

MANUAL # 10



EWUP FARM RECORD SYSTEM

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May, 1984

EGYPT WATER USE AND MANAGEMENT PROJECT

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EWUP MANUAL NO. 10

Prepared under support of  
WATER DISTRIBUTION RESEARCH INSTITUTE, WATER RESEARCH CENTER  
MINISTRY OF IRRIGATION, GOVERNMENT OF EGYPT

Contracting agencies

Colorado State University  
Engineering Research Center  
Ft. Collins, Colorado 80521  
USA

Consortium for International  
Development  
5151 E. Broadway, Ste., 1500  
Tucson, Arizona 85711 USA

All reported opinions, conclusions or  
recommendations are those of the writers  
and not those of the supporting or contracting agencies.

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## ACKNOWLEDGEMENTS

The authors wish to express their thanks and appreciation for the contributions made to this paper by the staff of the Egypt Water Use and Management Project, and to the field teams at Mansuriya, Kafr El Sheikh and El Minya.

The Project is funded jointly by the Arab Republic of Egypt, and by the United States Agency for International Development. The United States Agency for International Development in Egypt is under the directorship of Mr. Michael P. W. Stone. Mr. John Foster is the United States Agency for International Development Project Officer for the Egypt Water Use and Management Project.

The Egypt Water Use and Management Project is implemented under the auspices of the Ministry of Irrigation's Water Management and Irrigation Technologies Research Institute and in collaboration with both the Ministry of Irrigation and the Ministry of Agriculture through the Soil and Water Research Institute and the Agriculture Economics Institute, which provide the Project with personnel and services.

The Consortium for International Development, with executive offices in Tucson, Arizona, is the United States Agency for International Development Contractor for the Project. American Project personnel are drawn from the faculties of Colorado State University, the lead American university taking part in the Project, Oregon State University, New Mexico State University, and Montana State University. The Project Director is Dr. Hassan Wahby and the Project Technical Director is Dr. Eugene Quenemoen. Dr. E. V. Richardson is the Campus Project Coordinator at Colorado State University.

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## INTRODUCTION

The Egypt Water Use and Management Project (EWUP) is structured to function in an interdisciplinary mode to formulate and demonstrate viable on-farm management alternatives for the typical Egyptian farmer. Although water use and management is emphasized in the project title, it was realized from the inception of the project that the interaction of water with all other resources used in a modern irrigated agricultural system must be considered if the proposed innovations were to be acceptable and of lasting benefit. Of primary concern is the allocation of water, soil, capital and human resources used in agricultural production to allow for significant economic and social progress for the Egyptian farmers.

The farm enterprise system is not only governed by climate and soil, but also by the inputs of water, fertilizer, labor and associated technological inputs available from farm research. Modern technology may offer solutions to identified constraints or problems. It is the purpose of an interdisciplinary team of trained experts to determine which and what combinations of modern technology should be directed into the hands of the farmer. Without a thorough understanding of the problem, technology transfer will not be possible. Technicians often recognize that farmers need only to see the differences in methods or procedures correlated with the increased benefits related to the technology to accept it. However, on-farm demonstrations often do not illustrate these increased benefits or identify a technology that is not of practical value to a farmer.

The purpose of this manual is to provide the user of the EWUP Farm Record System with a guide for collecting and recording farm data. The Manual is divided into two parts. Part I is the Users Guide to the EWUP Farm Record. Part II is the Users Guide for the Farm Record Summary.

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PART I

USERS GUIDE  
FOR THE FARM RECORD

EWUP FARM RECORD SYSTEM

May - 1984

## FARM RECORD USERS GUIDE

The Egypt Water Use and Management Project (EWUP) farm records were designed to span a specific period of time, a year, beginning November 1 and ending the following year on October 31. The specific period chosen (the farm record year) allows inclusive enterprise records for the main summer crops including cotton and rice.

All farm activities are recorded in the farm record books on the date they occur. For some enterprises, such as berseem, broadbeans, and vegetables, the activities occur in more than one farm record year. Since all activities are recorded when they occur, more than one farm record is required when following the activities of these enterprises from planting to harvest. Data recorded for an enterprise in the previous years farm record, during the months of September and October, can be repeated (recorded) in the current farm record to enable following the activities of the enterprise from planting to harvest. However, a heavy line must be drawn across the "Crop Operation" page to set-off the repeated data from the current periods of activities since only the current period activities are included in the summary for the farm record book.

The purpose of the FARM RECORD USERS GUIDE is to assist the user, the enumerator, in recording the various farm activities. The core of a farm record system is the data which for the system to be of any value must be accurate, consistent, and recorded at frequent intervals. A farm record that is complete provides the data for analyzing farm management alternatives as well as measures of farmer well being.

The USERS GUIDE is divided into thirteen sections. Sections I through III include information related to the farm location, farm size, farm household, and an illustration of the fields (parcels) on the farm. Section IV contains the information related to the capital structure associated with the farm. The inventories include equipment, livestock, poultry, grains, forage, farm supplies, land, cash, and liabilities. Sections V, VIII, and IX contain the information related to the livestock activities on the farm. Sections VI and VII contain the information relating to the crop activities. Sections X and XI contain the information relating to other farm activities. Sections XII and XIII contain the information clarifying specific activities which have occurred on the farm and a summary of the farm activities during the farm record year.

I COVER

1. Write the name of the governorate where the farm is located on the line after "Governorate".
2. Write the name of the district in the governorate where the farm is located on the line after "District".
3. Write the name of the site (village) in the district where the farm is located on the line after "Site".
4. Write the name of the cooperative in the district serving the farm on the line after "Agric Coop".
5. Write the farmer's membership number in the agricultural cooperative on the line after "Pass Number".
6. Write the address of the farmer even if the farmer lives outside the area on the line after "Address".
7. Complete the date for the period of the farm record book in the area by the date.
8. Write the farmer's name after "Farmer's Name". The name should contain at least three parts (first, middle, family) so there will be no overlapping with other members in the family. The names should be the same, and spelled the same, as those from the list prepared for the area (site) by the Economists in the main office.
9. Write the farmer's code number in the area specified (circle). The farmer code numbers are included with the name list prepared by the economics discipline.
10. The size of the farm is the sum of land areas owned, rented-in, and shared-in. The "owned" land consists of all land controlled by the farmer for use in agricultural production excepting land rented-out on contract. The "owned" land includes land owned by the farmer which is operated by other members of the household.
11. The areas of the farm owned, rented-in, and shared-in are written reflecting the conditions on November 1 of the current farm record year.

## II HOUSEHOLD AND OFF-FARM INCOME

Household refers to the immediate family. This term does not exclude the extended household where more than one family (husband and wife) live in the same residence, but it does exclude the family members no longer living in the family residence.

Off-farm income refers to that income generated from non-farm activities, i.e. policeman, taxi driver, factory work, cooperative manager, etc.. Income generated from farm work performed by the farmer for another farmer, i.e. the farmer sells his labor and/or services for field work, is considered as other farm income.

1. Indicate in the specified area the marital status of the farmer.
2. Enter the number of male and female members in the immediate household in the area following "Male No." and "Female No." respectively.
3. Enter the number of male and female members in the immediate household that work on the farm in the area under "Male" and "Female". Include the part-time workers when determining the number of workers.
4. Indicate whether the farmer works full time on his farm and/or other farm related activities in the area after "Yes" and "No". If the farmer is a part-time farmer, describe the non-farm activities on the line provided. Write the amount the farmer receives during the year for the non-farm activities in the space before "LE".
5. Indicate whether any other members of the immediate household have non-farm work in the area after "Yes" and "No". If other household members have non-farm work, write the amount that is received for their non-farm activities in the space before "LE".
6. The amount received by the farmer and other members of the immediate household for farm work outside the farm is recorded in the "Other Farm Income" section of the farm record book.

## III LAND USE MAPS - WINTER/SUMMER CROPS

The land use maps are used to allocate the area in each parcel operated by the farmer. Each parcel should be adequately detailed to allow for analysis of crops and/or rotations produced during a specific period.

