StatusID View 05. Complete

DateCreated 27/04

Complete □

AuthorID Adam

01. Farmer Informed
02. Partially Complete
03. Overdue: Warn farmer
04. Overdue: Inform Committee
05. Complete

NonConformity Status values

The StatusID field is used to track the state of the non-conformity, whether there is need for more action or the infringment has been dealt with by KKFU team-members.

Data-schema

Field- Name and Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
NonConformitiesTypeID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
CategoryID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	
CorrectiveAction (Long Text)	Text for the KKFU field-officer to enter details of the action required of the farmer.	Entered by user	
CommitteeComments (Long Text)	Response by the committee, or reviewing staff-members to the action.	Entered by user	
DateDeadline (Date)	Date by which the farmer states they will improve their behaviour.	Entered by user	
StatusID (Link-ID)	Links to the Status table	Pick from list of possible Status values.	Default value: 832
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Complete (true/false)	Tick this field to lock the record so further editing is restricted.	True / false	Default value: false

Field- Name and Data-type	Description / Purpose	Possible Values	Coding / Automation
AuthorID (Integer)	Self explanitory		Automatically set by Orixa, not under the control of users or developers.

KKFU related database elements

Purpose

The data-schema elements in this part of the KKSys allow management of data relating to **Staff** and **Depots**. Each of these entities is linked to a set of child-entities.These child-entities enable the recording of many aspects of data that are required for the day-to-day operation of Kuapa Kokoo.

These entities exist to answer questions such as:

> - How many Zones does KKFU work with?
> - Who works for KKFU, with which roles as staff?
> - Listings for the Depots run by KKFU, **and** which Societies and Zones work with each Depot.

These are only example questions, and many other types of questions can be answered, including questions relating to issues such as how the data changes over time, whether Zones or Societies are growing or shrinking etc.

It is important to remember that some data-schema elements are used much more fully than others.

If changes are made to these entities in KKSys, the changes will be visible within the System Database Modeller .

Some data-entities (such as "Projects") had a period of use by KKFU staff, and have fallen into disuse. Staff at KKFU should review these entities and decide whether to use them or not in future. These under-used and unused entities all have the capacity to serve useful functions within KKFU.

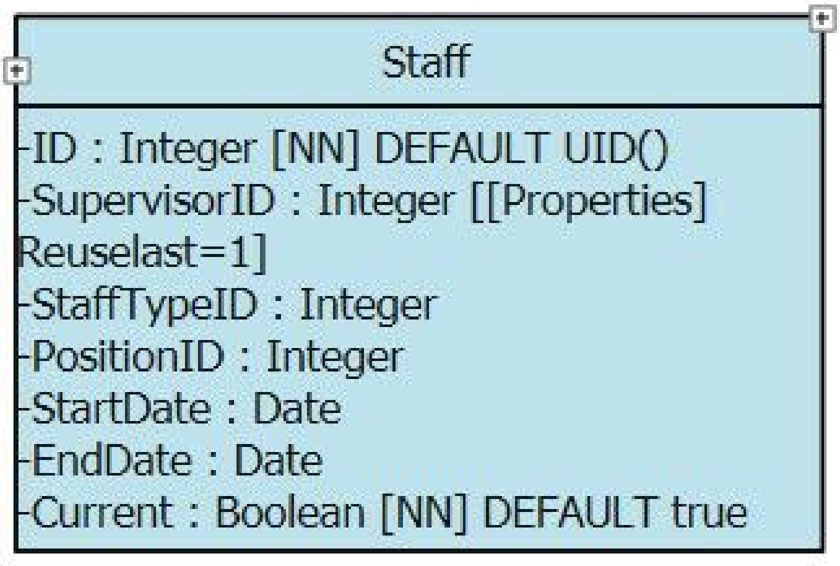
The use and purpose of each of these entities and the child-entities are detailed in individual sections of this help document below, please go to the linked articles for detailed, step by step description of each data-entity

1. Staff

2. Depots

Staff

The image below shows this data-entity and lists all the **data-fields**, with it's **data-type**. These images give an overview of the data-entities which is fully detailed in the individual linked sections listed above.

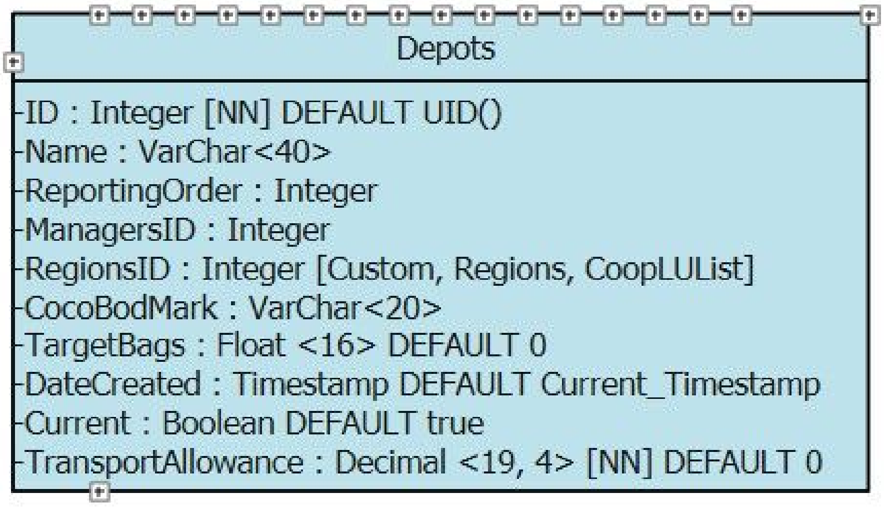


```
Staff
-ID : Integer [NN] DEFAULT UID()
-SupervisorID : Integer [[Properties]
Reuselast=1]
-StaffTypeID : Integer
-PositionID : Integer
-StartDate : Date
-EndDate : Date
-Current : Boolean [NN] DEFAULT true
```

Staff

Depots

The image below shows this data-entity and lists all the **data-fields**, with it's **data-type**. These images give an overview of the data-entities which is fully detailed in the individual linked sections listed above.



Depots

-ID : Integer [NN] DEFAULT UID()
-Name : VarChar<40>
-ReportingOrder : Integer
-ManagersID : Integer
-RegionsID : Integer [Custom, Regions, CoopLUList]
-CocoBodMark : VarChar<20>
-TargetBags : Float <16> DEFAULT 0
-DateCreated : Timestamp DEFAULT Current_Timestamp
-Current : Boolean DEFAULT true
-TransportAllowance : Decimal <19, 4> [NN] DEFAULT 0

Depots

Staff

Purpose

The Staff data-table a list of the staff (field officers, IT offices etc.) who KKFU work with. It is an **extension data-table** which descends from People, all staff are people, and so data relating to their names, date-of-birth etc., need to be entered here first, then the staff data-record subsequently.

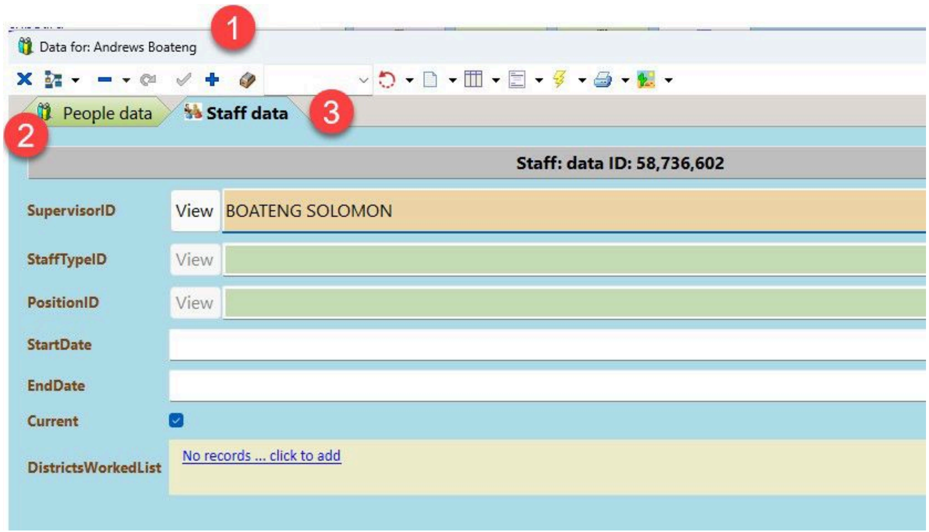
It includes data-fields such as "ActivityType", to list the type of activity which occurred, start and end dates.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

Note that this data-table was used for a period in the 2010's and has since stopped being used. It is still present in KKSys, and can be used again by KKFU staff at any point.