1. Label each field (parcel) by number (1, 2, . . . . , N) and each sub-field by letter (1A, 1B, 2A, . . . . .). Record the names of all the crops in each field (parcel) and the corresponding planting and harvesting dates. Inter-cropping fields should include planting and harvesting dates for each crop in the inter-cropping sequence.
2. A separate "Agricultural Operations" section must be completed for each field (sub-field). Any field (sub-field) rented-out for one season, whether for cash rent or share rent, must be included in the land use maps labeled as rented-out. The area for each field (sub-field) indicated on the land use map must be the same as the area indicated in the "Agricultural Operations" section. The sum of the field (sub-field) areas must equal the area operated by the farmer (owned + rented-in + shared-in).
3. NOTE...Labeling of fields and sub-fields may differ on the land use map for summer crops from the labeling used on the land use map for winter crops. All other requirements for the land use map for winter crops are applicable to the land use map for summer crops.

#### IV INVENTORIES

##### A. INVENTORY OF CAPITAL EQUIPMENT

Equipment includes saqias, tambours, pumps, balady plows, sprayers, tractors and/or other tools owned by the farmer and used in the farm operation.

1. Enter the name of the item in the "Item" column.
2. Enter the number of each item in the "No" column and the value (ownership share) of the item reflecting the market price at the beginning of the year in the "LE" column. Indicate the ownership share in the "Remarks" column if less than full ownership.
3. The value entered in the "LE" column for the ending inventory should reflect the market price of the item at the end of the year.
4. Items purchased during the year are recorded in the ending inventory as well as recorded as entries in the "Other Farm Expenses" section, "Other - Capital Purchases" column.

5. Items sold from the "Inventory of Capital Equipment" during the year will have a zero (0) value in the ending inventory and will be recorded as entries in the "Other Farm Income" section, "Other - Capital Sales" column.
6. Items bought and then sold during the year will not be included as entries in either the beginning or ending inventories for the year. However, these items will be recorded as entries in the "Other Farm Expenses" and "Other Farm Income" sections.

#### B. INVENTORY OF LIVESTOCK

Livestock includes cows, buffalos, calves, donkeys, sheep, goats, camels, and horses that are either owned and/or shared by the farmer and are in the farmer's possession.

1. Enter each type (kind) of livestock in the "Description" column.
2. Enter the value of the livestock in the "LE" columns at the beginning of the year and the end of the year using the market prices for each type (kind) at the respective time.
3. Animals with shared ownership are recorded as whole animal units with the value reflecting the ownership share. The ownership share is noted in the "Remarks" column.
4. Record the animals not owned by the farmer but in the farmer's possession by entering the type (kind), number, and a zero (0) value.
5. Calves born during the year and kept for the following year are recorded in the ending inventory at the current market value.
6. Calves from the previous year entered in the beginning inventory as calves increase in value during the year, due to their growth. The amount of the increase in value (due to the growth of the animal) that is part of current livestock production is recorded in the "Other" column of the "Livestock and Poultry Production" section.
7. If livestock are purchased during the year, the purchase is recorded in the "Other Farm Expenses" section. If the animal(s) remain at the end of the year they are recorded in the ending inventory at their current market value.

8. Livestock sold from the "Inventory of Livestock" during the year are recorded in the "Other Farm Income" section.

### C. INVENTORY OF POULTRY

Poultry includes chickens, ducks, pigeons, turkeys, and rabbits.

1. Enter each type (kind) of poultry in the "Kind" column.
2. Enter the number in the "No" column and value in the "LE" column for each kind of poultry at the beginning and the end of the year. The value(s) for the poultry should reflect the market price at the respective time.
3. Poultry hatched during the year and kept for the following year are recorded in the ending inventory at the current market value. Young chickens from the previous year are recorded in the beginning inventory.
4. Poultry purchased during the year are recorded in the "Other Farm Expenses" section. The poultry purchased during the year that have not been consumed at home nor have died are recorded in the ending inventory at the current market value.
5. Poultry sold from "Inventory of Poultry" during the year are recorded in the "Other Farm Income" section.

### D. INVENTORY OF GRAIN, FORAGE AND FARM SUPPLIES

Grain includes maize, wheat, broadbeans, flax, soybeans; forage includes any by-product from crop production such as straw and stalks; farm supplies include seed such as berseem, cabbage, tomato, pepper, eggplant, rice and other farm inputs such as chemical fertilizer, insecticides, herbicides that are used up in the production process.

1. Enter the name(s) of each of the grains, forages, or farm supplies in the "Item" column. Enter the unit of measure for grain, forage or farm supply in the "Kind of Unit" column.

2. Enter the quantity (number of units) in the "No" column and total value of the quantity in the "LE" column for each kind of grain, forage and farm supply at the beginning and end of the year. The values recorded should reflect the market price at the respective time.
3. Items purchased during the year and remaining at the end of the year are recorded in the ending inventory. The purchase of grain and farm supply items is recorded in the "Other Farm Expenses" section.

#### E. INVENTORY OF LAND, CASH AND LIABILITIES

Land includes all land owned whether a part of the "Size of Farm" of the "Cover" section or rented-out with a contract or with some other arrangement. Cash includes all money in the farmers immediate possession and deposits in banks or other financial institutions. Liabilities are those items owed to others (including banks).

1. Enter the description of each parcel of land, cash, or liability in the "Item" column. Enter the unit of measure for the land, cash, or liability in the "Kind of Unit" column.
2. Enter the quantity (number of units) in the "No" column and total value of the quantity in the "LE" column for each item of land, cash, or liabilities owed during the year. The value(s) of the item(s) should reflect the market price for that item at the respective time.
3. Land purchased during the year and kept for the next year is recorded in the ending inventory at the current market value. The purchase of the land is recorded in the "Other Farm Expenses" section in the "Land Purchases" column.
4. Land received as a gift or through inheritance during the year and kept for the next year is recorded in the ending inventory at the current market value. NOTE....The total value of the gift (inheritance), i.e. the ending inventory value, is included when computing appreciation.
5. Land sold from the "Inventory of Land, Cash and Liabilities" during the year is recorded in the "Other Farm Income" section in the "Land Sales" column.

6. The value of land given as a gift during the year is included as a minus value when computing appreciation.
7. The appreciation associated with the land in the inventory is recorded in the "Remarks" column.

#### V LIVESTOCK AND POULTRY PRODUCTION RECORD

The data for livestock and poultry production should be recorded at least at two (2) week intervals. These periods should be of a short duration to allow the farmer to provide accurate data. Where values are entered for products consumed at home, the market price at the time of entry is used. The livestock and poultry products should include milk, cheese, butter, eggs, and other related products.

1. Enter the date or period for the livestock and poultry production activity in the "Date or Period" column.
2. Enter the type (kind) of product in the "Item" column.
3. Enter the unit of measure for the type (kind) of product in the "Kind of Unit" column.
4. Enter the number of units of the type (kind) of livestock or poultry product produced in the "No" column.
5. Enter the total value of the number of units of livestock or poultry product produced in the appropriate "Home Use", "Sales", "Others" columns. The total value of the product should reflect the market price if recorded in the "Home Use" or "Others" columns and the amount received from the sale if recorded in the "Sales" column.
6. Record animals born during the year on their date of birth without entering a value.
  - (a) If an animal born during the year is sold or consumed for home use during the year the market value is entered in the "Home Use" column or the value received is entered in the "Sales" column. The date of sale or consumption is entered in the "Remarks" column. NOTE....The sale of an animal born during the year is not recorded in the "Other Farm Income" section.

- (b) If an animal born during the year dies during the year the date when the animal died is entered in the "Remarks" column.
  - (c) If an animal born during the year is kept to the end of the year, the market value of the animal is entered in the "Other" column.
7. The sale of animals, not of breeding age, included in the "Inventory of Livestock" are recorded during the year in the "Other Farm Income" section. NOTE....The value attributable to current livestock production (i.e. the animals growth) from these animals, not of breeding age, is recorded in the "Other" column and denoted in the "Remarks" column.
  8. Poultry consumed at home and/or sold during the year are recorded using the market value at the time of consumption (sale) under "Home Use" and/or "Sales" columns.
  9. Poultry hatched during the year and kept for the following year are recorded in the "Other" column at the market value. NOTE....The value entered in the "Other" column will be the value entered in the ending inventory "LE" column in the "Inventory of Poultry" section.
  10. If the farmer purchases livestock during the year and sells it before the end of the year, it will not show up in the "Inventory of Livestock". The purchase costs are recorded in the "Other Farm Expenses" section, and sales values are recorded in the "Other Farm Income" section. The difference between the two prices, if positive, will be recorded in the Livestock and Poultry Production record in the "Other" column and this difference represents the animal growth.