How and when to access Staff

The edit form is accessible from the **People-Farmers-Staff** data-entity on the KKSys System Entities screen, and is shown below.



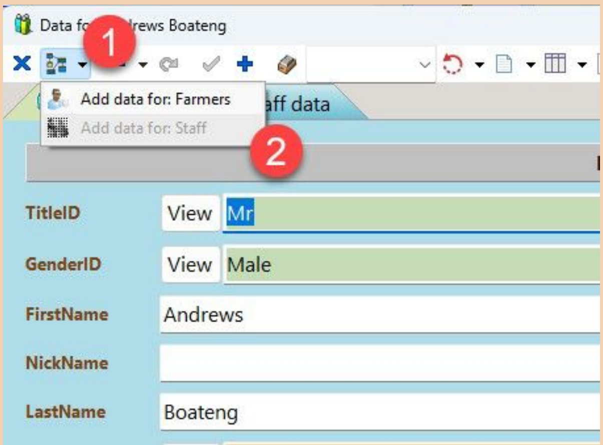
Staff: data ID: 58,736,602

SupervisorID	View	BOATENG SOLOMON
StaffTypeID	View	
PositionID	View	
StartDate		
EndDate		
Current	☑	
DistrictsWorkedList	No records ... click to add	

Staff Edit Form

1. Note that in the image above, we are viewing data for staff member "Andews Boateng"
2. This has "People" data added, which is on the first tab of the edit form.
3. Data specific to this staff member is stored on the "Staff" tab, including the staff-member's Supervisor, their Position etc.

Details of the Staff edit-form

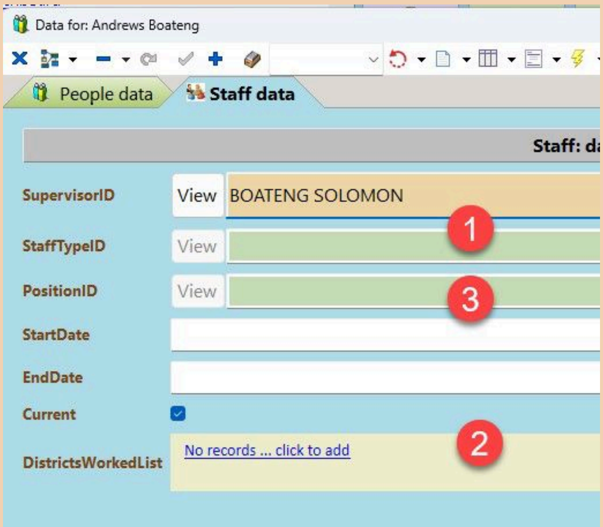


TitleID	View	Mr
GenderID	View	Male
FirstName		Andrews
NickName		
LastName		Boateng

Adding Staff data

When adding a "Staff" Record, first add a People record, and enter data such as first-name, last-name etc., on this screen. Then:

1. Click on the "Add extension record" button.
2. Click on "Add data for Staff", note that this option is greyed out if a Staff record is already present.



SupervisorID	View	BOATENG SOLOMON
StaffTypeID	View	
PositionID	View	
StartDate		
EndDate		
Current		☑
DistrictsWorkedList		No records ... click to add

Staff edit-form details

Once a "Staff" record has been added a small number of extra staff-related fields is available.

1. StaffTypeID: Contains options such as "Permanent", "Salaried" or "Casual".
2. PositionID: Contains options such as "ICO Officer", "ICO Manager", "IT Staff" etc.
3. DistrictsWorkedList: **for ICO officers** use this field to select the district where the staff-member works. The choice in this field will determine which Societies and Zones an ICO officer can see and work with.

Data-schema

Field- Name and Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
SupervisorID (Link-ID)	Links to the Staff table	Selected from list by User	[Properties] Reuselast=1
StaffTypeID (Link-ID)	Links to the Types table	Pick from list of possible Types values.	

Field- Name and Data-type	Description / Purpose	Possible Values	Coding / Automation
PositionID (Link-ID)	Links to the Types table, pick from values such as "field officer"	Pick from list of possible Types values.	
StartDate (Date)	Date the staff member started working for KKFU	Entered by user	
EndDate (Date)	Date the staff member stopped working for KKFU, leave blank for staff who are currently employed.	Entered by user	
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	Default value: true

Depots

Purpose

The Depots data-table a list of the locations where KKFU and KKL actually store cocoa which has been delivered by Zones who KKFU work with. It is an **master data-table** links to a number of other data-tables in the database.

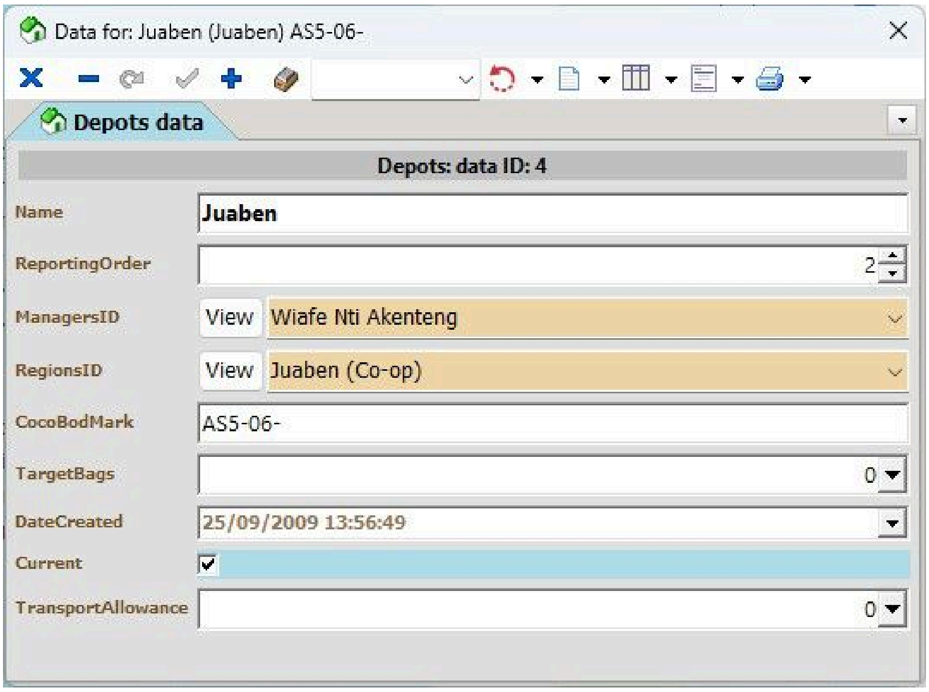
It includes data-fields such as "ManagersID, to list the staff member of KKFU who runs the depot, and the "TransportAllowance" which gives the value in Cedi's of the budget the depot has for transportation.

A full listing of **all** the fields in the data-table with their purposes and any automation built into the App is laid out below. To fully understand the purpose of the data-fields please consult this.

All of the Depots KKFU work with are listed here.

How and when to access Depots

The edit form is accessible from the KKSys System Entities screen, and is shown below.