## VI AGRICULTURAL OPERATIONS

The agricultural operations section details the production activities for a given crop enterprise. Each crop enterprise is considered to be a single crop or where inter-cropping (more than one crop being grown on the same parcel of land at the same time) is practiced several crops on a given field (parcel) as defined in the "Land Use Maps" section.

The first production activities generally are involved with land preparation which includes the application of organic fertilizer, plowing, leveling, smoothing, furrowing, puddling, and other enterprise specific

activities. Other activities following land preparation are planting, weeding, thinning, hoeing, application of chemical fertilizer, irrigation, insect control, and other enterprise related activities ending with the harvest activities. The harvest activities include cutting, picking, bundling, pulling, threshing, winnowing, transportation, and other enterprise specific harvest activities.

1. Enter the series number for this crop within the brackets preceding "Name of Crop".
2. Enter the name of the main crop after "Name of Crop". If inter-cropping is practiced, enter the name(s) of the inter-cropped crops, in the order in which the crops are planted, after the name of the main crop.
3. Enter the date (month, day, year) land preparation started after "Period From". NOTE....This date is not necessarily the planting date. Enter the date when the land was available to do land preparation for the next crop after "To". NOTE....This date is not necessarily the harvesting date; cutting the crop and removing the crop residue from the field would determine this ending date. The dates for completing threshing, winnowing, etc. could occur later.
4. The area must reflect the area of the main crop of the specific inter-cropping. The area corresponds to the area of the field (parcel) illustrated in the "Land Use Map" section. If the area of the inter-cropping changes, in other words, if the field is further sub-divided in the "Land Use Map" section, the "Agricultural Operations" section detailing the original area is ended. New "Agricultural Operations" sections must be defined for each of the new sub-divisions.
5. Enter the field number, corresponding to the "Land Use Map" designation, after "Field No".
6. Enter each activity (operation) separately, even if it occurs on the same date, in the "Item" column.
7. Family labor is that labor provided from family members in the same household who do not receive any remuneration for their work. Enter the total number of hours worked by men, women, and boys and/or girls for each activity (operation) in the appropriate "Family Labor" columns.
8. Hired labor is that labor provided from the immediate household or from outside the household who receive remuneration for their work. Enter the

total number of hours worked by men, women, and boys and/or girls for each activity (operation) in the appropriate "Hired Labor" columns. Enter the total amount paid for the hired labor in the "LE" column of the "Hired Labor" columns.

9. Enter for each activity (operation) the kind of equipment, animals, transportation, whether owned or hired, used to complete the activity (operation) in the "Kind" column of the "Equipment" columns. If the equipment is hired, enter the amount paid for hiring the equipment (including the costs associated with animals, labor, etc.) in the "LE" column of the "Equipment" columns.
10. Enter the total amount of manure (organic fertilizer) used in the "Amt" column of the "Manure" columns. Denote the appropriate measure for the manure (organic fertilizer), i.e. donkey load, camel load, wagon load, etc.. If the manure is purchased, enter the total amount paid in the "LE" column of the "Manure" columns. NOTE....The amount paid should include the cost of the manure plus the transportation. Transportation of manure provided by the farmer must be noted in the "Remarks" column. Manure provided by the farmer is recorded without a cost. If the farmer hires the transportation, the amount paid for the transportation is entered in the "LE" column of the "Manure" columns. Note in the "Remarks" column that the value in the "LE" column of the "Manure" columns is for transportation only.
11. Enter the kind and quantity (in kilograms) of fertilizer applied in the "Kind" and "Amt" columns respectively of the "Fertilizer" columns. Enter the actual amount paid for the fertilizer in the "LE" column of the "Fertilizer" columns and note in the "Remarks" column whether the fertilizer was purchased from the cooperative or from the free market.
12. Enter the quantity of seed used and/or the number of plants used for planting the crop in the "Amt" column of the "Seed" columns. Enter the amount paid for the seed and/or plants if purchased in the "LE" column of the "Seed" columns. Seed used from the "Inventory of Grain, Forage and Farm Supplies" or plants from the farmer's nursery, if the nursery has an "Agricultural Operations" section, are recorded with a zero (0) value. Plants from the farmer's nursery, when an "Agriclultural Operations"

section is not completed, are valued at either the cost of operating a nurse (seed, plus fertilizer plus labor plus etc.) or the cost of purchasing similar plants. NOTE....Beware of duplicating the costs of nursery plants.

13. Enter the kind, quantity, and amount paid for insecticides used in the "Kind", "Amt", "LE" columns respectively, of the "Insecticide" columns. If the cost of application is included in the amount paid, note this in the "Remarks" column.
14. Enter the actual number of hours to complete the activity (operation) in the "No. of Hours" column. If animals were used to complete the activity make a separate entry in the "No. of Hours" column for the number of hours the animals worked.
15. Enter any information in the "Remarks" column that may clarify the activity (operation). The "Remarks" column is also used for recording other information specific to an activity (operation) such as quantity of water applied ( $m^3$ ) for each irrigation, quantity of product harvested, and/or other integral parts of the activity (operation).

## VII CROP PRODUCTION

The crop production section summarizes the production of the crop enterprises detailed in the "Crop Operations" section. For each enterprise there will be a main product and the potentiality of several by-products (secondary products), for example wheat (grain) and wheat (straw).

Record the production from the crop enterprises possessing a dual pricing system, government and free market, to reflect the disposition of the production in both markets, i.e. by entering the production sold to the government on one line and the production disposed in the free market on a separate line. The term "dual pricing system" does not infer different prices received for production in the same market (free market) or from an enterprise that is harvested several times (vegetables) during the farm record year.

1. Enter the field number for each specific enterprise, corresponding to the field number in the "Agricultural Operations" section of the "Land Use Map" section, in the "Field No." column.

2. Enter the area for each specific enterprise, corresponding to the area in the "Agricultural Operations" section, in the "Area" column.
3. Enter the specific product produced in the "Item" column. When an enterprise produces more than one product, each product is entered on a separate line.
4. Enter the unit of measure associated with the product in the "Kind of Unit" column. Enter the market price of the product at the time of harvest and/or at the time of the transaction in the "Unit Price" column.
5. For each product, divide the total field production by the area (in feddans) and enter this value in the "Yield per Feddan" column.
6. For each product, enter the total quantity (number of units) of product harvested in the "Field Prod." column.
7. For each product, multiply the unit price times the total field production and enter the value obtained in the "Production Value" column.
8. The disposition of the product is recorded in the "Animal Feed", "Home Use", "Seeds", "Sales", and "Other" columns. "Animal Feed" includes the quantity (number of units) of product currently used for livestock feed and the quantity which will be fed at a later period. "Home Use" includes the quantity (number of units) of the product that will be consumed at home during the current farm record year and in the future. "Seed" includes the quantity (number of units) of the product that will be used as seed for planting during the current farm record year and in the future. "Sales" includes the quantity (number of units) of the product that is marketed during the current farm record year. "Other" includes the quantity (number of units) transferred as payment in-kind (share rent, donations, in-kind payment for winnowing, etc.) and the quantity kept to be sold in the future. For each quantity disposed, multiply the unit price times the relevant quantity (number of units) and enter the value obtained in the "Value" column. However, if the product is sold, enter the amount received from the sales transaction in the "Value" column of the "Sales" columns. The sum of the disposition "Value" columns should equal the "Production Value" column. Indicate the value entered in the "Other" column for share rent and future sales in the "Remarks" column.
9. Enterprises with multiple harvests, such as vegetables and berseem, should be allocated a sufficient number of lines to permit recording the disposition of production from each harvest.