Data for: Juaben (Juaben) AS5-06-

Depots data

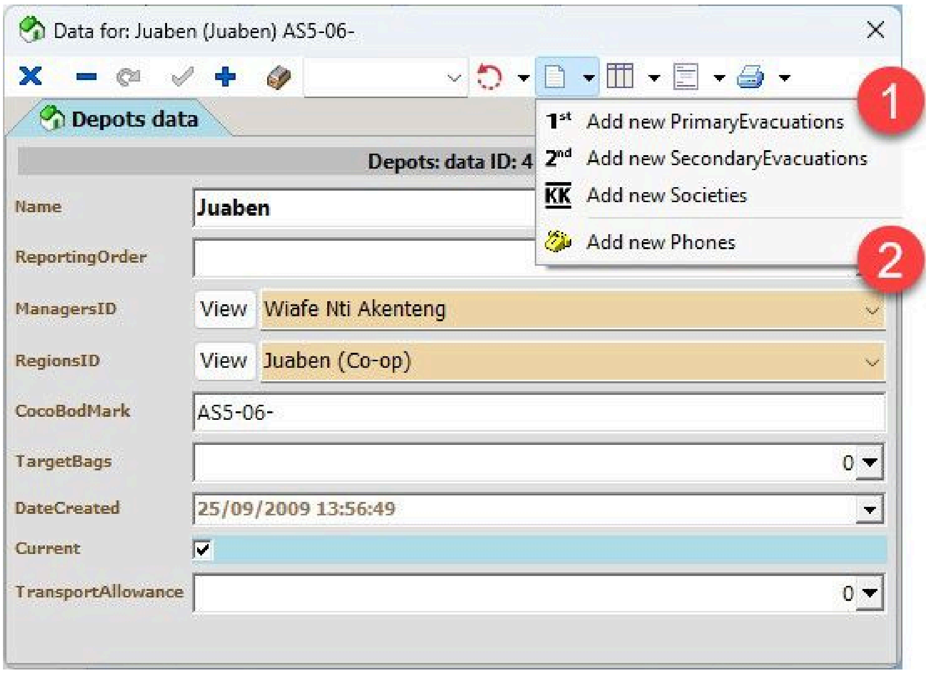
Depots: data ID: 4

Name		Juaben
ReportingOrder		2
ManagersID	View	Wiafe Nti Akenteng
RegionsID	View	Juaben (Co-op)
CocoBodMark		AS5-06-
TargetBags		0
DateCreated		25/09/2009 13:56:49
Current		☑
TransportAllowance		0

Depots edit form

Linkages to the Depots entity

From the Depots Entity it is possible to see lists of linked data, and add linked data. The image above shows the "New Items" menu open in the Societies Entity, with the linked data that can be added.


Data for: Juaben (Juaben) AS5-06-
Depots data
Depots: data ID: 4
1st Add new PrimaryEvacuations
2nd Add new SecondaryEvacuations
KK Add new Societies
Add new Phones
1
2

Name		Juaben
ReportingOrder		
ManagersID	View	Wiafe Nti Akenteng
RegionsID	View	Juaben (Co-op)
CocoBodMark		AS5-06-
TargetBags		0
DateCreated		25/09/2009 13:56:49
Current		☑
TransportAllowance		0

Linkages to the Depots entity

1. Depots can link to the entities shown: Societies, PrimaryEvacuations, SecondaryEvacuations and Phones.
2. The Depots entity is automatically linked to the Phones entity which is part of the Orixa framework, to allow storage of phone-numbers.

Data-schema

Field- Name and Data-type	Description / Purpose	Possible Values	Coding / Automation
ID (Primary Key)	Unique number which identifies each record.		Automatically set by Orixa, not under the control of users or developers.
Name (Text)	Self explanitory	Entered by user	
ReportingOrder (Integer)	Self explanitory	Entered by user	
ManagersID (Link-ID)	Links to the Staff table	Selected from list by User	
RegionsID (Link-ID)	Links to the Regions table	Selected from list by User	Will default to the currently open Regions ID
CocoBodMark (Text)	Self explanitory	Entered by user	

Field- Name and Data-type	Description / Purpose	Possible Values	Coding / Automation
TargetBags (Number)	Self explanitory	Any number value	Default value: 0
DateCreated (Timestamp)	Set to the exact date and time the record was first created.		Automatically set by Orixa, not under the control of users or developers.
Current (true/false)	Untick this field if the record is out-dated, no longer in use or discontinued.	True / false	Default value: true
TransportAllowance (Currency Value)	Self explanitory	Any number value	Default value: 0

The cloud API, its standards and operation

> **The KKFU database is installed on the cloud, using Amazon Web Services. An AWS EC2 instance has been created and is used to host the KKFU database and servers for provision of data access by users of remote versions of the KKFU Orixa Apps.**
> **KKFU IT Staff can access the AWS instances using the Orixa DB Admin tools.**
> **Outside developers can access the KKFU cloud API using the Swagger-compliant End-points served from the EC2 Instance.**

Non-technical description of the cloud API

All the data at KKFU is stored in a relational database. This allows data relating to Societies, Farmers, Internal and other Inspections, Purchases etc., to each be stored in separate data-tables, but linked together so that it is easy to view data such as a list of Farmers in one Society, or Internal Inspections of one farmer etc.