### VIII ANIMAL FEED RECORD

The animal feed record activities should be recorded at least at two week intervals. All feed fed to livestock and poultry, whether from current production, the "Inventory of Grain, Forage and Farm Supplies", or purchased, is recorded in this section.

1. Enter the date or period for which the data corresponds, in the "Date or Period" column.
2. Enter the kind (type) of feed, such as berseem, beans, concentrate, maize, etc., that was fed during the specified period in the "Feed" column.
3. Enter the unit corresponding to the kind (type) of feed, i.e. kerat cut, camel load, ardab, kela, kilogram, etc., in the "Units" column.
4. Enter the quantity (number of units) of feed fed during the period in the "No. of Units" column.
5. Enter the amount paid for the purchased feed fed during the period in the "Value" column. Feed included in the "Inventory of Grains, Forage, and Farm Supplies" and/or income received in-kind and/or produced during the current farm record year is recorded without a value. Note the source of the feed in the "Remarks" column.

### IX WORK DONE BY ANIMALS

The work done by animals section summarizes the data recorded as animal work in the "Crop Operations" section. This data should be entered when the activities for a given enterprise are completed, i.e. when a "Crop Operations" section is completed.

1. Enter the dates defining the period (at least one (1) month intervals) when the animal work was completed in the "Date of Period" column.
2. Enter the type (kind) of animal (cow, buffalo, camel, donkey) used to perform the work in the "Kind of Animal" column.
3. Enter the number of hours of each type of work completed by the animal(s) during the period in the "Transportation", "Plowing", "Leveling and Smoothing", "Irrigation", and "Puddling" columns.

## X OTHER FARM EXPENSES

The items in other farm expenses include capital purchases, such as purchases of land, livestock, poultry, equipment, grain and other farm supplies, and non-capital purchases (non-crop expenses), such as rent, taxes, fuel, chemicals, and salaried labor. Each transaction should be entered on the transaction date.

1. Enter the transaction date in the "Date" column.
2. Enter the value of the transaction in the "Land", "Livestock", "Poultry", and "Other" columns. Note the items recorded in "Other Capital Purchases" column, such as equipment, grain and other farm supplies, and the items recorded in the "Non-Capital Purchases" column, such as, rent, taxes, fuel, chemicals, salaries, cost of canal cleaning, in the "Remarks" column. The quantity (number of units) of land, livestock and poultry purchased should also be noted in the "Remarks" column.

## X I OTHER FARM INCOME

The items in other farm income include capital sales of land, livestock, poultry, equipment and non-capital sales (income) such as land rent, farm equipment rent, and labor (whether received as cash or in-kind). Each transaction should be entered on the transaction date.

1. Enter the transaction date in the "Date" column.
2. Enter the value received from the transaction in the "Land", "Livestock", "Poultry", and "Other" columns. Note the quantity (number of units) of land (include field number), livestock, and poultry sold in the transaction, in the "Remarks" column.
3. Enter the value received from the sale of equipment or farm supplies in the "Other Capital Sales" column. Note the item sold in the "Remarks" column.
4. Enter the value received from the sale of labor, land rent and other services, whether received as cash or in-kind income, in the "Other Non-Capital Sales" column. Note the item sold in the "Remarks" column.

## XII REMARKS

The remarks section is for recording any information necessary to clarify an activity included in the farm record book. If the farmer purchases (sells) some land and/or equipment and/or livestock during the farm record year, record the details (type, kind, make, where purchased (bought), name of seller (buyer)) of the transaction in this section. Record the descriptions of any and all rental agreements in this section.

## XIII SUMMARY

The summary section gives a brief overview of the farms activities detailed in the farm record. The farm income is summarized in animal production, crop production, capital sales, other farm income positive changes in the inventories and earnings from off-farm activities. The farm expenses are summarized in crop expenses, non-crop expenses, captial purchases, negative changes in the inventories, and non-purchased animal feed, seeds, other products used up in production process and adjustments. The detail for this section is obtained from the Farm Record column total in the various sections. See Appendix I (Farm Record Book sections).

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PART II

USERS GUIDE  
FOR THE FARM RECORD SUMMARY

EWUP FARM RECORD SYSTEM

MAY - 1984

## USERS GUIDE FOR THE FARM RECORD SUMMARY

The Egypt Water Use and Management Project (EWUP) farm records were designed to span a specific period of time, a year, beginning November 1 and ending the following year on October 31. At the conclusion of the farm record year, ending inventories are obtained and recorded and the initial farm record summarization, as outlined in the FARM RECORD USERS GUIDE, is completed.

The purpose of the USERS GUIDE TO THE FARM RECORD SUMMARY is to assist the user, the enumerator, in preparing the FARM RECORD SUMMARY COMPUTER INPUT FORM. The data entered on this form and then inputted to the computer represents the basic data set for the specific farm record. Data entry to the computer is mirrored in the FARM RECORD SUMMARY which is outputted by the computer. Assuming that the farm records have been completed in an orderly and accurate manner the analysis tables for farm records in a given area can then be obtained.

### I FARM RECORD SUMMARY WORKSHEET

The purpose of the Farm Record Summary Worksheet, Appendix II-A, is to provide a medium to abstract the relevant information from the Farm Record for each of the enterprises specified. Included is information on animal work, number of irrigations, family and hired labor, cash crop expenses, and the distribution of production. The preparation of the worksheet also allows the user to review the record book prior to completing the Farm Record Summary Computer Input Form (Section II). The following discussion on the worksheet is developed with regards to each of the three worksheet pages.

Each of the enterprises specified in the Agricultural Operations section of the Farm Record requires one worksheet line. Inter-cropped enterprises are to be entered as a single enterprise, one worksheet line, distinguished only through the "CROP CODES". Information for pages 1 and 2 of the worksheet is found in the Agricultural Operations section of the Farm Record. Information for page 3 is found in the Crop Production section of the Farm Record and in previous farm record summaries (carried in).

**A. WORKSHEET PAGE 1**

1. Enter the farm record number from the front cover after "Farmer No." on the worksheet.
2. Turn to the first or next enterprise specified in the Farm Record.
3. Enter the name(s) of the crop(s) in the "Crop" column.
4. Enter the field number in the "Field No." column.
5. Enter the two digit crop code(s) in the "Crop Code(s)" column. Crop codes for crops found in Egypt are listed in Appendix II-B. Up to three crop codes can be entered for inter-cropped enterprises.
6. Enter the crop area in feddans in the "Area Feddan" column. Values for converting kerats to feddans are listed in Appendix II-C.
7. Total the hours of animal work completed and enter the total for plowing in the "Plowing" column, the total for leveling in the "Leveling" column, the total for puddling in the "Puddling" column, the total for irrigation in the "Irrigat." column, the total for transport in the "Transport" column, and the total for any other activity for which animal power was required in the "Other" column.
8. Count the number of times the enterprise was irrigated and enter the value in the "No. of Irrigat." column.

**B. WORKSHEET PAGE 2**

1. Total the hours of family labor, entering the total man hours in the "Man" column, the total women hours in the "Wom" column, and the total boy or girl hours in the "B/G" column.
2. Total the hours of hired labor, entering the total man hours in the "Man" column, the total women hours in the "Wom" column, and the total boy/girl hours in the "B/G" column.
3. The input costs are entered in the "Crop Expense" section. Total the cost of all hired labor and enter the value in the "Labor" column. total the cost of all machinery and equipment hired and enter the value in the "Equip." column. NOTE....the costs associated with the animal rental and transportation recorded in the "Equipment" columns in the Farm Record are not to be included in

the value entered in the "Equip." column of the "Crop Expense" section, but should be added to the value entered in the "Other" column of the "Crop Expense" section. Total the cost of manure purchased and enter the value in the "Manure" column. Total the cost of chemical fertilizer purchased and enter the value in the "Chem Fert" column. Total the cost of seed purchased and enter the value in the "Seed" column. Total the cost of pesticides and herbicides purchased and enter the value in the "Pesticide" column. Total any other crop expenses not previously entered, including animal rental and transportation costs, and enter the value in the "Other" column.

4. Total the crop expenses entered on the worksheet line and enter the value in the "Total Expense" column.

#### C. WORKSHEET PAGE 3

1. Enter the unit of measure used in determining the quantity of crop harvested (produced) in the "Crop Unit" column.
2. Enter the total quantity harvested (produced) in the "Quantity Produced" column. Where more than one product is obtained from an enterprise, such as grain and straw or wheat and tomatoes in the case of inter-cropping, the total quantity harvested should reflect the total quantity harvested of the main product.
3. Enter the total value of harvested product(s) fed to livestock in the "Animal Feed" column. Enter the total value of the harvested product(s) retained for seed in the "Seed" column. Enter the total value of harvested product(s) sold in the "Sales" column. Enter the total value of harvested product(s) used as payment in kind and for any uses not previously specified in the "Other" column. Enter the total of the values entered in the "Animal Feed", "Home Use", "Seed", "Sales", and "Other" columns in the "Total" column.
4. For enterprises which were completed during the current farm year, but which were started in a preceding farm record year, enter the accrued expenses and returns those expenses and returns which were recorded in earlier Farm Records, in the "Carried In" columns. If

the preceding Farm Record is not available, do not enter values in the "Expenses", "Returns", or "Total Returns" columns. The carried in expenses can be obtained from either the preceding Farm Record or a previous Farm Record Summary sheet in the "Crop Expense" section and are entered in the "Expenses" column. The carried in returns are obtained from the preceding Farm Record in the "Crop Production" section and are entered in the "Returns" column. Do not enter either of the values if the enterprise was inter-cropped or if the enterprise was not completed during the year.

5. For enterprises which were completed during the current farm record year enter the total of the "Total" column in the disposition section and the "Returns" column in the carried in section in the "Total Returns" column. Enter a zero (0) for inter-cropped enterprises and for enterprises which were not completed during the current farm record year.

#### D. SUMMARY

Information for each enterprise specified in the Farm Record is entered as a single worksheet line. Inter-cropped enterprises are considered as a single enterprise distinguishable only by the entering of multiple two digit crop codes.

To complete the worksheet, repeat procedures A-2 through C-5 until the information for all of the enterprises specified in the Farm Record have been recorded on the worksheet. The last step is to total the columns of the worksheet.

### II FARM RECORD SUMMARY COMPUTER INPUT FORM

The Farm Record Summary Computer Input Form, Appendix II-D, is used to bring together information from various sections of the Farm Record and the Farm Record Summary Worksheet. This information is then entered in the computer and stored in a computer file. The Farm Record Summary not only

provides a summary of the Farm Record activities but also provides a printout of the data stored in the computer file. Errors and/or omissions in the data set can then be corrected prior to subjecting the data to further analysis.

The Farm Record Summary Computer Input Form is divided into seven tables. Table 1 records the Farm Record identification information found on the front cover of the Farm Record. Table 2 records the inventory changes found in the inventory section, pages 5 to 9, of the Farm Record. Table 3 records the animal and crop production. The animal production information is found in the "Livestock and Poultry Production Record" section, pages 10 to 13, of the Farm Record. The crop production information is found on page 3 of the Farm Record Summary Worksheet. Table 4 records the crop expense information found on pages 1, 2 and 3 of the Worksheet. Table 5 records the non-crop expense information found in the "Other Farm Expense" section, pages 62 and 63, of the Farm Record. Table 6 is the summary of income and expenses where the information is found in various sections of the Farm Record. Table 7 records the work done by animals. The information is found in the "Inventory of Livestock and Poultry" sections, pages 6 and 7, of the Farm Record and on page 1 of the Worksheet.

A. TABLE 1 - Farm Record Identification

1. Enter the name of the person completing this form on the line after "Summarized by:" on the Input Form.
2. Enter the name of the person who reviewed the Farm Record on the line after "Reviewed by:".
3. Enter the beginning year and the ending year in the blanks following "Farm Record Year".
4. Enter the Farm Record number, from the front cover of the Farm Record, after "Farmer's number:".
5. Enter the farmer's name, from the front cover of the Farm Record, on the line after "Farmer's Name:".
6. Enter the number of family members, from page 2 of the Farm Record. Enter the number of male family members after "Male:",

- the number of female family members after "Female:". Add the number of "Male:" and "Female:" family members and enter the result after "Total:".
7. Enter the farm area, from the front page of the Farm Record, entering the owned area after "Owned:", the rented area after "Rented:" and the shared area (shared in) after "Shared". The area should be specified in feddans using the conversion factors in Appendix II-C. Add the area "Owned:", "Rented:", and "Shared:" and enter the result after "Farm Size Feddans:".
  8. Enter the name of the area on the line after "Location".

#### B. TABLE 2 - Inventory Changes

1. Enter the values for the equipment inventory, from the "Inventory of Capital Equipment" page 5 of the Farm Record, entering the total of the beginning inventory in the "Beginning LE" column and the total of the ending inventory in the "Ending LE" column. Subtract the beginning inventory value from the ending inventory value and enter the result in the "Change LE" column. Enter any information which would help to clarify the values entered for beginning and ending inventories in the "Remarks" column.
2. Enter the values for the livestock inventory, from the "Inventory of Livestock" page 6 of the Farm Record, entering the total of the beginning inventory in the "Beginning LE" column and the total of the ending inventory in the "Ending LE" column. Subtract the beginning inventory value from the ending inventory value and enter the result in the "Change LE" column. Enter any information which would help to clarify the values entered for beginning and ending inventories in the "Remarks" column.
3. Enter the values for the poultry inventory, from the "Inventory of Poultry" page 7 of the Farm Record, entering the total of the beginning inventory in the "Beginning LE" column and the total of the ending inventory in the "Ending LE" column. Subtract the beginning inventory value from the ending inventory value and enter

the result in the "Change LE" column. Enter any information which would help to clarify the values entered for beginning and ending inventories in the "Remarks" column.

4. Enter the values for the grain, forage, and supply inventory, from the "Inventory of Grain, Forage and Farm Supplies" page 8 of the Farm Record, entering the total of the beginning inventory in the "Beginning LE" column and the total of the ending inventory in the "Ending LE" column. Subtract the beginning inventory value from the ending inventory value and enter the result in the "Change LE" column. Enter any information which would help to clarify the values entered for beginning and ending inventories in the "Remarks" column.
5. Enter the values for the land, cash, liability and real estate inventory, from the "Inventory of Land, Cash, Liabilities and Real Estate" page 9 of the Farm Record, entering the total of the beginning inventory in the "Beginning LE" column and the total of the ending inventory in the "Ending LE" column. Subtract the beginning inventory value from the ending inventory value and enter the result in the "Change LE" column. Enter any information which would help to clarify the values entered for beginning and ending inventories in the "Remarks" column. NOTE....Maximum is 39 characters for each remark line.
6. Add the "Beginning LE" column and enter the result on the "Total" line in the appropriate column. Add the "Ending LE" column and enter the result on the "Total" line in the appropriate column. Add the "Change LE" column and enter the result on the "Total" line in the appropriate column.
7. Enter the values for land appreciation from the "Remarks" column in the "Inventory of Land, Cash, Liabilities, and Real Estate" on page 9 of the Farm Record.

#### C. TABLE 3 - Animal and Crop Production

1. Enter the total of the "Home Use" column(s) in the "Livestock and Poultry Production" record, pages 10 to 13 of the Farm Record, under "Home Use".

2. Enter the total of the "Sales" column(s) in the "Livestock and Poultry Production" record, pages 10 to 13 of the Farm Record, under "Sales".
3. Enter the total of the "Other" column(s) in the "Livestock and Poultry Production" record, pages 10 to 13 of the Farm Record, under "Other".
4. Add the values for "Home Use", "Sales", and "Other" and enter the result under "Total".
5. Enter the value in the "Total" row for the "Animal Feed" column on page 3 of the Farm Record Summary Worksheet under "Animal Feed".
6. Enter the value in the "Total" row for the "Home Use" column on page 3 of the Farm Record Summary Worksheet under "Home Use".
7. Enter the value in the "Total" column for the "Seed" column on page 3 of the Farm Record Summary Worksheet under "Seed".
8. Enter the value in the "Total" column for the "Sales" column on page 3 of the Farm Record Summary Worksheet under "Sales".
9. Enter the value in the "Total" column for the "Other" column on page 3 of the Farm Record Summary Worksheet under "Other".
10. Add the values for "Animal Feed", "Home Use", "Seed", "Sales", and "Other" and enter the result under "Total". See Tables 1, 2, and 3 Appendix II-D.