This database is a complex data-object, it is stored in multiple locations and programming allows the versions held in different locations to synchronize so that data added by one user can be stored locally and later uploaded to the rest of the nodes of the network. ICO officers enter data on their own computers and only later (when they have data-connection) upload this to the rest of the network.

In this schema, the AWS EC2 instance is a **central node** containing an instance of the database which links to most of the other nodes and passes updates forwards and backwards to the other nodes.

The **cloud API** lies on top of the database as a communication layer. By using **JSON commands** programmers can pass instructions to the cloud API and these can access the KKFU database. This process must be accompanied by high levels of security control to ensure the integrity of the data. By accessing the cloud API programmers can write Apps which can access data in the KKFU database and update it.

For example programmers can write a phone-app which displays data in the database, and allows validated users to access it and update it.

Example URLs to return KKFU cloud data

www.orixa.co.uk/kkfu/<entity-name>/?<filter-conditions>

https://www.orixa.co.uk/kkfu/societies?$filter=ID eq 10

https://www.orixa.co.uk/kkfu/societies?$filter=DepotsID eq 25

https://www.orixa.co.uk/kkfu/societies(10)

In the above URLs, any KKFU entity-name (such as Farmer, People, Inspection, Staff etc.) can be added in place of the text "Societies". If the URL requests data which is not present (for example an ID which is not used) an "entity-not-found" error will be returned.

The standards for creating filter conditions against the cloud data follow web standards, as laid out in the Swagger help documents detailed below.

Technical description of the cloud API

The KKFU API has been made **Swagger Compliant**. This means that the API is **self describing**. Programmers can formulate API Calls using standard JSON code to form URL **GET**, **PUT**, **POST** and **DELETE** statements. These statements can all be formulated via review in the Swagger.

Note that calls to the API accessed via Swagger call against a **test** database, so no actions undertaken here are processed against the main database.

Programmers wishing to explore the data structure can use the Swagger client here:

KKFU Swagger API Link

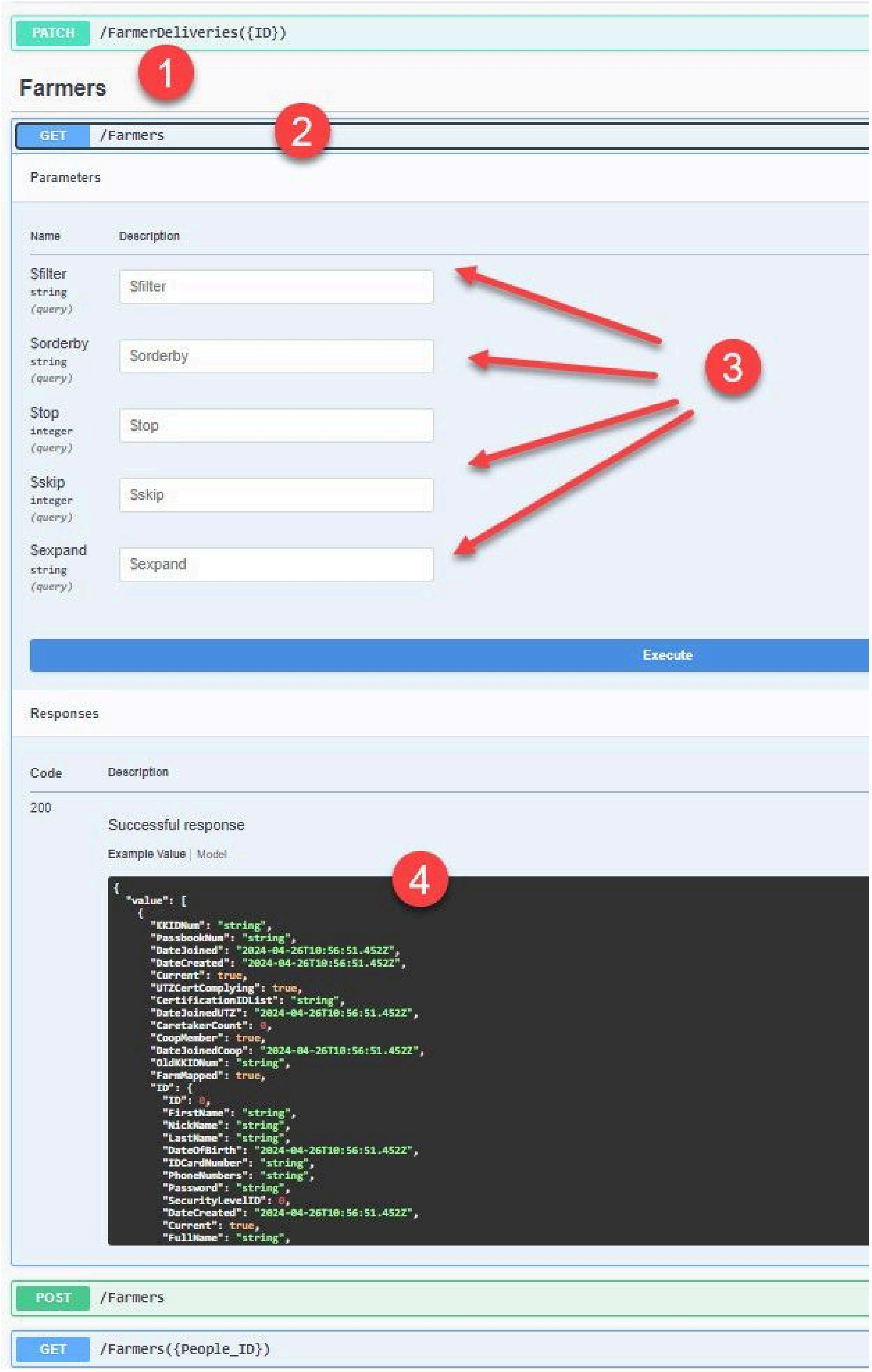
Programmers will also want to reference the general technical database specification and guide here:

KKSys Database Definition Documentation

Programmers new to Swagger self-describing end-points should start here:

Swagger UI Introduction

Reviewing and working with the API



PATCH /FarmerDeliveries({ID})

Farmers

GET /Farmers

Parameters

Name	Description
$filter string *(query)*	$filter
$orderby string *(query)*	$orderby
$top integer *(query)*	$top
$skip integer *(query)*	$skip
$expand string *(query)*	$expand

Execute

Responses

Code	Description
200	Successful response

Example Value | Model

```
{
  "value": [
    {
      "KKIDNum": "string",
      "PassbookNum": "string",
      "DateJoined": "2024-04-26T10:56:51.452Z",
      "DateCreated": "2024-04-26T10:56:51.452Z",
      "Current": true,
      "UTZCertComplying": true,
      "CertificationIDList": "string",
      "DateJoinedUTZ": "2024-04-26T10:56:51.452Z",
      "CaretakerCount": 0,
      "CoopMember": true,
      "DateJoinedCoop": "2024-04-26T10:56:51.452Z",
      "OldKKIDNum": "string",
      "FarmMapped": true,
      "ID": {
        "ID": 0,
        "FirstName": "string",
        "NickName": "string",
        "LastName": "string",
        "DateOfBirth": "2024-04-26T10:56:51.452Z",
        "IDCardNumber": "string",
        "PhoneNumbers": "string",
        "Password": "string",
        "SecurityLevelID": 0,
        "DateCreated": "2024-04-26T10:56:51.452Z",
        "Current": true,
        "FullName": "string",
```

POST /Farmers

GET /Farmers({People_ID})

KKFU Swagger UI

1. All the Entities in the KKFU database are contained in the API. Programmers can navigate through the listed Entities until they find the one they are looking for.

2. The form of the URL required to return data in the entity is shown under the **GET** heading. Note this is always in the form [APIURL]/[EntityName].

3. Swagger includes a number of standard mechanisms for creation of JSON to **GET** data.

4. The Swagger client will show examples of the response JSON. Coders can deserialize this to extract data for display in their Apps.