#### D. TABLE 4 - Crop Expenses

The information for Table 4 is found in the Farm Record Summary Worksheet. Each worksheet line contains the information for one enterprise. Each line in Table 4 represents one enterprise, therefore, information from each line on the Worksheet is entered on the corresponding line in Table 4. A maximum of 30 enterprises can be entered. The procedures for entering the information for the first line of Table 4 are detailed below.

1. Enter the name of the enterprise, from the "Crop" column on page 1 of the Worksheet, in the "Crop" column. NOTE....The name is limited to 20 characters maximum.
2. Enter the field number of the enterprise, from the "Field No." column on page 1 of the Worksheet, in the "Field Number" column. NOTE....The field number is limited to 8 characters maximum.

3. Enter the crop code(s) of the enterprise, from the "Crop Code(s)" column on page 1 of the Worksheet, in the "Crop Code" column. NOTE....The crop code(s), limited to 3 codes maximum, is entered as a single two digit number (15) or a series of two digit numbers (2308), (051204). See Table 4, Appendix II-D.
4. Enter the area, in feddans, of the enterprise, from the "Area Feddan" column on page 1 of the Worksheet, in the "Area Feddan" column.
5. Enter the value of labor expense, from the "Labor" column in the "Crop Expenses" section, page 2 of the Worksheet, in the "Labor LE" column.
6. Enter the value of equipment expense, from the "Equip." column in the "Crop Expenses" section, page 2 of the Worksheet, in the "Equip. LE" column.
7. Enter the value of the organic fertilizer expense, from the "Manure" column in the "Crop Expenses" section, page 1 of the Worksheet, in the "Organ. Fert. LE" column.
8. Enter the value of chemical fertilizer expense, from the "Chem. Fert." column in the "Crop Expenses" section, page 2 of the Worksheet, in the "Chem. Fert. LE" column.
9. Enter the value of seed expense, from the "Seed" column in the "Crop Expenses" section, page 2 of the Worksheet, in the "Seed LE" column.
10. Enter the value of pesticide/herbicide expense, from the "Pesticide" column in the "Crop Expenses" section, page 2 of the Worksheet, in the "Pest LE" column.
11. Enter the value of other expenses, from the "Other" column in the "Crop Expenses" section, page 2 of the Worksheet, in the "Other LE" column.
12. Enter the total of the expenses, from the "Total Expense" column in the "Crop Expenses" section, page 2 of the Worksheet, in the "Total LE" column.
13. Enter the value of carried in expenses, from the "Expenses" column in the "Carried In" section, page 3 of the Worksheet, in the "Expense Carried In LE" column.

14. Enter the value for total production, from the "Total Returns" column on page 3 of the Worksheet, in the "Total Value Prod. LE" column.

Repeat steps 1 to 14 for the enterprises listed on the Worksheet. Finally, enter the column totals in Table 4 from the corresponding Worksheet column totals.

NOTE....The maximum number of lines for enterprises is 30 lines.

#### E. TABLE 5 - Non-Crop Expenses

1. Enter the value for purchased animal feed, from the "Cost if Purchased LE" column total in the "Animal Feed Record" section, pages 56 to 59 of the Farm Record, on the line after "Purchased Animal Feed".
2. Enter the value for land rent, from the "Non-Capital LE" column in the "Other Farm Expenses" section, pages 62 and 63 of the Farm Record, on the line after "Land Rent".
3. Enter the value for taxes paid, from the "Non-Capital LE" column in the "Other Farm Expenses" section, pages 62 and 63 of the Farm Record, on the line after "Taxes".
4. Enter the value for share rent (shared in), from the "Non Capital LE" column in the "Other Farm Expenses" section, pages 62 and 63 of the Farm Record and/or from the "Other" column in the "Disposition" section, page 3 of the Farm Record Summary Worksheet, on the line after "Land Rent".
5. The "Other Farm Expenses" section, pages 62 and 63 of the Farm Record, is the location of the information for lines 5 through 10 of Table 5. Write the name of expense in the space after the line number using a maximum of 27 characters. Enter the value for the expense, from the "Non-Capital LE" column in the "Other Farm Expenses" section, in the "LE" column of the same line. See Table 5 Appendix II-D.

F. TABLE 6 - Summary of Income and Expenses

1. Enter the value for animal production, the value for "Total LE" in the "Animal Products" section in Table 3 of the Farm Record Summary Computer Input Form, in the space after "Animal Products".
2. Enter the value for crop production, the value for "Total LE" in the "Crop Products" section in Table 3, in the space after "Crop Products".
3. Enter the value for capital sales, add the "Land Sold LE" column total plus the "Livest. Sold LE" column total plus the "Poultry Sold LE" column total plus the "Capital LE" column total in the "Other Farm Income" section, pages 64 and 65 of the Farm Record, in the space after "Capital Sales".
4. Enter the value of other Farm Income which is the "Non-Capital Sales", such as land, or equipment rent, and labor worked outside the farm, pages 64 and 65 of the Farm Record, in the space after "Other Farm Income".
5. Enter the value for positive (increasing) inventory change, the total of the "Change LE" column in Table 2 of the Farm Record Summary Computer Input Form, in the space after "Inventory Change if +".
6. Enter the value of off-farm income, from the "Household and Off-Farm Income" section, page 2 of the Farm Record, in the space after "Off-Farm Income".
7. Enter the value for crop expenses, the total in the "Total LE" column in Table 4 of the Farm Record Summary Computer Input Form, in the space after "Crop Expenses".
8. Enter the value for non-crop expenses, the value in the "Total Non-Crop Expenses" column in Table 5 of the Farm Record Summary Computer Input Form, in the space after "Non-Crop Expenses".
9. Enter the value for capital purchases, add the "Land Purch. LE" column total plus the "Livest. Purch. LE" column total plus the "Poultry Purch. LE" column total plus the "Capital LE" column total in the "Other Farm Expenses" section, page 62 and 63 of the Farm Record, in the space after "Capital Pruchases".

10. Enter the value for negative (decreasing) inventory change, the total of the "Change LE" column in Table 2 of the Farm Record Summary Computer Input Form, in the space after "Inventory Change if -".
11. Enter the value for non-purchased animal feed and seed, add the value for "Animal Feed LE" and the value for "Seed" in the "Crop Products" section in Table 3 of the Farm Record Summary Computer Input Form, in the space after "Non-Purchased Animal Feed, Seed,".
12. Enter the value for adjustments, the total of the "Other LE" in the "Animal Products" section in Table 3 of the Farm Record Summary Computer Input Form, in the space after "Adjustments".
13. Total the income column and enter the value in the space after "Total Gross Income LE".
14. Total the expense column and enter the value in the space after "Total Gross Expenses LE".
15. Subtract the value of "Total Gross Exepnses LE" from the value of "Total Gross Income LE" and enter the result on the "Net Farm Income (with land appreciation) line in the space after the "=".
16. Subtract the value of "Land Appreciation" from the value of "Net Farm Income (with land appreciation)" and enter the result on the "Net Farm Income (without land appreciation)" line in the space after the "=" . See Table 6 Appendix II-D.

G. TABLE 7 - Work Done by Animals

1. Enter the number of animals, from the "Inventory of Livestock" section, page 6 of the Farm Record, in the respective blanks. The number of each of the specific animals is computed as the number of animals remaining in the inventory for a period of at least six months.
2. Enter the number of poultry, from the "Inventroy of Poultry" section, page 7 of the Farm Record, in the space under "Poultry".
3. Enter the number of animal hours worked in plowing, the total of the "Plowing" column in the "Animal Work" section, page 1 of the Farm Record Summary Worksheet, in the space under "Plowing".

4. Enter the number of animal hours worked in leveling, the total of the "Leveling" column in the "Animal Work" section, page 1 of the Farm Record Summary Worksheet, in the space under "Leveling".
5. Enter the number of animal hours worked in puddling, the total of the "Puddling" column in the "Animal Work" section, page 1 of the Farm Record Summary Worksheet, in the space under "Puddling".
6. Enter the number of animal hours worked in irrigation, the total of the "Irrigat." column in the "Animal Work" section, page 1 of the Farm Record Summary Worksheet, in the space under "Irrigation".
7. Enter the number of animal hours worked in transportation, the total of the "Transprt" column in the "Animal Work" section, page 1 of the Farm Record Summary Worksheet, in the space under "Transport".
8. Enter the number of animal hours worked in other activities, the total of the "Other" column in the "Animal Work" section, page 1 of the Farm Record Summary Worksheet, in the space under "Other".
9. Add the number of animal hours worked in "Plowing", "Leveling", "Puddling", "Irrigation", "Transport", and "Other" entering the result in the space under "Total".
10. Enter any comments or remarks to clarify any entries in the tables of the Input Form on the lines after "Remarks:". Each line is limited to a maximum of 80 characters. See Table 7 Appendix II-D.

### Summary

This ends the procedure for completing the Farm Record Summary Computer Input Form. The information summarizing the activities for the specified Farm Record can now be entered in the computer for storage and further analysis.

- 33'

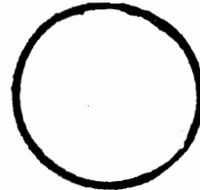
### III - APPENDICES

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APPENDIX I

FARM RECORD BOOK

Governorate : \_\_\_\_\_  
 District : \_\_\_\_\_  
 Site : \_\_\_\_\_  
 Agric. coop. : \_\_\_\_\_  
 Pass number : \_\_\_\_\_  
 Address : \_\_\_\_\_



# FARM RECORD

November 1<sup>st</sup> 198 to  
 October 31, 198

Farmer's Name :

Feddan                  Kerat

Size of farm :

No. Owned			No. Rented			No. Shared in		
F.	K.		F.	K.		F.	K.	
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....

EWUP ECONOMICS TEAM

- 2 -

## HOUSE HOLD &amp; OFF FARM INCOME

Married  Single 

House Hold Members

Male No.  Female No. Number of members who work in the farm      Male      Female  
 Is the farmer a full time worker in his farm?  
Yes  No If no, what is the other work he does?  
\_\_\_\_\_How much does he get from the other work during this  
Year? \_\_\_\_\_ L.E.

Are any other members working outside the Farm?

Yes  No If yes, how much money do they get during this year  
\_\_\_\_\_ L.E.

~~-3-~~

LAND USE MAP

WINTER CROPS

~~- 4 -~~

LAND USE MAP

\_SUMMER CROPS\_

























SUMMARY

Summary of Income	L.E.	Summary of Expenses	L.E.
Animal Products		Crop Expenses	
Crop Products		Non-Crop Expenses	
Capital Sales		Capital Purchases	
Other Farm Income		Non-Purchases Animal Feed and Others	
Inventory Change if + Off-Farm Income		Inventory Change if - Adjustments	
<b>Total Gross Income</b>		<b>TOTAL Gross Expenses</b>	
Net Farm Income With Land Appreciation	=	_____	LE
Land Appreciation	=	_____	LE
Net Farm Income Without Land Appreciation	=	_____	LE

Designed by Farouk Abdel Al, Gamal Ayad and M. E. Quenemoen

APPENDIX II-A

FARM RECORD SUMMARY WORKSHEET

FARM RECORD SUMMARY WORKSHEET

FARMER NO. -- -----

LINE NO.	CROP	FIELD NO.	CROP CODE(S)	AREA FEDDAN	ANIMAL WORK -- HOURS						NO. OF IRRIGAT.
					FLOWING	LEVELING	PUDDLING	IRRIGAT.	TRANSPRT	OTHER	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
TOTAL											

FARM RECORD SUMMARY WORKSHEET (continued)

LINE NO.	FAMILY LABOR (HRS)			HIRED LABOR (HRS)			CROP EXPENSES					TOTAL EXPENSE		
	MAN	WOM	B/G	MAN	WOM	B/G	LABOR	EQUIP.	MANURE	CHM FERT	SEED		PESTICID	OTHER
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
TOT.														

FARM RECORD SUMMARY WORKSHEET (continued)

LINE NO.	CROP UNIT	QUANTITY PRODUCED	DISPOSITION -- L.E.					CARRIED IN		TOTAL RETURNS
			ANIMAL FEED	HOME USE	SEED	SALES	OTHER	TOTAL	EXPENSES	
1										
2										
3										
4										
5										
6										
7										
8										
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TOTAL										

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APPENDIX II-B

CROP NAMES AND CODES

CROP CODES

CODE	CROP	CODE	CROP	CODE	CROP	CODE	CROP
01	= Berseem	16	= Eggplant	31	= Lupines *TERMIS	46	= Lentil *ADS
02	= Wheat	17	= Pepper *FELFEL	32	= Cowpeas *LOUBIAH	47	= Common Beand *FASULIA
03	= Broadbeans *FOOL	18	= Sweet Corn *ZORAHSOKR	33	= Cauliflower *QARNABIT	48	= Berseem (sh. season)
04	= Sugarbeets *BANGERSKR	19	= Okra *BAMIAH	34	= Spinach *SABANIKH	49	= Snake Cucumber *ATTAH
05	= Flax *KETTAN	20	= Cabbage *KUROMB	35	= Alfalfa *BERSEM HIGAZ	50	= Colcasia Tuber
06	= Cotton	21	= Fenugreek *HELBAH	36	= Sweet Potatoes *BTATA	51	= Garden Rocket *GARGIR
07	= Rice	22	= Onion *BASAL	37	= Purslane *REGLAH	52	= Parsely *BUQDOUNIS
08	= Maize *ZORAH SHAMY	23	= Artichoke *KHARSHOUF	38	= Beets *BANGER	53	= Carrot *GAZAR
09	= Soybeans *FOOL SOYA	24	= Potatoes	39	= Garlic *THOAM	54	= Radish *F EGL
10	= Sugarcane *QASAB	25	= Jew's Mallow *MLOKHIA	40	= Chick-Peas *HOMMOS	55	= Lettuce *KHUSS
11	= Grapes *ENAB	26	= Cucumer *KHIAR	41	= Egypt Mallow *KHOBEZAH	56	= Dill *SHABAT
12	= Peanuts *FOOL SOUDANY	27	= Squash *KOSAH	42	= Turnips *LEFT	57	= Egyptian Leak *QURRAT
13	= Sesame *SEMSEM	28	= Watermelon *BATTIKH	43	= Sorghum *ZORAH RAFIAH	58	= Other Vegetables
14	= Sunflower *ABBADSHAMS	29	= Maize Forage *DARAWAH	44	= Barley *SHAEIR	59	= -----
15	= Tomato	30	= Peas *BISELLAH	45	= Melons *SHAMMAM	60	= -----

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APPENDIX II-C

AREA CONVERSION KERATS TO FEDDANS

CONVERSIONS FROM KARATS TO FEDDANS

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K.	F.	K.	F.	K.	F.
01	= 0.04	02	= 0.08	03	= 0.13
04	= 0.17	05	= 0.21	06	= 0.25
07	= 0.29	08	= 0.33	09	= 0.38
10	= 0.42	11	= 0.46	12	= 0.50
13	= 0.54	14	= 0.58	15	= 0.63
16	= 0.67	17	= 0.71	18	= 0.75
19	= 0.79	20	= 0.83	21	= 0.88
22	= 0.92	23	= 0.96	24	= 1.00

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APPENDIX II-D

FARM RECORD SUMMARY  
COMPUTER INPUT FORM

03/23/84

FARM RECORD SUMMARY COMPUTER INPUT FORM

\*\*\*\*\* TABLE 1 \*\*\*\*\*  
FARM RECORD IDENTIFICATION

EWUP Economics Team

Summarized by: \_\_\_\_\_ Reviewed by: \_\_\_\_\_

Farm Record Year: November 1, \_\_\_\_ to October 31, \_\_\_\_

Farmer's number: \_\_\_\_\_

Farmer's name: \_\_\_\_\_ Family members: Male: \_\_\_\_ Female: \_\_\_\_ Total: \_\_\_\_

Farm size feddans: \_\_\_\_\_

Owned: \_\_\_\_\_ Rented: \_\_\_\_ Shared: \_\_\_\_

\*\*\*\*\* TABLE 2 \*\*\*\*\*  
INVENTORY CHANGES

ITEM	BEGINNING LE	ENDING LE	CHANGE LE	REMARKS
1. Inventory of Equipment	_____	_____	_____	_____
2. Inventory of Livestock	_____	_____	_____	_____
3. Inventory of Poultry	_____	_____	_____	_____
4. Inventory of Grain and Forage	_____	_____	_____	_____
5. Inventory of Land and Real Estate	_____	_____	_____	_____
Total	_____	_____	_____	_____

\*\*\*\*\* TABLE 3 \*\*\*\*\*  
ANIMAL AND CROP PRODUCTION

Land Appreciation = LE \_\_\_\_\_

Animal Products				Crop Products					
Home Use LE	Sales LE	Other LE	Total LE	Animal Feed LE	Home Use LE	Seed LE	Sales LE	Other LE	Total LE
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

\*\*\*\*\* T A B L E 4 \*\*\*\*\*  
CROP EXPENSES

03/23/84

Crop	Field Number	Crop Code	Area Feddan	Labor LE	Equip LE	Organ Fert LE	Chem Fert LE	Seed LE	Pest LE	Other LE	Total LE	Expense Carried In LE	Total Value Prod LE
1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
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26	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
27	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
28	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
29	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
30	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

\*\*\*\*\*TABLE 5\*\*\*\*\*  
NON-CROP EXPENSES

KIND OF EXPENSE	LE		KIND OF EXPENSE	LE
1 Purchased Animal Feed	_____	6	_____	_____
2 Land Rent	_____	7	_____	_____
3 Taxes	_____	8	_____	_____
4 Share Rent	_____	9	_____	_____
5 _____	_____	10	_____	_____
<b>TOTAL NON-CROP EXPENSE</b>				_____

\*\*\*\*\*TABLE 6\*\*\*\*\*  
SUMMARY OF INCOME AND EXPENSES

SUMMARY OF INCOME	LE	SUMMARY OF EXPENSE	LE
Animal Products	_____	Crop Expenses	_____
Crop Products	_____	Non-Crop Expenses	_____
Capital Sales	_____	Capital Purchases	_____
Other Farm Income	_____	Inventory Change if -	_____
Inventory Change if +	_____	Non-Purchased Animal Feed, Seed	_____
Off-Farm Income	_____	Adjustments	_____
<b>Total Gross Income LE</b>	_____	<b>Total Gross Expense LE</b>	_____
NET FARM INCOME (With Land Appreciation)	= LE _____		
NET FARM INCOME (Without Land Appreciation)	= LE _____		

\*\*\*\*\*TABLE 7\*\*\*\*\*  
FARM ANIMALS

Number of Animals							Hours Worked						
Cow	Buffalo	Calf	Donkey	Camel	Goat	Poultry	Plowing	Leveling	Puddling	Irrigation	Transporation	Other	Total
—	—	—	—	—	—	—	—	—	—	—	—	—	—
REMARKS: _____													
_____													
_____													

AMERICAN EQUIVALENTS OF EGYPTIAN ARABIC  
TERMS AND MEASURES COMMONLY USED  
IN IRRIGATION WORK

<u>LAND AREA</u>	<u>IN SQ METERS</u>	<u>IN ACRES</u>	<u>IN FEDDANS</u>	<u>IN HECTARES</u>
1 acre	4,046.856	1.000	0.963	0.405
1 feddan	4,200.833	1.038	1.000	0.420
1 hectare (ha)	10,000.000	2.471	2.380	1.000
1 sq. kilometer	100 x 10 <sup>4</sup>	247.105	238.048	100.000
1 sq. mile	259 x 10 <sup>6</sup>	640.000	616.400	259.000

<u>WATER MEASUREMENTS</u>	<u>FEDDAN-CM</u>	<u>ACRE-FEET</u>	<u>ACRE-INCHES</u>
1 billion m <sup>3</sup>	23,809,000.000	810,710.000	
1,000 m <sup>3</sup>	23.809	0.811	9.728
1,000 m <sup>3</sup> /Feddan (= 238 mm rainfall)	23.809	0.781	9.372
420 m <sup>3</sup> /Feddan (= 100 mm rainfall)	10.00	0.328	3.936

<u>OTHER CONVERSION</u>	<u>METRIC</u>	<u>U.S.</u>
1 ardab =	198 liters	5.62 bushels
1 ardab/feddan =		5.41 bushels/acre
1 kg/feddan =		2.12 lb/acre
1 donkey load =	100 kg	
1 camel load =	250 kg	
1 donkey load of manure =	0.1 m <sup>3</sup>	
1 camel load of manure =	0.25 m <sup>3</sup>	

EGYPTIAN UNITS OF FIELD CROPS

<u>CROP</u>	<u>EG. UNIT</u>	<u>IN KG</u>	<u>IN LBS</u>	<u>IN BUSHELS</u>
Lentils	ardeb	160.0	352.42	5.87
Clover	ardeb	157.0	345.81	5.76
Broadbeans	ardeb	155.0	341.41	6.10
Wheat	ardeb	150.0	330.40	5.51
Maize, Sorghum	ardeb	140.0	308.37	5.51
Barley	ardeb	120.0	264.32	5.51
Cottonseed	ardeb	120.0	264.32	8.26
Sesame	ardeb	120.0	264.32	
Groundnut	ardeb	75.0	165.20	7.51
Rice	dariba	945.0	2081.50	46.26
Chick-peas	ardeb	150.0	330.40	
Lupine	ardeb	150.0	330.40	
Linseed	ardeb	122.0	268.72	
Fenugreek	ardeb	155.0	341.41	
Cotton (unginned)	metric qintar	157.5	346.92	
Cotton (lint or ginned)	metric qintar	50.0	110.13	

EGYPTIAN FARMING AND IRRIGATION TERMS

<u>fara</u>	= branch
<u>marwa</u>	= small distributor, irrigation ditch
<u>masraf</u>	= field drain
<u>mesqa</u>	= small canal feeding from 10 to 40 farms
<u>qirat</u>	= cf. English "karat", A land measure of 1/24 feddan, 175.03 m <sup>2</sup>
<u>qaria</u>	= village
<u>sahm</u>	= 1/24th of a qirat, 7.29 m <sup>2</sup>
<u>saqia</u>	= animal powered water wheel
<u>sarf</u>	= drain (vb.), or drainage. See also <u>masraf</u> , (n.)

EGYPT WATER USE AND MANAGEMENT PROJECTPROJECT TECHNICAL REPORTS

<u>NO.</u>	<u>TITLE</u>	<u>AUTHOR</u>
PTR#1	Problem Identification Report for Mansuriya Study Area, 10/77 to 10/78.	By: Egyptian and American Field Teams.
PTR#2	Preliminary Soil Survey Report for the Beni Magdul and El-Hammami Areas.	By: A. D. Dotzenko, M. Zanati, A. A. Abdel Wahed, & A. M. Keleg.
PTR#3	Preliminary Evaluation of Mansuriya Canal System, Giza Governorate, Egypt.	By: American and Egyptian Field Teams.
PTR#5	Economic Costs of Water Shortage Along Branch Canals.	By: A. El Shinnawi M. Skold & M. Nasr
PTR#6	Problem Identification Report For Kafr El-Sheikh Study Area.	Egyptian and American Field Teams.
PTR#7	A Procedure for Evaluating the Cost of Lifting Water for Irrigation in Egypt.	By: H. Wahby, M. Quenemoen, and M. Helal.
PTR#9	Irrigation & Production of Rice in Abu Raya, Kafr El-Sheikh Governorate.	Compiled By: R. Tinsley.
PTR#10	Soil Fertility Survey in Kafr El-Sheikh, El Mansuriya and El-Minya Pilot Projects.	By: Zanati, Soltanpour, Mostafa, & Keleg.
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PTR#38	Precision Land Leveling On Abu Raya Farms, Kafr El-Sheikh Governorate, Egypt.	EWUP Kafr El-Sheikh Team

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